

BPER:

2023

TCFD
REPORT



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2024

TCFD REPORT

The present document is the English translation of the Italian TCFD Report, prepared for and used in Italy, and has been translated only for the convenience of international readers.

METHODOLOGICAL NOTE

The BPER Banca Group (hereinafter also "BPER Group" or "Group"), through its parent company BPER Banca (henceforth also "BPER", "Bank", "Parent Company", "Institute") joined the Task Force on Climate-related Financial Disclosure (TCFD) in 2021 on a voluntary basis in order to disclose its climate-related commitments to all its stakeholders with greater transparency.

The TCFD is an initiative established in 2015 by the Financial Stability Board (FSB) to address and quantify the risks generated by climate change on the stability of the global financial system. In 2017, the TCFD developed 11 recommendations set out within the "Recommendations of the Task Force on Climate-related Financial Disclosures - Final Report" (hereinafter "TCFD Recommendations") and the subsequent Annex "Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures" (hereinafter "TCFD Annex") published in 2021, aimed at promoting greater transparency on climate-related financial risks and guiding companies in reporting the information that investors and financial markets need in order to assess climate-related risks and opportunities.

Membership of the TCFD confirms and reinforces the Group's national and international climate commitments and is part of a broader framework of initiatives including compliance with United Nations frameworks such as the Principles for Responsible Banking (PRB) and the Net-Zero Banking Alliance (NZBA), for which the Group has embarked on a path to align its lending and investment portfolio with the 2030 and 2050 decarbonisation targets enshrined in the Paris Climate Agreement.

This TCFD Report (hereinafter also the "Report") includes the Group's climate-related information prepared referring to the scopes of the 11 TCFD Recommendations: Governance, Strategy, Risk Management and Metrics and Targets. In particular, the Report was prepared on the basis of the following criteria:

- Governance:
 - disclosure a) Description of the board oversight of climate-related risks and opportunities: description of the processes by which the Board oversees climate-related issues, the roles of the Board of Directors and its Internal Board Committees, and the monitoring frequency of climate-related activities. Description of how the Board addresses climate-related issues in the definition of corporate strategy and the monitoring process in relation to progress in the defined objectives;
 - disclosure b) Description of management's role in assessing and managing climate-related risks and opportunities: description of the operational roles in managing climate-related issues at management level and how management and the Board communicate about them.
- Strategy:
 - disclosure a) Description of climate-related risks and opportunities the organization has identified over the short, medium, and long term: description of risks and opportunities by sector and geographical area, taking into account Tables A1.1 and A1.2 of the TCFD Annex. Description of how short, medium and long term time horizons are taken into account. Description of significant exposures of the loan portfolio and other financial assets in relation to physical and transition risks;
 - disclosure b) Description of the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning: description of the areas on which the Group directs its strategic planning and of the scenario analyses carried out by the Group as a starting point for integrating climate factors into its credit policies and business strategies;
 - disclosure c) Description of the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario: description of the scenario analyses carried out by the Group considering scenarios consistent with a transition to a low-carbon economy, taking into account Section D of the TCFD Recommendations.

- Risk management:
 - disclosure a) Description of the organization’s processes for identifying and assessing climate-related risks: description of the risk identification and management process adopted by the organisation. Description of climate risk factors in relation to traditional banking risks (credit risk, market risk, operational risk, reputational risk, liquidity risk and strategic risk);
 - disclosure b) Description of the organization’s processes for managing climate-related risks: description of the risk management process, taking into account Tables A1.1 and A1.2 of the TCFD Annex;
 - disclosure c) Description of how the processes for identifying, assessing and managing climate-related risks are integrated into the organization’s overall risk management: description of the identification process for identifying, assessing and managing climate-related risks and integration into the Group’s risk management framework.
- Metrics and targets:
 - disclosure a) Disclosure of the metrics used by the organisation to assess, climate-related risks and opportunities in line with its strategy and risk management process: description of the metrics selected to measure climate-related risks and opportunities associated with energy use, direct and indirect emissions, and the Group’s level of exposure to physical and transition risks by sector and geographic area, taking into account Table A2.1 of the TCFD Annex;
 - disclosure b) Disclosure of Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions: reporting of direct Scope 1 and indirect Scope 2 and Scope 3 emissions, including emissions related to the credit and securities portfolio, in line with the GHG Protocol methodology and the PCAF¹ Standard;
 - disclosure c) Description of the targets used by the organization to manage climate-related risks and opportunities and performance against targets: description of the climate-related objectives defined by the Group as part of its Business Plan, in the short, medium and long term.

The disclosures included in the TCFD Report were subject to a limited assurance engagement according to the criteria set forth in the ISAE 3000 Revised principle by Deloitte & Touche, on a voluntary basis.

1 Partnership for Carbon Accounting Financials.

Contents

| | | |
|----------|---|-----------|
| 1 | INTRODUCTION | 6 |
| 1.1 | The Current Context | 6 |
| 1.2 | The Group's Role | 7 |
| 1.2.1 | Commitments and Memberships | 7 |
| 1.2.2 | Results Obtained | 9 |
| 1.2.3 | Climate Action | 10 |
| 1.3 | Executive Summary | 11 |
| 2 | GOVERNANCE | 16 |
| 2.1 | Presentation of Group Governance | 16 |
| 2.2 | Governance of Top Management on Climate | 17 |
| 2.2.1 | Roles and Responsibilities of the Board of Directors | 17 |
| 2.2.2 | Roles and Responsibilities of the Internal Board Committees | 17 |
| 2.2.3 | The Board's Self-Assessment | 18 |
| 2.3 | The ESG Management Committee | 19 |
| 2.4 | The ESG Strategy Office | 20 |
| 2.5 | Remuneration policies | 21 |
| 2.6 | Climate-Related Trainings | 22 |
| 3 | STRATEGY | 23 |
| 3.1 | The Group's Sustainability Framework | 23 |
| 3.2 | Climate-related Risks and Opportunities | 24 |
| 3.2.1 | Climate-related Risks | 24 |
| 3.2.2 | Climate-related Opportunities | 27 |
| 3.3 | Group Strategy | 27 |
| 3.3.1 | Enhancing the Green Offer | 28 |
| 3.3.2 | Redesigning the Data Governance Model | 32 |
| 3.3.3 | Engaging the Value Chain | 32 |
| 3.3.4 | Reducing Direct Impacts | 33 |
| 3.4 | The Evolution of Strategic Planning from an ESG Perspective | 35 |
| 3.5 | Architecture of the Scenario Analysis | 35 |
| 3.5.1 | Transition Risk | 38 |
| 3.5.2 | Physical Risk | 40 |
| 3.6 | Calculating the Carbon Footprint of the Portfolio | 42 |
| 3.7 | Alignment with Supervisory Expectations | 45 |

| | | |
|----------|---|-----------|
| 4 | RISK MANAGEMENT | 46 |
| 4.1 | ESG Infusion and Risk Management | 46 |
| 4.2 | Risk Identification, Assessment and Measurement | 47 |
| 4.3 | Management and Mitigation | 49 |
| 4.3.1 | Risk Governance Processes | 50 |
| 4.3.2 | Risk Appetite Framework | 51 |
| 4.3.3 | ICAAP and ILAAP | 51 |
| 4.3.4 | Internal Risk Forecasting and Stress Testing Programme | 51 |
| 4.4 | Monitoring and Reporting | 52 |
| 4.5 | Credit policies | 53 |
| 4.6 | The Business Continuity Plan | 55 |
| 4.7 | Assessment of risks associated with the Group's real estate | 56 |

| | | |
|----------|--|-----------|
| 5 | METRICS AND TARGETS | 57 |
| 5.1 | Climate Risk Indicators | 57 |
| 5.1.1 | Transition Risk | 57 |
| 5.1.2 | Physical Risks | 58 |
| 5.2 | Emissions | 72 |
| 5.2.1 | Scope 1 and 2 | 72 |
| 5.2.2 | Scope 3 | 73 |
| 5.3 | Targets and Commitments for the Future | 78 |
| 5.3.1 | 2022-2030 Energy Plan | 78 |
| 5.3.2 | Financing the Transition | 78 |
| 5.3.3 | Net-Zero Banking Alliance | 79 |
| 5.3.4 | Principles for Responsible Banking | 80 |

ANNEXES

| | |
|---------------------------------|----|
| Annex 1 - KRI Conversion Table | 81 |
| Annex 2 - KPI Conversion Table | 83 |
| Annex 3 - GICS Sectors In Depth | 89 |
| Independent Auditor's Report | 90 |

1. INTRODUCTION

1.1 The Current Context

The Global Risk Scenario

It is essential to define global actions to limit climate change in order to protect ecosystems and ensure sustainable intra-generational and intergenerational growth. Climate and environmental issues are increasingly at the centre of policy makers' agendas and will pose the main challenges of the next decade, also considering their strong correlation with macroeconomic, geopolitical and social variables. This is the snapshot portrayed in the World Economic Forum's "Global Risks Report 2024"¹, which identifies a marked predominance of climate and environment-related risks in the short and long term, exacerbated by the failed evolution of large-scale management and monitoring systems².

COP15, COP28 and the Paris Agreement

Recognising the urgency of the climate crisis, at the 28th annual meeting of the Conference of Parties (COP) organised by the United Nations (UN), national governments renewed their commitment to limit the global temperature increase to within 1.5 °C compared to pre-industrial levels, as enshrined in the Paris Agreement. The Conference also included a proposal to activate universal cooperation on decarbonisation initiatives, including phasing out coal, reducing the use of methane gas, combating deforestation, and specific actions for the food and agriculture sector, including for the protection of biodiversity.

UNEP FI Initiatives

The financial community will play a pivotal role in this respect, thanks to its ability to direct capital flows towards an economy with a lower environmental impact. This is why the United Nations Organisation established the Environment Programme Finance Initiative (UNEP FI), a network of banks, insurers and investors created to accelerate sustainable development and catalyse actions to support the transition to more sustainable and inclusive economic paradigms. Prominent UNEP FI initiatives include the Principles for Responsible Banking, a framework for identifying and defining targets for reducing the main economic, social and environmental impacts associated with banking business, and the Net-Zero Banking Alliance (NZBA), an alliance of the world's most virtuous banking institutions ready to set an example in defining decarbonisation targets for their credit and investment portfolios in the medium to long term, which the BPER Group has subscribed to.

European Policies and Regulations

The policy promoted by the European Green Deal aims to support sustainable development as the growth strategy of the European Union and to achieve the goal of becoming the first continent to achieve climate neutrality by 2050, fostering the creation of new jobs and boosting innovation, thereby contributing to a fair and inclusive transition. This is the background to the Action Plan for Financing Sustainable Growth aimed at financial sector actors, with the objective of driving a fair and orderly transition towards a financial sector that is more resilient to climate risk and to introduce incentives promoting sustainable investments. Therefore, a key role is also played by the Supervisory Authorities such as the European Central Bank (hereinafter also "ECB"), the European Banking Authority (hereinafter also "EBA") and the national ones, such as the Bank of Italy. With particular reference to climate and environmental risks, in 2020 the ECB published the Guide on climate-related and environmental risks³, with which it initiated an engagement process with banking sector stakeholders using different methods, including an initial self-assessment and definition of action plans and a subsequent "Thematic review on climate and environmental risks" held between January 2022 and August 2022. The remediation activities, begun in September 2022 and currently underway, will be completed by December 2024.

The work carried out by the European Parliament related to the enactment of the Corporate Sustainability Reporting Directive (CSRD). The CSRD will significantly broaden the range of companies subject to sustainability reporting and introduce new obligations to ensure greater completeness, comparability, reliability and consistency of sustainability information in relation to the themes of Environment, Social and Governance (ESG), also with respect to the broader sustainable finance framework, including the Sustainable Financial Disclosure Regulation (SFDR) and the EU Taxonomy Regulation. The European Sustainability Reporting Standards (ESRS) are an essential pillar of CSRD. The ESRSs have been officially adopted by the European Commission on 31 July 2023 and published in the EU Official Journal on 22 December 2023. With the adoption of the ESRSs, companies within the EU must follow a uniform framework for their sustainability reporting, as of 1 January 2024.

1 "The Global Risks Report 2024" of the World Economic Forum is available at the following [link](#).

2 A clear example has been the high number of extreme climate events that have taken place in Italy during 2023, such as those in Emilia-Romagna and Tuscany, with casualties and billions worth of damages.

3 ECB Guide on climate-related and environmental risks - Supervisory expectations for risk management and disclosure, 27 November 2020.

Open Challenges

Moving from setting climate ambitions to implementing a realistic decarbonisation strategy requires that companies allocate significant financial resources to strengthen the climate resilience of their business. Meanwhile, the banking sector will have to evolve its risk management and market reporting systems, on the one hand, and will be called upon to identify and seize the new opportunities associated with the transition to a low-carbon economy and an emerging definition of competitiveness of supply that gives increasing weight to sustainability issues, on the other. There are still many open challenges, all closely linked to the availability, quality and definition of a single data classification system.

1.2 The Group's Role

1.2.1 Commitments and Memberships

Commitment to the TCFD Framework

The BPER Group confirms its commitment to take an active part in the fight against climate change by pursuing a series of initiatives, also of a voluntary nature, aimed at improving risk management processes and the ability to seize climate-related opportunities. As evidence of this, in December 2021 the Group decided to adhere to the TCFD framework by highlighting, at first in the Consolidated Non-Financial Statement (henceforth "CNFS") referring to the financial year 2021 and, subsequently, as of the financial year 2022, in a specific Report, the path undertaken to define an effective governance model, a resilient industrial strategy, state-of-the-art climate risk management processes and short, medium and long term objectives consistent with the Group's commitments.

Actions for climate and environmental stability

Beginning in 2022, the Group put in place a significant set of actions to support a fair transition, such as joining the NZBA, and the subsequent definition of the first de-carbonisation targets of its portfolios in certain priority sectors, in line with Bank's aims to support a sustainable transition, the launch of the new 2022-2025 BPER e-volution Business Plan which includes all the evolutionary ESG projects (which exploit ESG Infusion leverage), including the Energy Plan, and the adoption of three new policies: the ESG Policy, the ESG-linked Loan Origination Policy and the ESG Investment Policy for the Management of the Group's proprietary portfolio. In addition, 2023 saw the Bank continue its efforts to align with the ECB requests related to the "Thematic review on climate and environmental risks", which follows on along the path set in 2020 with the publication of the "Guide on climate-related and environmental risks".

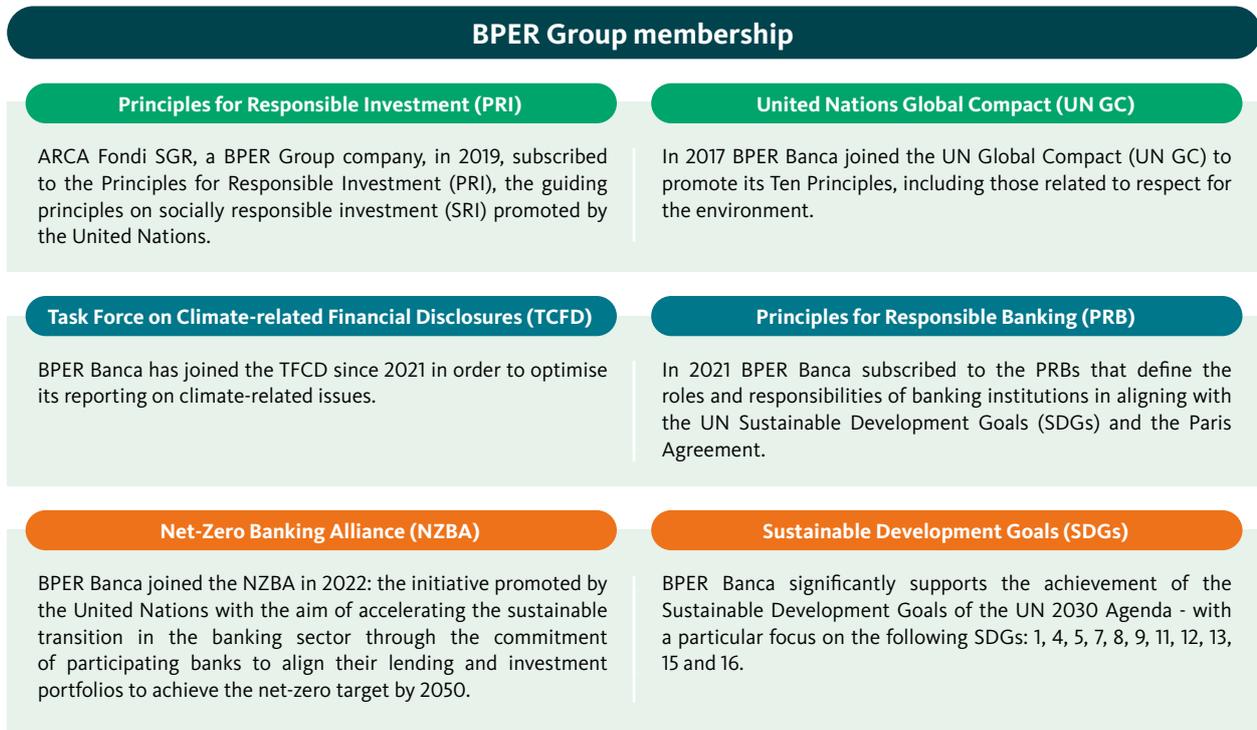
The Group has also continued to monitor the carbon footprint of its credit and investment portfolios by expanding the scope of companies included in the estimate and confirmed its compliance with the Principles for Responsible Banking, identifying among its own areas of commitment the climate change, for which a series of SMART Targets have been established (for further details please refer to paragraph 5.3.4 Principles for Responsible Banking of this document and to the Principles for Responsible Banking 2023 Report published by the BPER Group).

Lastly, aware that the main challenges of the coming years will be played out in the field of ESG data and information, the Group has restructured its data governance architecture by creating the BPER Data Platform: a multi-channel platform for data storage and processing that contains company data and which will serve as the basis for the evolution of climate and environmental risk management processes. In fact, BPER has acquired ESG data related to its own customers from Infoprovider. Furthermore, as of 2022, the Bank has set up a first pilot project for the provision of ESG questionnaires designed to acquire single name data, addressed, in the first year, to a cluster of approximately 350 customers, with a gradual expansion of the scope of companies covered over the course of 2023, taking into account the counterparties which, owing to their exposure threshold or to the sector to which they belong, are considered most representative.

International statements and guidelines to which the Group refers

These concrete actions fall within a broader perimeter of sustainable development principles set out in the declarations and guidelines that the BPER Group follows, such as the Universal Declaration of Human Rights, the OECD Guidelines for Multinational Enterprises and the Paris Agreement on Climate Change. These principles provide the value framework which inspires the BPER Group's operations and outlines its policies for the creation of shared long term value.

Figure 1: The BPER Group's membership of international frameworks for sustainable development, the environment and the climate.



To find out more about the memberships reference should be made to the 2023 CNFS of the BPER Group including the Integrated Report and Consolidated Financial Report of the BPER Banca Group as at 31 December 2023.

1.2.2 Results Obtained

The BPER Group's main achievements in 2023 are indicated below.

Further details can be found in the Consolidated Non-Financial Statement 2023⁴.

Figure 2: The BPER Group's climate results as at 31 December 2023



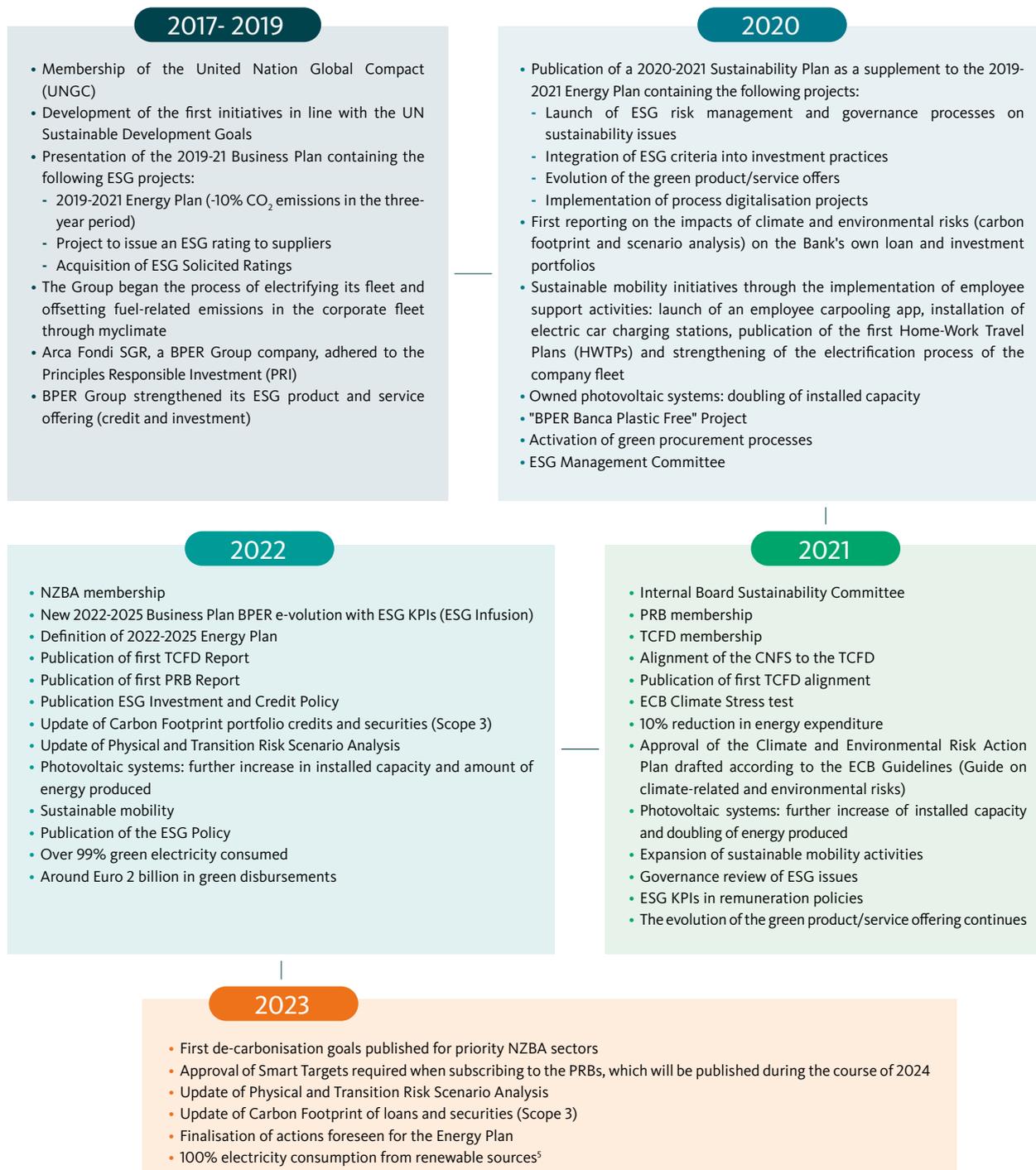
⁴ With reference to the percentage of electricity from renewable sources, it should be noted that the value, equal to 99.55% is rounded up. For more information, please refer to the 2023 CNFS. The Unsolicited ratings taken into consideration are: ISS ESG, S&P CSA, CDP Climate Change Questionnaire, Moody's Analytics, MSCI ESG Ratings Research. The Solicited ratings taken into consideration are: Standard Ethics Rating (SER), S&P ESG Evaluation, Sustainable Fitch, Sustainalytics. For further details on the results obtained, reference should be made to the Integrated Report and Consolidated Financial Report of the BPER Banca Group as at 31 December 2023 and the 2023 CNFS.

1.2.3 Climate Action

The following infographic shows the main actions implemented by the BPER Group from 2017 to date to combat Climate Change and reduce environmental impacts.

For further details, please refer to previous editions of the Consolidated Non-Financial Statement published on the Bank's institutional website.

Figure 3: Timeline of climate-related actions



5 It should be noted that the value of electricity consumption from renewable sources during 2023 was rounded up as it was equal to 99.55% of the total. This percentage takes into account both the electricity purchased and used from renewable sources and electricity produced independently by its own photovoltaic systems and consumed by the Group.

1.3 Executive Summary

Table 1: Executive summary of the BPER Group's reporting on the 11 recommendations of the TCFD framework

| Recommendation | BPER's Reporting | Reference in the 2023 Report |
|---|--|------------------------------|
| GOVERNANCE | | |
| a) Describe the board's oversight of climate-related risks and opportunities | <ul style="list-style-type: none"> In November 2022, BPER issued the new ESG Policy. It clearly and precisely identifies the commitments undertaken by the Group and included in the 2022-2025 BPER e-volution Business Plan in relation to sustainability and climate issues, as well as the roles and responsibilities of the governance bodies. More specifically: <ul style="list-style-type: none"> The BoD defines the Group strategy applied to sustainability and climate-related issues; The CEO, within the context of Sustainability, implements the strategic lines and the Plan and oversees the related measures; the Internal Board Control and Risk Committee supports the Board of Directors in the oversight of climate risks and in the process of integrating them into the Group's risk map; the Internal Board Sustainability Committee supports the Board of Directors on sustainability and climate issues, ensuring the pursuit of sustainable development; the Board of Directors approved an action plan for the gradual alignment with the expectations of the European Central Bank, which was then fully integrated into the 2022-25 BPER e-volution Business Plan; the Group's sustainability performance is monitored quarterly through specific reporting; ESG objectives and indicators were defined within the remuneration policies linked to the targets of the Business Plan. | Section 2.1, 2.2, 2.5 |
| b) Describe management's role in assessing and managing climate-related risks and opportunities | <ul style="list-style-type: none"> The ESG Policy also defines the roles and responsibilities of the BPER Group's departments in relation to sustainability and climate issues; The Group has established an ESG Management Committee to facilitate the coordination of Corporate and Group Functions with regard to sustainability and climate issues, and to support the CEO in the operational management thereof. The Committee normally meets on a quarterly basis and each member reports to the Board of Directors on the activities within their remit; The ESG Strategy Service supports the Managerial Sustainability Committee in the operational management of sustainability and climate issues in accordance with the provisions of the Business Plan which integrates Sustainability issues; The Group has a Risk Committee (management) chaired by the CEO, of which the Chief Risk Officer is the secretary. The Committee has consultative powers and supports the Delegated Director in the activities connected with the definition and implementation of the Risk Appetite Framework, of the risk governance policies (including ESG risks) and of the capital adequacy process of the Group and of the Companies that are a part of it. | Section 2.1, 2.3, 2.4 |
| STRATEGY | | |
| a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term | <ul style="list-style-type: none"> In response to regulatory developments and the demands of regulatory bodies, the Group is committed to integrating climate and environmental risk factors and defining the respective transmission channels within traditional risk management processes. The Group, within its sustainability strategy, has identified a series of opportunities linked to climate on a medium to short term (1-3 years) time frame, consistent with the 2022-2025 BPER e-volution Business Plan, that takes into consideration the positive externalities it can generate, including acting as a partner to support the transition of its customers; The Group has identified the carbon-related assets within its own credit and security portfolio, as well as the level of exposure to climate risk of its credit portfolio. | Section 3.2 |

CONTINUED

| Recommendation | BPER's Reporting | Reference in the 2023 Report |
|---|---|-------------------------------------|
| STRATEGY | | |
| <p>b) Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning</p> | <ul style="list-style-type: none"> • The Group's sustainability strategy is embodied in the ESG Infusion Programme, an integral and founding part of the new Business Plan; • The Group's strategy is based on the following cornerstones: <ul style="list-style-type: none"> – enhancing the green offer; – redesigning the data governance model; – engaging the value chain (customers and suppliers); – reduction of direct impacts; – reviewing risk management processes; • These 5 pillars are expanded by the constant development of the scenario analysis methodology and the portfolio carbon footprint monitoring activities, also thanks to the definition, during 2023, of the first de-carbonisation targets, in accordance with the NZBA, of its own portfolios in certain priority sectors (Power Generation and Oil & Gas). The Bank is working to adopt various strategies to balance its achievement of the set goals with the commercial and corporate sustainability of BPER Banca, while also reducing the impacts of the loans; • The Group has defined KPIs to measure and monitor the direct and indirect environmental impacts of its operations. In 2022, the Bank launched a project to evolve strategic planning processes with the objective of including ESG drivers through dedicated measures and KPIs (e.g., transition risks and physical risks). | <p>Section 3.3; 3.4; 3.6; 5.3.3</p> |
| <p>c) Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2 °C or lower scenario</p> | <ul style="list-style-type: none"> • In order to assess the risk areas related to climate change, the BPER Group has continued to carry out a new scenario analysis. In line with market best practices, where scenario analysis is concerned, an alignment has been undertaken with the scenarios produced by the Network for Greening the Financial System (NGFS) and the physical scenarios of the IPCC, taking into consideration the scenarios designed to keep the temperature beneath 2 °C, for a range of temporal horizons right up to 2050; • The scenario analysis was first carried out to provide disclosure consistent with the expectations of the regulatory frameworks, and constitutes a starting point for the integration of the other strategic analysis processes, especially with regard to credit policies and commercial strategies dedicated to customers most impacted by transition risk. • Starting in early 2022, the BPER Group was involved in two exercises mandated by the Supervisory Authority to assess the Group's overall compliance with climate and environmental risk guidelines, including the Thematic Review (completed during the month of December 2023) and the Regulatory Stress Test, seizing opportunities to further strengthen risk governance practices. In both cases, the BPER Group was well positioned compared to the most important European banks | <p>Section 3.5, 3.7</p> |

CONTINUED

| Recommendation | BPER's Reporting | Reference in the 2023 Report |
|---|---|------------------------------|
| RISK MANAGEMENT | | |
| <p>a) Describe the organization's processes for identifying and assessing climate-related risks</p> | <ul style="list-style-type: none"> Recognising all the possible risks to which the Group is or could be exposed starts from the analysis of prudential supervisory regulations, the best market practices, the macro-economic context and the assessments made by the Supervisory Bodies on the subject of risk oversight and management. The process of identifying relevant risks is the starting point and junction of all the Group's main strategic processes, and is carried out through a structured process involving the many corporate departments and functions. During the course of 2023, the BPER Group continued to strengthen its Risk Identification and Assessment process within the Group Risk Map, by assessing the impacts of climate and environmental risk factors on existing risks. In fact, the BPER Group considers climate and environmental risk factors as drivers that affect the entire spectrum of traditional banking risks. In particular, during the course of 2023, the Group has defined a progressive, multi-year adaptation plan with project milestones in line with the prudential expectations of the EU Regulator and such as to ensure internal consistency with other actions defined in the ESG Infusion plan, in order to support the construction of a consistent framework at Group level. In this context, the process of updating the long list of all the potential risks affected, starts out by identifying and analysing the systemic and idiosyncratic risk factors based on the reference context, including the indications provided by the Regulator in the context of the SSM Supervisory Priorities". This document actually contains in depth assessments of the main risk sand vulnerabilities that significant institutions directly supervised by the ECB are subject to on a temporal horizon of between 2 and 3 years. These risks are then compared to the reality of the BPER Group to establish which risks actually apply and thus establish the Risk Taxonomy. The risks included in the Risk Taxonomy are then subjected to a materiality analysis which can take into account regulatory obligations, the intrinsic nature of the risk within the business model or the likelihood of exceeding qualitative and quantitative materiality thresholds. The risks that are deemed material identify the Inventory Risk (the Group's material risks). In this context, continuing with the approach introduced in previous years, ESG risk factors continued to be fine-tuned and, in particular, quantitative indicators were strengthened to allow the materiality analysis of credit risk deriving from climate and environmental factors, quantity analysis was introduced to assess the materiality for the sub-category of ESG risk related to operational risks and ESG risk factors were introduced to the materiality/relevance analysis of market, reputational and strategic/business risks. Within the Group Risk Map, the document that details the relative position of the individual Group companies with regard to the risks of Pillar 1 and 2, both in current and forward-looking terms, a further complete tree diagram of ESG Risk was introduced that took into consideration its various components and sub-components and provided evidence of the current positioning of the BPER Group compared to this tree diagram, with particular reference to the risk identification framework. | <p>Section 4.1, 4.2</p> |

CONTINUED

| Recommendation | BPER's Reporting | Reference in the 2023 Report |
|--|---|------------------------------|
| RISK MANAGEMENT | | |
| <p>b) Describe the organization's processes for managing climate-related risks</p> | <ul style="list-style-type: none"> • Among the evolutions introduced during 2023 within the Risk Appetite Framework (RAF) these includes specific indicators added to the Risk Management Policy; in addition it's worth noting the presence in the RAF of an indicator related to the downgrading of the ESG Rating; • Based on the identified definitions and transmission channels, within the context of the 2023 ICAAP the forward-looking analyses designed to assess the possible impacts of climate transition dynamics and physical risks were expanded by adopting a double, both short term and long term, perspective, taking into account a range of alternative scenarios. Similar considerations also apply to the Internal Liquidity Adequacy Assessment Process (ILAAP); • The Group monitors the RAF metrics on a regular basis in order to promptly oversee any possible override of the identified risk tolerance and/or of the risk limits foreseen by the individual Risk Management Policies: these metrics are selected in line with the choices made within the ICAAP, ILAAP and Recovery Plan using consistent calibration methods and escalation processes. | <p>Section 4.1, 4.3</p> |
| <p>c) Describe how the processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management</p> | <ul style="list-style-type: none"> • The progressive analysis of climate and environmental risks complements and reinforces the existing risk management framework and is the result of an organisational process, which is an integral part of business management and helps to determine the Group's strategies and current operations. Following participation in thematic exercises conducted by the ECB, the Group identified areas for improvement to further strengthen the current framework; • The integration of ESG risks into the Risk Management framework performed during 2023 has enabled to develop the Risk Appetite Framework and the Internal Capital Adequacy Assessment Process (ICAAP) by identifying specific Key Risk Indicators and the implementation of special analyses. It has also allowed the process for the management of the individual risks to be updated and to integrate the risk reporting that is presented to the attention of the Company's bodies in order to report on the Group's Risk Profile, including ESG risk factors. The report also highlights the outcome of the Key Risk Indicator monitoring compared to the thresholds set out in the RAF, which if exceeded would entail the triggering of specific escalation mechanisms which, depending on the nature and causes responsible for it, could result in the implementation of mitigation measures or the acceptance of the risk. During the course of 2024, among other things, the modelling and designing of special protection methods will continue to be updated; • The Group has also strengthened its own Credit Risk Management Policy by identifying four indicators designed to assess the exposure to sectors that are subject to a high transition risk and subjects ruled out from the Paris Agreement, the relevant exposure to high physical risk subjects and the share of mortgage loans towards counterparties with high risk real estate collateral; • Further initiatives were planned and partly implemented on market, operational and reputational risk, liquidity and business; • The objective of the Group's Internal Risk Forecasting and Stress Testing Programme is to define the characteristics of the stress testing exercises carried out internally and used within the main risk governance processes. | <p>Section 4.3</p> |
| METRICS AND TARGETS | | |
| <p>a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process</p> | <ul style="list-style-type: none"> • The Group reports and monitors KPIs related to physical and transitional climate risk, energy consumption and Scope 1, 2 and 3 emissions; • The remuneration policies support the achievement of objectives linked to environmental sustainability by including specific KPIs in both the short and long term incentive plans which, as far as possible, reflect the commitments undertaken to mitigate climate risks; • The BPER Group has conducted a climate risk analysis on its loan portfolio, identifying the percentage of values exposed to high (high to very high) physical and transitional climate risk on short, medium and long term temporal horizons and on the "Delayed Transition", "Net Zero 2050" and "Current Policies" NGFS scenarios. The transition risks taken into consideration are those linked to "Policy and Legal", "Technology" and "Reputation", while the "Market" risks have been assessed as non-material. The exercise concerned: <ul style="list-style-type: none"> – the loan portfolio towards non-financial companies (NFCs) for both the transition and physical risk, to establish their impact on the income capacity and asset structure of the counterparties; – loans guaranteed by residential and commercial real estate, on which an assessment of the physical risk on the commercial value of the collateral was performed. • A physical risk analysis has also been carried out on the real estate owned by the BPER Group. | <p>Section 2.5, 5.1, 5.2</p> |

CONTINUED

| Recommendation | BPER's Reporting | Reference in the 2023 Report |
|--|--|------------------------------|
| METRICS AND TARGETS | | |
| b) Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks | <ul style="list-style-type: none"> The BPER Group quantifies and reports direct Scope 1 and indirect Scope 2 and Scope 3 emissions⁶; Specifically for investment-related emissions, the Group renewed the analysis of the carbon footprint of the loans and securities portfolio, with methodology defined by the PCAF. The emissions estimation was carried out as a preparatory activity for the definition of a decarbonisation strategy for more advanced climate risk management. | Section 5.2 |
| c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets | <ul style="list-style-type: none"> The BPER Group has integrated sustainability objectives into its business strategy through cross-cutting ESG Infusion levers. The programme identifies concrete actions and objectives to be achieved in the environmental field, as follows: <ul style="list-style-type: none"> external transition: support for the green transition of companies and households by earmarking a ceiling amount of over Euro 7 billion for green loans (sectors/supply chains, NRRP, the 110% 'Superbonus' tax deduction for the energy and seismic upgrading of properties, green mortgages, etc.); internal transition: Scope 1 science-based direct emissions reduction target, i.e., in line with the 1.5 °C scenario considered necessary to meet the Paris Agreement targets (-50.2% by 2030) equal to -23% by 2025. The target refers to total direct Scope 1 emissions, with reference to the 2021 baseline. It is also worth nothing that, during the course of 2023, the BPER Group also reached the objective of 100% electricity provision from renewable sources thanks to the underwriting of specific contracts with its suppliers; In 2022, the BPER Group, through its Parent Company BPER Banca, joined the Net-Zero Banking Alliance. The Group, during 2023, has established and communicated its first decarbonisation targets of its own portfolios for certain priority sectors: <ul style="list-style-type: none"> The first sector, related to "Power generation": 36% reduction in weighted emission intensity of counterparties in the portfolio, from a baseline of 256 kilograms of CO₂-equivalent per megawatt hour (256 kg CO₂e/MWh) in 2022 to an average value of 165 kilograms of CO₂-equivalent per megawatt hour (165 kg CO₂e/MWh) in 2030. The target set refers to financed emissions of 143 thousand CO₂-equivalent (143k tCO₂e), concerns power generation activities and considers Scope 1 and Scope 2 emissions for the companies in the referenced sector. The second target, the "Oil and gas" sector: 29% reduction in BPER Banca's financed emissions by 2030, starting from a baseline of 464 thousand tons of CO₂-equivalent (464k tCO₂e) in 2022. The target includes extraction, refining and distribution of oil, gas and their derivatives and covers Scope 1, 2 and 3 emissions of counterparties. | Section 5.3 |

⁶ With regard to Scope 3, the BPER Group has estimated the emissions defined by the GHG Protocol associated with the following categories i) Category 1 - Purchased goods and services, ii) Category 6 - Business Travel, iii) Category 15 - Investments.

