

## Green Bond Report 2023



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### Banco Santander **Green Bond Report** 2023

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## INTRODUCTION

As a responsible bank we place sustainability at the heart of our core activities to deliver on our purpose of helping people & businesses  $prosper^{1}$ 

#### Ambitions

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Support the transition to a low-carbon economy S

Promote inclusive growth



Strong governance and culture across the organization

Our sustainability strategy aims to help the business grow, be aligned with our stakeholders' expectations, and make Santander more resilient through strong risk management, robust data quality and privacy, a vibrant culture and clear governance. Our sustainability goals are consistent with the Group's business approach - Think Value, Think Customer and Think Global. We want to: 1. Create value for shareholders; 2. Be the partner of choice for our customers in their transition to a low carbon economy and support their financial inclusion; 3. Use our scale and local leadership to tackle global challenges in the markets where we operate.

#### Our climate and environmental targets<sup>2</sup>

	2018	2019		2020		2021		2022		2023		9M'24 <sup>3</sup>	2025/2030 target
<b>Electricity</b> from renewable sources <sup>4</sup>	43%	50%		57%		75%		88%		97%		99%	100% by 2025
<b>Green finance</b> raised and facilitated (EUR) <sup>5</sup>		19 bn	••••	33.8 bn		65.7 bn	••••	94.5bn	••••	115.3bn	••••	129.7	120 bn by 2025 220 bn by 2030
AuMs in <b>Socially</b> <b>Responsible Investments</b> (SRI) (EUR)					••••	27.1 bn	••••	53.2bn	••••	67.7bn	••••	85.5bn	100 bn by 2025
Thermal <b>coal</b> -related power & mining phase out (EUR)						7 bn		5.9 bn		4.9bn			0 by 2030
Emissions intensity of <b>power</b> generation portfolio <sup>6,7</sup>		0.21		0.17		0.19							0.11 tCO₂e / MWh in 2030
Absolute emissions of energy (oil & gas) portfolio <sup>6</sup>		23.84		22.58		27.43							16.98 mtCO <sub>2</sub> e in 2030
Emissions intensity of aviation portfolio		92.47		93.05		97.21							61.71 gCO₂e/ RPK in 2030
Emissions intensity of <b>steel</b> portfolio <sup>6</sup>		1.58		1.40		1.36							1.07 tCO <sub>2</sub> e/ tS in 2030
Emissions intensity of <b>auto</b> manufacturing portfolio				149		138							103 gCO <sub>2</sub> /vkm in 2030
Emissions intensity of <b>auto</b> lending portfolio <sup>8</sup>								137					75-89 gCO <sub>2</sub> e/ vkm in 2030

From → To ■■■■ Cumulative target

Commitment Achieved

#### Santander's Green, Social & Sustainability Funding Global Framework

Santander Group Green, Social & Sustainability Funding Global Framework<sup>9</sup> serves as a reference document for all issuance of green, social and sustainability labelled funding instruments offered by Banco Santander and/or any of its consolidated subsidiaries across the Group. The document was reviewed by Sustainalytics, which provided a second party opinion<sup>10</sup> confirming the framework is credible and impactful and aligns with the Sustainability Bond Guidelines 2021, Green Bond Principles 2021, Green Loan Principles 2023, Social Bond Principles 2021 and Social Loan Principles 2023. Both documents were published in June 2023. Although the Framework allows the use of proceeds towards a variety of green and social categories, the proceeds of the green bonds issued by Banco Santander, S.A. so far have been solely allocated towards renewable energy projects. In particular, the activities that have been financed via these green instruments are solar power (photovoltaic and concentrated solar electricity production) and wind power production, as specified within the Framework.

1. For more information, please see our <u>Annual Report 2023</u>. 2. For more information, please see our <u>Climate Finance Report 2023</u> and <u>9M'24 ESG presentation</u>. 3. 9M'24 pending to be reviewed by an independent body. 4. In countries where we can verify electricity from renewable sources at Banco Santander properties. It considers the 10 main countries in which we operate. 5. Includes Grupo Santander's contribution to green finance: project finance; green bonds; export finance, advisory services, structuring and other products, to help customers transition to a low-carbon economy. 6. The figures displayed are the latest available. Given limited data availability from customers to assess financed emission, we plan to provide target progress update in the upcoming disclosures. Banco Santander's internal calculation methodology has been used, based on the Partnership for Carbon Accounting Financias (PCAF). 7. In 2021 Annual report and Climate Finance report, we were over-attributed with our corporate customers' emissions. Therefore, the 2019 baseline emission intensity has been restated from 0.23 to 0.21 to align with PCAF standards. The target and climate ambition remains for this sector. 8. Consumer lending for acquisition of passenger cars in Europe, covering a significant majority of the exposure. 9. For more information, please see the <u>Framework</u>. 10. Santander Group Green, Social and Sustainability Framework <u>Second Party Opinion</u>.