2. GOVERNANCE

2.1 Presentation of Group Governance

During recent years the climate-related issues have been increasingly addressed and viewed as strategic; therefore, BPER has begun integrating them into its business processes by monitoring specific KPIs and objectives. The ESG metrics have been also been included in its remuneration policies, thus highlighting the close correlation between governance and strategy.

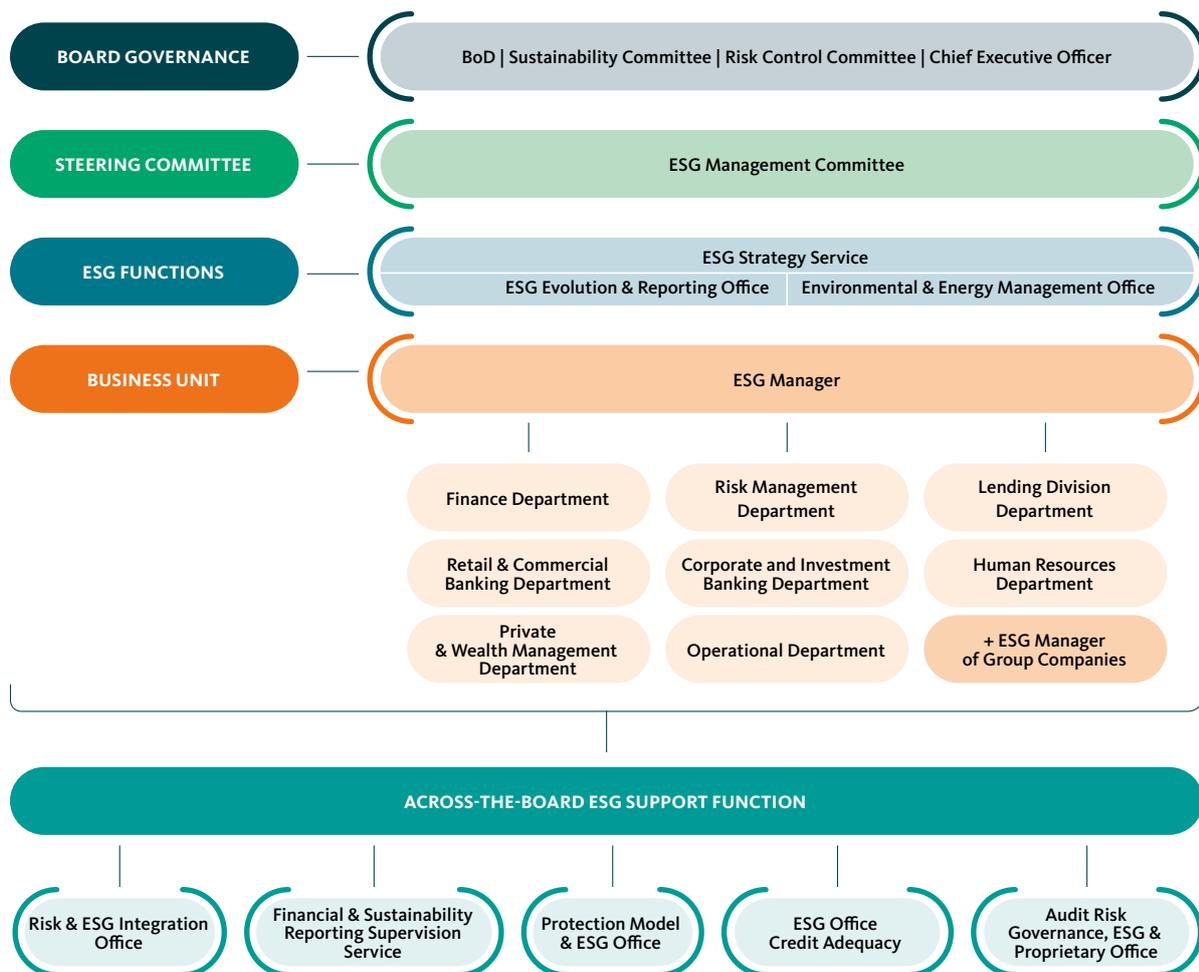
ESG Policy

The BPER Group's ESG governance was strongly reinforced in 2022 with the Board of Directors' approval of the "ESG Policy", which clearly and precisely identifies the Group's commitments on sustainability and climate change issues, as well as its management roles and responsibilities. The Policy aims to foster the spread of a culture of sustainability within the Group and to guide the governance, processes, articulations and corporate functions, in order to ensure the pursuit of sustainable growth with particular reference to ESG issues and a focus on combating Climate Change. The Policy has been defined based on the BPER Group's sustainability ambitions and in line with the principles outlined in the Corporate Governance Code of Borsa Italiana, in the documentation of competent international bodies, as well as in the directives issued by the Supervisory Authorities and Regulatory Bodies of the European banking sector, including, first and foremost, the EBA and the ECB.

The Governance Structure

The ESG Policy formally structures the Bank's new ESG Governance, even by establishing the roles and responsibilities assigned to the various departments of the BPER Group.

Figure 4: The BPER Group's sustainability governance



The new ESG policy, among other things, contains the key roles of the ESG Managers, defined within the structures that are active on ESG issues and who represent their pivotal figures, with the following functions:

- coordinates and monitors the activities defined to achieve the objectives;
- analyses the impacts of ESG issues in his/her structure of operation, for the issues within his/her competence, identifying risks and opportunities;
- coordinates relations with the stakeholders he/she comes into contact with on behalf of his/her structure of operation.

The ESG Managers are coordinated by the ESG Strategy Service and meet at ESG tables, assisting the same Office in implementing ESG projects. There are 35 ESG Managers, also present in the Legal Entities of Sardaleasing, Bibanca, Banco di Sardegna, Finitalia and BPER Factor.

In addition to the ESG Managers, other additional cross-the-board support functions within the Bank have been identified with specific knowledge on ESG issues, such as, by way of example: the Risk and ESG Integration Office, the ESG Credit Adequacy Office, the Financial & Sustainability Reporting Supervision Service, the Protection and ESG Modelling Office, the Audit Risk Governance, ESG & Property Office.

2.2 Governance of Top Management on Climate

The BPER Group's Board Governance over climate issues is assigned to three corporate bodies: the Board of Directors (BoD), the Internal Board Sustainability Committee and the Control and Risk Committee.

2.2.1 Roles and Responsibilities of the Board of Directors

The BoD defines Group guidelines and strategies relating to sustainability and climate-related issues. The Board of Directors is responsible for approving the Consolidated Non-Financial Statement (in the past also Sustainability Report), the Business Plan, the Risk Appetite Framework and the risk governance policies, integrating ESG and climate elements over time. The Board of Directors includes members with expertise on ESG issues. During the course of the year, the board meets on several occasions to discuss sustainability issues. For further details, please refer to the Corporate Governance Report published on the institutional website: <https://istituzionale.bper.it/governance/documenti>

The Board of Directors meet at least on a monthly basis and in 2023 addressed the Environmental and Climate Change issue in 11 meetings.

Finally, it's worth noting that the Managing Director, within the scope of its delegated powers, implements the strategic guidelines and the Plan and oversees the operational activities and actions to be implemented and monitored related to sustainability with the support of the ESG Strategy Office and the ESG Management Committee.

2.2.2 Roles and Responsibilities of the Internal Board Committees

In order to strengthen the oversight of sustainability and climate issues, the "ESG Policy" has also assigned roles and responsibilities to the Board's internal Control and Risk and Sustainability Committees.

Internal Board Control and Risk Committee

The Internal Board Control and Risk Committee supports the Board of Directors in assessing the ESG elements emphasised in the internal control system, identifying risks ("Group Risk Map"), risk objectives ("Risk Appetite"), tolerance thresholds ("Risk Tolerance") and strategies for capital and liquidity management, as well as on all relevant risks of the Bank and the BPER Group. In addition, the Control and Risk Committee periodically evaluates a number of possible scenarios, including stress scenarios, in order to determine how the ESG risk profile of the Bank and the BPER Group would react to external and internal events. The body meets to discuss sustainability and climate issues on a regular basis and among its various activities assesses the individual risk management policies and the quarterly reporting on risks which includes discussions specifically focusing on ESG risks. In 2023, the Committee addressed the Environment and Climate Change issue in 13 meetings.

Internal Board Sustainability Committee

The Sustainability Committee supports the Board of Directors' activities in the field of sustainability, with an impact on all the processes, articulations and corporate controls through which the Bank ensures the pursuit of sustainable development, with particular reference to environmental, social and governance issues. In particular, at least once a year the Committee examines and evaluates:

- the contents of the Group's ESG Policy as well as its ability to ensure, through constant dialogue with all stakeholders, the achievement of sustainable development objectives

- regulatory documents on ESG issues, final reports and other reports, including the Consolidated Non-Financial Statement;
- any reports by the CEO of problems and critical issues concerning sustainability that have arisen in the course of his work or of which he has otherwise become aware.

The Sustainability Committee also has a strategic role with regard to ESG and climate issues, and is responsible for assessing the Bank's positioning within sustainability metrics, indices and market benchmarks, and initiatives and programmes aimed at spreading a culture of sustainability and awareness of the need to pursue sustainable development throughout the Bank's organisational structures. As at today's date, the Sustainability Committee consists of the Chair of BPER Banca, Flavia Mazzarella, who acts as Chair of the Committee, and the directors Riccardo Barbieri (Deputy Chairperson, non-executive director) and Elisa Valeriani (non-executive and independent director). The Committee meets at least every two months. In 2023, this entity addressed the Environment and Climate Change issue in 9 meetings.

Monitoring sustainability performance

As part of the new 2022-2025 BPER e-volution Business Plan, the BPER Group has integrated sustainability through a cross-sectoral lever termed ESG Infusion. The projects with an ESG impact integrated in the Business Plan are monitored quarterly and submitted to the Sustainability Committee. The actions and objectives related to environmental issues are summarised below:

- external transition: support for the green transition of companies and households by earmarking a ceiling amount of over Euro 7 billion for green loans (specific sectors/supply chains, NRRP, the 110% 'Superbonus' tax deduction for the energy and seismic upgrading of properties, green mortgages);
- internal transition: Scope 1 science-based direct emissions reduction target, i.e., in line with the 1.5 °C scenario considered necessary to meet the Paris Agreement targets (-50.2% by 2030) equal to -23% by 2025. The target refers to total direct Scope 1 emissions, with a baseline of 2021; the energy efficiency activities are contained in the Energy Plan with a baseline of 2021 and planned closure in 2025. To this one must also add the increased target for the use of renewable energy. On this point, during the course of 2023, the BPER group has underwritten contracts with its suppliers to achieve the objective of 100% of its electricity consumption from renewable sources⁷;
- incorporating ESG targets in Management's long term incentive system with KPIs weighing 15% of the total;
- redesigning the internal Organisational Model to define roles and responsibilities in ESG;
- dissemination of the ESG culture and specific training activities: awareness-raising and involvement of the entire corporate workforce in sustainability issues as well as up-skilling and re-skilling actions for over 50% of employees;
- integration of ESG factors into risk, credit and investment processes;
- 25% expansion of the offering of ESG investment products and 25% increase in ESG-related assets under management compared to 31 December 2021 (Euro 12.7 billion);
- incorporating ESG criteria in the Bank's procurement choices (through supplier ESG assessment).

2.2.3 The Board's Self-Assessment

During the course of the 2022 financial year, to enable the board's self-assessment process, the BPER Group updated the self-assessment questionnaires of the Board of Directors and the Internal Board Committees in order to facilitate the expression of an opinion on the Group's work and on the processes of supervision and definition of strategic guidelines on sustainability and climate by Top Management.

With particular reference to the year 2023, the self-assessment process that took place during the first months of 2024 with the help of an external advisor.

By filling in a self-assessment questionnaire prepared by the advisor, each Director was called on to express a judgement, among other things, on the adequacy of the work performed by the Board and the Board's competent internal committees regarding medium to long term sustainability of the Bank's strategic approach, as well as its capacity to understand and managed the connected risks.

⁷ It should be noted that the value of electricity consumption from renewable sources during 2023 was rounded up as it was equal to 99.55% of the total. This percentage takes into account both the electricity purchased and used from renewable sources and electricity produced independently by its own photovoltaic systems and consumed by the Group.

2.3 The ESG Management Committee

In addition to the above-mentioned Sustainability Committee, a further Management Committee was established by the previous Board of Directors in 2020 and renamed the ESG Management Committee in 2022. This Committee, whose Regulation was updated in 2022, is comprised of the Chief Financial Officer (CFO), who acts as chair, all the Chiefs of the Parent Company, the Head of Management and Planning & Control and the Head of the ESG Strategy Service. The latter, together with the CFO, coordinates the activities and meetings of the Committee. The ESG Management Committee facilitates the coordination of Corporate and Group Departments with regard to sustainability issues and supports the CEO in the management of ESG and sustainability issues at both Parent Company and Group level. In addition, the Committee monitors the BPER Group's positioning in terms of sustainability and the 17 UN goals (SDGs) and promotes and manages the ESG strategy and sustainability issues, in line with what is defined in the Business Plan which is integrating the sustainability issues, with the support of the ESG Strategy Service.

The aforementioned Committee usually meets on a quarterly basis and in 2023 addressed the Environment and Climate Change issue in 4 meetings; in particular, besides an update on the progress of the projects concerning ESG impact, discussions focused on the integration of ESG factors in the processes underpinning the loan, risk management, strategic planning and investment services.

It should also be noted that the Group has a Risk Committee (management) chaired by the CEO, of which the Chief Risk Officer is the secretary. The Committee has consultative powers and supports the Delegated Director in the activities connected with the definition and implementation of the Risk Appetite Framework, of the risk governance policies (including ESG risks) and of the capital adequacy process of the Group and of the Companies that are a part of it.

2.4 The ESG Strategy Service

The ESG Strategy Service, set up in 2021 (formerly "Sustainability and ESG Management Office" and subsequently "ESG Strategy Office") has, as at 31 December 2023, 14 resources selected for their specific expertise in sustainability and climate matters. The Service supports the Managerial Sustainability Committee in the operational management of sustainability and climate issues in accordance with the provisions of the Business Plan which integrates Sustainability issues; Furthermore, it acts across-the-board at Group level on sustainability and climate issues, directly managing strategic planning and supporting the relevant corporate structures in achieving sustainable development goals.

Figure 5: The positioning of the ESG Strategy Service



A summary of the activities carried out by the ESG Strategy Service is provided below:

- sustainability reporting:
 - preparation of the Consolidated Non-Financial Statement (CNFS), integrated, for the year as at 31 December 2023, within the body of the Group Director's Report on Operations;
 - drafting of the Task force on Climate-related Financial Disclosure Report (TCFD);
 - drafting of the Principles for Responsible Banking (PRB);
 - with the definition of the relevant issues and sustainability indicators, the involvement and coordination of contributing departments, the owners of the information and the engagement of stakeholders;
- management of ESG Ratings;
- strategic and sustainability planning:
 - benchmarking in order to identify market trends and establish a proposal for the main ESG objectives to be included in the Business Plan as well as the participation in the Project definition stage for the aspects within their remit;
 - support in defining the budget ESG objectives;
 - consistent with the update, performed in January 2024, of the Regulations for the Business Plan, Annual Budget and Funding Plan in order to integrate the climate-related KPIs, thus enabling a complete integration of ESG factors into the company's strategy;
 - definition, monitoring and reporting of the ESG KPIs for the remuneration policies;
- ESG monitoring:
 - regulatory monitoring and macro-analysis of impacts by comparison with the functions of the new ESG objectives;
 - project monitoring, including the projects within the Business Plan, and ESG KPIs, with verification of the progress made;
 - monitoring and control of the management of direct and indirect environmental impact;
 - management of the Portfolio Alignment activities to monitor the emission alignment of the portfolio to de-carbonisation objectives;
- management of ESG data:
 - mapping of ESG information requirements;
 - coordination of data acquisition/purchase processes;
 - coordination of the ESG data management process;
 - regulatory and macro-analysis of the impacts of information requirements;
- management of environmental sustainability projects;
 - management of processes linked to stated de-carbonisation objectives;
 - management of relevant sustainability projects and identification of strategic ESG targets;
- coordination of discussions with supervisory bodies and stakeholders:
 - managing relations with the ECB on climate and environmental risk issues and coordinating cross-sectoral ESG exercises initiated by Supervisory Authorities (e.g., ECB Climate and Environmental Risk questionnaires);
 - managing relations and communications with international bodies regarding compliance with sustainability frameworks and ESG ratings;
 - monitoring consistency of ESG information disseminated outside the company, even through retrieval of relevant ESG data and information for clear, transparent and consistent communication of Group policies and actions;
 - management of reputational impacts related to sustainability issues;
- supports Committees and other corporate functions:
 - Internal Board Sustainability Committee on the promotion and management of the strategy on sustainability and climate issues;
 - ESG Management Committee in the operational management of sustainability issues in line what is set out in the plan objectives;
 - coordination of ESG Managers and company functions on ESG issues;
 - all Group structures on ESG issues also through the identification and delivery of training and consultancy services on sustainability issues and sustainability reporting;
- Energy & Mobility management:
 - proposal and supervision of measures to contain energy consumption, with a view to sustainability, within the various company activities even through specific projects and the launch of green initiatives (Energy Management);
 - management of the Energy Plan, definition, coordination, implementation and monitoring of the objectives;
 - mobility management activities with the identification of initiatives to reduce environmental impacts due to business mobility and employees' home-to-work mobility.

2.5 Remuneration policies

The Group's remuneration and incentive policies are aligned with the short and long term strategic objectives to create value for shareholders, employees, customers and all Group stakeholders. In particular, the remuneration policies support the achievement of objectives linked to environmental sustainability by including specific KPIs in both the short and long term incentive plans which, as far as possible, reflect the commitments undertaken to mitigate climate risks.

This is made possible by:

- the four year Long-term Incentive Plan (LTI) linked to the 2022-2025 Business Plan and based on BPER Banca shares and is designed to support the alignment of Management interests in the creation of long term value for shareholders and stakeholders. Introduced in 2022, in addition to the CEO and the MD, it also involves the Group's top management and key resources for the achievement of the 2025 strategic objectives (approximately 70 people in total within the Group). In this context, within the range of objectives 4 ESG metrics are included that carry an overall weight of 15% of which the two outlined below are dedicated to "green" strategies.

Figure 6: the Long term incentive plan metrics

| Area | Objective | Target |
|---------------------|--|---|
| Sustainable finance | Green financing plafond | Euro 7 billion disbursed to ESG businesses and households by 2025 |
| Energy transition | Reduction of CO ₂ emissions | -23% emissions by 2025 |

The "Energy Transition" objective will mainly be achieved by pursuing the actions contained in the energy plan (energy efficiency measures) that includes energy consumption and emissions.

- The variable MBO 2023 (Management By Objectives) remuneration and incentive system aimed at furthering the achievement of objectives consistent with the strategic guidelines detailed in the Plan, including those related to sustainability issues. This system is based on the Strategic Form assigned to the CEO and the Managing Director which outline the KPI's of the so called "Material Risk Takers", henceforth MRTs) and includes an ESG metric that accounts for 20% share and refers to six objectives, believed to be strategic in the short term, and that refer to project areas of the Business Plan⁸, among which we specifically wish to highlight:

20% - ESG goals (so-called meta KPIs)

Assets under management: increase in ESG investments

Green Loan Ceiling: loans specifically dedicated to investments in the area of sustainability (ESG)

Implementation of BEMS (Building Energy Management System): increase in solutions designed to monitor and optimise the energy performance of buildings and carried by Bank branches

Net Zero Banking Alliance: calculation of the carbon footprint of loan and investment portfolios; decarbonisation target setting for 2030 and 2050 for "high" emission sectors; implementation of monitoring tools for indirect emissions generated by the company's value chain (so called "Scope 3")

ESG Ratings: retention of the current Moody's ESG Solution, S&P ESG Evaluation and CDP ratings.

8 Further details on the ceilings and payout curves of these objectives can be found in the "2023 Report on Remuneration Policy and Compensation paid".

The short term incentive system (MBO 2023) calls for the allocation of ESG objectives essentially to all the most relevant personnel (MRTs) with different procedures depending on whether they are C-level managers or not with a weighting of between 10% and 15%⁹, possibly in combination with specific ESG objectives linked to their area of responsibility or with the objectives of the so called "manager assessment". A drip down effect is also foreseen for some of the Staff and Semi-central figures that are not part of the most relevant personnel with a weighting generally speaking of between 10% and 15%. Among the ESG objectives, especially the KPIs linked to the products placed by the Bank (i.e. ESG loans, "green" residential mortgages", sustainably managed assets) for the commercial departments and objectives such as the Net-Zero Banking Alliance and the reduction in the use of paper for departments that handle loans or transactions. The assignment of ESG objectives is extremely pervasive throughout the corporate structure, it ranges from the so called Top managers, and then feeds down to the heads of department, and occasionally even to the office heads when they are directly engaged in achieving a specific objective.

As at 31 December 2023, all ESG targets contained in the MBO had been met. For further details, please refer to chapter "1.3.2 Remuneration Policies" of the Consolidated Non-Financial Statement for the financial year 2023.

2.6 Climate-Related Trainings

Internal training is one of the cornerstones of the Group's approach to sustainability. In 2023, over 62,400 hours of training were provided to employees on ESG issues. The definition of an appropriate learning strategy for the personnel training path is assigned to the Talent & Internal Communication Service. In line with the objectives of the Business Plan which calls for the dissemination of ESG culture, it's worth noting that the ESG Managers, key active figures on ESG issues hailing from all sectors of the Bank, have been provided with special classroom and webinar training to become process innovators and promoters of applicable initiatives to ensure that ESG issues become part of BPER's banking operations. Finally, in 2023 the ESG training for the CEO and Top management continued and was also centred around climate and environmental risks.

As for ESG training specifically designed for the members of the Board of Directors it's worth noting that two training sessions were held in 2023, one on the issues surrounding the evolution of corporate reporting, the principles for the drafting and content of the CNFS, and the other concerning the risks, opportunities and management of the ESG transition.

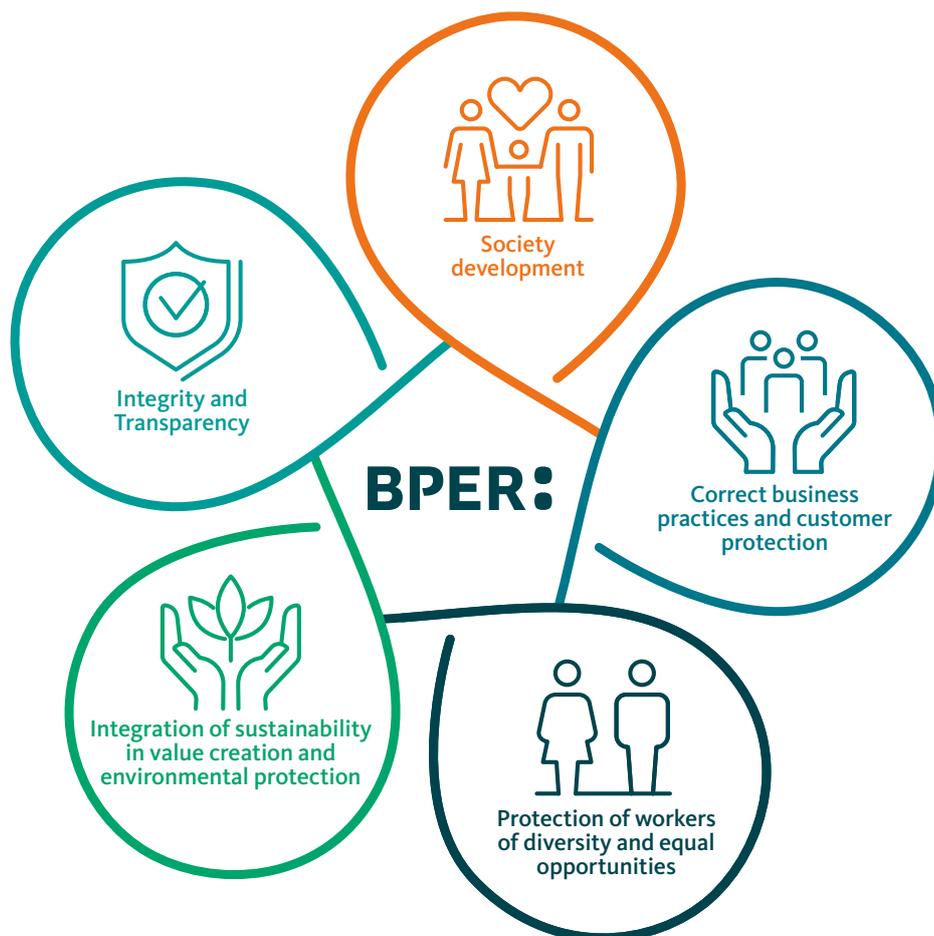
⁹ The "MRTs" are resources that can have a substantial impact on the risk profile of the entity on the basis of the criteria foreseen by current legislation. For further information: 2023 Report on Remuneration Policy and Compensation Paid" (section I) paragraph 7.3.

3. STRATEGY

3.1 The Group's Sustainability Framework

Drafted on the basis of the Group's inspiring principles, this Report provides an overview of the activities put in place to manage risks and identify climate-related opportunities and integrate them into strategic and operational business decisions. The Group's guiding principles described in the "ESG Policy" are:

Figure 7: The BPER Group's 5 guiding principles



With particular reference to climate issues, the BPER Group recognises the importance of integrating environmental sustainability into business processes to create shared value, not only to meet global challenges but also to create long term opportunities and contribute to a just transition. With this Report, the Group intends to demonstrate its awareness of sustainability issues, with particular reference to the climate, and its active commitment to integrating the principles to which it refers in its own operations and in the objectives it has already set and will set for itself, demonstrating its will to strengthen and implement the values of responsibility, loyalty and concreteness and respect for people, the environment and society as a whole.

3.2 Climate-related risks and opportunities

3.2.1 Climate-related Risks

In accordance with the relevant literature, including the ECB Guidelines¹⁰ on climate-related and environmental risks, the Report on the role of environmental and social risks in the prudential framework¹¹ of the EBA, the TCFD Recommendations and the TCFD Annex, the analysis of the climate-related risks has identified two risk categories:

- transition risk: risks arising from the transition to a low-carbon future, involving impacts caused by changes in policies and regulations, adoption of low-impact technologies, changes in markets and consumer trends;
- physical risk: risk arising from extreme weather events (acute) and gradual changes in climate as well as environmental degradation (chronic).

Generally speaking the temporal horizons adopted within the Risk Management processes appear consistent with those considered as part of the strategic planning processes (short term: annual, medium term: 3/5 years; long term: more than 10 years). Additionally, a few specific processes (see table 4, paragraph 4.1 ESG Infusion and Risk Management) prescribe the use of longer term temporal horizons (up to 2050, involving various low impact economy transition scenarios, which embody different temperature evolution hypotheses) with a view to understanding the potential impacts connected to climate risk factors (including scenarios designed to contain the temperature below 2 °C).

In line with the prudential Supervisory regulations, the BPER Group carries out an accurate identification of the risks to which it is or could be exposed on at least an annual basis, which then leads to the updating of the "Group Risk Map" document.

During the course of 2023 and the first months of 2024, in line with what had been planned and communicated by the Supervisory Authority, the integration of ESG issues within the entire structure of the Group's Risk Management continued, including the strengthening of the materiality analyses of these risk factors within the context of the risk identification process (for more details on this process please refer to paragraph 4.2 Risk identification, assessment and measurement).

The results of the materiality analysis of climate and environmental factors performed in 2023 are provided below:

Table 2: Summary of the results of the materiality analysis from a risk-by-risk perspective

| MACRO CATEGORIES | MATERIALITY OF CLIMATE-RELATED AND ENVIRONMENTAL FACTORS |
|--------------------------|--|
| Credit Risk | The credit risk sub-category resulting from climate factors is considered material for the BPER Group. |
| Market Risk | ESG risk factors are not material for the BPER Group |
| Operational Risk | The ESG risk sub-category within the context of operational risks is material for the BPER Group |
| Reputational Risk | ESG risk factors are material for the BPER Group |
| Liquidity risk | Environmental risk factors are material for the BPER Group |
| Strategic Risk | ESG risk factors are material for the BPER Group |

¹⁰ "Guide on climate-related and environmental risks", available at the following [link](#).

¹¹ "Report On The role of Environmental and Social Risks in the Prudential Framework", available at the following [link](#).

For a better understanding, by way of non-limiting example, we provide a synoptic view of the main impacts expected from the material risks identified in the Risk Map.

Table 3: Example of possible impacts expected from a risk-by-risk perspective

| MACRO CATEGORIES | IMPACT OF CLIMATE-RELATED AND ENVIRONMENTAL FACTORS |
|--------------------------|---|
| Credit risk | The national and European policies that tend towards a low carbon emission economy, featuring greater energy efficiency, could cause major adaptation costs and less profitability, especially for economic sectors/areas with high direct and indirect GHG emissions. Therefore, depending on the level of exposure of the Group in these sectors, there is a possibility that the risk profile of the counterparties could worsen, in terms of increased default and migration risk with a direct impact on impairment policies. Furthermore, the PD (Probability of Default) and LGD (Loss Given Default) Risk parameters could be directly impacted by the probability of extreme weather events occurring and/or the effectiveness of energy transition policies implemented by portfolio counterparties. As a complement, collateral valuations could also be revised in light of physical risk exposure based on geographical location |
| Market risk | The macro-economic contexts featuring strong transition policies towards a green economy could entail a sudden redefinition of the price of equity, debt and derivative securities, with particular focus on products linked to brown activities and/or sectors with a resulting negative impact on the Group's banking and trading book portfolio. Serious physical events at national and EU level could lead to changes in market expectations and higher expected volatility. In the specific context of the Group, transition policies and adverse weather events could have a negative impact on the securities issued by financial, corporate and government counterparties present in the bank's portfolio which could lead to an increased equity and credit spread risk |
| Operational risk | Extreme climate and environmental events capable of causing material damage to buildings, branches, data processing centres could result in potentially negative impacts with possible repercussions on the Group's operations. |
| Reputational risk | The reputational damage resulting from a critical climate event that might prejudice the normal operation of the institute or resulting from the decision to provide loans to companies connected with polluting activities. Possible negative impact on the Group's operations following possible decisions, statements or commercial relations contrary to supportive climate and environmental policies, or negative company issues and bad governance practices. |
| Liquidity risk | Possible impact on the liquidity and funding profile if, following adverse climate events or to cover costs resulting from the climate transition, the Group's customers ended up needing liquidity by accessing their current and deposit accounts and/or the credit lines granted. Furthermore, the sudden redefinition of the price of portfolio securities (particularly for securities of issuers connected to brown activities/sectors) could reduce the value of the liquid assets and thus negatively influence the Group's cash reserves. |
| Strategic risk | In the presence of strong transition policies and the increase in the frequency and intensity of acute and chronic physical events in certain geographical areas, a failure to promptly react and adjust to contextual changes could jeopardize the viability and sustainability of the business model. |

The activities for the evolution of the Risk Map described above and the related evidence in terms of the risk materiality have resulted in a strong reinforcement of the risk identification process; however, the assessment of potential areas where this process can be further developed is still in progress, with a view to pinpointing with a greater accuracy the specific characteristics of these kinds of risk alongside all regulatory developments.

With reference to the time frames used in the various Risk Management processes, including that of risk identification, reference should be made to paragraph 4.1 ESG Infusion and Risk Management, and especially to table 6, where an overview is provided in which the various objectives, frequencies and time frames of the main processes are defined.

Lastly, in 2024, a pilot project was set up with the aim of developing the materiality analysis by emphasizing the reference time frame (short, medium and long term; the latter can stretch as far as 2050); furthermore, for physical risks only, assessments were done for each individual acute hazard (including, by way of example, flood, wildfire, landslide and wind gust) and chronic ones (including, for example, flood, changing temperature, heat stress, changing precipitation patterns and types, sea level rise).

With particular reference to the transition risk, the various transmission channels through which it passes were analysed, which include the regulatory context, technological innovation and market sentiment. This exercise is consistent with the settings, metrics and time frames of the "scenario analysis" described in paragraph 3.5 Architecture of the Scenario Analysis.

For a detailed overview of the state of progress of the risk analysis reference should be made to paragraphs 4.2 Risk identification, assessment and measurement, 5.1 Climate Risk Indicators and 5.2 Emissions.

3.2.2 Climate-related Opportunities

The BPER Group is committed, within the scope of its sustainability strategy, to identifying climate-related opportunities, focusing on the positive externalities that the Group can generate on the economy, the environment and people, also in support of national and EU policy objectives for a just transition, and on the positive financial implications determined by contextual evolutions, such as the National Recovery and Resilience Plan (NRRP) and the new 2021-2027 Programme, which the Group can and must access, in line with its own reference principles. The BPER Group thus aims to become a credible partner in supporting the transition path of its customers, consistent with the challenges that each economic sector will have to face in terms of climate and the Group's current business model.

The main climate opportunities identified by the Group over a short-to-medium-term time horizon (short term: yearly; medium term: 3/5 years) consistent with the 2022-2025 BPER e-volution Business Plan, more details of which can be found in section 3.3 of this Report.

Table 4: Climate-related opportunities identified by the BPER Group

| | |
|---|---|
| <p>Energy transition</p> | <p>Financing sustainable investments to support companies in the ecological transition, for the implementation of projects in pursuit of environmental objectives as defined by the Green New Deal and the construction of sustainable energy generation facilities</p> |
| <p>Sustainable construction</p> | <p>Financing companies and individuals for the purchase and construction of new energy-efficient buildings and for the renovation of existing buildings to support sustainability and energy savings</p> |
| <p>Other sectors connected to the Subsidised Finance opportunities (NRRP and 2021-2027 Plan)</p> | <p>Sustainable and customised funding compared to the public offers of Subsidised Finance (i.e. NRRP) for the main industry specific areas concerning tourism, agriculture, trade, logistics, research and energy, by exploiting the Tender Search Service (Servizio Cercabandi) that the Bank has made available to companies that intend to exploit the subsidized loan measures alongside the commercial offers of the Bank.</p> |

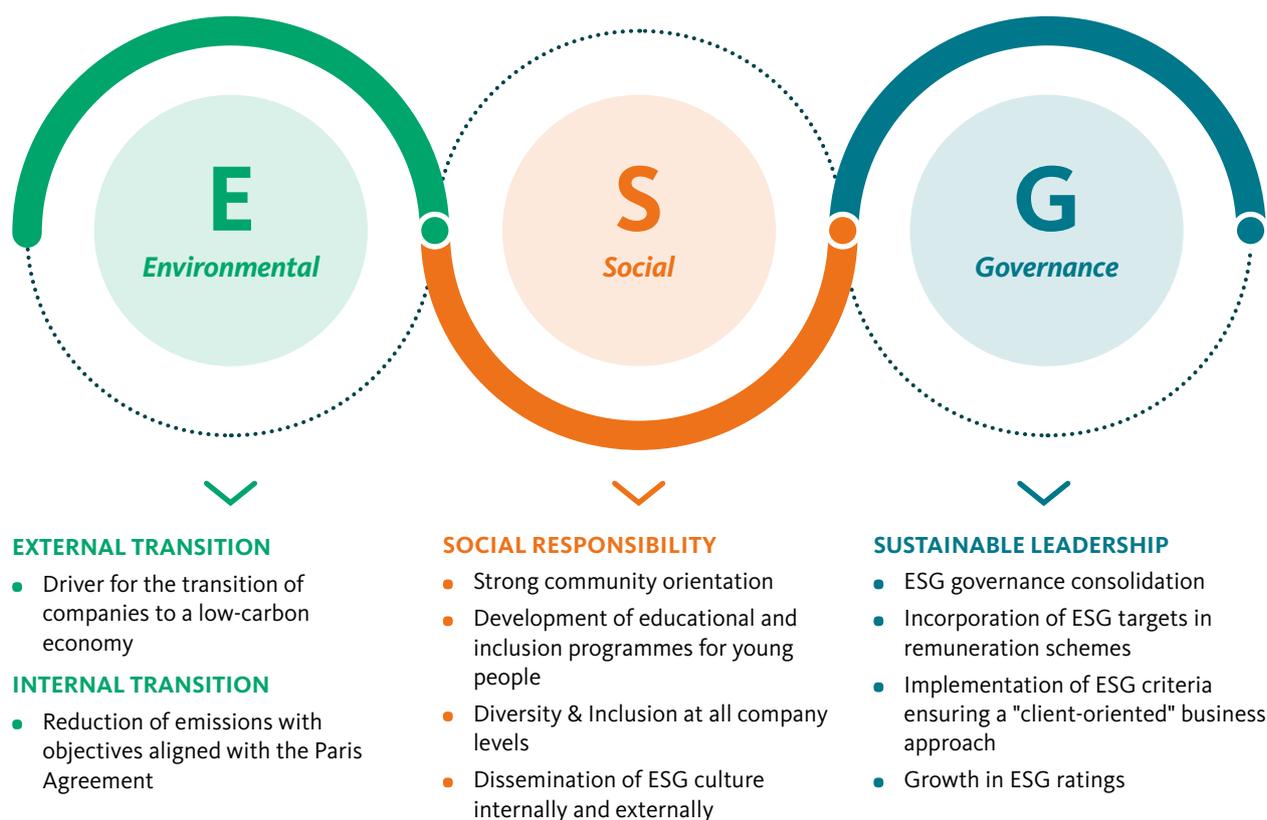
3.3 Group Strategy

In order to implement an effective climate strategy capable on the one hand of managing risks and on the other of multiplying the detection of available opportunities, the BPER Group has defined five cornerstones in its approach:

- enhancing the green offer;
- redesigning the data governance model;
- engaging the value chain (customers and suppliers);
- reduction of direct impacts;
- reviewing risk management processes.