3. Key figures 4. Gre & imp

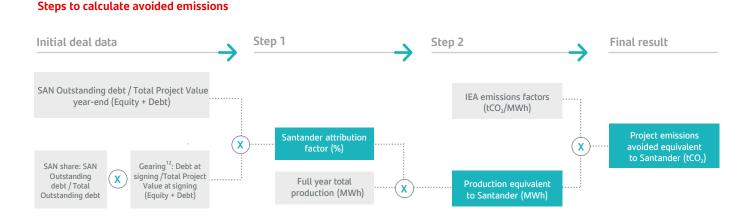
4. Green bond allocation & impact report

## **2. CALCULATION METHODOLOGY**

## Installed capacity, energy production and avoided CO<sub>2</sub> emissions:

Every year, Santander estimates the  $CO_2$  emissions that the power generation attributable to its renewable energy portfolio, allocated to green bonds, avoids. Emissions calculations come from the technology mix of associated national grids in the countries where the Eligible Assets are located. Here, we used the latest available data from the International Energy Agency (IEA) emission factors (tCO<sub>2</sub>/MWh).<sup>11</sup>

Under this methodology, electricity generation (MWh) is based on the yearly production reported by project developers or, when not available, on the installed capacity (MW) and an adequate technology-specific load factor.



# The impact measurement methodology we use is based on an internal estimate calculation according to the <u>GHG Protocol</u> and the Partnership for Carbon Accounting Financials (PCAF) standard for financed emissions.<sup>13</sup> It takes into account Santander's attribution factor in the overall financing of each project, which includes both debt and equity. A refinement to the calculation of the attribution factor is introduced this year, prioritizing the use of the most recent

Therefore, due to this calculation methodology, the total number of avoided emissions is influenced by several factors, such as the decarbonization trend of the national grids reflected in the emission factors, information available in the market at project signing or the composition of the allocated assets pool, among others.

11. International Energy Agency (IEA) 2024 edition of the emission factors data package; CO<sub>2</sub> emission factors for 2022 for electricity only generation (CHP electricity included for world countries (in CO<sub>2</sub> per kWh)).

#### 12. For more details, see page 5.

financial statements available.

13. PCAF developed the banking industry's main standard to assess financed emissions. According to the PCAF methodology, the denominator should include the total capital needed to finance the project. As per the standard used to assess financed emissions, the denominator to assess avoided emissions should include the total amount of debt and equity available.

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#### Step 1 - Santander attribution factor:

The Attribution Factor is calculated using year-end debt and equity data for new deals as well as for existing projects in which significant changes in financial structure might impact the gearing:

 $Attribution Factor_{p} = \frac{SAN outstanding debt_{p}}{Total Project Value_{p}}$ 

- → p is the project.
- → SAN outstanding debt<sub>p</sub> is the outstanding amount of debt disbursed by Santander at 31 December 2023.
- Total Project Value<sub>p</sub> is the sum of the total debt + equity of the project at 2023 financial close.

Otherwise, the gearing is maintained, as follows:

 $Attribution Factor_{p} = \frac{SAN outstanding debt_{p}}{Total Project Value_{p}} * Gearing_{p}$ 

- $\rightarrow$  p is the project.
- → SAN outstanding debt<sub>p</sub> is the outstanding amount of debt disbursed by Santander at 31 December 2023.
- → Total outstanding debt<sub>p</sub> is the total amount of outstanding debt at 31 December 2023.
- → Gearing p is the ratio between debt and debt+equity at signing of project.

#### Step 2 - Project production:

To calculate the avoided  $CO_2$  emissions, we classified the eligible projects by virtue of their operational status and energy production calculation method:

- → Actual production: Projects that began up to and including 31 December 2023.
- Avoided emissions calculated using actual production and Santander's attribution factor (MWh/year). For multilocation projects, the avoided emissions take into account the amount of energy produced in each country and the emission factor for the corresponding country.
- → Estimated production: Projects that began after and including 1 January 2024.
  - Avoided emissions calculated using estimated annual production, based on the P50 estimation model<sup>14</sup>, and Santander's attribution factor (MWh/year). For multilocation projects, the avoided emissions take into account the amount of energy produced in each country and the emission factor for the corresponding country.

14. An estimation model according to which the P50 value is the predicted annual production and for which there is a 50% probability that it will be exceeded in a given year. Source: Platform Carbon Accounting Financials (PCAF), The Global GHG Accounting and Reporting Standard Part A: Financed Emissions. Second Edition (2022)

## **3. KEY FIGURES**

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Since our first €1 billion green bond issuance in 2019 and implementation of our global sustainable debt issuance plan, we have continued leveraging on our origination capabilities to issue more green bonds and notes.

The outstanding green bond issuances as of 31 December 2023 were:

- → October 2019: €1 billion senior preferred bond with a 7-year tenor issued by Banco Santander S.A.
- → June 2020: €1 billion senior non-preferred bond with a 7-year tenor issued by Banco Santander, S.A.
- → June 2021: €1 billion senior non-preferred bond with an 8-year<sup>15</sup> tenor issued by Banco Santander S.A.

- → March 2021: € 3 million note with a 3-year tenor issued by SAN PRO (Retail Spain), guaranteed by Banco Santander S.A.
- → March 2021: € c. 2 million note with a 3-year tenor issued by SAN PRO (Retail Spain), guaranteed by Banco Santander S.A.
- → February 2023: PLN 74.7 million note with a 1.2-year tenor issued by SAN PRO (Retail Spain), guaranteed by Banco Santander S.A.
- → April 2023: PLN 24.2 million note with a 1.5-year tenor issued by SAN PRO (Retail Spain), guaranteed by Banco Santander S.A.

Issuances amounted to EUR 3,028 million and are detailed below:

lssuer	Ban <u>ço</u> Santander, S.A.	Banço Santander, S.A.	Banço Santander, S.A.	SANPRO (guarantor Banco Santander S.A.)	SANPRO (guarantor Banco Santander S.A.)	SANPRO (guarantor Banco Santander S.A.)	SANPRO (guarantor Banco Santander S.A.)
Issue Rating	A2 / A+ / A (Moody's / S&P / Fitch)	Baa1 / A- / A- by Moody's / S&P / Fitch	Baa1 / A- / A-by Moody's / S&P / Fitch	Notes have not been rated			
Issuance CCY	EUR	EUR	EUR	EUR	EUR	PLN	PLN
Nominal Amount (issuance ccy)	1,000,000,000	1,000,000,000	1,000,000,000	3,039,000	1,925,000	74,670,000	24,200,000
Nominal Amount (EUR)	1,000,000,000	1,000,000,000	1,000,000,000	3,039,000	1,925,000	17,192,309.26	5,571,901.49
Issue Date	4 October 2019	23 June 2020	24 June 2021	3 March 2021	30 March 2021	7 February 2023	5 April 2023
Maturity	4 October 2026	23 June 2027	24 June 2029	3 March 2024	2 April 2024	14 April 2024	4 October 2024
Instrument	Senior Preferred	Senior Non Preferred	Senior Non Preferred	Senior Preferred	Senior Preferred	Senior Preferred	Senior Preferred
Coupon	0.30%	1.125%	0.625%	Variable	Variable	Variable	Variable
Listing	EuronextDublin	EuronextDublin	EuronextDublin	EuronextDublin	EuronextDublin	EuronextDublin	EuronextDublin
ISIN	XS2063247915	XS2194370727	XS2357417257	ES0305466072	ES0305466080	XS2569719508	XS2591234294

15. With a call date on 24/06/2028.

16. Issuer rating: A2 (Stable) / A+ (Stable) / A- (Stable) by Moody's/S&P/Fitch.



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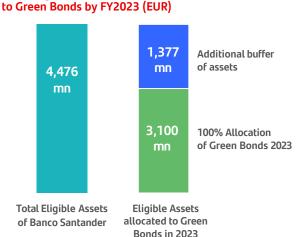
## 4. GREEN BOND ALLOCATION & IMPACT REPORT 17

#### i. Allocation report

In accordance to the Santander Group Green, Social & Sustainability Funding Global Framework, the issuance of this report is motivated by the issuance of additional notes since the last Green Bond Report.