In addition to these five cornerstones is the continuous evolution of the scenario analysis methodology and monitoring the portfolio's carbon footprint, with the commitment to continue defining decarbonisation targets and alignment with the Paris Agreement (NZBA targets) during the course of the year. Moreover, these analyses are an important support in the definition of Credit policies (thanks to the assessment of exposure in relation to the different sectors in the portfolio) and commercial evaluations, especially with regard to the analysis of short and long term transition risk. The Group's climate strategy took concrete form in the cross-cutting ESG Infusion lever, an integral and founding part of the new Business Plan designed with the aim of creating long term shared value by strengthening sustainability issues within the corporate business model. The BPER Group intends to improve its leadership in the management of sustainability issues to become more efficient, competitive and to be a credible and reliable partner for its customers in the development of a more sustainable, fair and inclusive society. The across-the-board ESG Infusion lever includes concrete actions to be pursued along lines of action on issues related to the environment, society and governance. The activities are monitored quarterly by the Sustainability Committee.

Figure 8: ESG Infusion



KPIs have been defined specifically for climate-related matters in order to monitor direct and indirect environmental impacts and the support provided to customers for a just transition, with a focus on financial inclusion, diversity management and support for the weaker fringes of society.

3.3.1 Enhancing the Green Offer

The enhancement of the green offer is a central element of the strategy outlined in the cross-cutting ESG Infusion lever of the Business Plan, and is identified as an enabling factor for the achievement of the sustainability objectives the Group intends to set itself in the next three years, and broader in the medium and long term. Of the 12 KPIs defined and monitored, four relate to the enhancement of products and services offered to customers with particular reference to credit and wealth management activities, which are characteristic of the banking Group's business. In particular, of the four KPIs related to products and services, three have a specific ESG sustainability bearing and in particular on the environment:

- ceiling on the provision of green credit;
- increase in the commercial catalogue of sustainable funds and SICAVs;
- sustainable Asset Under Management (AuM) growth.

A description of how environmental and climate issues are integrated into the loan and investment products and services is provided below:

Credit

To give new impetus to its sustainability lending strategy within its business plan, the BPER Group has set a ceiling on green lending, identifying challenging targets that at the same time reflect the Group's clear commitment to mitigating the phenomenon of climate change, through the gradual decarbonisation of its portfolio. For additional details to those provided below, please refer to section "4.7 ESG Products and Sustainable Finance" of the BPER Group's 2023 CNFS.

Tax Credit

The BPER Group had already set up a business line in 2020 dedicated to the purchase of tax credits foreseen by the "Superbonus 110%" tax relief measure. This benefit introduced by the Relaunch Decree (Italian Decree Law 34/2020, converted by Italian Law 77/2020), allowed a 110% deduction of the expenses incurred for energy efficiency measures in buildings, installation of sustainable energy infrastructures (photovoltaic systems, electric vehicle charging stations, etc.) and/or reduction of buildings' vulnerability to seismic risk. During the course of 2023, approximately Euro 2.8 billion were paid out to purchase tax credits generated by green actions.

Corporate Investment Banking (CIB)

Project finance is part of the ethical products with environmental purposes and refers to the financing of projects aimed at the creation of systems for the production of energy from renewable sources (wind, photovoltaic, hydroelectric, biomass, etc.) or for infrastructural initiatives under concession (ports, hospitals, parking lots, various infrastructures, gas distribution systems, etc.). The distinctive element of project finance is to allow the implementation of projects of typically collective interest by bearing a large part of the cost thanks to medium-long term financing formulas, based essentially on the assessment of the individual projects' ability to support themselves. In addition, since 2016 the Bank has been offering the project finance instrument called Private Finance For Energy Efficiency (PF4EE) conceived by the European Commission. The instrument is aimed at providing incentives for investment in energy efficiency projects, facilitating access to sources of dedicated financing for companies thanks to information initiatives of European financial institutions and to the increase in resources available to the system to encourage investments. As part of this tool commercially known as BPER LIFE4ENERGY, BPER Banca provides specialised consultancy services on the main public subsidies available at territorial level and supports the implementation of energy diagnoses for the identification of efficiency enhancement measures.

During the first months of 2024 the new Sustainability Linked Loan ("SLL") of the BPER Group will be launched, with which the Bank hopes to guide and encourage its customers to improve their sustainability performance and reduce their environmental impact.

Companies

BPER Banca is also the "financing bank" of the Green New Deal Company Revolving Fund, an instrument that envisages granting contributions aimed at achieving environmental sustainability and energy efficiency for Italian companies. The measure was activated by the Department for Business and Made in Italy with a budget of Euro 750 million and is aimed at transposing European legislation focused on tackling climate and environmental problems.

In addition, in the wake of the opportunities arising from the Subsidised Finance (National Recovery and Resilience Plan "NRRP" and 21/27 Economic Programme), the Group has taken steps to support companies wishing to embark on an energy transition path through the provision of sustainable and customised financing solutions associated with the "Green" calls. BPER Banca focuses on the "Green" calls involving investments that contribute substantially to climate change mitigation and are selected by BPER Banca on a sectoral basis. The Group stands out for its activities in sectors such as tourism and agriculture.

These opportunities generated for the corporate world are complemented by various types of privileged financing granted by the BPER Group to mitigate the effects of climate change, such as:

- Fin Helios Aziende: financing dedicated to the installation of photovoltaic systems;
- Fin Energy: financing dedicated to companies wishing to invest in the installation of plants for producing electricity from renewable sources;
- Fin PMI Crisis Green: financing with a direct guarantee from the Central Guarantee Fund for SMEs structured to support companies on investments pursuing objectives related to energy efficiency or the diversification of energy production or consumption;
- SACE Green Loan: financing disbursed following an agreement signed with SACE that envisages financing, for a minimum amount of Euro 50 thousand up to a maximum amount of Euro 15 million, green projects in line with the EU Taxonomy;
- Regional Multi-purpose Energy Fund Financing: financing for companies in Emilia-Romagna, aimed at the promotion of energy efficiency and the development of the use of renewable energy in companies of the craft sector;
- Life4Energy (end of listing 21/12/2023): loan guaranteed by EIB (European Investment Bank) for companies that decide to undertake energy efficiency works, and especially photovoltaic systems. It's part of the "Private Finance For Energy Efficiency (PF4EE)" project supported by the European Union within the context of the LIFE PROGRAMME;
- Green Corporate Real Estate Residential Loan: funding for the purchase, construction and refurbishing of real estate for any intended use - residential, office, commercial or logistics - with high energy performance and efficiency;
- Fin Sabatini Green: finance linked to the Sabatini ter subsidy to support "green investments" within the context of programmes aiming to improve the eco-sustainability of products and manufacturing processes;
- Fin Sustainability: financing with direct guarantee by EIF (European Investment Fund) designed to facilitate access to loans by companies certified by the EIF as "Sustainable Enterprises" or that request funding for investments which the EIF classifies as "Green Investments".

Further, it should be noted that, as of 2024, a new loan product will be available termed Sustainability Linked Loan, linked to regular objectives that the beneficiary companies must achieve (KPIs), measured using Sustainability Performance Targets (SPTs).

Retail

The BPER Group has joined the European pilot project for energy efficiency interventions, and has created new lines of green financing for private individuals.

The Bank's offer consists of two types of loans: mortgages and personal loans. The Green Loan is reserved for customers who purchase eco-sustainable real estate units that are included in the A and B energy classes, in order to promote the purchase of buildings with a high energy efficiency rating. The Personal Loans have been devised for those who wish to install renewable energy systems, heat and water systems, thermal insulation, or buy electric or hybrid cars, scooters and electric bikes or latest-generation appliances. Its objective is to improve the energy efficiency of one's home, making it more ecological and sustainable, or to acquire other eco-sustainable instruments.

In line with the increasing national and European initiatives designed to promote energy saving and modernise real estate assets, with a view to rewarding the ecological choice made by the customer who purchases/builds/refurbishes energy efficient or requalified real estate properties, from 26 September to 22 December 2023 BPER also allocated a special ceiling of Euro 150 million for BPER and Euro 15 million for Banco di Sardegna, with a particularly advantageous pricing, for the surrogation/replacement of mortgage loans on residential buildings that fell within the A or B energy classes.

At the start of 2024 another new promotion was launched that was reserved for the purchase of residential units with energy classes A, B or C. In 2023 over Euro 481 million were disbursed for energy class A, B, or C mortgage loans.

Investments

The themes of sustainable development and responsible finance have become strategic in the choices of investors who are increasingly interested in green and sustainable products. Also, following the introduction of regulations by the European Union, in 2023 the main players in the financial sector have further increased their offer and commitments related to sustainable finance.

Wealth Management

The 2022-2025 Business Plan includes among its objectives a 25% expansion of the offer of ESG investment products and a 25% increase in ESG assets managed.

At the end of 2023, the Group offered 983 funds which promote environmental, social and governance (ESG) features or are focused on sustainable investments. The sustainable AuM amount to Euro 17.3 billion with an increase of 10.5% compared to the previous year (Euro 15.7 billion) and equal to 35% of total managed assets. Also, during the course of 2023, three ESG certificates were placed with a counter value at the end of December amounting to Euro 361 million.

Regarding the climate change issue, in specific terms, the Group has included in its ESG offer range a variety of climate strategies that focus on the risks and opportunities resulting from climate change:

- funds that invest in companies that are not yet sustainable (but intend to become so) and aim to create an impact through an active management of investments;
- funds that invest in companies that are contributing to the transition towards a low carbon emission economy through their products and services and which will benefit from this transition;
- funds that invest in companies that contribute or facilitate the transition towards clean energy;
- funds that invest in companies aligned with the Paris Agreement (so called Paris Aligned);
- funds that invest in companies with a reduced carbon intensity and/or footprint compared to a reference index;
- funds that invest in companies aligned with the principles of the circular economy;
- funds that invest in Green Bonds.

The Group takes into consideration the main negative effects on sustainability factors (Principal Adverse Impact or henceforth also "PAI") of its investment decisions taken as a participant in financial markets, within the context of its portfolio management service, and as a financial consultant within the context of its provision of consultancy services. In this context the following PAI indicators have been identified as being preeminent;

- PAI 2 - Carbon footprint;
- PAI 3 - GHG intensity (Corporate);
- PAI 5 - Share of non-renewable energy consumption and production;
- PAI 10 - Violations of the principles of the United Nations' Global Compact and OECD (Organisation for Economic Cooperation and Development) Guidelines for multinational corporations;
- PAI 15 - GHG Intensity (Sovereign Issuers and International Organisations).

On 30 June 2023, the Group as a market participant published its first statement on the main negative effects of investment decisions on sustainability factors and began regular monitoring of these indicators.

Since October, the Group has integrated its ESG reporting for its clientele with additional information regarding the sustainability characteristics of the products. In particular, the customers are informed on:

- the minimum share of the financial product invested in one or more activities that substantially contributed to the achievement of one or more environmental goals and that are considered eco-sustainable pursuant to Regulation (EU) 2020/852;
- the minimum share of the financial product invested in economic activities that contribute to achieve an environmental and/or social goal on condition that these investments do not significantly harm any other of said goals (DNSH - Do No Significant Harm) and that the companies that benefit from these investments comply with best governance practices pursuant to Regulation (EU) 2019/2088;
- the macro categories of PAI indicators that are taken into consideration by the financial product.

Arca Funds

Arca Fondi SGR (BPER Group company) has adhered to the United Nations Principles for Responsible Investment (UN PRI) since 2019. All the portfolios managed by the SGR integrate ESG risk factors into the Investment Process through the use of a proprietary rating model which, based on data from a qualified infoprovider, allows an ESG rating to be assigned to almost all of the financial instruments that are used for investment purposes. In addition to the overall ESG aggregate, ratings are also available for the three "pillars" E (Environmental), S (Social) and G (Governance). The ratings in the model can range between CCC and AAA with a scale that assumes the same granularity as that foreseen for credit ratings (i.e., the A rating is divided into A-, A and A+). The rating model used by Arca Fondi allows daily monitoring of the sustainability characteristics of individual financial instruments and aggregated funds.

During 2023 an internal climate and environmental risk estimate model has been developed associated to the managed portfolios, which enables the quantification of the potential impact of a worsening climate crisis. Studies have also been carried out to analyse the impact of hydrological events on customer's investment decisions.

Arca Fondi also has a product range dedicated to the topic of sustainability, called Sistema ESG Leaders, which only includes UCITSs (Undertakings for Collective Investment in Transferable Securities) that fall within the specifications of Art. 8 or Art. 9 of European Regulation 2088/2019 (SFDR).

The funds in the ESG Leaders range are characterised by their rigorous approach and high sustainability profiles. The proposed investment solutions include the Arca Oxygen Plus funds, which invest in financial instruments of issuers committed to reducing greenhouse gas emissions in line with the objectives of the Paris Agreement, the Arca Blue Leaders fund, a UCITS that invests in companies that make sustainable and efficient use of water and marine resources and the Arca Social Leaders Fund, an innovative product that selects the issuers' securities with the best revenue prospects and that pay the greatest attention to Social issues. During 2023 the Arca Green Bond fund was also launched which invests in green bonds, classified as Art. 9 pursuant to the SFDR. The placement of the ESG Leaders range funds are associated with local environmental and social initiatives.

In particular, during the course of 2023 the reforestation activities in collaboration with AzzeroCO₂ and Lega Ambiente continued as well as the beach, river and lake bank cleaning campaign carried out in collaboration with MareVivo, while a collaboration was also initiated with the Laureus Foundation to support the Social OSA Overlimits project, which promotes integration and equal opportunities in sports.

As at 30 December 2023, the assets of the products classified under Art. 8 and Art. 9 pursuant to Regulation (EU) 2019/2088 (Euro 8.3 billion) amounted to approximately 21% of the assets managed by Arca. A few specifications of the product classified as Art. 9 are provided below:

- Arca Oxygen Plus 30: AUM Euro 79,267,816;
- Arca Oxygen Plus 50: AUM Euro 330,528,384;
- Arca Oxygen Plus 60: AUM Euro 41,929,650;
- America Climate Impact shares: AUM Euro 550,397,064;
- Europa Climate Impact Shares: AUM Euro 673,758,905;
- Arca Blue Leaders: AUM Euro 39,502,788;
- Arca Green Bond: AUM Euro 27,262,324;
- Arca Green Leaders: AUM Euro 158,772,782.

Beyond credit and wealth management activities, which are also monitored as part of business planning, the BPER Group consistently reflects its commitment to sustainability both in its investment activities and in setting rules for the issue of Green, Social and Sustainability bonds.

Investments owned

The BPER Group has changed the way it manages its financial investments, attributing greater weight to factors that favour sustainable growth attentive to society and the environment by adopting a specific "Policy on ESG (Environment, Social and Governance) Investments in the Management of the Proprietary Portfolio". The Group is committed to contributing to sustainable economic development by giving preference, in its investment choices and in general in the management of its financial portfolio, to companies that adopt virtuous practices centred on the use of environmentally-friendly production methods, on the guarantee of inclusive working conditions that respect human rights, and on the adoption of the best standards of corporate governance. As at 31 December 2023 the Group holds a financial portfolio with an ESG score equal to approximately Euro 2,343 million, of which close to one half (Euro 1,081 million) is related to Green Bonds, a 15% increase compared to the year 2022.

Green, Social and Sustainability Bond Framework

The BPER Group is formally committed to driving the transition of companies towards a low-carbon economy, in line with the objectives of the Paris Agreement, and promoting social and financial inclusion. BPER published the "Green, Social and Sustainability Bond Framework" as a confirmation of its commitment. This framework, updated in 2023, and aims to become the reference document for the issuance of Green, Social and Sustainability Bonds ("Sustainable Debt Instruments") by BPER Group entities.

The rationale underlying the BPER Group's Framework is to attract dedicated funding for loans and investments that bring positive environmental or social impacts and support the Group's commitment to building an innovative, inclusive and sustainable economy. The BPER Group's framework complies with the International Capital Market Association's ("ICMA") 2022 Guidelines, Green Bond Principles ("GBP"), Social Bond Principles ("SBP") and Sustainability Bond Guidelines ("SBG") and the EU Taxonomy Substantial Contribution Criteria.

The BPER Group aims to update its framework over time to remain in line with best market practices, policies and legislation on sustainable finance. More generally, this Framework may be subsequently updated as the BPER Group's sustainable financing needs change, new products are launched for customers and/or the sustainable financing market evolves.

BPER Banca, during the month of February 2024, has also successfully completed the placement of the first Senior Preferred bond qualified as "green", in compliance with the Group's GSS Bond Framework (Green, Social and Sustainability Bond Framework), designed for institutional investors. The amount placed equals Euro 500 million, with a 6 year expiry and the possibility of an early call after 5 years. The issue, the profits of which are earmarked to finance and/or refinance the Eligible Green Assets, is integrated within the BPER ESG strategy and provides tangible evidence of the fulfilment of environmental sustainability objectives.

3.3.2 Redesigning the Data Governance model

In 2022, the BPER Group kicked off its first data project to support the company's path towards implementing ESG-related actions. The project was mainly developed along four lines:

- supporting the preparation of the Consolidated Non-Financial Statement in terms of assessing the eligibility of assets, quantifying the carbon footprint of the loan portfolio and scenario analysis;
- defining Bank-wide nomenclature consistent with the European taxonomy for the classification of counterparties, assets and project purposes;
- assessing the data world for the identification and provision of information necessary to meet regulatory (EBA/ECB) and non-regulatory requirements;
- designing and initialising the ESG database for use by all the Bank's structures.

In 2023 the activities focused on gradually enriching the data of the BPER Data Platform and their use by the various functions of the Bank continued. It should be noted that especially during the course of 2023 an OCR (Optical Character Recognition) was developed to reach the Energy Performance Certificates (APEs) which enables the automatic detection of data related to energy performance contained in the certificate analysed by the Group's IT systems. For further details, please refer to section "4.5 Credit Policies" of this document and section "4.7 ESG products and Sustainable Finance" of the 2023 CNFS of the BPER Group.

3.3.3 Engaging the value chain

Supplier engagement

In order to strengthen the responsible approach in the supply chain, in cooperation with the ABC Consortium, from 2019 to 2021 the BPER Group implemented a supplier engagement project in order to assign a Sustainability Rating to the Group's top 200 suppliers. The pilot project included an evaluation system carried out through a documentary audit, after which the individual supplier received an ESG rating free of charge.

After the pilot engagement phase (2019-2021 Business Plan) was completed, the entire procurement process was revised in 2022 from an ESG perspective, with the aim of selecting both suppliers and purchased products. The Green Procurement project included in the 2022-2025 Business Plan, concerning the integration of ESG criteria in the procurement and supplier management processes, was developed starting from the need to realign corporate purchasing and consumption.

The procurement cycle for Group Companies, in accordance with the "Regulations for the purchasing process and payables cycle", governing the roles and responsibilities of the various functions involved, is overseen by the Procurement Service Centre. The mission of the service is to ensure that internal customers benefit from the availability of products and services that best satisfy their requirements, selecting suppliers that guarantee the best balance between price and quality of service, as well as those able to satisfy the Company's expectations in regard to social and environmental responsibility.

The risks relative to the supply chain are carefully governed through preliminary analysis and document requests that enable each supplier to be assessed as extensively as possible. The reputational risks in this area are mapped together with the designated office and monitored periodically. The Procurement Service Centre has recently engaged in a project aimed at revising the tools used during the various procurement stages that includes the implementation of a dedicated platform. New supplier assessment have been introduced and the supplies also take into account aspects related to ESG concerns.

For further details, please refer to section "1.5 Relations with Suppliers" of the BPER Group's 2023 CNFS.

Customer engagement

SME Project

The BPER Group, in collaboration with the Cattolica University of Piacenza, through its Territorial Offices and various local trade associations (e.g., Chambers of Commerce and/or Confindustria), BPER planned a national Roadshow, to be held during the 2022-2024 three year period, aimed at informing and educating SME customers and prospects on the topic of sustainability and the related opportunities available to report their ESG performance. This initiative is designed to highlight the opportunities, in terms of competitiveness, arising from embarking on a virtuous path related to sustainability issues and clear, transparent reporting on ESG performance. In fact, the BPER Group recognises the strategic and priority role of the banking system also with regard to the dissemination of useful information to start virtuous paths among SMEs and confirms its commitment to assisting its customers in the transition path with this initiative.

For further details, please refer to section "4.7 ESG Products and Sustainable Finance" of the BPER Group's 2023 CNFS.

ESG Assessment of Companies

During the course of 2022, BPER Banca began collaborating with CRIF S.p.A. and has continued to do so in 2023, with a view to administering ESG questionnaires to its customers through the Synesgy Platform. With this collaboration, the Group has equipped itself with an innovative tool in the market with which to carry out ESG data collection campaigns to acquire single name information on counterparties. This will allow a gradual reduction in the use of sectoral proxies for the definition of ESG data useful for risk management and credit granting processes, also in accordance with the requirements of banking Supervisory Authorities. The questionnaire was first sent to a cluster of about 350 customers, and in 2023 the perimeter was gradually extended.

3.3.4 Reducing direct impacts

2022-2030 Energy Plan

The BPER Group, in line with its commitment to align its business model with the Paris Agreement goals, has defined actions to save and improve energy efficiency to be carried out over a time horizon extending to 2030, with an intermediate step in 2025. During the course of 2023, the BPER Group has underwritten contracts with its suppliers to achieve the objective of 100% of its electrical energy consumption from renewable sources¹²;

During the course of 2023, the overall 10% increase in Scope 1 emissions compared to 2022 is attributable to: i) a greater use of refrigerant gases for air conditioning systems of the Group's offices, due to breakdowns to a few air conditioning systems and the expansion of the company's perimeter; ii) an increase in the number of oil-fuelled heating systems located in the former Carige site; iii) an increase in fuel consumption by the car pool following the expansion of the company's perimeter and resulting increase in work-related travel. These increases have been partly balanced out by the reduction in emissions resulting from a decreased use of natural gas due to the rationalisation plan that has led to the closure of a number of branches during 2023.

Based on this evidence, in 2022 the BPER Group defined and published the 2022-2030 Energy Plan, an integral part of the new 2022-2025 Business Plan, which aims to reduce its direct Scope 1 emissions by 23% by 2025 and halve them by 2030 (compared to the 2021 baseline), and to reach 100% of electricity purchased from renewable sources.

The Scope 1 and 2 emission reduction strategy defined by the BPER Group is aligned with the international community's calls for limiting the global average temperature increase in 2050 to within 1.5 °C compared to pre-industrial levels, and exploits the best practices available in the market for climate change mitigation. For further details, please refer to section "6.1.2 Energy Saving Measures" of the BPER Group's 2023 CNFS.

¹² It should be noted that the value of electricity consumption from renewable sources during 2023 was rounded up as it was equal to 99.55% of the total. This percentage takes into account both the electricity purchased and used from renewable sources and electricity produced independently by its own photovoltaic systems and consumed by the Group.

The active role of employees

The initiatives for the reduction of paper consumption

During the course of 2023, the Group's initiatives designed to reduce paper consumption include:

- dematerialisation of F24 forms with reinternalisation of branch processing;
- BPER CARD account statements online;
- promoting the use of AES (Authorised Electronic Signature) and QES (Qualified Electronic Signature) for the digital signature of banking documents;
- promotion of the Arca Click initiative aimed at reducing the frequency of sending coupon distribution and reporting documents;
- postal projects: a project designed to optimise the costs related to postage, which among the other repercussions has led to a substantial reduction of printouts and paper transmission of documents sent on a regular basis to customers related to the main relationships through unilateral measures designed to increase the use of Online Mail for digital customers.

All these initiatives made it possible to avoid emissions totalling 321 tCO₂e. For further details on paper-saving initiatives, please refer to section "6.2.1 Acquisition and Responsible Use of Resources" of the BPER Group's 2023 CNFS.

"Piantiamola di inquinare!" – Sustainable Mobility Project (Wecity)

For the third year running, in 2023 the BPER Group again implemented the initiative "Piantiamola di inquinare!" (Let's stop polluting!), with the aim of reducing the environmental impact linked to employee mobility and promoting the spread of a bicycle culture by encouraging its use for the home-work commute.

The 2023 edition, once again implemented in partnership with Wecity, involved around 300 employees spread across the Group's various branches who cycled, walked or rode a scooter to work for three months, covering a total of 54,000 km, thereby cutting around 7.5 tonnes of CO₂, equivalent to the result produced by more than 1,000 adult trees in one year by photosynthesis.

In line with the figures for the previous year, BPER Banca also makes the Jjob car pooling app available to its employees, which in the calendar year 2023 prevented the emission of 4.1 tCO₂ into the atmosphere, for a total of 31,898 km saved.

Paper on the correct use of energy with guidelines

Guidelines were also produced for employees, which included tips and actions to implement in order to foster the development of a corporate culture of responsibility regarding the use of air conditioning/lighting devices and systems. Through the Guidelines, BPER wishes to raise awareness among its employees on the subject of energy saving, and to promote virtuous behaviour also through the dissemination of information on the impacts of bad habits.

The Group aims to reduce energy waste in headquarters and branches through this employee engagement initiative, with significant effects on the direct environmental impacts it generates.

For further details, please refer to section "6.2.3 Projects and Initiatives" of the BPER Group's 2023 CNFS.

3.4 The evolution of strategic planning from an ESG perspective

The project named "P&C Climate Risk", that ended in the middle of September 2023, has enabled the Group to plan the enhancement of its processes linked to strategic planning to identify a few potential "climate-related" KPIs to be included in the main Planning and Control Management processes (for example the Budget process, the Business Plan process and the Funding Plan).

Within the first workshop, a short list of KPIs was selected, that can be classified under three main categories:

- Risk Management (i.e. exposure to physical risk - counterparties/collateral; Exposure to transition risk - company);
- Portfolio (i.e. ESG Portfolio with high/low ESG rating; Collateral with a certified high/low rating of its Energy Performance Certificate (EPC));
- Products and Services (i.e. Volume of "Green" bond emissions, volumes of "Green" loans).

To strengthen this process, in January 2024 the Regulations for the Business Plan, Annual Budget and Funding Plan were updated in order to integrate the climate-related KPIs and their related considerations, thus enabling a complete integration of ESG factors into the company's strategy.

With regard to the second workshop, two alignment exercises on credit portfolios have been performed:

- The first exercise, which took place in March of 2023, based on NGSF scenarios, identified 3 sectors among those expected to have a greater greenhouse gas emission reduction rate on their path to Net-Zero by 2050: the Oil & Gas sector, the Iron and Steel sector and the Real Estate sector;
- in July 2023 an additional analysis was performed that integrated the goals defined by the NZBA projects on the two sectors that are required to define their Net-Zero goals stated on 2 August 2023: Power Generation and Oil & Gas. Taking into account an intermediate macro climate scenario, which presumes a less "severe" transition than that envisaged by the NZBA scenario but which, nevertheless, calls for an acceleration of the activities compared to the "Current Policies scenario, the evolution of greenhouse gases by the counterparties within the context of the "target setting" appears to be aligned with the declared NZBA goals.

For further details on Financed Emissions compared to the carbon-related sectors (Energy, Transportation, Materials and Building, Agriculture, Food and Forest Products) reference should be made to chapter 5.2.2 Scope 3, which details the Financed Emissions and, in percentage terms, the ratio of Exposure and Emissions compared to the total.

3.5 Architecture of the scenario analysis

Scenario analysis is "a process for identifying and assessing the potential implications of a range of plausible future states under conditions of uncertainty. Scenarios are hypothetical constructs and not designed to deliver precise outcomes or forecasts. Scenarios provide a way for organizations to consider how the future might look if certain trends continue or certain conditions are met. Scenario analysis can be qualitative, relying on descriptive, written narratives, or quantitative, relying on numerical data and models, or some combination of both"¹³.

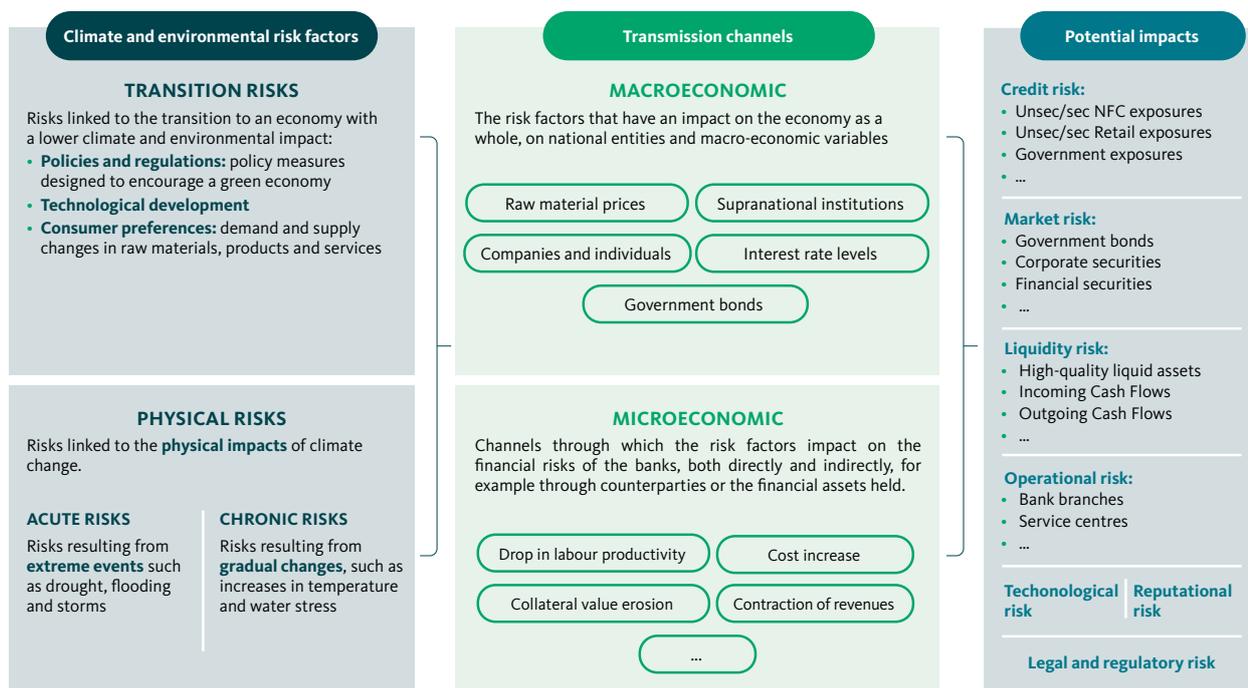
The risks linked to climate change are conventionally divided into transition risks, which produce negative financial effects caused by the transition to low emissions economy, and physical risks, both chronic and acute.

Transition and physical risks have an impact on economic activities which in turn affect the financial system. This impact can manifest itself via a two-fold transmission channel: at a macroeconomic and a microeconomic level.

- The macroeconomic transmission channel: refers to the mechanisms by which the risk factors affect macroeconomic dimensions, such as labour productivity and economic growth. These impacts have repercussions on the economic context in which the Bank operates;
- Microeconomic transmission channel: refers to the mechanisms by which the risk factors impact the Bank's individual customer counterparties, thus transmitting the risk to the Bank and, on a more general footing, to the financial system. The customer companies may see their operations affected, or their ability to access sources of funding. The impact on the Bank can also be indirect, through the specific financial assets of the affected companies held by the Bank.

13 TCFD - Task Force on Climate-related Financial Disclosure-June 2017.

Figure 9: Climate Risk Transmission Channels



The scenario analysis presented here is part of the development of a company process that aims to strengthen its ability to identify, assess and monitor Group risks. What is being represented for TCFD purposes is therefore consistent with the materiality and capital adequacy analyses (Internal Capital Adequacy Assessment Process, ICAAP) performed within the context of the aforementioned process. In this perspective, the analysis of the physical risk is consistent and connected at the outset with the analysis of the transition risk.

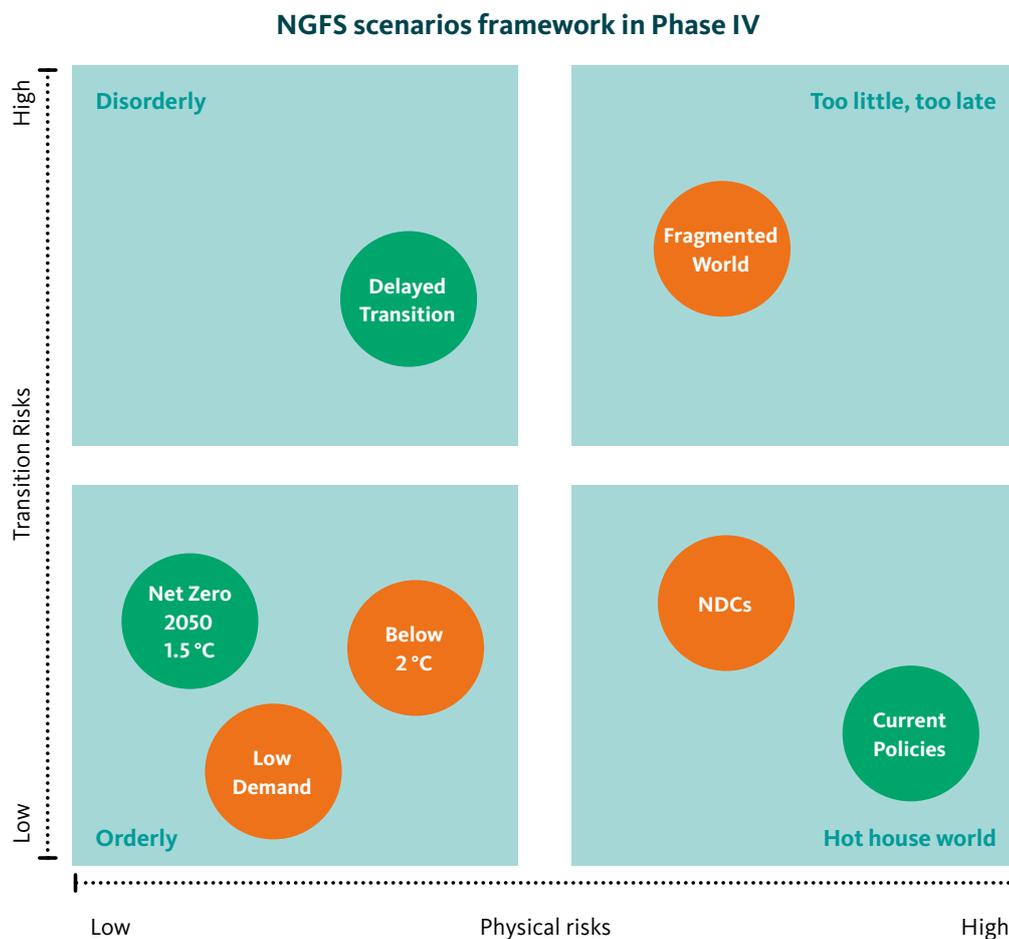
The analyses are based on simulations that depend on the reference scenario with a bottom-up approach, that incorporate all the granular information available to the Group (e.g. GHG emissions of funded counterparties, APE (Energy Performance Certifications) of collaterals, exact location of the real estate units and their commercial value at the time, geo-morphological characteristics of the area, etc.).

In line with market best practices, the scenario analysis has been aligned with the scenario developed by the Network for Greening the Financial System (NGFS)¹⁴ to their most updated version; these scenarios are an adaptation of the physical climate scenarios prepared by the Intergovernmental Panel on Climate Change (IPCC) to represent the evolution of temperatures depending on a range of pathways, referred to as the Representative Concentration Pathways (RCPs).

NGFS is a group of 127 Central Banks and Supervisory Authorities and 20 Observatories that has committed to sharing information and models, thus contributing to the development of the management of risks linked to the climate and the environment within the financial sector, with a view to supporting the transition towards a sustainable economy. The scenarios have therefore been developed to this end to provide a common starting point when analysing climate risks for the economy and the financial system. They have been created as a tool to shed light on potential future risks and prepare the financial system to weather the shocks they may entail. The NGFS scenarios are not actual forecasts, instead, they aim to explore a range of possible alternative climate hypotheses, and thus monitor the resulting evolution of climate change (physical risk) and of the policies, technology and changes to preferences (transition risk).

14 <https://www.ngfs.net/ngfs-scenarios-portal/explore>

Figure 10: NGFS scenarios



NGFS explores four main scenario categories, classified by level of risk as at 2100:

- Orderly transition: which presupposes that climate policies are promptly introduced and become gradually more stringent. The physical and transition risks are relatively contained;
- Disorderly transition: explores the outcomes of a higher transition risk due to policies being delayed or divergent between Countries and sectors;
- Hot house world: implies that some climate policies are implemented in a few jurisdictions, but a global level the efforts are not sufficient to halt a significant global warming. These scenarios entail serious physical risks;
- Too little too late: implies that a late and uncoordinated transition is unable to limit the physical risks. This type of scenario is present for the first time in stage IV.

The Stage IV of the NGFS consists in a set of seven macro-climate scenarios and one scenario (termed baseline, in which there is no climate damage) taken as a benchmark. Each NGFS scenario explores different hypotheses on the evolution of climate policies, emissions and temperature. Each scenario differs in terms of level of ambition, timing of the related policies, coordination and technological levers.

In the scenario analyses of the BPER Group three scenarios were considered as relevant:

- Net Zero 2050: belongs to the family of NGFS Orderly transition scenarios and limits global warming to +1.5 °C, by means of rigorous climate policies and innovation, managing to achieve zero net global CO₂ emissions around 2050;
- Delayed Transition: belongs to the Disorderly transition family and supposes that annual emissions do not decrease until 2030. Rigorous policies are required to limit warming below 2 °C;
- Current Policies scenario: belongs to the Hot House World family of scenarios; supposes that existing climate policies remain in place, but their level of ambition is not strengthened.

The Net Zero 2050 and Delayed Transition scenarios according to NGFS can be equated to the “low temperature scenario”, with a Representative Concentration Pathway (RCP) of 2.6. The “Current Policies” scenario belongs to the “high temperature scenario” class, with an RCP equal to 6.0.