The proceeds from the green bonds outstanding as of December 31<sup>st</sup>, 2023 (total notional amount of **€3,028** million) have been allocated to **82** renewable energy (wind and solar) transactions: 29 greenfield and 53 brownfield projects that were originated between **2016** and **2023** and represent a total drawn outstanding amount of **€3,100** million. The share of eligible assets allocated to existing loans<sup>18</sup> represents 35.04% of the total issued amount.<sup>19</sup>

There is no remaining balance of unallocated proceeds of the green bonds.



Total eligible assets of Banco Santander and Allocation

**2023 Green Bonds eligible allocated assets by technology** Distribution, number of projects and allocated amount as of FY2023

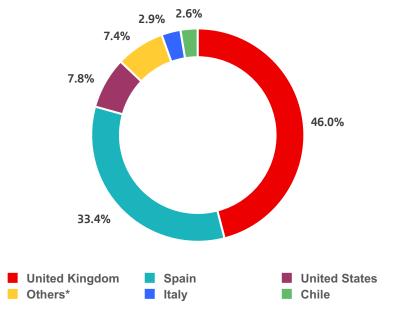


17. Rounded numbers may not add up

19. Calculated as the share of Eligible Assets allocated to existing loans at the date of each issuance as a percentage of Total Eligible Assets allocated

<sup>18.</sup> Existing loan defined as closed prior to respective green bond issuance.





The proceeds of outstanding Green Bonds as of December 31<sup>st</sup>, 2023 have been fully allocated towards €3,100mn eligible assets. 6 Annex

\*Others include, The Netherlands, Germany, France, Brazil and Poland.

#### ii. Impact report

#### a. Summary of avoided emissions

The following table summarizes the positive impact generated by the Eligible Assets financed via outstanding Green Bonds.

Technology	SAN Avoided CO <sub>2</sub> emissions (tCO <sub>2</sub> )	%	SAN Avoided CO₂ emissions (tCO₂/€ Mn invested)	Overall avoided CO <sub>2</sub> emissions (tCO <sub>2</sub> )	%	
Wind	754,387	76 %	381	16,724,444	86 %	
Projects with actual production	234,891	24 %	291	5,403,141	28 %	
Projects with estimated annual production	519,496	53 %	443	11,321,303	58 %	
Solar	231,873	24 %	207	2,801,158	14 %	
Projects with actual production	161,073	16 %	157	1,381,015	7 %	
Projects with estimated annual production	70,800	7 %	760	1,420,143	7 %	
TOTAL GENERAL	986,260	100 %	318	19,525,602	100 %	

Avoided emissions for the period 1 January 2023 to 31 December 2023 amounted to **986,260 tons of CO<sub>2</sub> (318 tCO<sub>2</sub>/\inMn invested)**, while the average avoided CO<sub>2</sub> per MWh of the projects allocated to the Green Bonds was **0.213 tCO<sub>2</sub>/\inMWh.** 

#### b. Use of proceeds by technology

The following data shows the use of proceeds of the assets portfolio:

	Green Bonds Asset Allocation								
	Number of loans	Allocated Loan Amount (€mn)	Allocated Loan Amount %	Average Attribution Factor					
Total general	82	3,100	100 %	15 %					
Wind	34	1,982	64 %	11 %					
Offshore	18	1,413	46 %	6 %					
Onshore	16	569	18 %	17 %					
Solar	48	1,118	36 %	18 %					
Photovoltaic	32	562	18 %	20 %					
Thermosolar	16	555	18 %	12 %					

#### c. Installed capacity and production by geography

The impact pursued with green bonds issued is measured using renewable energy installed capacity (MW) and production (MWh).

	Brazil	Chile	France	Germany	Italy	The Netherlands	Poland	Spain	UK <sup>20</sup>	United States	Total
Nº of deal	1	2	2	1	6	1	1	43	17	8	82
Average SAN share (€mn)	12	40	40	71	15	61	5	24	84	30	38
TOTAL Installed Capacity (MW)	319	311	54	900	425	600	1,140	4,079	13,525	2,990	24,342
TOTAL installed Capacity (MW) attributed to %SAN	12	39	13	30	55	22	6	604	638	153	1,572
TOTAL Production (MWh)	1,446,768	555,567	210,098	4,940,300	611,482	2,451,000	4,201,753	7,929,478	49,087,843	8,582,407	80,016,696
TOTAL Production (MWh) equivalent to % SAN	55,776	78,130	48,793	166,335	80,389	89,980	22,388	1,205,978	2,476,672	395,208	4,619,650

20. Installed capacity, production and avoided emissions of one project in a joined UK/Ireland portfolio with assets in both countries and one project in a joined United Kingdom/ Italy/Sweden/France/Spain/Norway/Finland have been included in the UK values. Avoided emissions are calculated considering the emission factor of each country.