The scenario analysis was first carried out to provide disclosure consistent with the expectations of the regulatory frameworks, constituting a starting point for the integration of the other strategic analysis processes as indicated above, especially with regard to credit policies and commercial strategies dedicated to customers most impacted by transition risk, for example the creation of new ad hoc products. For further details, please refer to section “4.7 ESG Products and Sustainable Finance” of the BPER Group's 2023 CNFS. The analysis was conducted with reference to:

- estimation of the physical risk on the loan portfolio at both company and real estate collateral level, as well as on the properties owned by the BPER Group;
- estimation of the transition risk on the loan portfolio at company level;
- estimation of the impact of environmental risk not linked to climate on a group of selected companies.

The data extraction period is 30 September 2023. The BPER Group Legal Entities involved are: BPER Banca, Banco di Sardegna, Bibanca, Banca Cesare Ponti and Sardaleasing.

The companies analysed are those belonging to the Loan to Customers portfolio with the following characteristics:

- Large Corporate, SMEs and Small Business segments;
- Exclusion of securities counterparties;
- Exclusion of companies without any Financial Statements;
- Exclusion of companies with geographical location missing or inconsistent (due to geolocation process required in measuring physical risks).

The decision to measure the macroeconomic and environmental effects over a long term time horizon is consistent with the TCFD Guidelines, which recommend choosing time horizons that are compatible with the Group's financial and investment planning, the duration of counterparties' main assets and activities, and national and international climate policies. The analysis was however also performed on medium and short term time horizons to provide an even more thorough representation of the climate and environmental risk drivers.

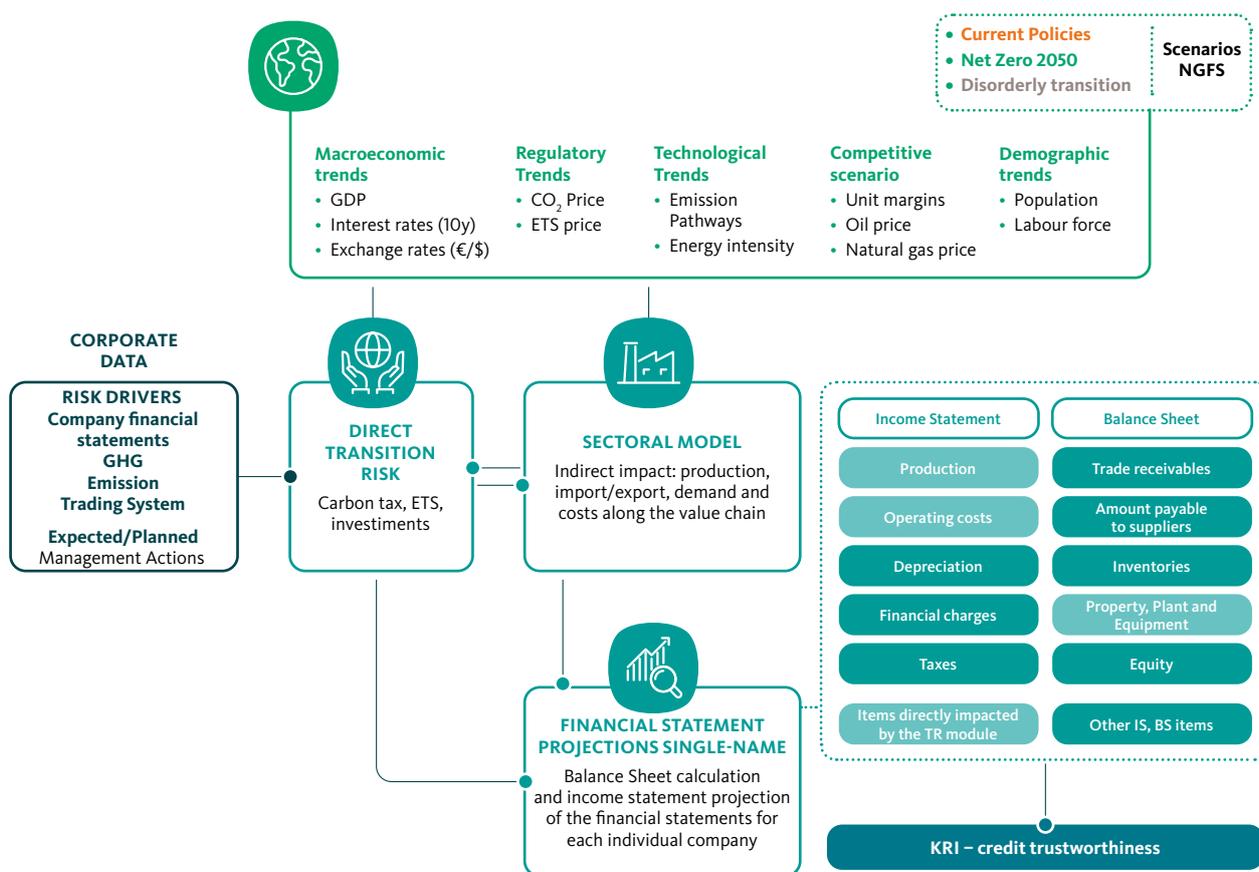
- Short term horizon (ST): considers the four coming years, consistent with the Bank's Strategic Planning processes;
- Medium term horizon (MT): considers the time interval up to seven years from the present and enables the BPER Group to adapt its strategies and initiatives to allow for the changed conditions due to emerging trends, market dynamics and stakeholder expectations;
- Long term horizon (LT): runs to 2050 and, besides alignment with the aforementioned TCFD guidelines, enables the BPER Group to assess the strategies and initiatives designed to achieve a future with a lower level of greenhouse gases and, more in general, alignment with global sustainability goals.

3.5.1 Transition risk

Transition risk represents the economic and financial impact suffered by the company as it transitions a sustainable “low carbon” or “low emission” economy. The transition towards a low emission economy takes on board the need to implement actions to mitigate and adapt to climate change and its effects. Specific elements of the transition envisage impactful changes related to policies, legislative changes, technological innovations and changes to markets. These changes can be driven by a range of factors:

- Legal and policy risks: these are risks linked to the development of policies designed to fight climate change and to support adaptation and the possible related legal disputes;
- Technological risks: result from the implementation of innovative technologies to support the transition; they may have a serious impact on companies and on the “business as usual” approach;
- Consumer preferences: they entail potentially sudden changes in the demand and supply of a few goods and services;
- Reputational risks: linked to the customer's perception of the company with regard to its contribution to the transition and possible repercussions on the reputation of the company itself.

Figure 11: Transition Risk analysis process



The development of the transition risk analysis is achieved by combining economic data and climate data change with the financial statements of the individual companies. The purpose of the analysis is to establish the potential impact of a transition scenario on the financial position of the individual company.

The transition scenario transmits the impacts of certain set variables, such as for example the adoption of a carbon tax and the variations in the price of raw materials, onto the individual companies. A specific de-carbonisation policy does in fact involve the adoption of a carbon tax that is levied on counterparties that are not aligned with the foreseen de-carbonisation pathway.

A few elements of the scenario are projected onto the company using a sectoral model, which applies the macro variables to production sectors, and thus establishes elements such as production, costs and demand. These elements are then transmitted to the individual company based on the production sector they belong to and projected onto the financial statements, defining operating costs and revenues (and related profit margins) aligned with the reference scenario.

The financial statement simulation will then encompass the specific dynamics of the reference transition scenario and produce a series of indicators related to the companies capacity to react to the scenario, its transition investment requirements and the riskiness dynamic as it affects its relations with the Bank. A summary of the credit rating of the counterparty based on the expected performance of the main items and indicators of the financial statement affected by the transition risk is used as a Key Risk Indicator (KRI). This permits the identification of a critical value for expected impact over recovery capacity.

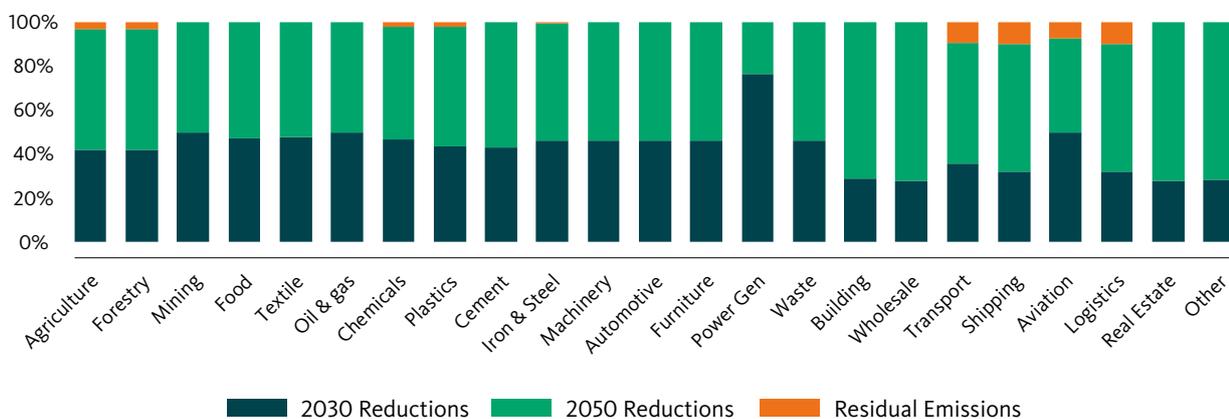
The NGFS climate scenarios envisage specific pathways for the reduction of GHG emissions for the various production sectors. Each sector, based on the internal dynamic characteristics of the production factors and the available and scalable technology, considers an emission reduction pathway consistent with the reference climate scenario goals. The expected performance in the "Net Zero 2050" scenario is shown below:

This is a graph that includes details of the emission reduction percentages compared to the sector baseline for a 2030 - 2050 time horizon.

Figure 12: Emission reduction percentages compared to the sector baseline for a 2030 - 2050 time horizon.

(Source: Data processed by Prometeia based on NGFS scenarios)

EMISSION REDUCTION SCENARIOS - NET ZERO 2050



3.5.2 Physical risk

The physical risk is linked to the impact of climate change in physical terms. These impacts can be felt both in a short and medium term time horizon, as well as in a long term time horizon. The physical risk is conventionally divided into acute risks and chronic risks:

- Acute risks: these are risks linked to the occurrence of specific events (such as flood, landslide, drought) and have a frequency that is trending upwards, both at a regional and global level;
- Chronic Risks: these are long term risks that depend on the gradual changes to the occurrence of relevant climate phenomena, such as temperatures, winds or rainfall. These events are for the most part located in specific areas.

Additionally, the scenario analysis has also taken into consideration the physical risk of the occurrence of earthquakes: despite not being linked to climate causes, this risk has been analysed given its relevant linked to the conformation and characteristics of the Italian landscape. The earthquake risk indicator is similar to the acute risk indicators, in that it concerns extreme phenomena that can cause material damage to assets (e.g., damage to the structure of a warehouse, loss of goods in storage, damage to machinery).

The hazards taken into consideration in the analysis scenario ¹⁵are detailed below:

- Acute hazards: take into consideration 10 hazards, i.e. wildfire, wind gust¹⁶, flood, landslide, heat wave, cold wave, drought, heavy precipitation, hurricane and tornado;
- Chronic hazards: take into consideration 11 hazards, i.e. sea level rise, changing temperature, temperature variability, changing wind patterns, changing precipitation patterns and types, precipitation variability, water stress, heat stress, soil erosion, coastal erosion and subsidence;
- Earthquake risk.

The physical risk driver considers all the dangers described above; however, not all these are material for the perimeter analysed. A preliminary vulnerability assessment is performed which leads some dangers to be ruled out of the analysis (for the very reason that they are not material). The exclusions are made based on the following considerations:

- Geography: some dangers are not relevant for certain specific geographical areas;
- Type of portfolio: some dangers are not material for certain portfolios (i.e. the danger of drought for the real estate collateral portfolio);
- Exercise in materiality: certain dangers are ruled out as a result of the pilot materiality assessment exercise that the BPER Group carried out during the first quarter of 2024 and to which the TCDF is aligned.

¹⁵ The risks are aligned with the indications provided in the EU regulation on the taxonomy of sustainable activities: Delegated Regulation (EU) 2023/2486 of the European Commission of 27 June 2023 Annex A - II. Classification of climate-related hazards. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32023R2486>

¹⁶ The windgust risk includes wind storms/whirlwinds. Hurricanes and tornadoes have specific indicators.

Table 5: Classification of climate-related hazards

| HAZARD TYPE | INDICATOR | DESCRIPTION |
|----------------------------|---|---|
| Acute | Heavy precipitation | Identifies areas most prone to extreme rain or snowfall and areas prone to heavy hailstorms |
| | Landslide | Identifies areas most prone to landslides |
| | Wildfire | Identifies areas most prone to wildfire |
| | Flood | Identifies flood-prone areas, whether riverine, rainfall or coastal |
| | Heat wave | Identifies areas most prone to extreme heat events |
| | Cold wave/frost | Identifies areas most prone to extreme cold events |
| | Drought | Identifies the areas most prone to extreme droughts |
| | Wind gust | Identifies the areas most prone to extreme wind gusts |
| | Tornado | Identifies areas most prone to tornadoes |
| | Cyclone, hurricane, typhoon | Identifies areas most prone to hurricanes |
| Chronic | Changing wind patterns | Identifies the areas most prone to future variations in wind intensity and direction |
| | Changing precipitation patterns | Identifies geographical areas that in the future will experience significant changes in average snowfall and rainfall |
| | Changing temperature | Identifies areas subject to above-average temperature rises expected for Europe |
| | Soil erosion | Classifies the territory according to the intensity and frequency of soil erosion phenomena |
| | Coastal erosion | Classifies the territory according to the intensity and frequency of coastal erosion phenomena |
| | Sea level rise | Identifies coastal areas that will experience the greatest sea level rise |
| | Water stress | Identifies areas that may experience crop maintenance water stress, i.e., lack of sufficient water supplies to keep crops alive |
| | Heat stress | Identifies areas more or less subject to heat stress, i.e., prolonged periods of high temperatures |
| | Subsidence | Identifies the areas most prone to subsidence of the bottom of a marine basin or of a continental area |
| | Temperature variability | Identifies areas subject to substantial temperature changes |
| | Precipitation or hydrological variability | Identifies areas subject to substantial precipitation changes |
| Not climate-related | Earthquake | Classifies the territory according to the intensity and frequency of earthquakes |

The physical risk assessment process is divided into four stages:

- **Climate scenario:** the reference climate scenario identifies the fundamental variables such as the emission pathways foreseen by the transition policy and the resulting progress foreseen for temperatures. The low granularity climate variables are defined in line with the scenario and these are the main input for the definition of the risk maps;
- **Map risk calculation:** the risk maps are obtained by using high granularity historical information combined with the climatologies that depend on the reference scenario via a "downscaling" process. A risk map is developed for each danger and for each scenario that covers an impact forecast and a likelihood of the phenomenon, on an annual basis up to the year 2050;
- **Vulnerability identification:** geolocation of the companies and the real estate by identifying latitude and longitude. The central offices and the production sites are identified for each company. During the same process the dataset is provided with additional information that is useful for risk assessment, such as for example the distance from woodland, the distance from the river, etc. which further improves the level of the contained in the risk map; by combining these factors the Synthetical Physical Risk Indicators - SPRI's are calculated for each of the locations of the counterparties in the portfolio;
- **Risk measurement:** implementation of the damage functions and the calculation of the relevant KRIs (Key Risk Indicators) for the companies and the company real estate. With regard to the corporate portfolio, the KRI used is an indicator that summarises the counterparty's credit rating based on the expected performance of the main financial statement items and indicators; for the real estate the KRI is represented by an assessment of the impact on the market value of the real estate in question.

3.6 Calculating the carbon footprint of the portfolio

The carbon footprint represents the overall total of greenhouse gas emissions associated directly or indirectly with a product, organisation or service measured in tCO₂ equivalent (tCO₂e).

For a financial institute the major component of its emission profile are the Scope 3 emissions, related to Category 15 of the GHG Protocol, in other words emissions linked to the portfolio's loans/investments.

Details on the methods used and the results obtained from the calculation of the carbon footprint are presented below. The calculation of the emissions funded by companies in the equity portfolio and the loan portfolio, would require an assessment of their Scope 3 emissions, in addition to Scope 1 and Scope 2 according to the PCAF methodology for the Oil & Gas, Mining, Transportation, Construction, Buildings, Materials and Industrial activities sectors. To guarantee the continuity of information, in 2023 the calculation only takes into consideration the Scope 1 and 2 emissions, however will be included in the next reports.

Loan portfolio emissions

With reference to the loan portfolio, the BPER Group has updated the carbon footprint calculation method, as it is a preliminary activity in the definition of the de-carbonisation targets in view of the Bank's joining of the Net-Zero Banking Alliance (henceforth "NZBA" or "Alliance").

With reference to the loan portfolio the emissions have been calculated for investments made to "General Purpose" companies and emissions for collateral real estate.

As described early, the NZBA is an initiative promoted by the United Nations, which the BPER Group has voluntarily joined and is thus committed to defining the medium term goals (within 2030) and long term goals (within 2050) to reduce financed emissions towards sectors with a high environmental impact identified by the same Alliance guidelines: agriculture, aluminium, cement, coal, commercial and residential real estate, iron and steel, oil and gas, energy production and transportation.

To calculate its carbon footprint the BPER Group has referred to "The Global GHG Accounting and Reporting Standard" Guidelines devised by PCAF (Partnership for Carbon Accounting Financials), the standard for financed emissions reporting attributable to investments and loans in financial institution portfolios.

The guidelines constitute the detailed methodological standard for calculating financed emissions associated with asset classes considered relevant for financial institute portfolios.

To this end, the use of accurate data provided directly by the emitting companies or by certified entities and, if not available, reference to sectoral and dimensional estimate models is foreseen.

In particular, the model used to calculate financed emissions considers the product of the following two factors:

- attribution factor: uniformly calculated among the various PCAF asset classes, which establishes the percentages of emissions produced by the funded company to be attributed to the institute that has issued the loan (or investment). This calculation is based on the ratio between the existing loan (or investment) amount and the value of the funded company/project financed;
- emission profile: the PCAF provides a series of calculation methods based on a score system related to the quality and availability of the data used. The scores define a range from 1 (the highest, that applies to counterparties for which the verified glasshouse gas emissions are available) to 5 (the lowest, where the financed emissions are estimated based on sectoral data).

The main data sources used for the calculation refer to:

- internal Bank databases related to the exposures and the financial statement data of the counterparties that are of use in calculating the emission attribution factor;
- Bank databases and data supplied by qualified infoproviders related to the characteristics of the real estate units to calculate the emission factors for the real estate loan portfolio;
- data supplied by qualified infoproviders regarding Scope 1, 2 and 3 emissions of the counterparties, useful to calculate the emissions for General Purpose loans.

It should be noted that the PCAF methodology, adopts an approach based on the use of revenue to calculate the emission profile; it is therefore supposed that the loans/investments with generic purposes fund all the activities of the emitting company and for the purpose of Carbon Accounting one takes into account the counterparty's overall emission profile.

For specialised loans/investments, on the other hand, it's not the emission profiles of the financed companies that are considered but rather those related to the financed project (i.e. residential or commercial real estate units).

Therefore, to calculate the carbon footprint for general purpose loans the GHG Scope 1 and Scope 2 emissions of the emitting companies in portfolio have been considered as acquired from qualified data providers and the Enterprise Value Including Cash (EVIC) of the emitting companies, where available.

The loan portfolio carbon footprint was calculated on the Bank data updated to 31 December 2023, including the following Group Legal Entities: BPER Banca, Banco di Sardegna, Sardaleasing, BPER Factor and Bibanca.

In line with the PCAF methodology, the financed emissions have been calculated for the following asset classes:

- loans with unknown destination of the sums (so called General Purpose) issued to listed and unlisted Corporate counterparties, ascribable to the following asset classes included in the PCAF methodology: Bonds and listed equity and Business loans and unlisted equity;
- loans for the purchase of real estate, divided between commercial and residential real estate in line with the PCAF standard, ascribable respectively to the Commercial Real Estate and Mortgage categories, that only include mortgage loans for the purchase of previously built and fully operational real estate units.

With reference to the General Purpose loans the PCAF methodology supposes that, regarding their generic purpose, they fund all the activities of the emitting company. Therefore, one takes into account the overall emission profile of the counterparty which, in line with the PCAF Score 2, the BPER Group has acquired from qualified infoproviders.

The formula used to calculate financed emissions pursuant to the Score 2 of the PCAF methodology for the general purpose loans is shown in detail below: $(\sum \text{Gross loans} / \text{Total assets on the Balance sheet}) * \text{GHG Emissions}$.

It should be noted therefore, that it has not been possible to carry out the calculation for counterparties for which a value of GHG emissions has not been provided and/or for which the balance sheet information required to calculate the total assets on the Balance Sheet is not available.



COMMERCIAL REAL ESTATE AND MORTGAGES

As anticipated, having calculated the Carbon Accounting in accordance with the PCAF Standard it has also been possible to obtain an overview of specialised loans, within the loan portfolio, earmarked for real estate purchases. In particular, this loan category has been allocated to the Standard PCAF asset classes, Commercial Real Estate and Mortgages; the first includes on-balance sheet loans for specific corporate purposes, i.e. the purchase and refinancing of commercial real estate (CRE), and on-balance sheet investments in CRE when the financial institution has no operational control over the property; the second asset class includes on-balance sheet loans for specific consumption purposes, i.e. the purchase and refinancing of residential real estate units, including individual houses and multi-family residences with a limited number of units.

The contribution of these loans, in gross investment terms, turns out to be a relevant share of the total exposures in the ten sectors identified by the NZBA. For this reason, it is considered useful to detail the BPER Group's exposure to the aforementioned category, even given the path set to reduce financed emissions.

Regarding the Commercial Real Estate and Mortgages loans, the PCAF Standard provides a database (PCAF European building emission factor database) containing different emission factors according to the energy class, climate bracket, type of building: these factors provide a quantification of financed emissions with different levels of accuracy. The Standard defines the accuracy of the calculation as a "score", which runs from 1 (the highest quality of the data, for which the actual emissions of the buildings are available) to 5 (the lowest data quality, for which emissions are calculated based on the number of buildings). For the above asset classes, for the purpose of carbon accounting, it is possible to calculate the financed emissions with scores of 3, 4 and 5, depending on the availability of the data. Obtaining a higher quality data score would in actual fact allow the calculation of accurate energy consumption for the buildings, which cannot be applied to the Group exposures involving loans to families and companies.

It should be noted that the exposures that do not have a value for the building and the exposures whose use is attributable to "Land" are excluded from the calculation.

Securities portfolio emissions

Together with the analysis of the emissions associated with the loan portfolio, the BPER Group estimated the emissions from its securities portfolio. This analysis included approximately 2,100 securities in the portfolio, referring to four Legal Entities of the Group (BPER Banca, Banco di Sardegna, Bibanca and Sardaleasing)¹⁷.

For the securities portfolio carbon footprint calculation, the database of a qualified info-provider was used, which includes GHG Scope 1 and 2 emissions and the Enterprise Value Including Cash (EVIC) of the companies issuing the securities, where the data are available. For each issuer, the financed issues were calculated as a share of GHG Scope 1 and 2 issues equal, in proportion, to the ratio of the value of the security held by the Group on the EVIC.

The Scope 1 and Scope 2 emissions data on which the analyses are based are generally either those reported by the counterparty companies or, if the counterparty does not report its own emissions, the proprietary benchmark infoprovider estimation methodology was used, a brief summary of which is provided below. Within the Scope 1/Scope 2 carbon estimation approach, data disclosed by companies (current and historical) are used to estimate carbon intensity at company and industry segment level. The estimation model for emissions has three distinct models, used according to the order of preference detailed below. It should be noted that this infoprovider estimates Scope 1 and Scope 2 emissions separately, making it possible to consider partially disclosed data (e.g., if the company only reports Scope 1 emissions, the estimate will be limited to Scope 2 emissions) and use the best model from the options below after considering the disclosed data available:

- production model: used for electric utilities to estimate direct emissions from power generation, using fuel mix data for power generation to estimate Scope 1 emissions;

¹⁷ The value of the exposures included in the analyses amounts to approximately 85% of the Group's securities portfolio (excluding government bonds and intra-group exposures from the calculation); for the remaining portion of securities exposures (approx. 15% of the securities in the portfolio, in terms of Euro value), the information, to be acquired via the infoprovider, and needed to apply the methodology adopted to calculate financed emissions is not available.

- company-specific intensity model: the company-specific intensity model is used for companies not involved in power generation, which is based on data previously reported by the company;
- industry-specific intensity model: where a company does not report and has never reported its emissions, a segment-specific intensity model is used, which is based on estimated carbon intensities for different industry segments.

The figure was calculated as:

Financed Scope 1 and 2 emissions = Total GHG emissions (Scope 1 + Scope 2) * (Exposure / Enterprise Value Including Cash)¹⁸

The calculation method employed for the purpose of the 2023 financial statements is the same to the one applied for the 2022 financial year. The use of the Enterprise Value Including Cash (EVIC) figure, also suggested by the TCFD¹⁹ Recommendations and consistent with the most recent European Banking Authority guidelines, is in fact a more appropriate measure of the overall value of the companies in the portfolio²⁰.

3.7 Alignment with Supervisory Expectations

In response to requests from the European Central Bank, the Group engaged in alignment with supervisory expectations on climate and environmental risks. This section provides evidence of the Group's commitment in this sense. This section provides evidence of the Group's commitment in this sense.

Thematic review of climate and environmental risks

Following the definition by the BPER Group in 2021 of an Action Plan, sent to the ECB, to fill the gap that surfaced compared to the Supervisory Expectations on climate and environmental risks, as of the first months of 2022, right up to the end of December 2023, the BPER Group was engaged in the Thematic Review exercise, set in motion by the ECB, designed to assess the Group's overall compliance with ECB Guidelines.

During 2023, in line with the planning, all the activities foreseen by the above actions plan continued, which, among other things, was completely included in the 2022-2025 BPER e-volution Business Plan, the implementation of which, with a specific focus on ESG issues, is monitored on a quarterly basis. This aspect highlights the BPER Group's attention to sustainability issues.

For a detailed view of the progress of the activities, please refer to section 4 of this document.

¹⁸ Where the EVIC figure was not available, in continuity with the proxies used for FY 2021 and 2022, the financed emissions were calculated by taking the counterparty turnover figure as the denominator.

¹⁹ TCFD - Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures.

²⁰ It should be noted that the EVIC represents a measure of the market value of companies and is therefore subject to fluctuations based on their performance: this aspect will be taken into account by the Bank when making intra-annual comparisons.

4. RISK MANAGEMENT

4.1 ESG Infusion and Risk Management

The integration and management of ESG risks into the regulatory and prudential supervisory framework is an issue of considerable relevance for the European Supervisory Authorities. As also indicated in the ECB "Guide on climate-related and environmental risks", the ECB considers the process leading towards ecological transition as involving both risks and opportunities for the entire economic system and financial institutions, while the physical damage induced by climate change and environmental degradation can have a very significant impact on the real economy and the financial sector.

This is confirmed by the fact that even for the period 2024-2026, the ECB has identified climate-related and environmental risks as the main risk factors to be prioritised in the Single Supervisory Mechanism (SSM). This is also why supervised Institutions must continue the process to integrate climate-related and environmental risk into their overall risk management system in a proactive, strategic and forward-looking manner, so as to mitigate and communicate them in accordance with relevant regulatory requirements.

On this point, during the course of 2023, the BPER Group continued its implementation of the progressive, multi-year adaptation plan with project milestones in line with the prudential expectations and such as to ensure internal consistency with other actions defined in the "ESG Infusion" plan, in order to support the construction of a consistent framework at Group level.

More specifically, the activities that have impacted various core processes of the Risk Management Framework, across all areas, include (i) the risk identification process, (ii) the Risk Appetite Framework, (iii) the single risk management process (including second level checks) and related reporting, (iv) the capital adequacy assessment process (ICAAP), (v) the Internal Liquidity Adequacy Assessment Process (ILAAP) and (vi) the risk forecasting and stress testing programme.

An overall overview that makes it possible to define the various goals, frequencies and time horizons that characterise the main processes is provided below:

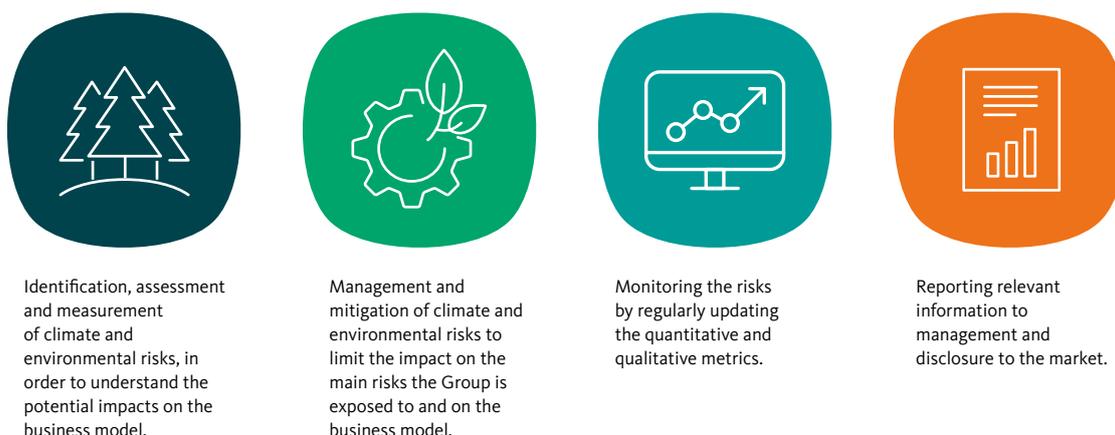
Table 6: Risk management processes impacted by the ESG Infusion plan

| PROCESS | OBJECTIVE | FREQUENCY | TIME HORIZON |
|--|--|---|--|
| Risk identification | Definition and updating of the Group's Risk Map, a document designed to identify the risks that the Group is or could be exposed to, currently and in the future, which may have significant impacts on the Group's economic, financial and equity balance, hindering the achievement of its strategic objectives. The Group Risk Map is relevant for the entire Risk Management Framework, as it sets the stage for the implementation and pursuit of all the main risk governance processes such as the RAF, the ICAAP, the ILAAP and the single risk governance policies. | At least on a yearly basis | 1 year |
| Risk Appetite Framework | Definition of the Group's risk appetite in line with the risks identified within the Group's Risk Map. | At least on a yearly basis | 1 year 3 years (for some indicators) |
| Single risk management process | Measuring, monitoring and reporting on the individual risks that the Group turns out to be exposed to in line with the Group's Risk Map. The single risk processes are formalised within specific governance policies approved by the Board of Directors. | Ongoing | Not applicable |
| ICAAP | Assessment of the Group's equity adequacy | Ongoing | 3 years for the application of the short term scenarios 30 years for the application of the long term scenarios |
| ILAAP | Assessment of the adequacy of the governance system and the Group's liquidity risk management | Ongoing | 3 years |
| Risk Forecasting and stress testing | Provide support for decision-making and business processes and assess specific areas of vulnerability in the exposure to individual risks | Variable depending on the purpose of the exercise | Variable depending on the purpose of the exercise (daily, monthly, half-yearly, annually, every three years) |

Consistent with the Group's business model, the strategies pursued and its risk appetite framework, ESG risk management underpins the development of the 2022-2025 Business Plan. In fact, the BPER Group has defined a risk-taking and management strategy with the aim of ensuring, under business-as-usual and stress conditions, a risk profile that is sustainable and consistent with its business model and the market context. Therefore, the strategy also considers activities aimed at achieving sustainability goals, with the understanding that the implications of ESG-related risks on individuals and corporate performance require careful and responsible corporate management. These factors are integrated while taking into account market requirements, regulatory changes, the expectations of the Supervisor and the various stakeholders in order to identify those short and medium-long term management actions that can mitigate the risks arising from the pursuit of the defined sustainability objectives.

The BPER Group has integrated ESG factors into its own risk management framework. More specifically, the Risk Management cycle is divided into the following four phases:

Figure 13: The Risk Management cycle



This chapter details the processes and main activities performed by the BPER Group during the stages outlined above.

4.2 Risk Identification, assessment and measurement

Recognising all the possible risks to which the Group is or could be exposed starts from the analysis of prudential Supervisory regulations, the best market practices, the macro-economic context and the assessments made by the Supervisory Bodies on the subject of risk oversight and management. The process of identifying relevant risks is the starting point and junction of all the Group's main strategic processes, and is carried out through a structured process involving the many corporate departments and functions.

The BPER Group, in line with the prudential supervisory regulations (including the ECB Guidelines²¹ on climate and environmental risk and the Report on the role of Environmental and Social Risks in the Prudential Framework²² of the EBA), carries out an accurate identification of the risks to which it is or could be exposed on a regular basis, taking into account its operations and reference markets. The risk identification process results in the periodic updating of the "Group Risk Map", which illustrates the relative position of the individual Group companies with respect to Pillar I and Pillar II risks, both current and prospective. This activity is carried out centrally by the Parent Company, and the Risk Map is recognised as the base for risk management and governance, making it the cornerstone of the Internal Control System.

In this context, the process of updating the long list of all the potential risks affected, starts out by identifying and analysing the systemic and idiosyncratic risk factors based on the reference context, including the indications provided by the Regulator in the context of the SSM Supervisory Priorities²³. This document actually contains in depth assessments of the main risk sand vulnerabilities that significant institutions directly supervised by the ECB are subject to on a temporal horizon of between 2 and 3 years.

²¹ "Guide on climate-related and environmental risks", available at the following [link](#).

²² "Report On The role of Environmental and Social Risks in the Prudential Framework", available at the following [link](#).

These risks are then compared to the reality of the BPER Group to establish which risks actually apply and thus establish the Risk Taxonomy.

The risks included in the Risk Taxonomy are then subjected to a materiality analysis which can take into account regulatory obligations, the intrinsic nature of the risk within the business model or the likelihood of exceeding qualitative and quantitative materiality thresholds.

The risks that are deemed material identify the Inventory Risk (the Group's material risks).

In this context, continuing with the approach introduced in previous years, ESG risk factors continued to be fine-tuned and, in particular, quantitative indicators were strengthened to allow the materiality analysis of credit risk deriving from climate and environmental factors, quantity analysis was introduced to assess the materiality for the sub-category of ESG risk related to operational risks and ESG risk factors were introduced to the materiality/relevance analysis of market, reputational and strategic/business risks.

In particular, with respect to liquidity risk, the Group has begun the process of consolidating the current framework by defining specific criteria that enable the materiality of the impact of climate and environmental risk factors on the Group's liquidity and funding risk profile to be detected.

A summary of the main risk categories to which the Group is exposed that are impacted by ESG risk factors is provided below:

Table 7: A summary of the main risk categories to which the Group is exposed that are impacted by ESG risk factors

| MACRO CATEGORIES | DEFINITION |
|--------------------------|--|
| Credit Risk | The possibility that an unexpected change in the creditworthiness of a counterparty, to which an exposure exists, will generate a corresponding unexpected change in the value of the credit position |
| Market Risk | Risk of losses caused by unfavourable developments in market elements |
| Operational Risk | Risk of incurring losses due to inadequate or failed internal processes, human resources and systems, or from exogenous events, including legal risk |
| Reputational Risk | Current or prospective risk of a decline in earnings or capital arising from a negative perception of the Group's image on the part of customers, employees, counterparties, Bank shareholders, investors or Supervisory Authorities |
| Liquidity risk | Risk of default on payment commitments (expected and unexpected) |
| Strategic Risk | Risk that changes in the competitive environment and economic conditions of the company's business or choices of competitive/strategic positioning in the market will not produce the expected results |

The related materiality analysis performed in 2023 highlighted the following outcomes:

Table 8: Summary of the materiality analysis results from a risk-by-risk perspective

| MACRO CATEGORIES | MATERIALITY OF CLIMATE-RELATED AND ENVIRONMENTAL FACTORS |
|--------------------------|--|
| Credit Risk | The credit risk sub-category resulting from climate factors is considered material for the BPER Group. |
| Market Risk | ESG risk factors are not material for the BPER Group |
| Operational Risk | The ESG risk sub-category within the context of operational risks is material for the BPER Group |
| Reputational Risk | ESG risk factors are material for the BPER Group |
| Liquidity risk | Environmental risk factors are material for the BPER Group |
| Strategic Risk | ESG risk factors are material for the BPER Group |

Within the Group Risk Map, a further complete tree diagram of ESG Risk was introduced that took into consideration its various components and sub-components and provided evidence of the current positioning of the BPER Group compared to this tree diagram, with particular reference to its integration in the risk identification framework.

Furthermore, within the context of an evolution process of the climate risk factor identification framework, during the course of 2024 a pilot programme was introduced, consistent with the settings, metrics and time horizons of the scenario analysis described under paragraph 3.5 Scenario analysis architecture, with a view to evolving the materiality analysis by introducing assessments, in addition to those related to the time frame (short, medium and long term) also on a single hazard level, albeit restricted to just the physical risk.

The process of identifying ESG risks within the Group Risk Map makes it possible to associate them with the main risk categories and their sub-risks. The Group adopts a comprehensive approach in this regard, taking into account the business, the exposures and the companies that comprise it.

Compared to what was stated in the 2022 Sustainability Report, the classification of credit risk arising from climate-related factors as a sub-risk is confirmed. It has also been confirmed that the ESG risk are a sub-category of operational risks and a quantitative approach to the materiality analysis that has also been extended to market and liquidity risks was developed over the course of the year.

Lastly, the approach of considering ESG risk as a whole within the range of liquidity, market, strategic/business and reputational risks was also confirmed, integrating the definition to better delimit its scope of reference and developing monitoring analyses within the related assessment frameworks.

For a short overview of the main impacts expected on material risks reference should be made to paragraph 3.2 Climate-related risks and opportunities.

The Risk Map evolution activities and the related evidence in terms of the materiality risk have produced one of the cornerstones of the ESG Risk Management project launched by the Group in 2022; however, the assessment of potential areas where the process can be further developed is still in progress, with a view to pinpointing with a greater accuracy the specific characteristics of these kinds of risk alongside all regulatory developments.

4.3 Management and mitigation

The management and mitigation phase is instrumental in managing the risks impacting the Group's capital adequacy and liquidity, in a current and/or forward-looking perspective.

The Group's capital adequacy and liquidity processes (ICAAP and ILAAP) are strongly integrated in the corporate governance processes related to strategic planning and the Risk Appetite Framework, as well as the overall internal control system. The planning of strategic objectives is related to their financial and capital sustainability, as well as the associated risk profiles. The Risk Appetite is defined in line with the strategic planning process, where the risk levels originated by the business and strategic objectives underlying the planning forecasts (business plan, budget, capital and funding plan, NPE plan) are consistent with the risk levels that the Group intends to achieve. By using risk forecasting and stress testing techniques the Group can also assess its own vulnerability to extreme yet plausible events and the potential negative effects of significant changes in one or more risk factors, taken individually or of joint movements of a set of risk factors under the assumption of adverse scenarios.

The progressive analysis of ESG risks integrates and strengthens the existing framework and is the result of a complex organisational process, which is an integral part of business management and helps to determine the Group's strategies and current operations. Following participation in thematic exercises conducted by the ECB, the Group identified areas for improvement to further strengthen the current framework.

The integration of ESG risks into the Risk Management framework performed during 2023 has enabled to develop the Risk Appetite Framework and the ICAAP by identifying specific Key Risk Indicators, implementing special analyses, updating the single risk management processes and integrating the risk reporting. During the course of 2024, among other things, the modelling and designing of special protection methods will continue to be updated.

4.3.1 Risk Governance processes

Consistent with what was detailed in the 2022 Sustainability Report, during 2023 the Group has further strengthened the governance processes for risks impacted by ESG risks.

With particular emphasis on credit risk, within the folds of the update of the Credit Risk Management Policy, four indicators have been identified with a view to assessing the exposure to sectors that are subject to a high transition risk and subjects ruled out from the Paris Agreement, the relevance of exposure to high physical risk subjects and the share of mortgage loans towards counterparties with high physical risk real estate collateral. These indicators are included in the Risk Appetite Framework among the Level 3 metrics.

At the same time, the second level Credit Control function has integrated the ESG factors into the control process, with particular emphasis on the climate risk. The framework was implemented in both the Single File Review and Collateral File Review analysis methodology.

The results of the analyses carried out are included in the regular reporting on control activities of management reporting.

Furthermore, BPER Bank has completed the planning required to define the actions to be taken on the internal models used to assess the credit risk in order to incorporate climate components. In particular, as part of the IFRS 9 accounting calculation for December 2023 a first step towards the inclusion of climate-related elements in the PD IFRS 9 risk parameters was taken (an action that replaces the previous management overlay). The activity will continue in 2024 with further releases into production as part of the rating allocation process.

In relation to market risk, a dedicated approach has been finalized to incorporate the impact of ESG risk factors into the proprietary portfolio risk factor management and mitigation framework, through the use of appropriate IT tools. This has made it possible to select a primary set of risk indicators that can be used for property portfolio management purposes and more in general financial risk management purposes.

Within the context of operational risk, as part of the activities under the specific project mentioned above, the overall risk management framework has been integrated in order to monitor environmental, social and governance risk factors. In particular, as part of the operational risk identification process, the transmission channels that define how the ESG factors can lead to operational losses for the Group have been identified and this has led to the updating of the "Operational Risk Map" by also introducing additional classification labels, with a view to identifying the affected ESG (Environmental - Social - Governance) factor. A specific monitoring indicator has also been introduced to keep track of the number of ESG events recorded in the period as part of the Loss Data Collection process.

As far as the reputational risk is concerned, it has been integrated in the overall risk management framework in order to oversee environmental, social and governance risk factors in relation to the direct or indirect exposure of the Group or its counterparties. This activity has involved the update of the "Reputational scenario catalogue" and the identification of monitoring indicators connected to the ESG risk factors.

Lastly, the strategic and business assessment model adopted also hones in on ESG risk factors. In particular, from a qualitative point of view it envisages the verification of the integration within the Bank's governance processes (essentially strategic and operational planning/budgeting) of the ESG risk factors and of the level of compliance with external reference regulations. This analysis is furthermore supported by the monitoring (once again to assess the risk in question) of the ESG objectives that the Group has included in the 2022-2025 Business Plan (see ESG Infusion Pillar), in order to verify the actual degree of fulfilment.

It should be noted that the BPER Group, over the course of the coming years, will continue to assess additional areas where actions can be undertaken to develop the risk governance framework further, with a view to pinpointing with greater accuracy the specific aspects connected to this kind of risk as well as any regulatory developments.

4.3.2 Risk Appetite Framework

The BPER Group identifies the Risk Appetite Framework (RAF) as a tool for overseeing the risk that the Group intends to take in the implementation of its business strategies, considering it as an essential element to ensure that the governance policy and the process by which risks are handled comply with the principles of sound and prudent business management. The principles of the RAF are formalised and approved by the Parent Company, which revises them periodically, assuring their alignment with strategic guidelines, with the business model and with the regulatory requirements in force from time to time. Based on the definitions and transmission channels identified, among the evolutions introduced during 2023 within the RAF these includes specific indicators added to the Risk Management Policy; in addition it's worth noting the presence in the RAF of an indicator related to the downgrading of the ESG Rating.

4.3.3 ICAAP and ILAAP

The ICAAP and ILAAP processes are strongly integrated in the corporate governance processes related to strategic planning and the Risk Appetite Framework, as well as in the overall internal control system, also taking into account the evolution of the internal and external conditions in which the Group operates. In particular, the methodologies used ensure consistency between the various processes.

These processes are based on appropriate corporate risk management systems and presuppose adequate corporate governance mechanisms, an organisational structure with well-defined lines of responsibility, and effective internal control systems.

Where climate risks are concerned, within the context of the 2023 ICAAP the forward-looking analyses designed to assess the possible impacts of climate transition dynamics and physical risks were expanded by adopting a double perspective, both short term and long term, taking into account a range of alternative scenarios.

Similar considerations apply to the ILAAP process.

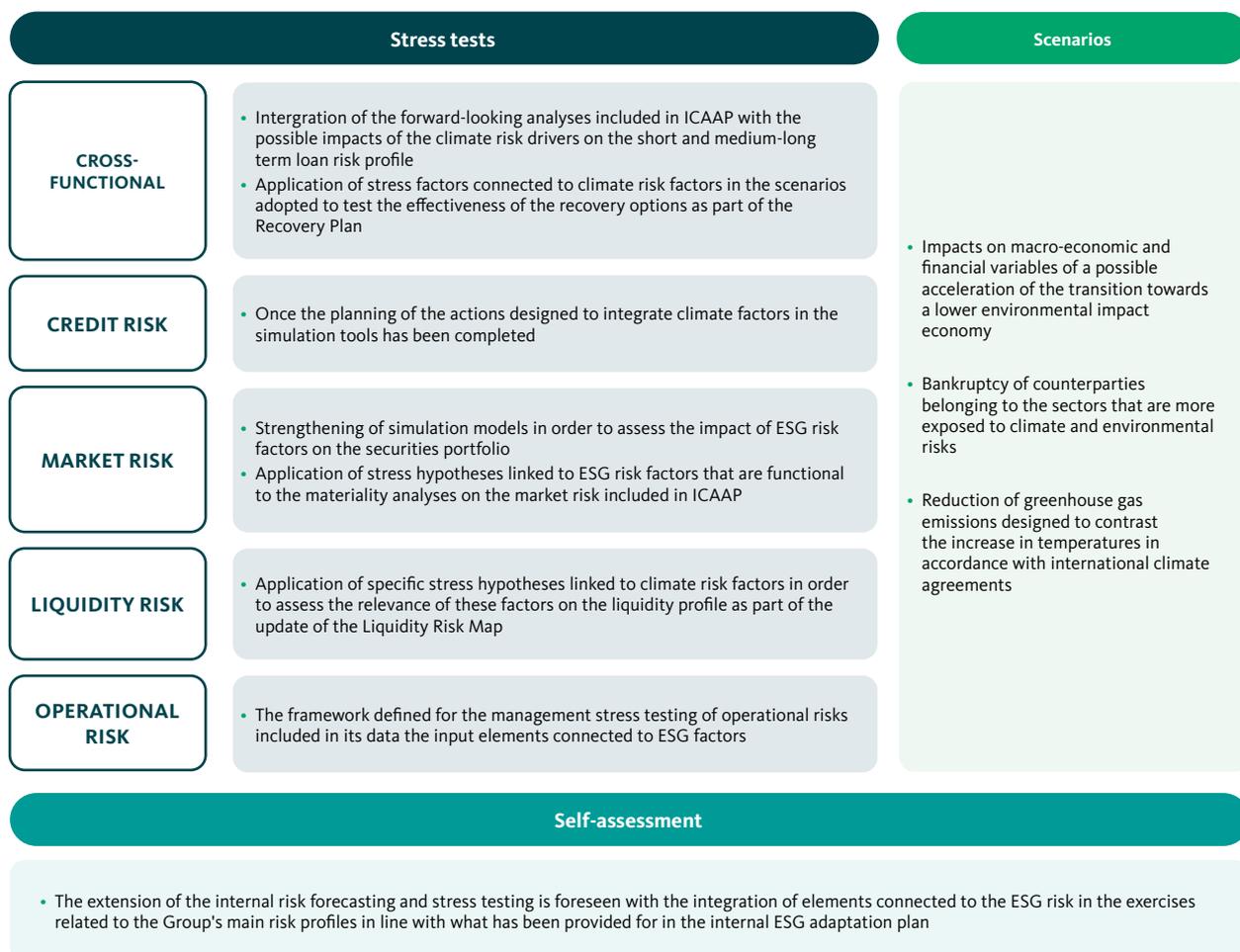
4.3.4 Internal Risk Forecasting and stress testing programme

The objective of the Group's Internal Risk Forecasting and stress testing programme is to map the characteristics of the risk forecasting and stress testing exercises carried out internally and used within the main risk governance processes, verifying the relative degree of effectiveness through a specific self-assessment process and identifying possible areas for improvement.

Where climate risk is concerned, the update of the Programme in 2023, in addition to monitoring the progress of the integration of these factors within the simulation activities performed by management as part of its Risk Management processes, it has also incorporated and mapped all the developments completed during the course of 2023.

An overview of the integration of ESG risk factors within the internal risk forecasting and stress testing framework, in line with the Group's Risk Map and the Risk Appetite Framework is provided below.

Figure 14: Overview of the integration of ESG risk factors within the internal risk forecasting and stress testing framework



4.4 Monitoring and reporting

The monitoring and reporting phases constitute the framework that supports the management of key governance processes, consistent with the Risk Appetite Framework and the business model underlying the Business Plan.

The Group periodically monitors the RAF metrics in order to monitor on a timely basis any overruns of the risk tolerance thresholds identified and/or assigned risk limits included in the individual risk management policies and, if appropriate, direct the necessary communication processes to the Corporate Bodies and for subsequent remedial actions. These metrics are selected in line with the choices made within the ICAAP, ILAAP and Recovery Plan and share consistent calibration methodologies and escalation processes.

During 2023 the Group, in addition to the components linked to the Group's positioning in terms of ESG rating, has also integrated its ESG developments (including credit risk, operational and reputational risk) within its quarterly risk management reporting in order to ensure appropriate information to its Board Senior Management.

In particular, for credit risk a section dedicated to climate risk factors has been introduced in order to represent the Bank's exposure to climate risk with regard to loans to companies and mortgage loans subject to high physical risk (understood as the financial impact of climate changes, including more frequent extreme weather events and gradual changes to the climate).

This approach guarantees organic monitoring of the company's evolution, enabling the Group to proactively manage any critical situations that may entail possible remedial actions.

4.5 Credit policies

During the course of 2023 the BPER Group has activated major actions and plans with a view to guiding the integration of ESG factors within the credit macro-process, pursuing two main objectives: integrating the analyses of all the pertinent stages of the granting and monitoring process, overseeing the risks while supporting and steering the credit towards sustainable investment, as a way of supporting the Group's strategic goals.

The BPER Group's credit policies are developed in line with the RAF, which has provided new third-level metrics since 2021 aimed at monitoring the physical and transition risk of the loan portfolio.

During the course of the recent years, the ESG data has been updated on a regular basis and the relevant drivers have been identified for each individual counterparty, as a way of supporting the single-name assessment of climate and environmental risk factors while developing the indications related to credit issues according to a client-based approach.

In particular, the overall credit policy framework has been the object of a review that has led to the evolution of the previous sectoral/geographic indications, with ESG factors integrated in both the high level regulatory framework (ESG-linked Loan Origination Policy, issued in December 2022) and in terms of the operational model, by developing a micro loan strategy at the counterparty level (i.e. single-name) by applying a specific notching mechanism.

To integrate the ESG factors into this mechanism a modular approach with growing intensity has been set out, in order to meet the Group's strategic objectives, adapt to market and regulatory development and the type of data available, in order to integrate a multitude of ESG variables to identify the exposure to climate and environmental risks.

With reference to notching, the loan strategies adopted for the year 2024 will be primarily activated with reference to the Oil & Gas sector and especially for counterparties considered to be high risk (in line with the Risk Management framework and therefore with the third level KRIs introduced by the Group's credit risk governance Policy) on the basis of the following drivers:

- transition score risk (which includes counterparty GHG emissions related to turnover and the impact on economic and financial elements: turnover, capex, EBITDA);
- exclusion of the counterparty from benchmarks aligned with the Paris Agreement.

As far as the physical risk exposure indicator, any specific actions will be defined by also taking into consideration possible regulatory developments related to the presence of mandatory insurance coverages.

For 2024 the Bank has also plans to extend the framework to all the sectors²³ taken into consideration by the ESG-linked Loan Origination Policy, based on specialist sectoral level approaches and methods drawn up based on the recomposition objectives that take into account the ESG profile of the BPER Group's lending portfolio.

The indications of the ESG-linked Loan Origination Policy are procedurally integrated, as early as the commercial analysis phase, with specific "icons" representative of the sector included in the application used by corporate counterparty managers and a brief description of the applicable requirements.

The credit granting application is supplemented with specific alert messages designed to highlight the applicability of the ESG-linked Loan Origination Policy to the counterparty's sector. With reference to the counterparties operating on the "Coal" sector, a specific alert has been included that is associated with a management strategy consistent with the Group's disengagement from this sector. In brief, the overall evolution of the credit policy framework developed as part of the Business Plan reinforces the traditional approach of dual top-down and bottom-up analysis.

For the purposes of the integration of the loan process with a specific focus on the customer, a clusterisation system of the type of borrower has been established using a modular approach with intensified investigations and of the level of in-depth analysis depending on the complexity/risk levels, subdividing them into families, POEs and companies, based on their relative obligations to produce non-financial statements.

²³ Oil & Gas, Power Generation, Mining, Gambling, High emission manufacturing; with reference to the Carbon sector, the system envisages specific phasing-out rules as early as January 2023.

The process integrations have been prioritised by setting out an in-depth approach for the counterparties for which detailed information is available (NFRD²⁴ companies), in the presence of relevant exposures (approved at least at the Loan Committee level), which entails the analysis of accurate counterparty information including, if available, the Sustainability Report.

The physical and transition risk score of the counterparty has been assessed thanks to an external valuation platform developed by a leading infoprovider at system level whose questionnaire is integrated and functional in defining said score.

The process was then integrated with operational level valuations, in order to enable the application of product based strategies. The development of "green" products aligned with the EU Taxonomy²⁵ enables the application of cross-cutting strategies that maximise the transition risk reduction effect and the increase of the share of eco-sustainable loans pursuant to the EU Taxonomy disbursed by the Group. The proposal and identification of said products during the allocation phase enables the identification of the borrowers which, despite not (or not yet) subject to sustainability reporting and/or devoid of accurate counterparty valuations, are applying investment strategies designed to mitigate the transition risk.

The collateral assessment and reassessment process has also been reinforced taking into account the potential effects resulting from the exposure to the physical and/or transition risk. To this end, indications have been forwarded to the providers that are designed to recommend the acquisition of detailed information, in addition to the collection of the Energy Performance Certificate (EPC), on possible elements that might be exposed to physical risks that have come to light during inspections, the geographical and land registry identification of the real estate units and the specific floor in relation to the total number of floors of the building, the state of the building and whether it has recently undergone refurbishing, especially if functional to energy efficiency, and whether these elements have been taken into consideration in calculating the value of the asset and in order to select comparables, if this is the method used.

As for the acquisition of the EPC on collaterals, it has been integrated into the reference process whenever there is contact with the customer - at the time of filing the loan request, with the delivery of the report to the manager; when carrying out the survey, with delivery to the survey expert; when renewing the customer's exposure and the additional procedural integrations have also been included that are required in order to digitally acquire the document at any time.

At the same time, an OCR (Optical Character Recognition) engine was developed to acquire the EPC documents which enables the automatic detection of the data related to energy performance contained in the certificates analysed by the Group's IT systems.

In order to make all the acquired information available to the stakeholders to ensure an appropriate valuation of the collateral, the procedural integrations required to highlight, during the origination stage, the physical risk score and the energy classes of the real estate units have also been included in the application used by the network.

Lastly, even the first level reporting has been integrated with reference to the distribution of the Residential Real Estate/ Commercial Real Estate exposures by energy class, integrated with additional analysis elements (e.g. the Loan to Value bracket, LTV), both with reference to the stock and the YTD flow.

24 Companies subject to non-financial reporting obligations pursuant to EU Directive 2014/95, absorbed in Italy by Italian Legislative Decree no. 254/2016.

25 Regulation (EU) 2020/852 regarding the institution of a framework to encourage sustainable investment and amending Regulation (EU) 2019/2088 and subsequent delegated deeds.

4.6 The Business continuity plan

Considering the acute physical climate and environmental risks, the BPER Group manages the possibility of suffering economic losses resulting from the reduction in the value of property owned due to its geographical location or due to the occurrence of adverse events; to mitigate this risk, the Bank has stipulated insurance coverage (Global Buildings Insurance) that covers against:

- extreme weather events;
- flooding;
- earthquakes;
- tsunamis;
- flooding/inundation.

For the Campania area, the branches are also covered for the risk of volcanic eruption.

Another impact caused by acute physical risks are losses due to the interruption of business continuity resulting from natural disasters (e.g., floods, heavy snowfall, extreme temperature changes). It has in any case been identified as a risk and every year the Business Continuity office receives the hydrogeological risk for each real estate unit where work is performed from the Building & Facility Service.

The BPER Group, on an annual basis, does in fact perform a Business Impact Analysis, to identify the risk level for each individual corporate process, according to a qualitative and quantitative approach. The Operational Continuity Plan (PCO) is then updated, and mitigation actions and the recovery solutions are defined that enable the continuation of the activities of critical processes even when faced with particularly serious events. The PCO is drafted in compliance with dispositions of the Banca d'Italia which with circular 285 of 2013 as subsequently amended, and in accordance with the best practices for the sector.

The PCO lists the buildings where critical processes are performed, and highlights the relative risk levels. In case that extreme weather events take place that compromise BPER's capacity to provide services to customers, the solutions foreseen for the "Unavailability of the service provision site" are activated in order to safeguard service continuity.

If the unavailable site is part of the commercial network, the recovery solutions include:

- moving employees and customers to a neighbouring branch (sister branch);
- execution of the more urgent transactions by personnel in another branch or by central facilities;
- in the absence of a "sister branch" or if the distance exceeds 25 km, and if recovery times are extended, containers and/or camper vans are brought to the disaster area to help citizens, which become branches within the perimeter of the disaster and remain operational while technicians restore the damaged premises.

If the damaged site is a central office, the recovery solutions differ:

- remote work is immediately activated for all employees at that operational unit;
- Business Impact Analyses are carried out to verify the presence of one or more sister units and of competent resources that can safely operate remotely and intervene to secure operations from different premises (there are many sister functions distributed over different territories in BPER, due to the numerous merger acquisitions in recent years).
- the transfer of resources and operations to alternative sites or recovery sites is considered;
- if machinery or equipment is damaged during the crisis, the data can in any case be accessed from the desired location (campers or sister units), seeing as backups are constantly being made.

BPER carries out an annual operational continuity test, the results of which are presented to the top management, to assess the adequacy of the overall system and the effectiveness of the Plan's solutions, with a view to constant improvement.

During 2023, the Bank proved its operational resilience by handling a number of different emergency situations. The most relevant concerned the flooding in Romagna region, during which 23 rivers and streams broke out of their banks in a geographical area that includes more than 180 BPER branches and operational offices. The business continuity solutions applied enabled the branches to be promptly put back on line. No head office process was interrupted during the emergency. Over the course of a few days the agencies that had been flooded had been dried and repaired, while the customers were served by sister units just a few kilometres away.

4.7 Assessment of risks associated with the Group's real estate

The operational risk management framework identifies and assesses the exposure to operational risks even for acute physical risks. In this context, during the operational risk identification process, specific risks referred to extreme weather events capable of generating material damage to real estate, branches, data processing centres are identified which may result in operational breakdown impacts or interruptions of Group operations.

During the annual assessment of operational risk exposure, performed via Risk Self Assessment, the objective is to estimate, for an annual time horizon, the degree of exposure to operational risks, by defining annual expected loss volumes and extreme impacts and assess the adequacy of the mitigation processes and measures identified at Group level (e.g. insurance coverage, Operational Continuity plans).

By way of example, reconstruction/refurbishing/containment costs incurred as a result of damage to real estate (and their systems) caused by natural events such as floodings, landslides, earthquakes and such are deemed operational losses.

During 2023, in order to increase the awareness of the degree of exposure to risk and also to make the risk quantification process associated with real estate assets more objective, the tools used to support the risk analysis for this kind of instance were strengthened by introducing a new synthetic report which is designed to monitor exposure to climate risk of the Group's real estate assets using synthetic risk level indicators and to support the specialist personnel involved in the annual assessment of operational risk exposure.

In detail, the climate and natural risks taken into consideration in the above report are:

- hydrogeological;
- landslide risk;
- earthquake risk.

For each of the risks listed above, various options are defined for both individual buildings as well as at a national and regional level, as well as aggregate measurements that provide a picture of the overall exposure to natural and physical risks.

5. METRICS AND TARGETS

Besides the indicators previously mentioned in remuneration policies (paragraph 2.5) PAI (paragraph 3.3) and Risk Management (paragraph 4.3) the climate risks indicators (both physical and transition) and the Scope 1, 2 and 3 emissions are detailed below. Reference should be made to Annexes 1 and 2 for further details on the description of said indicators, calculation methods and references to the non-financial reports.

5.1 Climate risk indicators

The BPER Group, to reinforce its internal risk identification, assessment and monitoring process, has developed and applied a materiality valuation framework for Climate Risks (transition risk and physical risk) with a view to identifying the portions of the portfolio exposed to the main risk factors, by measuring the joint impacts of the main transmission channels. The exercise has concerned the lending portfolio in relation to Non Financial Corporations (NFCs) for both transition and physical risks, to establish the impact on the revenue capacity and the asset structure of the counterparties and the loans guaranteed by residential and commercial real estate, on which an assessment of the effects of the physical risk has been carried out on the commercial value of the collaterals. A physical risk analysis has also been carried out on the real estate owned by the BPER Group.

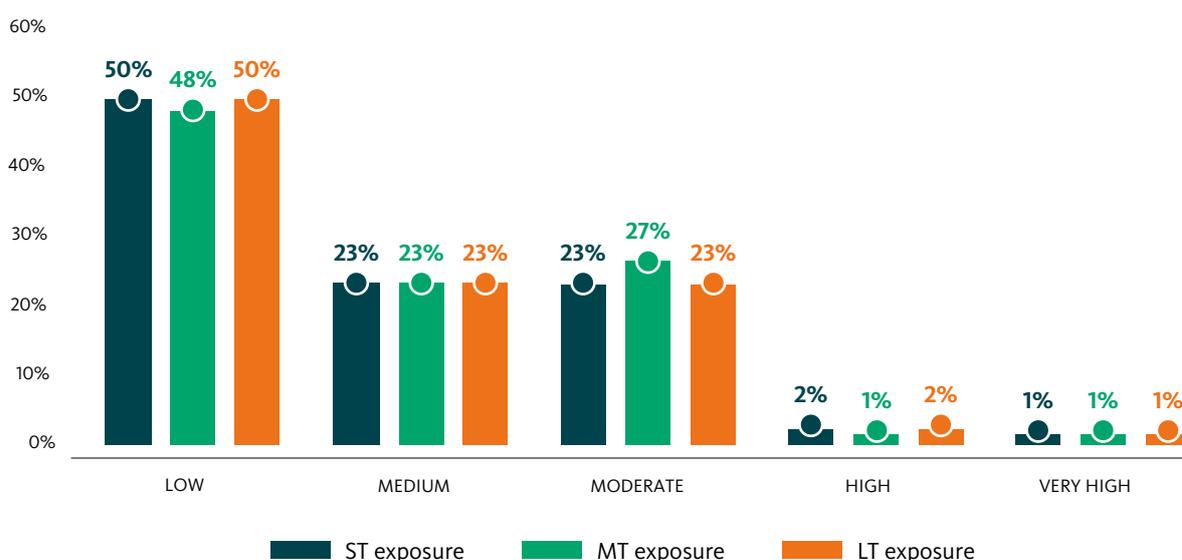
The number of NFCs analysed amount to over 97,000 in the main Large Corporate, SME and Small Business segments, meaning all the companies for which a financial statement was available. As far as the real estate put up as collateral, approximately 380,000 units were processed (which represent 99% of the portfolio). The BPER Group properties analysed are equivalent to 100% of the owned real estate units. These are around 1,500, with approximately 73% belonging to BPER Banca. The time horizons used for the analyses are those detailed in paragraph 3.5.

5.1.1 Transition risk

The transition climate risks have been assessed within the perimeter of the lending portfolio for non-financial companies. Among the scenarios reported in paragraph 3.5, the scenario represented here for the transition risk is NGFS "Net Zero 2050" scenario, as it is the one that predicts a greater impact than the others with regard to transition risks: in this regard its use reflects a prudential approach, because it considers the highest risk among all the other scenarios.

When comparing the short, medium and long term time horizons it can be noticed that within the same risk level bracket there are no great exposure swings. In all the time horizons, approximately half of the NFC exposure, which amounts in total to approximately Euro 30 billion, belongs to the low risk level bracket, while only 2-3% falls within the high and very high risk bracket.

Figure 15: Distribution of transition risk - Companies²⁶



²⁶ The percentages have been shown with decimal places. For this reason, the sum of the individual percentage items may give an approximate figure.

The distribution by GICS production sector shows the companies in the long term time horizon and in the high and very high risk brackets. The sector with the highest concentration of NFCs and exposure is represented by the "Consumer Discretionary", with over 1,550 companies and an exposure of approximately Euro 240 million (22%). Other relevant sectors are "Industrials" (27% of the total number of companies and 21% of exposure, "Consumer Staples" (13% of the total number of companies and 21% of the exposure and "Materials" (9% of the total number of companies and 13% of the exposure).

Table 9: Representation of the % No. of Companies and % Exposure by GICS sector (Long Term)

| GICS SECTOR | % No. COMPANIES | % EXPOSURE |
|------------------------|-----------------|------------|
| Communication Services | 2.4 | 0.4 |
| Consumer Discretionary | 36.9 | 21.7 |
| Consumer Staples | 12.7 | 21.2 |
| Energy | 1.6 | 5.7 |
| Financials | 0.1 | 0.0 |
| Health Care | 2.8 | 5.7 |
| Industrials | 27.0 | 21.2 |
| Information Technology | 1.6 | 2.4 |
| Materials | 8.6 | 12.8 |
| Real Estate | 5.2 | 3.4 |
| Utilities | 1.1 | 5.5 |

5.1.2 Physical risks

Besides on the lending portfolio of non-financial companies, the physical risk have also been monitored on real estate units, both those put up as collateral as those owned by the BPER Group. 10 acute²⁷ hazards and 11 chronic²⁸ hazards were taken into consideration, in addition to earthquakes, which despite not being linked to climate dynamics, are nevertheless relevant for the Italian landscape.

Among the scenarios reported in paragraph 3.5, the scenario represented here is the NGFS "Current Policies" scenario, as it is the one that predicts a greater impact than the others with regard to physical risks: in this regard its use reflects a prudential approach, because it considers the highest risk among all the other scenarios.

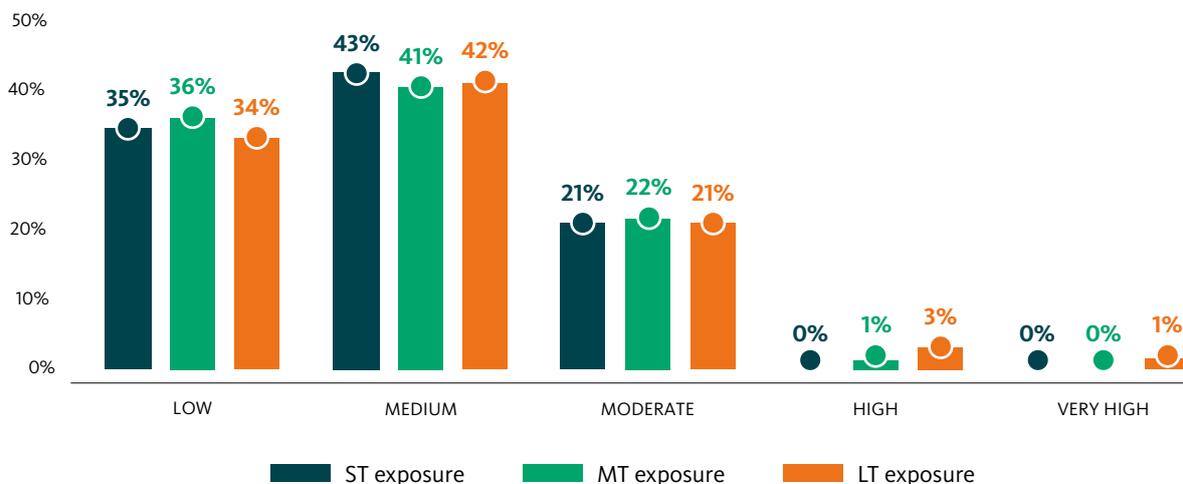
Companies

Over 97,000 companies were considered within the perimeter, most of the acute risk exposure belongs to low and medium risk brackets: between 75% and 78% of the approximately Euro 30 billion in total, depending on the reference time horizon. The highest risk brackets (high and very high) account for 4% of the exposure in the long term, and drop down to 1% in the medium and are almost non-existent in the short term.

²⁷ Heavy precipitation, Landslide, Wildfire, Flood, Heat wave, Cold wave, Drought, Wind gust, Tornado and Hurricane: for details reference should be made to paragraph 3.5.

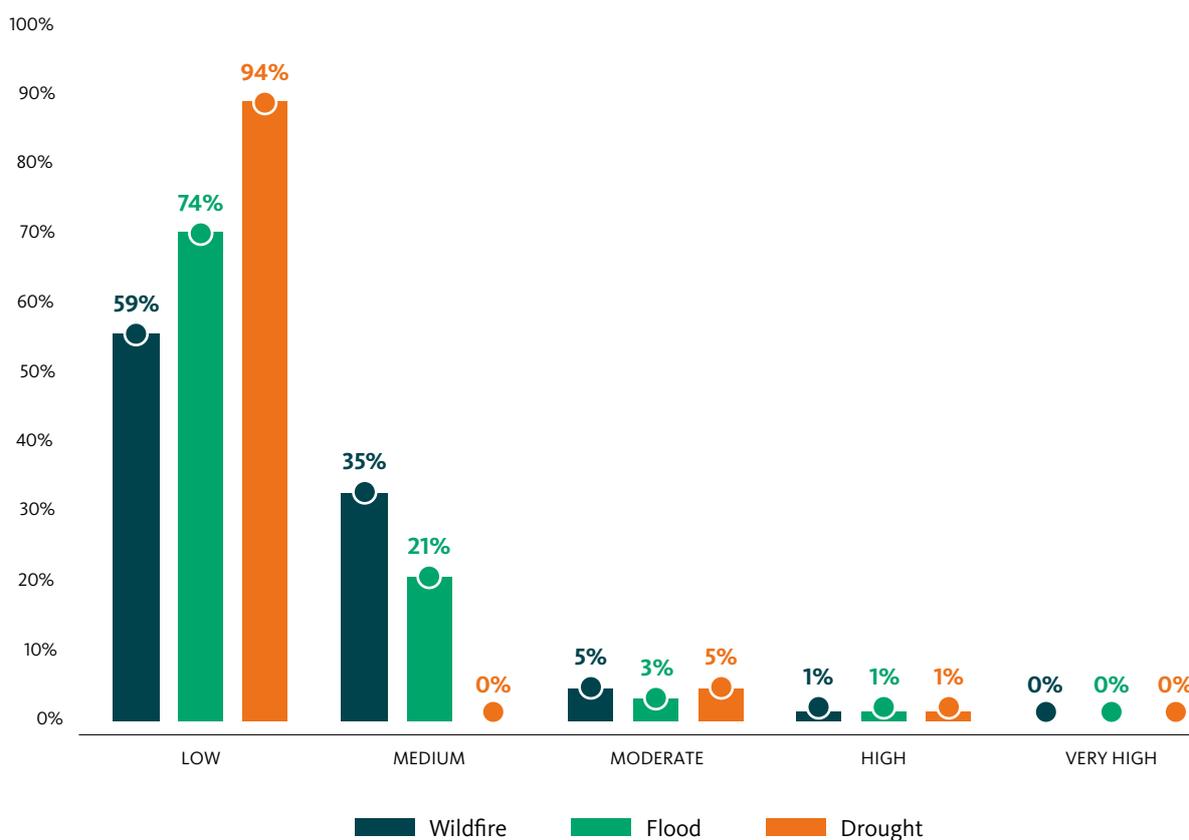
²⁸ Changing wind patterns, Changing precipitation patterns and types, Changing temperature, Soil erosion, Coastal erosion, Sea level rise, Water stress, Heat stress, Subsidence, Temperature variability, Precipitation variability: for details refer to paragraph 3.5.

Figure 16: Distribution of the acute physical hazard - Companies



Considering the long period, the three most relevant risks are linked to wildfire, flooding and drought. One notes a strong concentration for all three of the acute hazards in the low to medium risk brackets.

Figure 17: Distribution of the three most relevant acute hazards - Companies



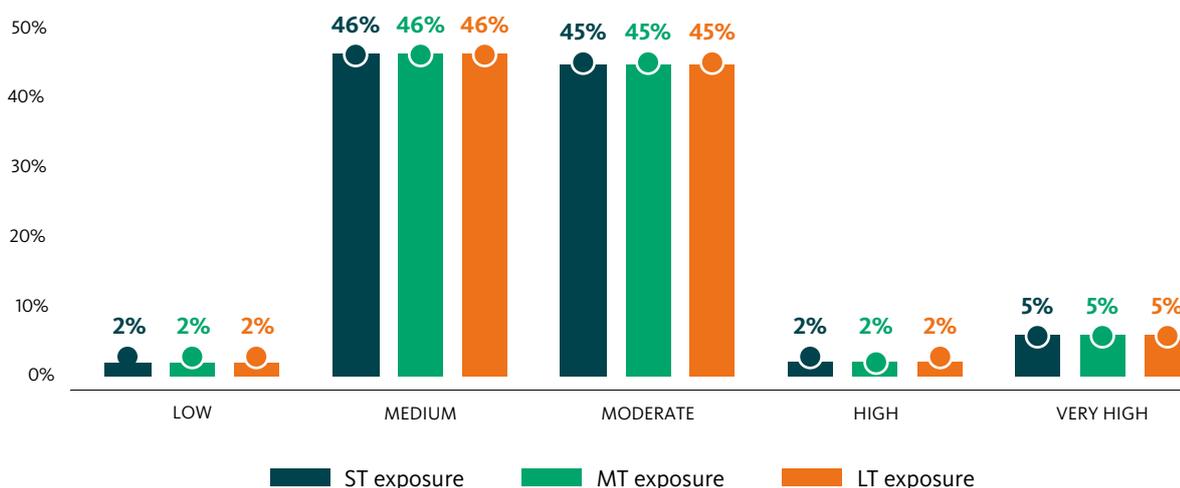
In the regional distribution of high and very high risk companies in the long term horizon it can be noted how approximately one fifth of the companies (a little under 20,000) are located in Lombardy, and account for an exposure of approximately Euro 220 million (18%). The other regions with relevant exposure are Emilia-Romagna (13%) and Sardinia (11%).

Table 10: Representation of the % No. of Companies and the % Exposure by Region (Long Term)²⁹

| REGION | % No. COMPANIES | % EXPOSURE |
|------------------------------|-----------------|------------|
| Abruzzo | 3.7 | 2.9 |
| Basilicata | 1.3 | 0.4 |
| Calabria | 7.2 | 4.8 |
| Campania | 9.7 | 7.3 |
| Emilia-Romagna | 9.6 | 13.2 |
| Friuli-Venezia Giulia | 0.2 | 1.0 |
| Lazio | 12.9 | 9.5 |
| Liguria | 3.4 | 4.7 |
| Lombardy | 13.3 | 17.5 |
| Marche | 2.6 | 2.4 |
| Molise | 0.6 | 0.3 |
| Piedmont | 4.2 | 5.7 |
| Apulia | 4.5 | 2.7 |
| Sardinia | 9.1 | 10.7 |
| Sicily | 8.5 | 5.4 |
| Tuscany | 4.1 | 4.7 |
| Trentino-Alto Adige/Südtirol | 0.4 | 1.0 |
| Umbria | 1.2 | 1.2 |
| Valle d'Aosta | 0.1 | 0.1 |
| Veneto | 3.2 | 4.5 |

Where chronic risk is concerned, 90% of the exposure is ascribed to the medium and moderate risk brackets, totalling approximately Euro 28 billion. The distribution within the individual risk brackets appears to be uniform for short, medium and long term time horizons. The high risk brackets (high and very high) account for approximately 7% of the exposure.