6 Annex

## **5. DISCLAIMER**

IMPORTANT INFORMATION

#### Non-IFRS and alternative performance measures

This report contains, financial information prepared in accordance with International Financial Reporting Standards ("IFRS") and taken from our financial statements, as well as alternative performance measures ("APMs") as defined in the Guidelines on Alternative Performance Measures issued by the European Securities and Markets Authority (ESMA) on 5 October 2015 and other non-IFRS measures. The APMs and non-IFRS measures were calculated with information from Grupo Santander; however, they are neither defined or detailed in the applicable financial reporting framework nor audited or reviewed by our auditors. We use these APMs and non-IFRS measures when planning, monitoring, and evaluating our performance.

We consider them to be useful metrics for our management and investors to compare operating performance between periods. APMs, we use are presented unless otherwise specified on a constant FX basis, which is computed by adjusting comparative period reported data for the effects of foreign currency translation differences, which distort period onperiod comparisons. Nonetheless, the APMs and non-IFRS measures are supplemental information; their purpose is not to substitute IFRS measures. Furthermore, companies in our industry and others may calculate or use APMs and non-IFRS measures differently, thus making them less useful for comparison purposes. APMs using ESG labels have not been calculated in accordance with the Taxonomy Regulation or with the indicators for principal adverse impact in SFDR.

For further details on APMs and Non-IFRS Measures, including their definition or a reconciliation between any applicable management indicators and the financial data presented in the consolidated financial statements prepared under IFRS, please see the 2023 Annual Report on Form 20-F filed with the U.S. Securities and Exchange Commission (the SEC) on 21 February 2024<sup>21</sup>, as well as the section "Alternative performance measures" of Banco Santander, S.A. (Santander) Q3 2024 Financial Report, published on 25 October 2023<sup>22</sup>.

Underlying measures, which are included in this document, are non-IFRS measures.

The businesses included in each of our geographic segments and the accounting principles under which their results are presented here may differ from the businesses included and local applicable accounting principles of our public subsidiaries in such geographies. Accordingly, the results of operations and trends shown for our geographic segments may differ materially from those of such subsidiaries.

#### ESG Data

This report also contains statements on emissions and other climate related performance data, statistics, metrics and/or targets (the "ESG Data").

The ESG Data are not financial data and are non-IFRS data. Such ESG Data are non-audited estimates (with the exception of the identified sections of this report which have been subject to the limited assurance report of *PricewaterhouseCoopers Auditores, S.L.* dated December 2024, carried out in accordance with the International Standard on Assurance Engagements 3000 (ISAE 3000) (Reviewed), "Assurance Engagements other than Audits or *Reviews of Historical Financial Information*", issued by the International Auditing and Assurance Standards Board (IAASB) of the International Federation of Accountants (IFAC).

The ESG Data are sourced from a variety of internal and external sources and may be based on underlying data, assumptions, estimates, standards, methodologies, metrics, measurements and judgements believed to be reasonable at the time of preparation, but which continue to evolve and may differ significantly from those used by other companies and those that may be used by us in the future. Given their inherent uncertainty and complexity, the ESG Data should be regarded as indicative and for illustrative purposes only and should not be considered guarantees as they may subsequently turn out to be inaccurate.

The ESG Data included in this report may consider broader definitions of materiality used by certain external frameworks and reporting guidelines and the use of the terms "material", "significant", "important" or similar words or phrases is not meant to imply that it is material to us under mandatory reporting standards.

Accordingly, the ESG Data are for informational purposes only, are not intended to be comprehensive and do not constitute investment, financial, legal, accounting, tax or other advice and such information should not be relied or acted upon for providing such advice. Santander makes no representations or warranties as to the quality, completeness, accuracy, or fitness for a particular purpose and shall not be liable for any use by any party of, for any decision made or action taken by any party in reliance upon, or for any inaccuracies or errors in, or omissions from, the ESG Data. No liability is being accepted in connection with it except where such liability cannot be limited under overriding provisions of applicable law. In addition, any commitments, goals and targets discussed in this report, including but not limited to our net-zero related commitments, goals and targets, are aspirational and there can be no assurance that any such commitments, goals or targets will be achieved.