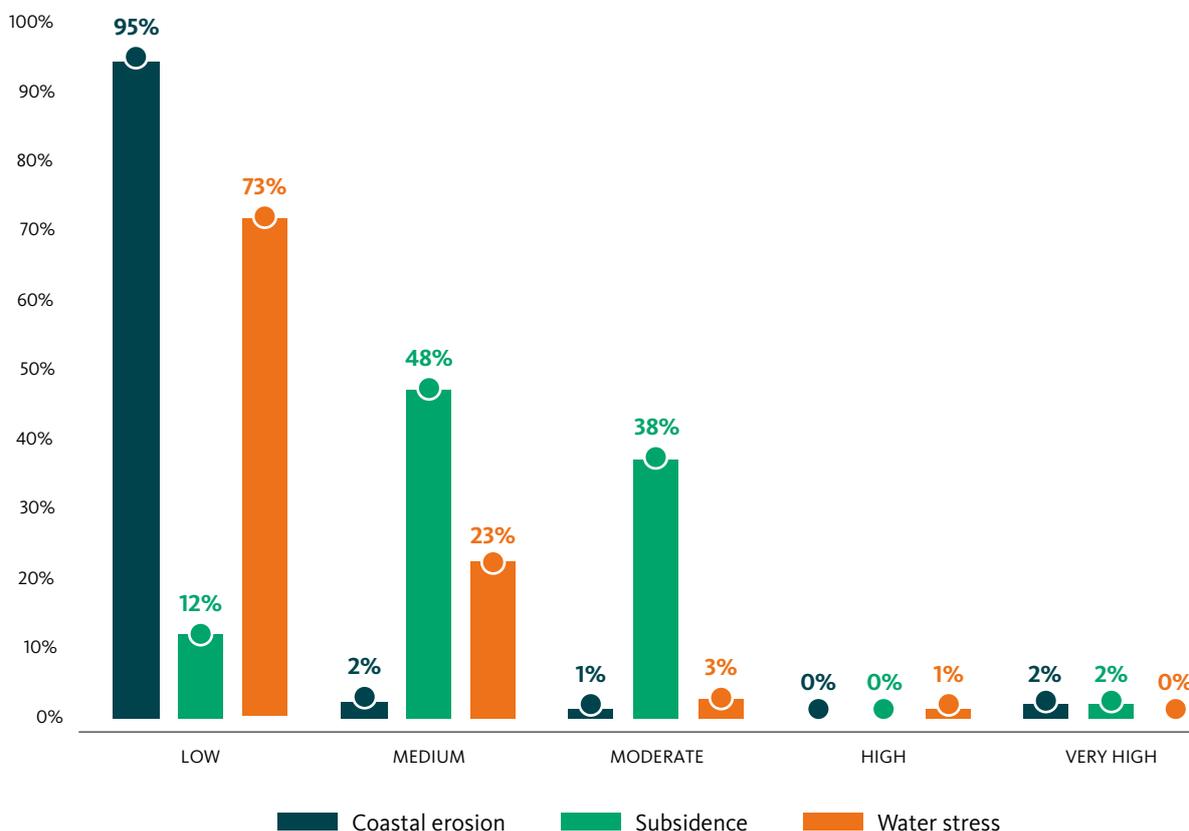
Figure 18: Distribution of the chronic physical risk - Companies



²⁹ The percentages have been shown with decimal places. For this reason, the sum of the individual percentage items may give an approximate figure.

The most impacting chronic hazards on the corporate perimeter in the long term are coastal erosion, which despite 95% of its exposure (almost Euro 29 billion) being concentrated in the low risk bracket, it has the highest percentage in the high risk (high and very high) brackets (2% with almost Euro 600 million). It is followed by subsidence, which has a profile that is more evenly spread across the median brackets, but which in the very high risk bracket has a scant 2% exposure. Lastly, the water stress is highly concentrated in the low risk bracket (73% of exposure - Euro 22 billion) and medium risk bracket (23% - Euro 7 billion).

Figure 19: Distribution of the three most relevant chronic hazards - Companies



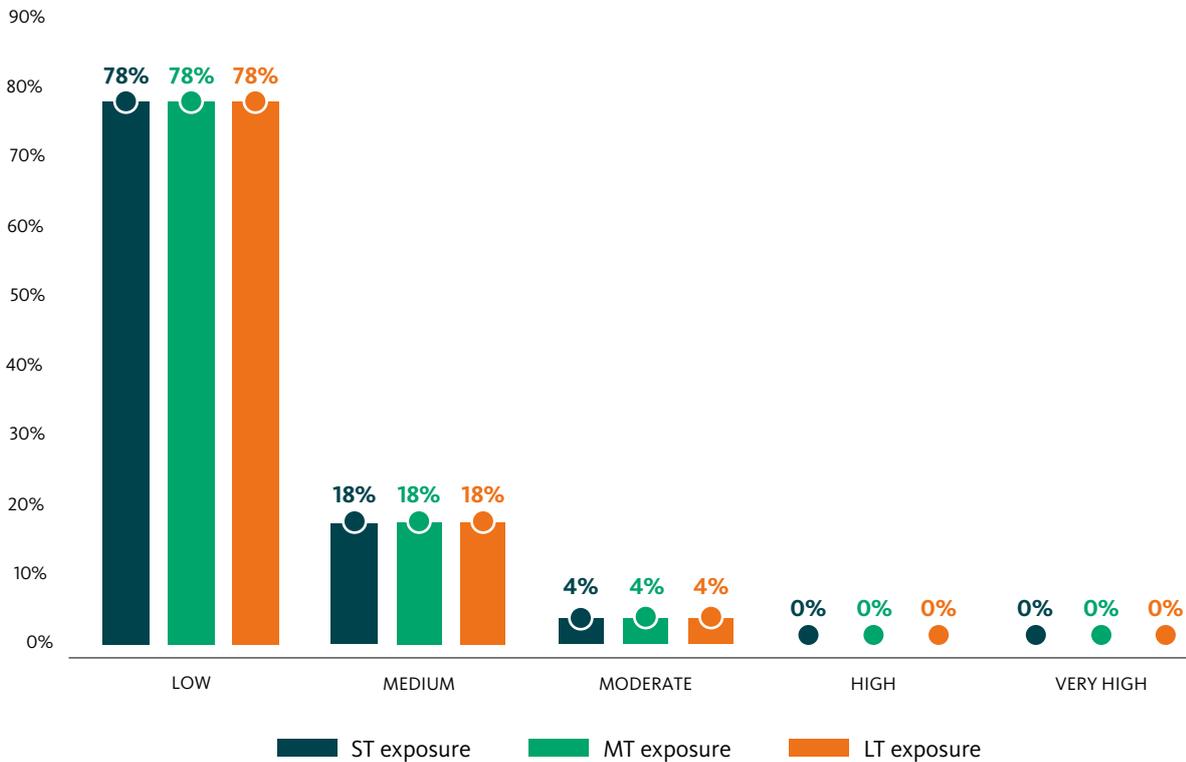
The regions that are more exposed to high risk brackets (high and very high) in the long term are Lombardy (19% of exposure and approximately 1,300 companies, equivalent to 11% of the total, Campania (19% of exposure and 22% of the total number of companies) and Sardinia (19% of exposure and 15% of the total number of companies).

Table 11: Representation of the % No. of companies and % Exposure for each Region (Long Term).³⁰

| REGION | % No. COMPANIES | % EXPOSURE |
|------------------------------|-----------------|------------|
| Abruzzo | 4.0 | 2.5 |
| Basilicata | 0.5 | 0.2 |
| Calabria | 3.2 | 1.4 |
| Campania | 22.0 | 18.5 |
| Emilia-Romagna | 9.4 | 11.7 |
| Friuli-Venezia Giulia | 0.0 | 0.0 |
| Lazio | 5.1 | 2.3 |
| Liguria | 3.8 | 4.6 |
| Lombardy | 10.5 | 19.3 |
| Marche | 3.4 | 3.3 |
| Molise | 0.5 | 0.3 |
| Piedmont | 1.9 | 1.9 |
| Apulia | 3.5 | 2.3 |
| Sardinia | 14.5 | 18.6 |
| Sicily | 11.8 | 5.5 |
| Tuscany | 1.7 | 1.6 |
| Trentino-Alto Adige/Südtirol | 0.2 | 1.6 |
| Umbria | 0.4 | 0.2 |
| Valle d'Aosta | 0.0 | 0.0 |
| Veneto | 3.9 | 4.0 |

As regards the earthquake risk, 78% of the total exposure is concentrated in the low risk bracket over all time horizons, with almost no exposure in the higher (high and very high) brackets.

Figure 20: Distribution of the earthquake risk - Companies



³⁰ The percentages have been shown with decimal places. For this reason, the sum of the individual percentage items may give an approximate figure.

The region that is most exposed to high risk brackets (high and very high) in the long term is Abruzzo, which accounts for approximately Euro 34 million of exposure (40% of the total) and approximately 240 companies (41% of the total).

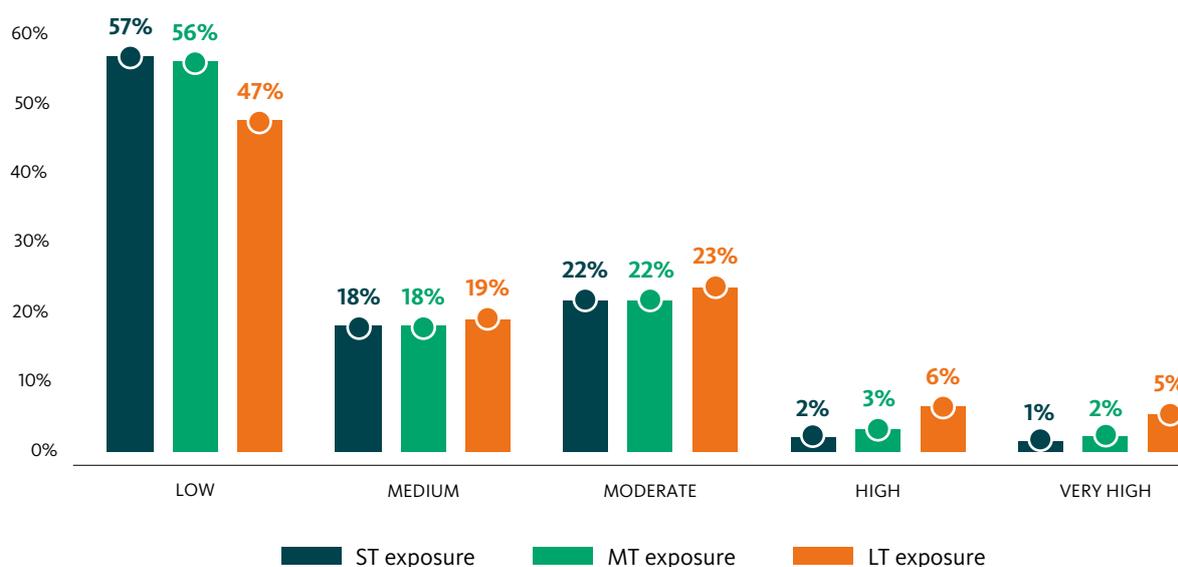
Table 12: Representation of the % No of companies and % Exposure by Region (Long Term)³¹

| REGION | % No. COMPANIES | % EXPOSURE |
|------------------------------|-----------------|------------|
| Abruzzo | 41.2 | 39.8 |
| Basilicata | 0.2 | 0.0 |
| Calabria | 1.0 | 0.1 |
| Campania | 7.1 | 3.6 |
| Emilia-Romagna | 15.2 | 25.5 |
| Friuli-Venezia Giulia | 0.3 | 0.5 |
| Lazio | 2.2 | 1.5 |
| Liguria | 1.2 | 0.5 |
| Lombardy | 3.4 | 1.8 |
| Marche | 1.4 | 0.3 |
| Piedmont | 0.9 | 0.5 |
| Apulia | 12.2 | 15.2 |
| Sardinia | 2.2 | 3.7 |
| Sicily | 0.3 | 0.1 |
| Tuscany | 2.9 | 3.1 |
| Trentino-Alto Adige/Südtirol | 0.2 | 0.0 |
| Umbria | 6.2 | 3.3 |
| Veneto | 1.7 | 0.4 |
| Valle d'Aosta | 0.0 | 0.0 |

Real Estate Collateral

The collateral real estate units are exposed for approximately Euro 34 billion in total and amount to 378,000 units. Approximately half of the exposure to acute physical hazard is concentrated in the low bracket with percentages that range between 57% in the short term and 47% in the long term. The exposure in the high risk brackets (high and very high) stands at 11% for the long term, 5% in the medium term and 3% in the short term.

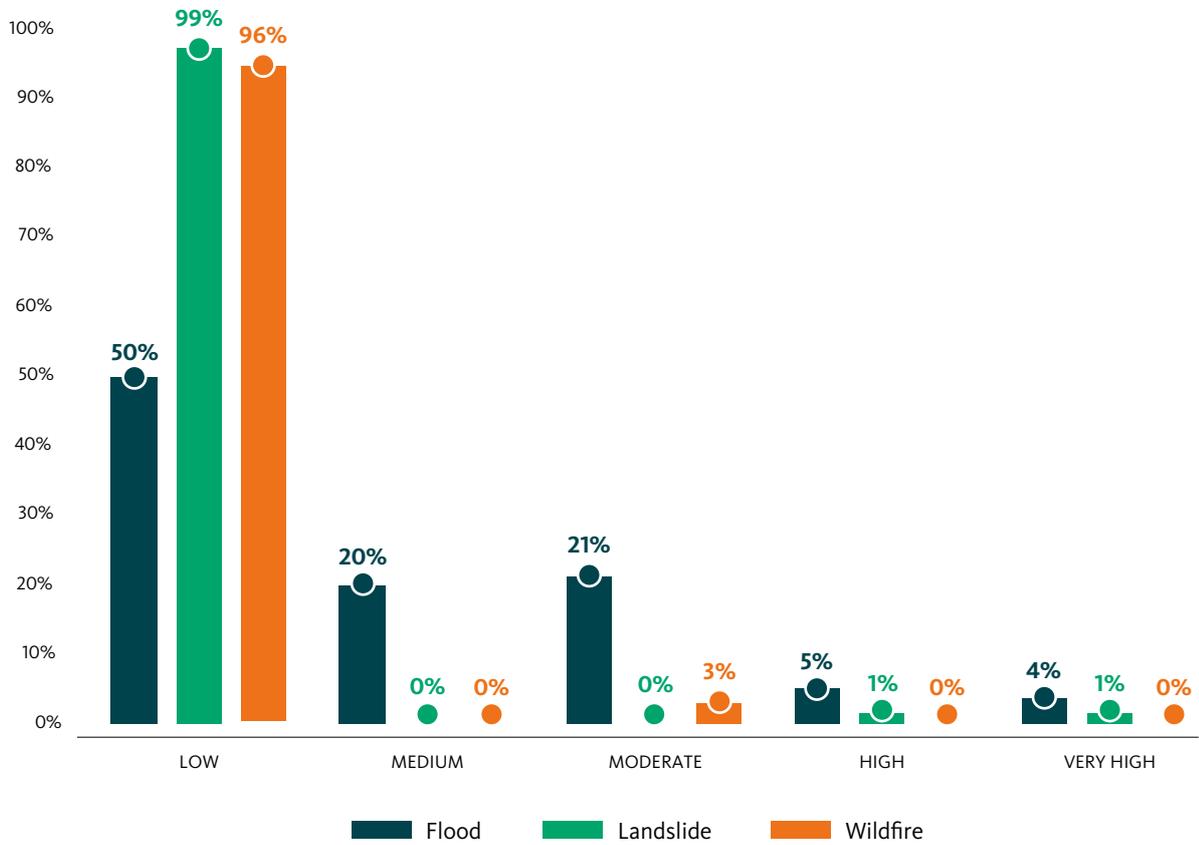
Figure 21: Distribution of acute physical risk - Collateral properties



³¹ The percentages have been shown with decimal places. For this reason, the sum of the individual percentage items may give an approximate figure.

The acute hazards that have the greatest impact on the high risk (high and very high) brackets in the long term are flooding (with an exposure equal to Euro 2.8 billion, amounting to approximately 8%), landslides (with little more than 1% of exposure) and fire.

Figure 22: Distribution of the three most relevant acute physical hazards - Collateral properties



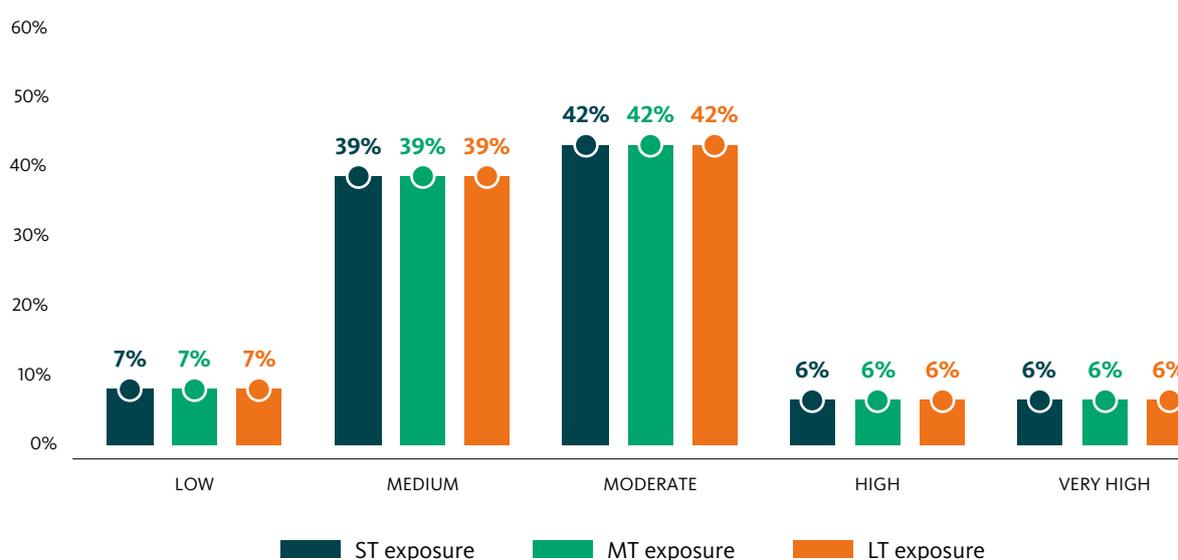
In the territorial distribution of the collateral properties that in the long term fall within the high acute (high and very high) risk brackets Lombardy stands out, with over 7,000 properties and exposure of almost Euro 1 billion.

Table 13: Representation of the % No. of Properties and % Exposure by Region (Long Term)³²

| REGION | % No. OF PROPERTIES | % EXPOSURE |
|-----------------------|---------------------|------------|
| Abruzzo | 3.7 | 2.7 |
| Basilicata | 0.7 | 0.6 |
| Calabria | 2.6 | 2.1 |
| Campania | 3.1 | 3.2 |
| Emilia-Romagna | 11.7 | 12.7 |
| Friuli Venezia Giulia | 0.7 | 0.6 |
| Lazio | 7.0 | 10.0 |
| Liguria | 6.6 | 5.2 |
| Lombardy | 24.8 | 26.3 |
| Marche | 4.9 | 3.8 |
| Molise | 0.2 | 0.2 |
| Piedmont | 7.5 | 6.7 |
| Apulia | 2.5 | 2.2 |
| Sardinia | 8.8 | 8.8 |
| Sicily | 4.4 | 3.8 |
| Tuscany | 4.7 | 5.1 |
| Trentino-Alto Adige | 0.4 | 0.5 |
| Umbria | 0.8 | 0.7 |
| Valle d'Aosta | 0.4 | 0.4 |
| Veneto | 4.7 | 4.5 |

The chronic risks are evenly distributed across the time horizons within the single risk brackets. 42% of the real estate portfolio is concentrated in the moderate risk bracket while 39% is in the medium risk bracket. The highest brackets (high and very high) hold down approximately 12% of the exposure, amounting to a total of Euro 4 billion.

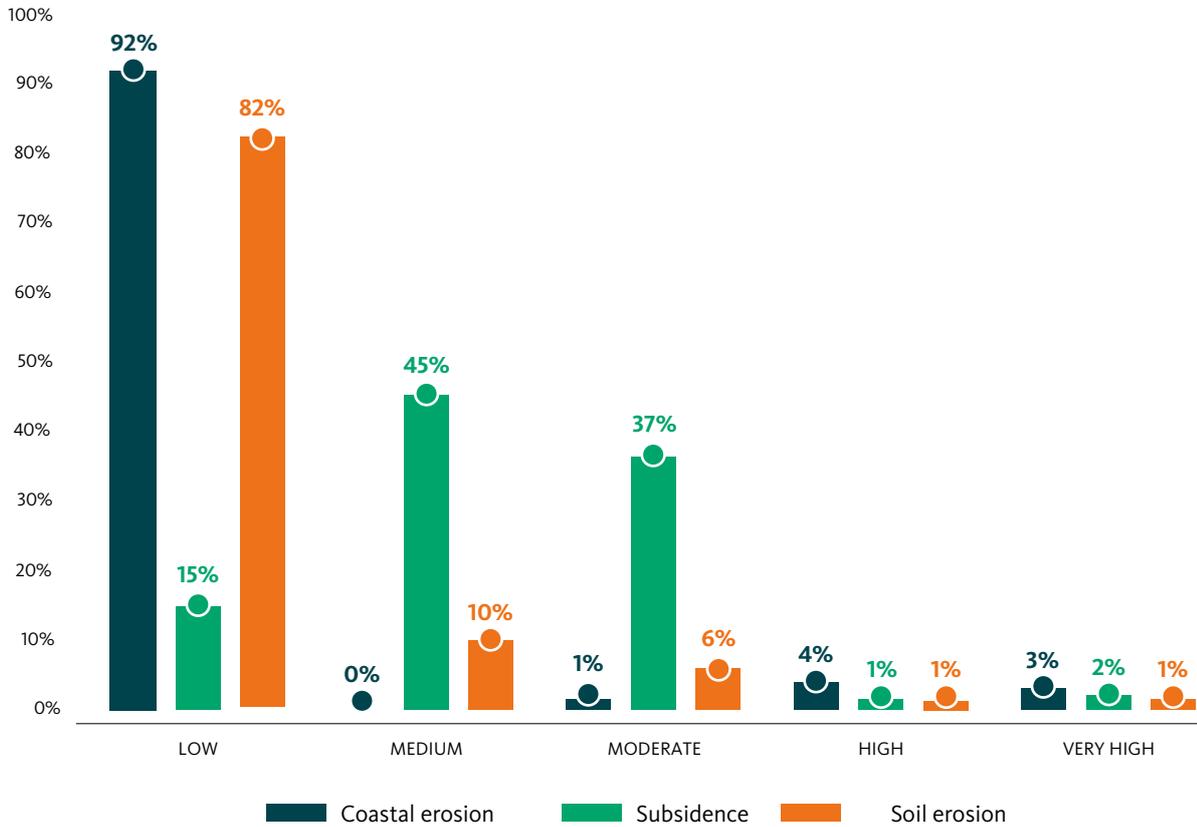
Figure 23: Distribution of the chronic physical risk - Collateral properties



³² The percentages have been shown with decimal places. For this reason, the sum of the individual percentage items may give an approximate figure.

Coastal erosion is the hazard with the highest exposure in the long term in the high and very high risk bracket, and accounts for 7% of the total exposure. Subsidence has the highest exposure in the medium risk bracket (45% equal to an exposure of almost Euro 16 billion) and in the moderate risk bracket (37%, equal to an exposure of over Euro 12 billion) and 3% is ascribed to the high risk brackets (high and very high). Soil erosion closes the classification and accounts for 2% of the high risk brackets.

Figure 24: Distribution of the three most relevant chronic physical hazards - Collateral properties



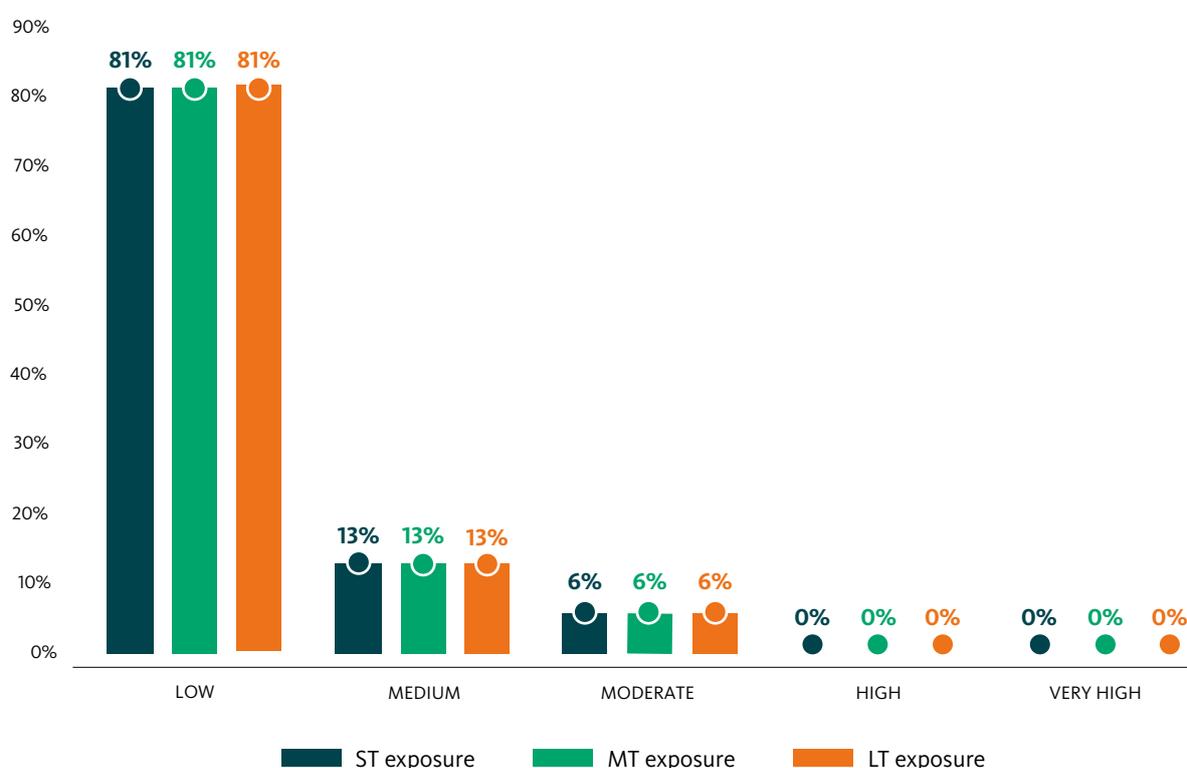
The regions most exposed to the highest risk brackets (high and very high) in the long term are Lombardy (15% exposure), Liguria (13% exposure), Emilia-Romagna (12%) and Sardinia (10%). Together they account for 50% of the total exposure of Euro 4 billion and 42% of the 39,000 properties.

Table 14: Representation of the % No. of Properties and % Exposure by Region (Long Term)³³

| REGION | % No. OF PROPERTIES | % EXPOSURE |
|-----------------------|---------------------|------------|
| Abruzzo | 6.3 | 4.7 |
| Basilicata | 0.3 | 0.2 |
| Calabria | 5.6 | 3.8 |
| Campania | 6.4 | 6.3 |
| Emilia-Romagna | 10.0 | 11.9 |
| Friuli Venezia Giulia | 0.3 | 0.2 |
| Lazio | 6.6 | 6.5 |
| Liguria | 15.1 | 13.2 |
| Lombardy | 8.8 | 14.8 |
| Marche | 8.9 | 7.6 |
| Molise | 0.6 | 0.4 |
| Piedmont | 1.6 | 1.3 |
| Apulia | 3.7 | 2.9 |
| Sardinia | 7.7 | 10.1 |
| Sicily | 6.5 | 5.3 |
| Tuscany | 4.1 | 4.0 |
| Trentino-Alto Adige | 0.2 | 0.1 |
| Umbria | 0.3 | 0.2 |
| Valle d'Aosta | 0.1 | 0.1 |
| Veneto | 6.9 | 6.4 |

The earthquake risk is concentrated in the first risk bracket, with 81% of the exposure. The exposure related to high risk brackets (high and very high) is almost non-existent.

Figure 25: Distribution of the earthquake risk - Collateral properties



³³ The percentages have been shown with decimal places. For this reason, the sum of the individual percentage items may give an approximate figure.

The regional distribution of the high risk (high and very high) in the long term is highly concentrated in the Abruzzo region, that accounts for 42% of the properties (approximately 1,200) and 41% of the exposure (approximately Euro 94 million).

Table 15: Representation of the % No. of Properties and % Exposure by Region³⁴

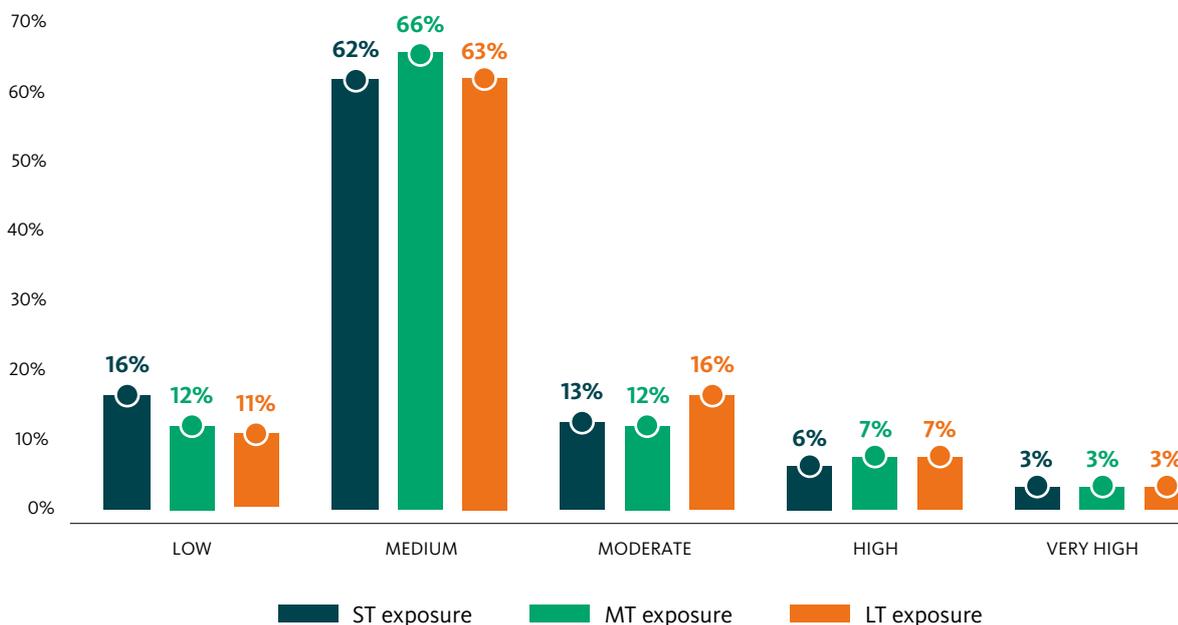
| REGION | % No. OF PROPERTIES | % EXPOSURE |
|-----------------------|---------------------|------------|
| Abruzzo | 42.3 | 40.8 |
| Basilicata | 0.1 | 0.9 |
| Campania | 4.1 | 3.4 |
| Emilia-Romagna | 16.2 | 19.3 |
| Friuli Venezia Giulia | 4.6 | 4.4 |
| Lazio | 0.2 | 0.0 |
| Marche | 3.9 | 3.8 |
| Apulia | 19.5 | 19.0 |
| Tuscany | 1.9 | 2.1 |
| Umbria | 7.4 | 6.2 |

Owned properties

The properties owned by the BPER Group that were subjected to the physical risk analysis amount to 1,500 units for a total market value of Euro 1.8 billion. The properties belonging to BPER Banca amount to slightly fewer than 1,100 units (73% of the total) with an equivalent market value of approximately 1.2 billion (68% of the total).

The acute physical risk is mostly concentrated in the medium risk bracket across all time horizons considered (62-66% of the total exposure); approximately 9-10% of the exposure is attributed to the high risk (high and very high) brackets.

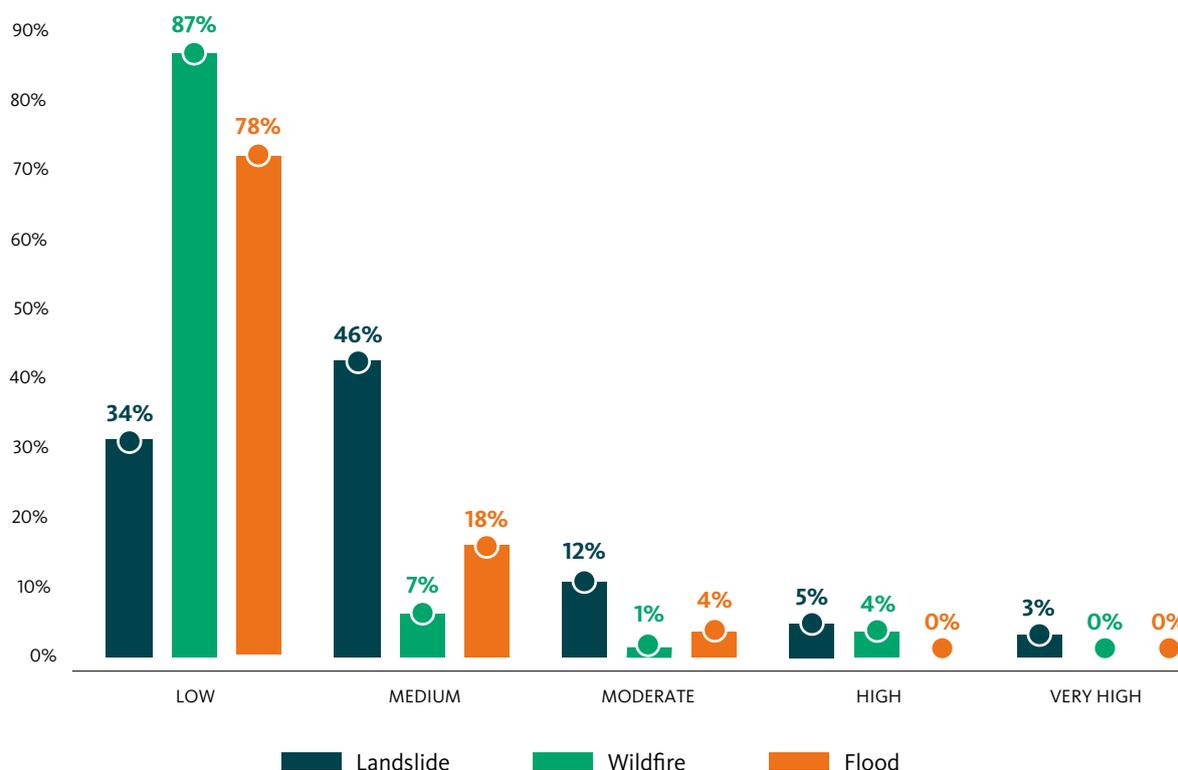
Figure 26: Distribution of acute physical risk - Owned properties



Landslide events turn out to be the most significant risk, and account for 46% of the long term exposure for the medium risk bracket, 12% are assigned to the moderate bracket and approximately 8% to the high risk bracket. The fire risk exposure is concentrated in the low risk brackets (approx. 87%), but also retains a 4% that is assigned to the high risk bracket. The top three are closed out by the risk of flooding, which is heavily concentrated in the low risk (78%) and medium risk (18%) brackets.

³⁴ The percentages have been shown with decimal places. For this reason, the sum of the individual percentage items may give an approximate figure.

Figure 27: Distribution of the three most relevant acute physical risks - Owned properties



Once again, in the long term scenario, the regional distribution of acute high risk and very high risk properties is concentrated in Lombardy, Liguria and Sardinia. Of the 250 properties in the high risk bracket (exposure value of Euro 190 million), this group of regions accounts for approximately half.

The total of the properties exposed to high acute risk (high and very high) in the long term belong exclusively to BPER Banca in Lombardy and Liguria, unlike Sardinia, where BPER Banca has no exposure.

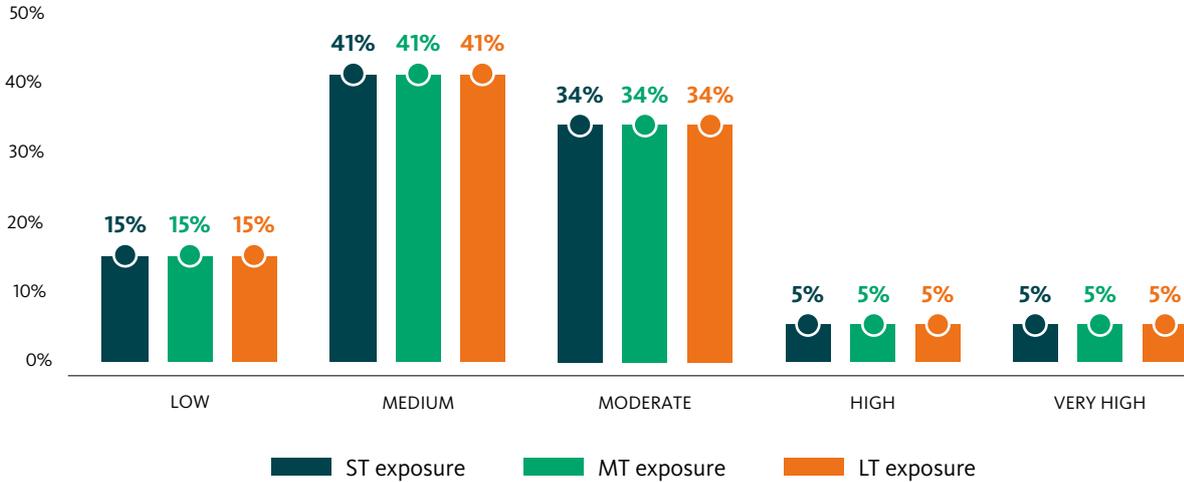
Table 16: Representation of the % No. of Properties and % Exposure by Region (Long Term)³⁵

| REGION | % No. OF PROPERTIES | % EXPOSURE |
|----------------|---------------------|------------|
| Abruzzo | 5.7 | 6.2 |
| Basilicata | 3.6 | 3.7 |
| Calabria | 10.1 | 2.6 |
| Campania | 8.9 | 18.2 |
| Emilia-Romagna | 5.3 | 5.3 |
| Lazio | 3.2 | 3.1 |
| Liguria | 18.6 | 17.6 |
| Lombardy | 15.4 | 13.4 |
| Marche | 4.0 | 3.0 |
| Piedmont | 3.2 | 2.7 |
| Apulia | 0.4 | 0.5 |
| Sardinia | 14.6 | 14.8 |
| Sicily | 1.6 | 1.3 |
| Tuscany | 4.9 | 7.0 |
| Umbria | 0.4 | 0.6 |

³⁵ The percentages have been shown with decimal places. For this reason, the sum of the individual percentage items may give an approximate figure.

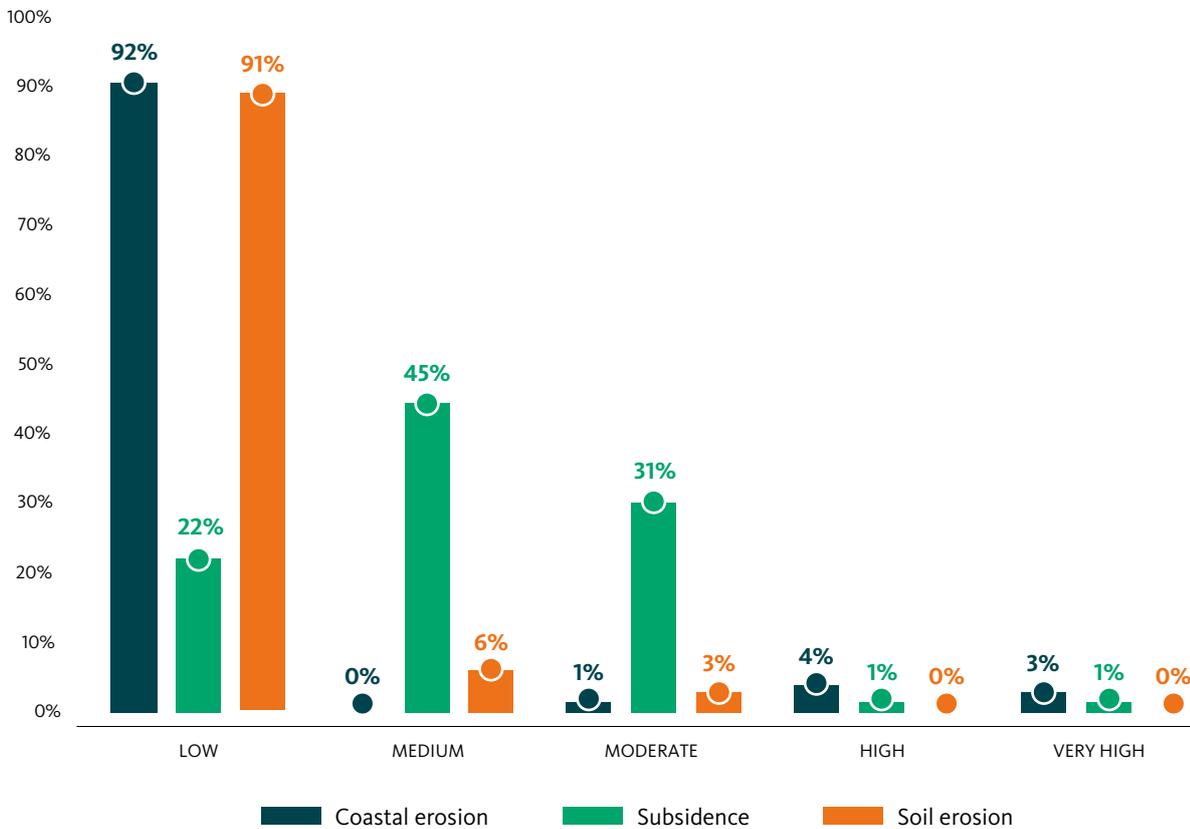
Where the chronic physical risk is concerned, 75% of the total exposure belongs to the medium and moderate risk brackets (almost 1,200 properties with a market value of just short of Euro 1.4 billion). The high risk brackets (high and very high) account for approximately 10% of the total exposure.

Figure 28: Distribution of chronic physical risk - Owned properties



In the long term, coastal erosion turns out to be the most impacting hazard in the high risk (high and very high) brackets, accounting for 7% of the total exposure (approx. Euro 125 million). Subsidence, on the other hand, only accounts for 2%, while soil erosion accounts for just under 1%.

Figure 29: Distribution of the three most relevant chronic physical risks - Owned properties



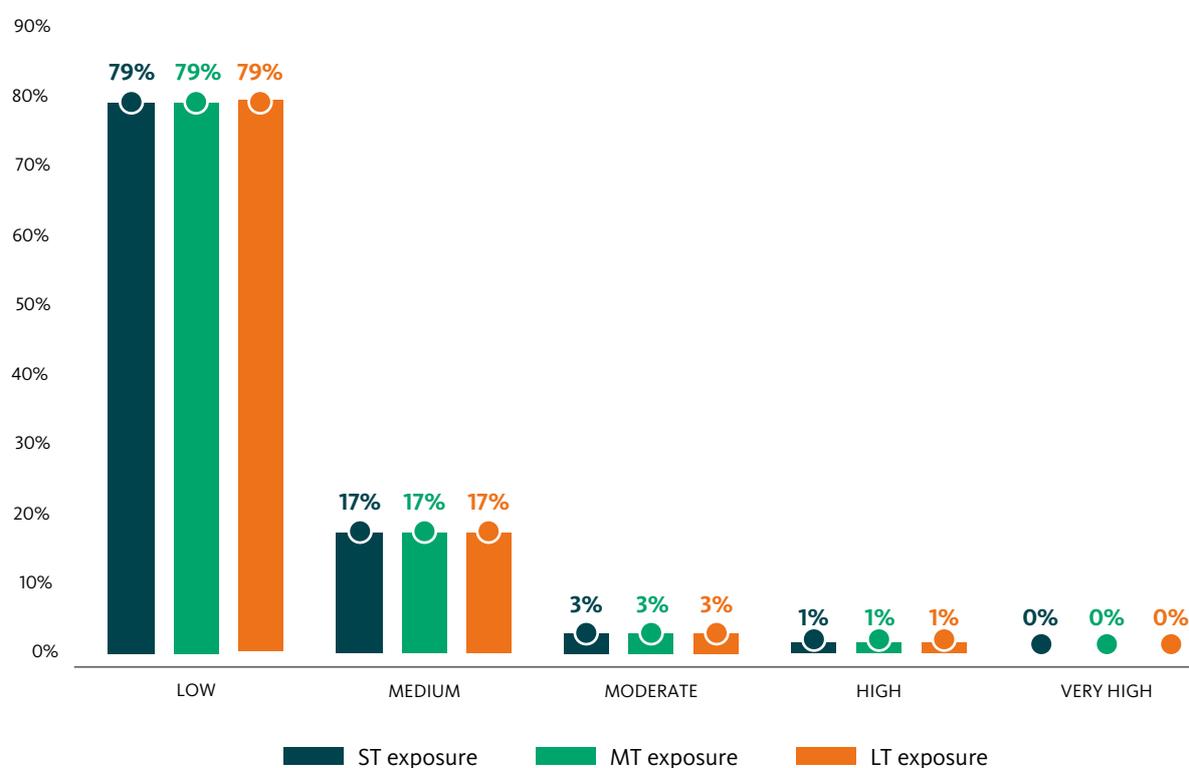
The regional distribution of the long term exposure for the highest risk brackets (high and very high) sees Liguria (28% of the exposure worth approx. Euro 48 million) come out way ahead of Lombardy (19% exposure worth over Euro 30 million). All the properties in Liguria refer to BPER Banca, as do approx. 90% of the properties in Lombardy.

Table 17: Representation of the % No. of Properties and % Exposure by Region³⁶

| REGION | % No. OF PROPERTIES | % EXPOSURE |
|----------------|---------------------|------------|
| Abruzzo | 2.1 | 1.9 |
| Basilicata | 0.7 | 0.3 |
| Calabria | 7.0 | 8.0 |
| Campania | 3.5 | 8.0 |
| Emilia-Romagna | 6.3 | 6.3 |
| Lazio | 4.9 | 2.2 |
| Liguria | 33.8 | 27.8 |
| Lombardy | 11.3 | 19.0 |
| Marche | 2.8 | 10.2 |
| Molise | 0.7 | 0.4 |
| Piedmont | 2.8 | 0.9 |
| Apulia | 2.8 | 3.2 |
| Sardinia | 13.4 | 9.2 |
| Sicily | 1.4 | 0.6 |
| Tuscany | 4.2 | 1.0 |
| Veneto | 2.1 | 1.0 |

The earthquake risk exposure for properties owned by the BPER Group is concentrated in the low risk bracket, accounting for 79% (approx. Euro 1.4 billion) of the total across all time horizons. The high and very high risk brackets cover 1% of the total exposure (Euro 13 million).

Figure 30: Distribution of the earthquake risk - Owned properties



³⁶ The percentages have been shown with decimal places. For this reason, the sum of the individual percentage items may give an approximate figure.

Of these Euro 13 million, 60% belong to the Abruzzo region and are entirely within the scope of BPER Banca.

Table 18: Representation of the % No. of Properties and % Exposure by Region³⁷

| REGION | % No. OF PROPERTIES | % EXPOSURE |
|----------------|---------------------|------------|
| Abruzzo | 22.2 | 60.8 |
| Campania | 11.1 | 2.1 |
| Emilia-Romagna | 16.7 | 5.0 |
| Liguria | 11.1 | 7.9 |
| Marche | 11.1 | 1.8 |
| Apulia | 11.1 | 9.2 |
| Sardinia | 5.6 | 2.4 |
| Tuscany | 5.6 | 2.0 |
| Umbria | 5.6 | 8.8 |

5.2 Emissions

5.2.1 Scope 1 and 2

Just like every year, even in 2023 the BPER Group measured its Scope 1 and 2 emissions, with the aim of monitoring and in time reducing the emissions associated with the Group's operations. This section shows the Scope 1³⁸ and Scope 2³⁹ emissions over the last two years, expressed in tonnes of CO₂ equivalent.

Table 19: Summary table of Scope 1 emissions for the BPER Group in 2022 and 2023

Scope 1

| | 31.12.2023 | 31.12.2022 |
|--|---------------|---------------|
| Total Scope 1 (t CO₂e) | 12,195 | 11,045 |

Source of emission factors: ISPRA, with transformation into CO₂ equivalent according to the procedure set out in the "Guidelines on the application of GRI (Global Reporting Initiative) Environmental Standards in banking" published by ABI Lab in December 2023 and December 2022, respectively for the 2023 and 2022 data.

³⁷ The percentages have been shown with decimal places. For this reason, the sum of the individual percentage items may give an approximate figure.

³⁸ Scope 1 emissions are accounted for according to the GHG Protocol Standard methodology.

³⁹ Scope 2 emissions are accounted for according to the GHG Protocol Standard methodology.

Table 20: Summary table of Scope 2 emissions for the BPER Group in 2022 and 2023

Scope 2 ⁴⁰

| | 31.12.2023 | 31.12.2022 |
|--|---------------|---------------|
| Total Scope 2 from electricity purchased - Location Based (t CO ₂ e) | 25,656 | 25,793 |
| Total Scope 2 from thermal energy purchased - Location Based (t CO ₂ e) | 801 | 352 |
| Total scope 2 - Location-Based (t CO₂e) | 26,457 | 26,145 |
| Total Scope 2 from electricity purchased - Market-Based (t CO ₂ e) | 200 | 349 |
| Total Scope 2 from thermal energy purchased - Market-Based (t CO ₂ e) | 801 | 352 |
| Total scope 2 - Market-Based (t CO₂e) | 1,001 | 701 |

The reporting standard used (GRI Sustainability Reporting Standards 2016) envisages two different Scope 2 emissions calculation approaches: "Location-based" and "Market-based".

The "Location-Based" approach envisages the use of average emission factors related to energy generation within well-defined geographical boundaries, including local sub-national or national boundaries.

More specifically, for electricity the emission coefficient used with reference to the Italian parameter equals to 267.94 gCO₂/kWh for 2023 and 260.60 g CO₂/kWh for 2022. Source of emission factors: ISPRA, with transformation into CO₂ equivalent according to the procedure set out in the "Guidelines on the application of GRI (Global Reporting Initiative) Environmental Standards in banking" published by ABI Lab in December 2023 and December 2022, respectively for the 2023 and 2022 data.

Where thermal energy is concerned, the coefficient used was 209.50 gCO₂/kWh for 2023 and 210.96 gCO₂/kWh for 2022.

The "Market-Based" approach involves the use of specific emission factors linked to the contractual purchase method adopted by the organisation for its energy consumption. Where "Market-Based" emission factors were not available, "Location-Based" factors are used.

Regarding the purchase of 100% renewable electricity covered by guarantees of origin, an emission factor of 0 is attributed. The remaining part will be multiplied by the Residual Mix coefficient which represents the mix of electricity generation shares remaining after taking into account the use of specific tracking systems for energy sources used, such as Guarantee of Origin certificates. For this approach the emission factor for the national "Residual Mix" was used, which for Italy is equal to 457.15 g CO₂/kWh for 2023 and 457 g CO₂/kWh for 2022 (Source of emission factors: AIB, European Residual Mixes 2022 and 2021 for 2023 and 2022 data respectively).

For thermal energy the above-mentioned "Location-Based" coefficient was used.

For further details, please refer to paragraph "6.1.3 Emissions Generated" of the BPER Group's 2023 CNFS.

5.2.2 Scope 3 ^{41 42}

Where Scope 3 emissions are concerned, the Group considered emissions from the following categories:

- Category 1 - Purchased goods and services;
- Category 6 - Business Travel;
- Category 15 - Investments.

With particular reference to category 15, continuing on from the previous years, in 2023 the Group renewed the carbon footprint analysis of its loan and securities portfolio by broadening its accounting perimeter, even after joining the NZBA, which took place during the first quarter of 2022. The calculation of the emissions funded by companies in the securities and the loan portfolio, would require an assessment of the Scope 3 emissions, in addition to Scope 1 and Scope 2, according to the PCAF methodology for the Oil & Gas, Mining, Transportation, Construction, Buildings, Materials and Industrial activities sectors. To guarantee the continuity of information, in 2023 the calculation only takes into consideration the Scope 1 and 2 emissions, however will be included in the next reports.

This testifies to the Group's commitment to monitoring the emissions associated with its portfolios, which represent the most significant emission items in the total.

The calculation of the portfolio emissions is a critical activity for net-zero analysis as it precedes the scenario analyses and the definition of the de-carbonisation objectives, and supports the monitoring and climate risk management activities required to achieve these objectives with reference to carbon-intensive sectors.

40 As a result of the accounting system improvement process, the data relative to i) Total scope 2 from purchased thermal energy - Market-Based; ii) Total Scope 2 - Market based for 2022 have been revised compared to what was published in the previous Consolidated Non-Financial Statement. For the previously published data reference should be made to the 2022 Consolidated Non-Financial Statement.

41 The other indirect GHG emissions (Scope 3) reported in this document were calculated following the Greenhouse Gas Protocol methodology, as reported in the Corporate Value Chain (Scope 3) Accounting and Reporting Standard, available here: https://ghgprotocol.org/sites/default/files/standards/Corporate-Value-Chain-Accounting-Reporting-Standard_041613_2.pdf

42 For business travel (by plane and train), BPER Bank Luxembourg S.A. is excluded from the data reporting scope because the booking system is not centrally aligned. Source of emission factors: "UK Government GHG conversion factors for company reporting 2023" - business air travel sheet - for 2023 data, "UK Government GHG conversion factors for company reporting, 2022" business air travel sheet for 2022 data.

This section shows the Scope 3 emissions over the last two years, expressed in tonnes of CO₂ equivalent.

Table 21: Allocation of Scope 3 emissions for the BPER Group in the 2022-2023 two-year period.

| GHG PROTOCOL EMISSION CATEGORY | | UNIT OF MEASUREMENT | 2023 | 2022 |
|---|------------------------------------|-------------------------|------------------|------------------|
| Category 1 - Purchased goods and services | Purchased paper | tCO ₂ e | 933 | 966 |
| | Trains | tCO ₂ e | 155 | 89 |
| Category 6 - Business Travel | Planes | tCO ₂ e | 484 | 271 |
| | Loan Portfolio ⁴³ | tCO ₂ e | 3,382,316 | 3,043,000 |
| Category 15 - Investments | Securities portfolio ⁴⁴ | tCO ₂ e | 265,662 | 116,297 |
| | Total | tCO₂e | 3,649,550 | 3,160,623 |

For further in-depth details, especially related to categories 1 and 6, refer to chapter "6.1.3 Emissions Generated" of the 2023 CNFS of the BPER Group included in the Integrated Report and Consolidated Financial Report of the BPER Banca Group as at 31 December 2023.

Loan portfolio emissions

With reference to the accounting year 2023, following the expansion of the accounting perimeter, the value of financed emissions equals 3,382,316 tCO₂e resulting from the sum of 3,103,972 tCO₂e ascribable to General Purpose Loans and 278,344 tCO₂e and tCO₂e ascribable to real estate purchase loans (subdivided between commercial and residential properties).

The Carbon Footprint analysis of the loan portfolio as at 31 December 2023 was conducted using a new calculation method that allowed the perimeter of exposures analysed to be expanded.

This meant that a larger number of counterparties could be analysed compared to 2022, with the inclusion of a new asset class concerning mortgage loans for the purchase of residential and commercial properties.

With reference to the GHG emissions of companies in the portfolio, counterparty Scope 1 and Scope 2 emissions were taken into consideration.

The financed emissions as at 31 December 2023 of the General Purpose Loan portfolio amount to 3,103,972 tCO₂e, with Scope 1 and Scope 2 components covering 66% and 34% respectively.

The following table provides details of Exposure, Financed Emissions and average Intensity according to the sectoral classification of the GICS (Global Industry Classification Standard) standard. These are useful in monitoring the exposure of the BPER Group with regard to the main climate sensitive economic sectors.

43 With reference to the accounting year 2023, following the broadening of the accounting perimeter (exposure: Euro 40.06 billion) of the counterparties, the value of financed emissions equals the sum of 3,103,972 tCO₂e, ascribable to General Purpose Loans (100,928 counterparties), and 278,344 tCO₂e, ascribable to loans for real estate purchases (83,450, subdivided between commercial and residential properties, in line with PCAF standards). The loan portfolio carbon footprint was calculated on the Bank data updated to 31 December 2023, including the following Group Legal Entities: BPER Banca, Banco di Sardegna, Sardaleasing, BPER Factor and Bibanca.

44 The securities portfolio analysis included approximately 2,113 securities in the portfolio that referred to four legal entities of the Group (BPER Banca, Banco di Sardegna, Bibanca and Sardaleasing). The value of the exposures included in the analyses amounts to approximately 85% of the Group's securities portfolio (excluding government bonds and intra-group exposures from the calculation); for the remaining portion of securities exposures (approx. 15% of the securities in the portfolio, in terms of Euro value), the information, to be acquired via the qualified infoprovder, and needed to apply the methodology adopted to calculate financed emissions is not available.

The securities portfolio analysed, net of the exclusions indicated (government securities, supranational issuers and intra-group exposures and companies for which the data necessary for the application of the methodology are not available), consists of approximately 450 issuers, for which the Bank has information and data from a qualified infoprovder in order to calculate the financed emissions on the basis of the methodology adopted. The counterparties excluded from the analysis are those for which the information necessary for its application is not available.

Table 22: Exposure, Financed Emissions, Emission Intensity and Average Emissions of the General Purpose Loan portfolio according to GICS aggregation

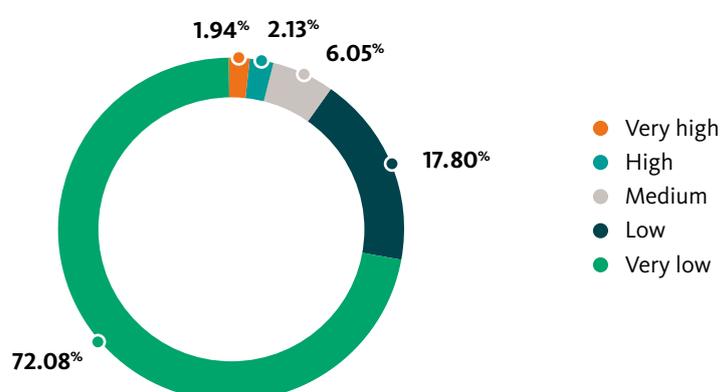
| GICS Sector | Exposure (%) | Financed Emissions (%) | Average Intensity (gCO ₂ e/ Euro) | Average GHG Scope 1&2 (tCO ₂ e) |
|------------------------|--------------|------------------------|---|---|
| Industrials | 33.91% | 20.10% | 64.35 | 1,176.46 |
| Consumer Discretionary | 15.92% | 7.58% | 46.21 | 552.87 |
| Consumer Staples | 14.11% | 11.02% | 64.21 | 2,052.41 |
| Real Estate | 13.13% | 1.51% | 60.94 | 83.18 |
| Materials | 10.00% | 33.81% | 320.90 | 18,163.89 |
| Health Care | 4.24% | 1.78% | 43.70 | 1,438.54 |
| Utilities | 2.74% | 5.09% | 647.80 | 83,824.30 |
| Communication Services | 2.59% | 0.19% | 27.45 | 864.19 |
| Information Technology | 1.92% | 0.52% | 20.05 | 464.56 |
| Energy | 1.44% | 18.38% | 156.86 | 274,098.62 |
| Financials | 0.01% | 0.00% | 14.45 | 22.48 |

It should be noted that 3.65% of the financed emissions over the total is attributable to counterparties for which it was not possible to identify the GICS sector they belong to.

By analysing the results for the various GICS sectors, the highest exposure is found within the Industrial sector (33.91% of total exposures) which does however have a lower average Intensity compared to more Carbon Intensive sectors such as, for example, Materials (10.00%) or Utilities (2.74%).

As shown in the graphic below, in line with what had been observed in the previous years, the BPER Group portfolio is more exposed in sectors with average or low emission intensities.

Figure 31: Carbon footprint of the loan portfolio by exposure and intensity class



The BPER portfolio has been analysed based on emission intensity levels. In particular, the threshold have been attributed according to the following criteria:

- Very high: Scope 1 + Scope 2 intensity greater than 500 gCO₂e/Euro;
- High: Scope 1 + Scope 2 intensity below 500 gCO₂e/Euro and above 300 gCO₂e/Euro;
- Average: Scope 1 + Scope 2 intensity below 300 gCO₂e/Euro and above 100 gCO₂e/Euro;
- Low: Scope 1 + Scope 2 intensity below 100 gCO₂e/Euro and above 50 gCO₂e/Euro;
- Very low: Scope 1 + Scope 2 intensity less than 50 gCO₂e/Euro;

As can be inferred, most of the exposures are classified as being “Very low” (72.08%) or “Low” (17.80%) intensity. The intensity percentage for the “Average” category stands at 6.05%, while the two remaining groupings (“High” and “Very high”) together account for 4.07% of the total.

Furthermore, it should be noted that the Real Estate sector includes General Purpose exposures towards counterparties belonging to the real estate sector, other than investments with revenue to be used to purchase commercial and residential properties for which a more detailed analysis is provided below.

The following table provides details of Financed Emissions and of the ratio of Exposure and Emissions over the total in percentage terms, for carbon-related sectors. The allocation to carbon-related sectors has been made according to the sectoral classification of the GICS (Global Industry Classification Standard) standard. These are useful in monitoring the exposure of the BPER Group with regard to the main carbon-related economic sectors. In particular, the loan portfolio exposure to carbon-related sectors was 26.32%, accounting for 42.75% of the total Financed Emissions.

Table 23: Exposure and Financed Emissions of the General Purpose Loan portfolio for the carbon-related sector

| Carbon-related sector | Financed Emissions (tCO ₂ e) | Exposure (%) | Financed Emissions (%) |
|--|---|--------------|------------------------|
| Agriculture, Food, and Forest Products | 226,670.91 | 7.98% | 7.30% |
| Energy | 562,826.53 | 2.02% | 18.13% |
| Materials & Buildings | 407,582.39 | 10.59% | 13.13% |
| Transportation | 130,001.62 | 5.73% | 4.19% |

Focus Commercial Real Estate and Mortgages

A summary of the most interesting information regarding financed emissions for the Commercial Real Estate and Mortgages asset classes is provided below:

Table 24: Exposure, Financed Emissions, Emission Intensity and Average Emissions of the Real Estate Loan portfolio

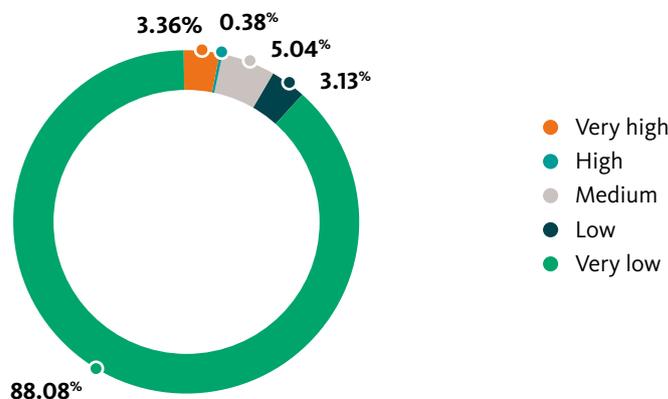
| Specialised loans - Real Estate | Mortgages (Residential properties) | Commercial Real Estate (Commercial Properties) |
|---|------------------------------------|--|
| Exposure in terms of GCA (%) | 94% | 6% |
| Financed emissions (%) | 73% | 27% |
| Emission intensity (tCO ₂ e/m ²) | 0.015 | 0.018 |

The table above shows the value of the emission intensity (in tCO₂e/m²) considering only the score 3 and score 4 positions, as for score 5 positions the surface area of the properties is not available and it is therefore not possible to calculate this kind of emission intensity.

Securities portfolio emissions

The total emissions financed by BPER amount to 265,662 tCO₂e, excluding from the calculation government securities, exposures to supranational issuers, securities for which the information necessary for the application of the adopted methodology is not available, and intra-group counterparties⁴⁵. The analysis of the portfolio carbon footprint, compared to 2022, has been able to rely on a greater amount of available data. In fact, given an equal amount of securities in the portfolio for the two periods, in 2023 it was possible to associate the emission data with a significantly greater number of counterparties (with a coverage of just 50% of the portfolio in 2022 compared to approx. 86% in 2023). The overall portfolio emissions have seen an increase of 128% compared to the previous year, due mainly to the increased data availability. However, 2% of the emissions cannot be pinned on specific GICS sectors given the lack of accurate data provided by the reference infoprovider. Therefore, the data shown below do not take these emissions into consideration.

Figure 32: Carbon footprint of the securities portfolio by exposure and intensity class



⁴⁵ The securities portfolio analysed, net of the exclusions indicated (government bonds, supranational issuers and intra-group exposures and companies for which the data necessary for the application of the methodology are not available), consists of approximately 450 issuers, for which the Bank has information and data from the infoprovider for the purposes of calculating the financed emissions on the basis of the methodology adopted. The counterparties excluded from the analysis are those for which the information necessary for its application is not available.

Main sectors by emission intensity:

- very high: mining support service activities, shipping and water transport, crude oil and natural gas collection and extraction, waste treatment and disposal, supply of electricity, gas, steam and air conditioning;
- medium: land transport, real estate activities, manufacture of pharmaceuticals, manufacturing, professional, scientific and technical activities;
- low: financial services activities (excluding insurance and pension funds);
- very low: information and telecommunication activities.

The intensity clusters were identified as follows:

- very high intensity: emission intensity of Scope 1 + Scope 2 greater than 500 gCO₂e/Euro;
- high intensity: emission intensity of Scope 1 + Scope 2 less than 500 gCO₂e/Euro and greater than 300 gCO₂e/Euro;
- average intensity: emission intensity of Scope 1 + Scope 2 less than 300 gCO₂e/Euro and greater than 100 gCO₂e/Euro;
- low intensity: emission intensity of Scope 1 + Scope 2 less than 100 gCO₂e/Euro and greater than 50 gCO₂e/Euro;
- very low intensity: emission intensity of Scope 1 + Scope 2 less than 50 gCO₂e/Euro.

The investment portfolio analysed is mainly concentrated in Low or Very Low Intensity sectors (3% and 88% of total exposures, respectively). Exposure to Very High Intensity sectors is rather low (3%), while High Intensity exposures are very limited (<1%). A more aggregated analysis of the Securities portfolio by macro-sector (i.e., GICS⁴⁶ sectors) shows that:

- The exposure towards very high intensity entities, especially towards companies in the materials and utilities sectors, each with emissions exceeding 50,000 tCO₂e, is minimal compared to the total of the Bank's securities portfolio (overall it amounts to just over 3% of the portfolio);
- the financial corporations sector, which accounts for over 83.3% of BPER's gross exposure, is associated with a low emission intensity.

Below is the detail of the intensity of Emissions, Exposure and Financed Emissions for the various GICS sectors⁴⁷:

Table 25: Exposure, Financed Emissions and Emission Intensity of the Securities Portfolio⁴⁸

| GICS Sector | Financed Emissions (tCO ₂ e) | Exposure (%) | Financed Emissions (%) | Average intensity (gCO ₂ e/Euro) |
|------------------------|---|--------------|------------------------|---|
| Financials | 20,148.35 | 83.29% | 7.75% | 39.85 |
| Industrials | 40,412.36 | 4.57% | 15.54% | 258.02 |
| Utilities | 94,467.35 | 2.50% | 36.33% | 1,148.26 |
| Consumer Discretionary | 5,562.64 | 1.77% | 2.14% | 48.15 |
| Information Technology | 3,018.24 | 1.65% | 1.16% | 58.36 |
| Communication Services | 2,239.69 | 1.58% | 0.86% | 38.23 |
| Consumer Staples | 3,896.71 | 1.48% | 1.50% | 85.03 |
| Health Care | 1,131.42 | 1.45% | 0.44% | 34.4 |
| Materials | 76,999.21 | 0.86% | 29.61% | 1,054.60 |
| Real Estate | 230.38 | 0.47% | 0.09% | 116.5 |
| Energy | 11,949.33 | 0.38% | 4.59% | 368.85 |

The analysis of the sectors to which the BPER Group's investment portfolio is exposed and the definition of their emission intensity is a fundamental prerequisite for steering the portfolio towards environmentally performing sectors and companies, i.e., those with a low carbon footprint or with an emission reduction strategy.

⁴⁶ In FY 2023, for carbon footprint reporting purposes, the Bank clusters counterparties using the GICS classification, in line with the approach used for the FY 2022 disclosure. This revision was dictated not only by the need to conform to market best practice, but was also deemed necessary following the use of data provided by a qualified infoprovder. The GICS classification was in fact developed by MSCI in collaboration with S&P, and the Bank therefore deemed it appropriate to revise the clustering logic based on the methodology developed by the same entity that provides the data needed to compile the information. As requested in the Carbon Disclosure Project's "CDP Climate Change Questionnaire 2022", the Bank also calculated the breakdown of portfolio emission intensity at industry level, in accordance with the sub-sectoral GICS classification, included in annex 3.

⁴⁷ For more details on the translation of the GICS sectors, please refer to Annex 3 of this Report or to the Borsa Italiana website <https://www.borsaitaliana.it/borsa/glossario/gics.html>.

⁴⁸ The financed emission data for the GICS sector presented here does not take into account emissions that cannot be attributed to specific sectors, which nevertheless account for 2% of the total portfolio emissions, equivalent to 12% of the exposures analysed. This quantity is instead considered in the total of 265,662 tCO₂e.

In particular, it is important to acknowledge that, despite the exposure of the securities portfolio towards the carbon-related sector being equal to less than 10%, this exposure represents almost 90% of financed emissions for which the GICS sectors is known.

Table 26: Exposures, Financed emissions of the securities portfolio linked to carbon-related sectors.

| Carbon-related sector | Financed emissions (tCO ₂ e) | Exposure (%) | Financed Emissions (%) |
|--|---|--------------|------------------------|
| Agriculture, Food, and Forest Products | 420.04 | 0.47% | 0.16% |
| Energy | 106,416.69 | 2.84% | 41.24% |
| Materials & Buildings | 87,505.02 | 3.36% | 33.91% |
| Transportation | 31,779.26 | 2.64% | 12.32% |

5.3 Targets and commitments for the future

5.3.1 2022-2030 Energy Plan

As mentioned in the "Strategy" section, in 2022 the BPER Group published its new 2022-2025 Business Plan which includes the Energy Plan. The Energy Plan has also set targets for reducing CO₂ emissions in line with the Paris Agreement. The above reduction goals will primarily impact the BPER Group's Scope 1 emissions. By 2030 a 50.2 % reduction in direct Scope 1 emissions is expected, which translates into bringing CO₂ emissions to 7,143.9 tCO₂e in 2030, compared to 14,345 tCO₂e in 2021, through several strategic actions which will be implemented over the course of 3 Business Plans.

The actions contained in the 2022-2025 Energy Plan specifically concern the following:

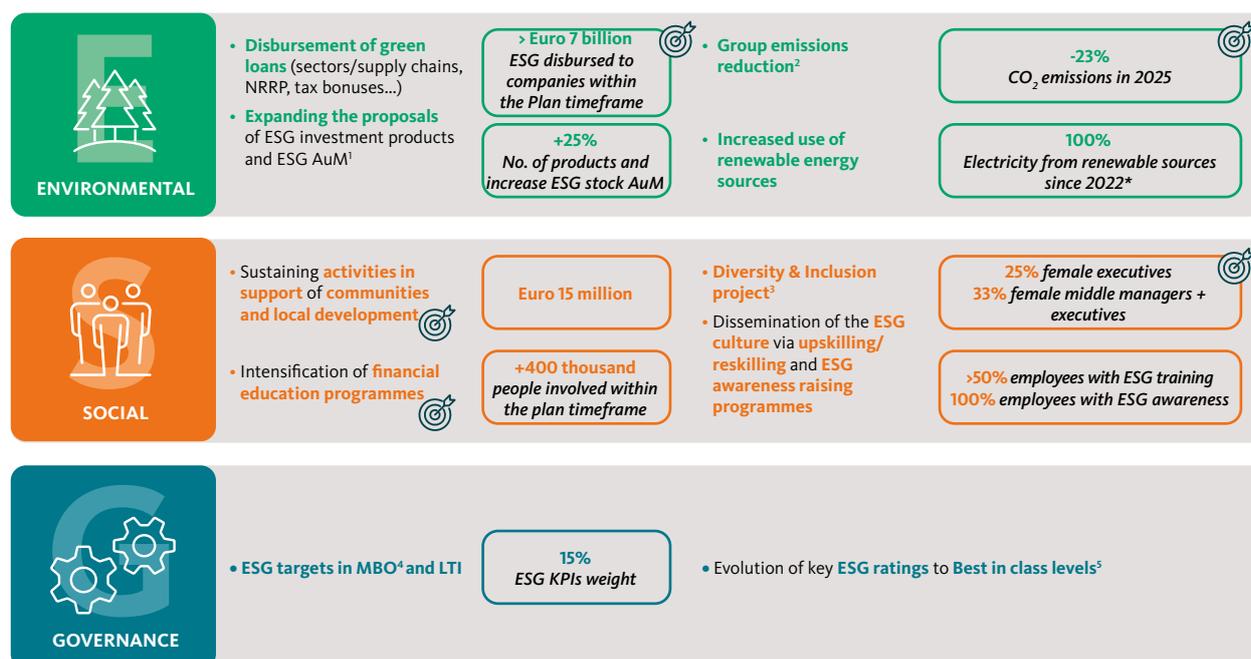
- conversion of gas-fired generators to heat pumps: during the course of 2023, 50 sites fuelled with methane gas heating units have been converted into heat pump heating units. Gas-fired generators are the BPER Group's main cause of climate-changing emissions, and this process of gradual replacement has begun over the past few years, but to date many buildings, including many medium and large assets, still have generators powered by methane gas;
- car fleet electrification: gradual process of converting the company car fleet of "endothermic" cars to hybrid-plug-in and/or electric cars;
- gas leak detection platform: in 2023 the platform was implemented and will become operational during the first months of 2024. This platform will guarantee the containment of F-gas leaks with a resulting drop in CO₂ emissions;
- optimisation of the use of functional management spaces: in 2023 a refurbishing project of the BPER Banca's Management Centre was undertaken for the rationalisation of the use of a number of management buildings in Modena, in order to optimise space and reduce both operating costs and CO₂ emissions. Even Finitalia during the course of 2023 has optimised its operational spaces by halving the surface area of the available properties. Additionally, once again as part of the optimisation of operational spaces, 214 branch offices have been closed;
- BEMS centralised management platform with AI algorithms: in 2023 the preliminary in depth assessments were undertaken to identify the partner for the development of the platform that in the first months of the year will enable the start of a pilot project with a first sample of properties equipped with BEMS equipment;
- extension of the BEMS control and monitoring perimeter: during the course of 2023, 8 large sized management sites have been completed and/or commissioned with a view to reducing waste and CO₂ emissions;
- Installation of 135 new BEMS units in as many BPER Banca branches which allow the management and monitoring of energy consumption and optimise energy usage.

5.3.2 Financing the transition

As described in the 2022-2025 Business Plan (section 3.3 of this document), the BPER Group has integrated sustainability in its strategy through a cross-cutting lever called ESG Infusion. To this end, the Plan identifies concrete actions and objectives to be achieved in the environmental field, as described below:

- external transition: support for the green transition of companies and households by earmarking a ceiling amount of over Euro 7 billion for green loans (specific sectors/supply chains, NRRP, the 110% 'Superbonus' tax deduction for the energy and seismic upgrading of properties, green mortgages, etc.);
- internal transition: the goal is to reduce Scope 1 direct science-based emissions, in line with the 1.5 °C scenario as described in the previous paragraph. In addition to the above-mentioned environmental targets, the Plan also describes ESG goals that also have an environmental aspect. One such example is the target related to upskilling and reskilling of the BPER Group's employees, which is extremely relevant for the achievement of all targets. Therefore, the main ESG targets of the 2022-25 Business Plan are set out in full below.