#### **Third Party Information**

In this report, Santander relies on and refers to certain information and statistics obtained from publicly available information and third party sources, which it believes to be reliable. Neither Santander nor its directors, officers and employees have independently verified the accuracy or completeness of any such publicly available and third-party information, make any representation or warranty as to the quality, fitness for a particular purpose, noninfringement, accuracy or completeness of such information or undertake any obligation to update such information after the date of this report.

In no event shall Santander be liable for any use by any party of, for any decision made or action taken by any party in reliance upon, or for inaccuracies or errors in, or omission from, such publicly-available and third-party information contained herein. Any sources of publiclyavailable information and third-party information referred or contained herein retain all rights with respect to such information and use of such information herein shall not be deemed to grant a license to any third party.

<sup>22.</sup> Alternative performance measures of Banco Santander, S.A. (Santander) Q3 2023 Financial Report, published on 25 October 2023

#### **Forward-looking statements**

Santander hereby warns that this report contains "forward-looking statements" as per the meaning of the U.S. Private Securities Litigation Reform Act of 1995. These statements may be identified by words like "expect", "project", "anticipate", "should", "intend", "probability", "risk", "VaR", "RoRAC", "RoRWA", "TNAV", "target", "goal", "objective", "estimate", "future", "commitment", "commit", "focus", "pledge" and similar expressions. They include (but are not limited to) statements on our future business development, performance, shareholder remuneration policy and ESG Data. While these forward-looking statements represent our judgement and future expectations, results may differ materially from those anticipated, expected, projected or assumed in forward looking statements. In particular, forward looking statements are based on current expectations and future estimates about Santander's and third-parties' operations and businesses and address matters that are uncertain to varying degrees and may change, including, but not limited to (a) expectations, targets, objectives, strategies and goals relating to environmental, social, safety and governance performance, including expectations regarding future execution of Santander's and thirdparties' (including governments and other public actors) energy and climate strategies, and the underlying assumptions and estimated impacts on Santander's and third-parties' businesses related thereto; (b) Santander's and third-parties' approach, plans and expectations in relation to carbon use and targeted reductions of emissions, which may be affected by conflicting interests such as energy security; (c) changes in operations or investments under existing or future environmental laws and regulations; (d) changes in rules and regulations, regulatory requirements and internal policies, including those related to climate-related initiatives; (e) our own decisions and actions including those affecting or changing our practices, operations, priorities, strategies, policies or procedures; (f) events that lead to damage to our reputation and brand; (g) exposure to operational losses, including as a result of cyberattacks, data breaches or other security incidents; and (h) the uncertainty over the scope of actions that may be required by us, governments and others to achieve goals relating to climate, environmental and social matters, as well as the evolving nature of underlying science and industry and governmental standards and regulations.

Forward-looking statements are therefore aspirational, should be regarded as indicative, preliminary and for illustrative purposes only, speak only as of the date of this report, are informed by the knowledge, information and views available on such date and are subject to change without notice. Santander is not required to update or revise any forwardlooking statements, regardless of new information, future events or otherwise, except as required by applicable law.

Santander does not accept any liability in connection with forward-looking statements except where such liability cannot be limited under overriding provisions of applicable law.

Forward-looking statements are aspirational, should be regarded as indicative, preliminary and for illustrative purposes only, speak only as of the date of this report, are informed by the knowledge, information and views available on such date and are subject to change without notice. Santander is not required to update or revise any forward-looking statements, regardless of new information, future events or otherwise, except as required by applicable law.

#### Historical performance is not indicative of future results

Statements about historical performance or growth rates must not be construed as suggesting that future performance, share price or results (including earnings per share) will necessarily be the same or higher than in a previous period. Nothing in this report should be taken as a profit and loss forecast.

#### Not a securities offer

This report and the information it contains does not constitute an offer to sell nor the solicitation of an offer to buy any securities 2. Calculation 3. Key figures methodology

4. Green bond allocation & impact report

5. Disclaimer 6 Annex

## 6. Annex

I. PwC Independent Limited Assurance Report