Figure 33: Objectives of the ESG Infusion programme



1. Higher number of ESG products and ESG AuM on offer

2. Science-Based Targets: 23% emission reduction by 2025 and 50% reduction by 2030 (as requested by NZBA)

3. Targets do not include ARCA Sgr

4. Valid for 2022

5. S&P ESG Evaluation, Moody's ESG Solutions, Standard Ethics Rating

Included in the LTI plan; for key social projects, the positive impact generated will be considered

*It should be noted that the value of electrical energy consumption from renewable sources during 2023 was rounded up as it was equal to 99.55% of the total. This percentage takes into account both the electricity purchased and used from renewable sources and electricity produced independently by its own photovoltaic systems and consumed by the Group.

As at 31 December 2023, the BPER Group had disbursed Euro 3.8 billion in green financing; for more details on the degree of progress of the projects included in the Business Plan and the level of achievement of the various targets, please refer to the 2023 CNFS, and with regard to the subject of transition financing, to chapter "4.7 ESG Products and Sustainable Finance" of the BPER Group's 2023 CNFS or to chapter 3 "Strategy" of this document.

5.3.3 Net-Zero Banking Alliance

After joining the NZBA on 9 March 2022, the BPER Group has worked to define the de-carbonisation goals for the priority sectors - electricity generation, oil and gas - published on 3 August 2023. The basis for the definition of the Net-Zero targets is represented by the carbon footprint of the loan portfolio as at 31 December 2022, carried out in accordance with the PCAF Guidelines.

For more details on the method used to calculate financed emissions of the loan portfolio refer to paragraph 5.2.2 Scope 3 - Loan portfolio emissions.

The calculations of financed emissions was used to identify exposures towards the carbon-intensive sectors established by the Alliance: agriculture, aluminium, cement, coal, commercial and residential properties, iron and steel, oil and gas, energy production and transportation. More specifically, the allocation of the sectors has been carried out according to two criteria: the internationally approved sectoral classification codes (i.e. NACE) and the asset type.

For loans without a specific purpose, which we presume finance all the activities of the emitting company, the overall emission profile of the counterparty has been taken into account by using NACE codes. For loans granted to the commercial and residential property sector the emission profile of the real estate construction companies have not been taken into account but loans granted for real estate purchases have been valued individually. Therefore, the attribution is based on the type of loan (i.e. loans earmarked for the purchase and/or refinancing of real estate to be used for residential or commercial purposes).

After having identified the exposures toward carbon-intensive sectors, a preliminary scenario analysis was performed to define the calculation metrics of the portfolio baseline and the medium term (i.e. 2030) and long term (2050) de-carbonisation targets. Additionally, steps have been taken to select the applicable climate scenarios and define the emission pathways to be followed to achieve the targets, in line with the NZBA Guidelines.

Subsequently, the de-carbonisation targets for the priority sectors of energy production and oil and gas have been defined, based on the results of the scenario analysis in combination with other factors, the main ones being: the relevance of the financed emissions compared to other sectors, the availability of methodologies and statistics from reliable and robust data, the priority assigned by the other participants in the NZBA and the assessment of a few strategic factors to ensure that the targets selected can be achieved by BPER Banca with a balanced effort.

With reference to the electricity generation sector, BPER Banca aims to reduce the weighted intensity of portfolio counterparty emissions by 36%, reducing it from a base of 256k kg CO₂e/MWh in 2022 to an average of 165 kg CO₂e/MWh by 2030. This target is related to financed emissions associated with energy generation activities, including Scope 1 and Scope 2 emissions for the companies in the sector analysed.

With reference to the Oil and Gas sector BPER Banca aims to reduce financed emissions by 29% by 2030 in the oil and gas sector, starting from a base of 464 tCO₂e in 2022. This target includes the extraction, refining and distribution activities linked to oil and gas and their derivatives and covers Scope 1, 2 and 3 emissions of the counterparties.

Besides the definition of de-carbonisation targets for each carbon-intensive sector, the NZBA Guidelines call for specific disclosure obligations in order to provide details of the monitoring methods adopted as well as the strategies put in place to achieve said targets.

More specifically, BPER Banca undertakes to report absolute emissions and emission intensity annually, within the next 12 months after target publication. This reporting process will enable BPER Banca to provide shareholders, investors and other stakeholders with a complete overview of the composition of the loan portfolio, with particular reference to corporate counterparties belonging to high emission intensity sectors.

Furthermore, within 12 months from the publication of the targets, BPER Banca will have to present a high level transition plan that must outline the actions and time frames involved to achieve these targets. To this end, BPER Banca is working to adopt various strategies to balance its achievement of the set goals with the commercial and corporate sustainability of BPER Banca, while also reducing the impacts on the investments. In particular, priority may be given to an approach supporting companies and private entities in improving their environmental performance, by fulfilling the increasing demand for "green" loans. The NZBA encourages banks to provide specific details of the actions planned for the various classes of assets and sectors.

5.3.4 Principles for Responsible Banking

As part of the activities related to the SMART TARGETS definition process in compliance with the Principles for Responsible Banking, the BPER Group has updated the impact analysis for both its retail and corporate portfolios, continuing on with the activities carried out in previous years. At the end of the analysis process, two significant impact areas have been identified: mitigation of climate change and financial inclusion.

The identification of these priority areas provided the ground rules on which the BPER Group has defined its own SMART targets. On this issue, as far as financial inclusion is concerned, the following targets have been defined:

- 400,000 people contacted (both customer and not) within the 2022-2025 plan time frame by means of financial education initiatives involving training initiatives, lessons, events, learning pills, webinars, sharing of materials;
- Increase in the percentage of private customers using digital systems over the total of active private customers, with a target of 64% by 31 December 2025.

Annex 1 - KRI Conversion Table

| # | Area | Key Risk Indicators | Indicator description | Calculation method | Unit of measurement | 2023 TCFD Report | CNFS 2023 | Notes |
|---|-------------------------------|--|--|--|---------------------|------------------|-----------|--|
| 1 | Risk Management - credit risk | HIGH PHYSICAL RISK MORTGAGE LOANS | The indicator aims to assess the relative exposure of mortgage loans to counterparties with real estate collateral geo-localised in areas with a high acute/chronic physical risk. The aim is to assess the risk connected to the occurrence of adverse negative phenomena (e.g. earthquakes, flooding, etc.). | The indicator is calculated as a ratio of the exposure guaranteed by mortgage loans (residential and commercial) with a high physical risk ("High" and "Very High" score - financial impact due to climate change and environmental degradation) over the total of mortgage loans. The credit exposure is considered with regards to cash exposure guaranteed by mortgage loans. | % | 4.3.1 | - | Compliant with what will be stated in the CDP questionnaire in the section: 2 – Risks & Opportunities |
| 2 | Risk Management - credit risk | HIGH PHYSICAL RISK EXPOSURE | The indicator aims to assess the exposure towards companies with production facilities geo-localised in areas with a high acute/chronic physical risk. The aim is to monitor the composition of the loan portfolio based on the counterparty's granular data in order to identify subjects who are more exposed to the risk in question. | The indicator is calculated as a ratio of the exposure to a "High" and "Very High" physical risk (financial impact due to climate change and environmental degradation) over the total of loan exposures towards companies. The loan exposure considered includes the agreed "in bonis" amount and the amounts used for the defaults of the IT aligned banks and the securities exposure that is included in the banking book. | % | 4.3.1 | - | Compliant with what will be stated in the CDP questionnaire in the section: 2 – Risks & Opportunities |
| 3 | Risk Management - credit risk | EXPOSURE TO HIGH TRANSITION RISK | The indicator aims to assess the exposure towards companies that have an economic activity and their related production plants that are subject to transition risk. The aim is to monitor the composition of the loan portfolio based on the counterparty's granular data in order to identify subjects who are more exposed to transition risk. | The indicator is calculated as the sum of the exposures towards companies with a high transition risk (score 4 and 5) (in terms of financial losses that an entity may incur, either directly or indirectly, following the adaptation process towards a more sustainable economy from an environmental standpoint) over the total of exposures towards companies. The loan exposure considered includes the agreed "in bonis" amount and the amounts used for the defaults of the IT aligned banks and the securities exposure that is included in the banking book. | % | 4.3.1 | - | Compliant with what will be stated in the CDP questionnaire in the section: 2 – Risks & Opportunities |

| # | Area | Key Risk Indicators | Indicator description | Calculation method | Unit of measurement | 2023 TCFD Report | CNFS 2023 | Notes |
|---|---|--|--|---|---------------------|------------------|-----------|--|
| 4 | Risk Management - credit risk | Exposure towards counterparties not included in the Paris Agreement (Art. 12) | The indicator aims to assess the exposure towards companies that operate in sectors not included in the Paris Agreement. The objective is to monitor the share of the loan portfolio towards counterparties with high emission levels. | The indicator is calculated as a ratio of the sum of exposures towards companies included in the Paris Agreement over the total of loan exposures towards companies. The loan exposure considered includes the agreed "in bonis" amount and the amounts used for the defaults of the IT aligned banks and the securities exposure that is included in the banking book. | % | 4.3.1 | - | Compliant with what will be stated in the CDP questionnaire in the section: 2 – Risks & Opportunities |
| 5 | RAF | Downgrading of the ESG Rating (St. Ethics/MSCI) | The ESG rating (or sustainability rating) is a synthetic evaluation that certifies the soundness of an issuer, a security or a fund in terms of environmental, social and governance performance, as proof of the commitment and continuous improvement in these contexts. The MSCI (Morgan Stanley Complex Index) ESG Ratings aim to measure BPER's resilience with regard to long term and financially relevant ESG risks. They are expressed through nine different rating classifications (from AAA to CCC). The ratings produced by Standard Ethics (an independent rating agency active since 2004) aim to promote the standard principles of sustainability and governance issued by the EU, the OECD and the United Nations. Its final assessments on the level of compliance of companies and nations with the sustainability principles are expressed through nine different rating classifications (from EEE to F). | The indicator is calculated by verifying any variations as a result of the rating update by MSCI/Standard Ethics and, in the event of a notch downgrade, the alert threshold is triggered. | - | 4.3.2 | - | Compliant with what will be stated in the CDP questionnaire in the section: 2 – Risks & Opportunities |
| 6 | Risk Management - Operational risk | ESG Risk – Number of reported events | A specific monitoring indicator has also been introduced to keep track of the number of ESG events recorded in the period as part of the Loss Data Collection process. | Number of loss events associated with ESG factors with a report date within the reference period. | - | 4.3.1 | - | Compliant with what will be stated in the CDP questionnaire in the section: 2 – Risks & Opportunities |

Annex 2 - KPI conversion table

| Area | No. | KPIs | Unit of measurement | 2023 TCFD Report | CNFS 2023 | Methodology | Notes |
|-------------------|-----|--|---------------------|------------------|-----------|---|---|
| Scenario analysis | 1 | % exposure of the loan portfolio towards companies with high (high to very high) transition risk | % | 5.1.1 | | TCFD Metrics and Objectives; Carbon Disclosure Project (CDP) Climate Change Questionnaire; NGFS climate scenarios and macro-economic variables; Counterparty and sector data - Financial Statements, Surveys and BI, GHG (Scope 1 and 2); Prometeia proprietary methodology that estimates the impact of the NGFS "Net Zero 2050" climate scenario and of the related transition hypotheses on the financial statements of the individual companies. The metric identifies the companies with a % exposure to high and very high transition risk; the indicator calculated is referred to a long term time horizon. | Compliant with what will be stated in the CDP questionnaire in the section: 2 – Risks & Opportunities 3 – Business Strategy |
| Scenario analysis | 2 | % exposure of the loan portfolio towards corporate counterparties exposed to high overall acute physical risk (high to very high) | % | 5.1.2 | | TCFD Metrics and Objectives; Carbon Disclosure Project (CDP) Climate Change Questionnaire; The indicator considers the physical risks associated with acute hazards. The NGFS scenario considered for the representation of physical risks is the "Current Policies" one. The metric identifies the % exposure towards counterparties subject to a high and very high climate risk; the indicator calculated is referred to a long term time horizon. | Compliant with what will be stated in the CDP questionnaire in the section: 2 – Risks & Opportunities 3 – Business Strategy |
| Scenario analysis | 3 | % of exposure of loan portfolio towards corporate counterparties exposed to high overall chronic physical risk (high to very high) | % | 5.1.2 | | TCFD Metrics and Objectives; Carbon Disclosure Project (CDP) Climate Change Questionnaire; The indicator considers the physical risks associated with chronic hazards. The NGFS scenario considered for the representation of physical risks is the "Current Policies" one. The metric identifies the % exposure towards counterparties subject to a high and very high climate risk; the indicator calculated is referred to a long term time horizon. | Compliant with what will be stated in the CDP questionnaire in the section: 2 – Risks & Opportunities 3 – Business Strategy |

CONTINUED

| Area | No. | KPIs | Unit of measurement | 2023 TCFD Report | CNFS 2023 | Methodology | Notes |
|-------------------|-----|--|---------------------|------------------|-----------|---|---|
| Scenario analysis | 4 | % exposure of the loan portfolio towards corporate counterparties exposed to earthquake risk | % | 5.1.2 | | TCFD Metrics and Objectives; Carbon Disclosure Project (CDP) Climate Change Questionnaire; The physical risks have also been assessed in relation to earthquakes, which despite not being linked to climate dynamics, are nevertheless relevant for the Italian landscape. The metric identifies the % exposure towards counterparties subject to a high and very high earthquake risk; the indicator calculated is referred to a long term time horizon. | Compliant with what will be stated in the CDP questionnaire in the section: 2 – Risks & Opportunities 3 – Business Strategy |
| Scenario analysis | 5 | % of real estate collateral exposed to high acute physical risk (high to very high) | % | 5.1.2 | | TCFD Metrics and Objectives; Carbon Disclosure Project (CDP) Climate Change Questionnaire; The indicator considers the physical risks associated with acute hazards. The NGFS scenario considered for the representation of physical risks is the "Current Policies" one. The metric identifies the % exposure towards properties subject to a high and very high climate risk; the indicator calculated is referred to a long term time horizon. | Compliant with what will be stated in the CDP questionnaire in the section: 2 – Risks & Opportunities 3 – Business Strategy |
| Scenario analysis | 6 | % of real estate collateral exposed to high chronic physical risk (high to very high) | % | 5.1.2 | | TCFD Metrics and Objectives; Carbon Disclosure Project (CDP) Climate Change Questionnaire; The indicator considers the physical risks associated with chronic hazards. The NGFS scenario considered for the representation of physical risks is the "Current Policies" one. The metric identifies the % exposure towards properties subject to a high and very high climate risk; the indicator calculated is referred to a long term time horizon. | Compliant with what will be stated in the CDP questionnaire in the section: 2 – Risk & Opportunities 3 – Business Strategy |
| Scenario analysis | 7 | % value of collateral real estate exposed to earthquake physical risk | % | 5.1.2 | | TCFD Metrics and Objectives; Carbon Disclosure Project (CDP) Climate Change Questionnaire; The physical risks have also been assessed in relation to earthquakes, which despite not being linked to climate dynamics, are nevertheless relevant for the Italian landscape. The metric identifies the % exposure towards properties subject to a high and very high earthquake risk; the indicator calculated is referred to a long term time horizon. | Compliant with what will be stated in the CDP questionnaire in the section: 2 – Risk & Opportunities 3 – Business Strategy |

CONTINUED

| Area | No. | KPIs | Unit of measurement | 2023 TCFD Report | CNFS 2023 | Methodology | Notes |
|-------------------|-----|---|---------------------|------------------|-----------|---|--|
| Scenario analysis | 8 | % value of owned real estate properties exposed to acute physical risk | % | 5.1.2 | | TCFD Metrics and Objectives; Carbon Disclosure Project (CDP) Climate Change Questionnaire; The indicator considers the physical risks associated with acute hazards. The NGFS scenario considered for the representation of physical risks is the "Current Policies" one. The metric identifies the % exposure towards properties subject to a high and very high climate risk; the indicator calculated is referred to a long term time horizon. | Compliant with what will be stated in the CDP questionnaire in the section: 2 – Risk & Opportunities 3 – Business Strategy |
| Scenario analysis | 9 | % value of owned real estate properties exposed to chronic physical risk | % | 5.1.2 | | TCFD Metrics and Objectives; Carbon Disclosure Project (CDP) Climate Change Questionnaire; The indicator considers physical risks associated with chronic hazards. The NGFS scenario considered for the representation of physical risks is the "Current Policies" one. The metric identifies the % exposure towards properties subject to a high and very high climate risk; the indicator calculated is referred to a long term time horizon. | Compliant with what will be stated in the CDP questionnaire in the section: 2 – Risk & Opportunities 3 – Business Strategy |
| Scenario analysis | 10 | % value of owned real estate properties exposed to earthquake physical risk | % | 5.1.2 | | TCFD Metrics and Objectives; Carbon Disclosure Project (CDP) Climate Change Questionnaire; The physical risks have also been assessed in relation to earthquakes, which despite not being linked to climate dynamics, are nevertheless relevant for the Italian landscape. The metric identifies the % exposure towards properties subject to a high and very high earthquake risk; the indicator calculated is referred to a long term time horizon. | Compliant with what will be stated in the CDP questionnaire in the section: 2 – Risk & Opportunities 3 – Business Strategy |

CONTINUED

| Area | No. | KPIs | Unit of measurement | 2023 TCFD Report | CNFS 2023 | Methodology | Notes |
|------------------------------|-----|--------------------|---|------------------|---------------|--|---|
| Direct environmental impacts | 1 | Scope 1 emissions | tCO ₂ e | 5.2.1 | Section 6.1.3 | TCFD Metrics and Objectives; Carbon Disclosure Project (CDP) Climate Change Questionnaire; GRI 305; GHG Protocol; Guidelines on the application of GRI (Global Reporting Initiative) environmental standards in banking, published by ABI Lab in December 2023; UK Government GHG conversion factors for company reporting 2023. | Decarbonisation targets in the 2022-2030 Energy Plan. Compliant with what will be stated in the section questionnaire: 4 – Targets & Performance 5 - Emission Methodology 6 – Emission Data 10 - Verification |
| Direct environmental impacts | 2 | Scope 2 emissions | tCO ₂ e | 5.2.1 | Section 6.1.3 | TCFD Metrics and Objectives; Carbon Disclosure Project (CDP) Climate Change Questionnaire; GRI 305; GHG Protocol; Guidelines on the application of GRI (Global Reporting Initiative) environmental standards in banking, published by ABI Lab in December 2023; AIB European Residual Mixes 2022 by Market-based emission factor. | De-carbonisation target included in the 2022-2030 energy plan and contracts underwritten with its suppliers to achieve the target of 100% of electricity consumption from renewable sources ⁴⁹ . Compliant with what will be stated in the CDP questionnaire in the section: 4 – Targets & Performance 5 - Emission Methodology 6 – Emission Data 10 - Verification |
| Direct environmental impacts | 3 | Emission intensity | tCO ₂ e/ employees and tCO ₂ e/mq | | Section 6.1.3 | Carbon Disclosure Project (CDP) Climate Change Questionnaire; GRI 305-5. | Compliant with what will be stated in the CDP questionnaire in the section: 4 – Targets & Performance 6 – Emission Data |
| Energy | 1 | Energy consumption | GJ | | Section 6.1.1 | GRI 302-1; Guidelines on the application of GRI (Global Reporting Initiative) environmental standards in banking, published by ABI Lab in December 2023. | KPIs reported in CNFS in accordance with GRI Standards. |

CONTINUED

⁴⁹ It should be noted that the value of electricity consumption from renewable sources during 2023 was rounded up as it was equal to 99.55% of the total. This percentage takes into account both the electricity purchased and used from renewable sources and electricity produced independently by its own photovoltaic systems and consumed by the Group.

| Area | No. | KPIs | Unit of measurement | 2023 TCFD Report | CNFS 2023 | Methodology | Notes |
|--------------------------------|-----|--|---------------------|------------------|--------------------------|---|---|
| Energy | 2 | Energy consumption | MWh | | Section 6.1.1. and 6.1.3 | Carbon Disclosure Project (CDP) Climate Change Questionnaire; GRI 302-1; Guidelines on the application of GRI (Global Reporting Initiative) environmental standards in banking, published by ABI Lab in December 2023. | Compliant with what will be stated in the CDP questionnaire in the section: 4 – Targets & Performance 8 – Energy |
| Energy | 3 | Energy savings | MWh | | Section 6.1.2 and 6.1.3 | Carbon Disclosure Project (CDP) Climate Change Questionnaire; GRI 302-4; Guidelines on the application of GRI (Global Reporting Initiative) environmental standards in banking, published by ABI Lab in December 2023. | Compliant with what will be stated in the CDP questionnaire in the section: 4 – Targets & Performance 7 – Emission Breakdown |
| Energy | 4 | Energy intensity | GJ/man and GJ/sq.m | | Section 6.1.1 | GRI 302-3; Guidelines on the application of GRI (Global Reporting Initiative) environmental standards in banking, published by ABI Lab in December 2023 CDP. | KPI reported in CNFS according to GRI Standards, equivalent to KPI emission intensity [tCO ₂ e/man and/or tCO ₂ e/sqm]; Compliant with what will be stated in the CDP questionnaire in the section: 6 – Emission Data |
| Indirect environmental impacts | 1 | Scope 3 emissions - Financed emissions of the General Purpose loan portfolio | tCO ₂ e | Section 5.2.2 | | TCFD Metrics and Objectives; Partnership for Carbon Accounting Financials (i.e., PCAF) with reference to the General Purpose asset class; GHG Protocol, Category 15 - Investments Scope 3; Internal databases and qualified infoprovder. | Decarbonisation targets currently being set as part of the Net-Zero Banking Alliance membership; Ceiling green credit volume targets in the ESG Infusion Programme, part of the 2022-2025 BPER e-volution Business Plan; Compliant with what will be stated in the CDP questionnaire in the section: 14 – Portfolio Impact with unit of measurement: 1) Total emissions [tCO ₂ e] 2) Intensity [tCO ₂ e / Revenue] |

CONTINUED

| Area | No. | KPIs | Unit of measurement | 2023 TCFD Report | CNFS 2023 | Methodology | Notes |
|--------------------------------|-----|--|---------------------|------------------|-----------|--|--|
| Indirect environmental impacts | 2 | Scope 3 emissions - Financed emissions of the Securities portfolio | tCO ₂ e | Section 5.2.2 | | TCFD Metrics and Objectives; Partnership for Carbon Accounting Financials (i.e., PCAF); Carbon Disclosure Project (CDP) Climate Change Questionnaire; Database from qualified infoprovder, GICS sectoral classification; GHG Protocol, Category 15 - Investments Scope 3. | Decarbonisation targets currently being set as part of the Net-Zero Banking Alliance membership; Compliant with what will be stated in the CDP questionnaire in the section: 14 – Portfolio Impact with unit of measurement: 1) Total emissions [tCO ₂ e] 2) Intensity [tCO ₂ e / Revenue] |
| Indirect environmental impacts | 3 | Scope 3 emissions - Purchased goods and services and Business travel | tCO ₂ e | Section 5.2.2 | | TCFD Metrics and Objectives; Carbon Disclosure Project (CDP) Climate Change Questionnaire; GRI 305; GHG Protocol, Category 1 - Purchased goods and services, Category 6 - Business travel, Scope 3; UK Government GHG conversion factors for company reporting 2023. | Compliant with what will be stated in the CDP questionnaire in the section: 4 – Targets & Performance 5 - Emission Methodology 6 – Emission Data 10 - Verification |
| Indirect environmental impacts | 4 | Scope 3 emissions - Financed emissions of the Real Estate and Mortgages loan portfolio | tCO ₂ m2 | Section 5.2.2 | | TCFD Metrics and Objectives; GHG Protocol, Category 15 - Investments Scope 3; PCAF (Partnership for Carbon Accounting Financials), Asset Class “Mortgages” and “Commercial Real Estate”. | The PCAF Conversion Factor Database was used for the Real Estate sector, in order to accurately map the financed emissions; Decarbonisation targets currently being set as part of the Net-Zero Banking Alliance membership; Ceiling green credit volume targets in the ESG Infusion Programme, part of the 2022-2025 BPER e-volution Business Plan. |

With regard to the Principal Adverse Impact (PAI) indicators taken into consideration as part of the portfolio management service and consultancy service, as described in section 3.3.1 Enhancing the green offer, Wealth Management sub-paragraph, for more details reference should be made to the statement on the main negative effects of the investment decisions on sustainability factors, published on the BPER Banca institutional website.

As regards the Climate-Environmental indicators integrated into the remuneration policies (MBO and ILT), reference should be made to section 2.5 Remuneration Policies.

Annex 3 - GICS Sectors In Depth

The GICS (Global Industry Classification Standard) was introduced in 1999 by MSCI in collaboration with Standard & Poor's to establish a globally accepted criterion for the sectoral classification of industries, in order to allow greater comparability to research and analyses carried out in different parts of the world. The logic of GICS is that each company is classified into a sector according to its core business (as measured by its revenue accounting items). The sectors thus identified are:

- Energy Sector (companies belonging to the energy sector);
- Materials Sector (companies belonging to the manufacturing sector);
- Industrials Sector (companies belonging to the industrial sector);
- Consumer Discretionary Sector (companies that are more sensitive to economic cycles);
- Consumer Staples Sector (companies less sensitive to economic cycles);
- Health Care Sector (pharmaceutical and biotechnology companies);
- Financials Sector (companies belonging to the finance sector);
- Information Technology sector (hardware, software and semiconductor companies);
- Telecommunications Services Sector (companies belonging to the telecommunications sector);
- Utilities Sector (companies belonging to the public goods sector such as gas, electricity, water, etc.);
- Real Estate Sector (companies belonging to the Real Estate sector).

The GICS "Consumer Discretionary Sector" and "Consumer Staples Sector" have been included, and the following industries in particular:

- The Consumer Staples Sector includes the GICS industries:
 - 3010 - Food & Staples Retailing: food and staples retailing;
 - 3020 - Food, Beverage & Tobacco: beverage production, food production (including agricultural products, packaged food and meat), tobacco companies;
 - 3030 - Household & Personal Products: manufacture of goods for personal and commercial consumption (e.g., cosmetics, household and industrial cleaning products, soaps and detergents, kitchen utensils);
- The Consumer Discretionary Sector includes the GICS industries:
 - 2510 - Automobiles & Components: manufacture of automotive components (e.g. automotive equipment, tyres and rubber);
 - 2520 - Consumer Durables & Apparel: production of household durables (e.g., furniture, household appliances), production of leisure goods, production of textiles, clothing and luxury goods;
 - 2530 - Consumer Services: services for consumers (e.g. restaurants, cruise line services);
 - 2550 - Retailing: direct and internet retailing (e.g., shopping centres, computer and electronics retailing).



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INDEPENDENT AUDITOR'S REPORT ON THE TCFD REPORT

**To the Board of Directors of
BPER Banca S.p.A.**

We have carried out a limited assurance engagement on the TCFD Report of BPER Banca S.p.A. and its subsidiaries (hereinafter "BPER Banca Group" or "Group") for the period ending December 31, 2023 (hereinafter "TCFD Report"). The TCFD Report has been prepared on the basis of the criteria established in the "Methodological note" of the document itself, with reference to the "Recommendations of the Task Force on Climate-related Financial Disclosures" (hereinafter "TCFD Recommendations") defined by the *Financial Stability Board*.

Responsibility of the Directors for the TCFD Report

The Directors of BPER Banca S.p.A. are responsible for the preparation of the TCFD Report in accordance with the criteria established in the "Methodological note" of the document itself, with reference to the TCFD Recommendations.

The Directors are also responsible for such internal control as they determine is necessary to enable the preparation of the TCFD Report that is free from material misstatement, whether due to fraud or error.

The Directors are moreover responsible for defining the climate-related objectives of BPER Banca Group.

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.

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

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Codice Fiscale/Registro delle Imprese di Milano Monza Brianza Lodi n. 03049560166 - R.E.A. n. MI-1720239 | Partita IVA: IT 03049560166

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Auditor's responsibility

Our responsibility is to express our conclusion based on the procedures performed about the compliance of the TCFD Report with the criteria established in the "Methodological note" of the TCFD Report. 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 TCFD Report is 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 TCFD Report are based on our professional judgement and included inquiries, primarily with company personnel responsible for the preparation of information included in the TCFD Report, analysis of documents, recalculations and other procedures aimed to obtain evidence as appropriate.

Specifically, we carried out the following procedures:

1. analysis of the policies, procedures and other company documentation in order to understand the governance structure and the processes relating to climate-related strategy and risk management of the BPER Banca Group;
2. comparison between the data and information included in the TCFD Report with climate-related data and information included in the consolidated non-financial Statement and in the consolidated financial statements of the BPER Banca Group;
3. understanding of the processes underlying the origination, recording and management of qualitative and quantitative material information included in the TCFD Report.

In particular, we carried out interviews and discussions with the management of BPER Banca S.p.A. and we carried out limited documentary verifications, in order to gather information about the processes and procedures which support the collection, aggregation, elaboration and transmittal of climate-related disclosures to the department responsible for the preparation of the TCFD Report.

In addition, for material information, taking into consideration the Group's activities and characteristics:

- a) with regards to qualitative information included in the TCFD Report, we carried out interviews and gathered supporting documentation in order to verify its consistency with the available evidence;
- b) with regards to quantitative information, we carried out both analytical procedures and limited verifications in order to ensure, on a sample basis, the correct aggregation of data.



Conclusion

Based on the work performed, nothing has come to our attention that causes us to believe that the TCFD Report of BPER Banca Group as of December 31, 2023, is not prepared, in all material aspects, in accordance with the criteria established in the “Methodological note” of the TCFD Report.

DELOITTE & TOUCHE S.p.A.

Signed by
Stefano Merlo
Partner

Bologna, Italy
March 22, 2024

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

IMPACT OF NATURE-RELATED FACTORS



Impact of nature-related factors

With a view to adequately identify and manage ESG risks, the BPER Group has extended the monitoring parameter by integrating risks resulting from climate change, meaning risks that refer to the Group's potential exposure to counterparties that may contribute or be influenced by climate change, with environmental risks not linked to climate, such as those resulting from impacts on biodiversity, on the deterioration of natural capital and of the ecosystems.

In 2023 the first pilot analysis was performed on Nature-related risks by mapping the loan exposures of the corporate portfolio. This disclosure is located in the volume of the TCFD 2023 Report added to the same, as it is not an integral part of it. 3,089 companies were taken into consideration for the pilot analysis, with total exposure amounting to approx. Euro 8 billion. The company sample selection process was designed to represent the production sectors in which Nature-related risks have the greatest impact.

Safeguarding biodiversity and land and sea ecosystems, as well as the growing attention paid to the circular economy and the protection of natural resources, are issues of increasing relevance, to protect well-being and health, but also for the prosperity of economy systems, often heavily dependent on natural resources and ecosystemic services.

The measurement and monitoring of environmental risks other than Climate Change, such as those linked to biodiversity, the impoverishing of natural factors and pollution, therefore take on increasing relevance for the market and legislation, even where the financial sector is concerned.

The ECB believes that credit institutions should frame climate and environmental risks in the folds of an overall and far-sighted strategic approach that might help to understand how climate change and environmental degradation give rise to structural changes that influence economic activities with repercussions on the financial system. The institute, among other things, within its own "Climate and nature plan for 2024-2025", emphasised that during the course of the coming months it will delve deeper into the impact that risks linked to nature may have on the economy, to get a better understanding of the possible implications for the monetary policy and financial systems¹.

In light of these elements, during 2023, the BPER Banca Group has begun an initial analysis aimed at:

- mapping the share of its exposures towards counterparties operating in sectors which, based on the main international reference frameworks, it is believed may generate relevant dependencies and impacts linked to nature;
- understanding the current impact and risks linked to environmental issues, other than Climate Change, and thus useful to support the Group in outlining its own strategic approach to the management of these issues.

The analysis concerned various aspects, i.e. the impacts directly generated by the Group and those connected to the business, in terms of products/services offered and the exposure of the loan and disinvestment portfolio, in order to produce an "as-is" mapping that could be used to activate discussions with the various business functions and owner controls, with whom both individual and plenary discussion groups have been organised.

With reference to possible direct impacts on natural issues, the assessment highlighted a number of best practices introduced by the BPER Group which emphasise the commitment to protecting the environment and natural resources, as indicated in the ESG Policy.

Some examples are provided below.

With the Green Procurement project, included in the 2022-2025 Business Plan, regarding the integration of ESG criteria in the procurement process and supplier management, the BPER Group intends to carefully select purchase following Italian and European Minimum Environmental Criteria (MEC).

The BPER Group is also engaged in acquiring the certifications that testify to the environmental sustainability of its real estate. More specifically, in the Modena Management Centre, once the works have been completed (estimated within 2026) two certifications will be obtained belonging to the Leadership in Energy and Environmental Design framework, i.e. the LEED certification (Gold level) which certifies the sustainability level of a building with reference to its entire life cycle and the WELL Certification (Bronze level) which certifies the level of well-being and healthiness of premises. Similar activities, but with a focus on obtaining the Leed certificate, have been begun on buildings located in Ferrara Corso Giovecca, Ancona Via Stamira, Naples Via Petronio and Rome Via Bissolati, for which the works, and therefore the awarding of the certification, are expected to be completed during 2025. By the end of 2024 it is also expected that the first 20 company sites will be certified according to the UN EN ISO 14001:2015 (Environmental Management Systems) and UN EN ISO 50001:2018 (Energy Management Systems) standards.

¹ ECB, "Climate and nature plan for 2024-2025":
https://www.ecb.europa.eu/ecb/climate/our-climate-and-nature-plan/shared/pdf/ecb.climate_nature_plan_2024-2025.el.pdf

With reference to the business, there was a constant growth in the value of products and services with environmental purposes in both retail banking and commercial and corporate banking. Within the specific context of the analyses performed, particular significance can be attributed to the Group's loans in support of the circular economy and the protection of natural resources, as well as the gradual increase of offers of funds that promote environmental characteristics (e.g. funds that invest in companies aligned with the principles of the circular economy), as is the case of the Arca Blue Leader Fund which engages in sustainable investments pursuant to Article 9 of the (EU) Regulation 2019/2088, that focus on the sustainable use and protection of water and marine waters and resources.

The most significant engagement has concerned the loan and investment portfolio on which a series of in depth assessments have been performed.

Assessment of environmental relevance: results

As part of its commitment to constant improve the identification and management of ESG risks, the BPER Group has extended the monitoring parameter of these risks by integrating risks resulting from climate change with non climate-related risks, as those resulting from impacts on biodiversity, on the deterioration of natural capital and of ecosystems.

Therefore, a preliminary assessment exercise was performed at the beginning of 2024 focused on BPER Banca exposure.

The methodology is centred around the Bank's non-financial customer companies and takes into account the main risk drivers linked to environmental factors, in terms of:

- Impacts on nature: changes to nature caused by commercial or industrial activities that may have potential impacts on social and/or economic functions (positive or negative, direct, indirect or cumulative);
- Dependencies on nature: aspects of ecosystemic services on which an organisation, or other actors, depend on to operate (for example, the availability of water and other natural resources etc.)

The methodology adopted by the Group follows practices and guidelines provided by the Taskforce on Nature-related Financial Disclosures (TNFD) and, in the case in point, is based on the "LEAP" process (Locate, Evaluate, Assess, Prepare) indicated by the association which in particular assesses the vulnerability of the loan portfolio to environmental risks.



Locate

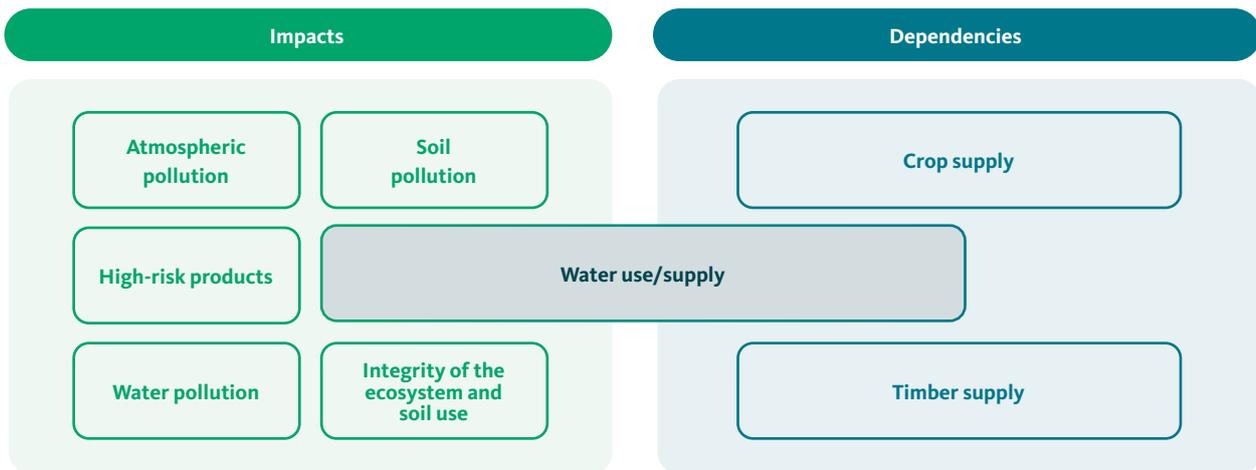
During the localisation phase, the central offices and the local production units of customer companies are located, in order to analyse the interactions between the industries and the surrounding nature (direct operations). The company's operational sites are located in space on maps that show the vulnerability of ecosystemic services and the impacts on biodiversity of the various geographic areas.

Evaluate

For each counterparty within the sample, specific impact/dependency scores for the sector are applied using the materiality at sector level (top-down approach). The most relevant impacts and dependencies (for direct operations) are assessed by applying a bottom-up approach which takes into consideration the state of the natural resources particular to that position as well as the materiality of the specific dependence or impact for the sector. Additionally, possible dependencies and impacts resulting from the value chain are assessed using input-output matrices that take into account environmental issues. Various sectoral and territorial scores are estimated and normalised for each company in order to allow comparisons between sectors and geographical areas.

More specifically:

- **Impacts:** 6 indicators are considered (at both a sectoral and territorial level);
- **Dependencies:** 3 indicators are considered (supply services and direct physical inputs).



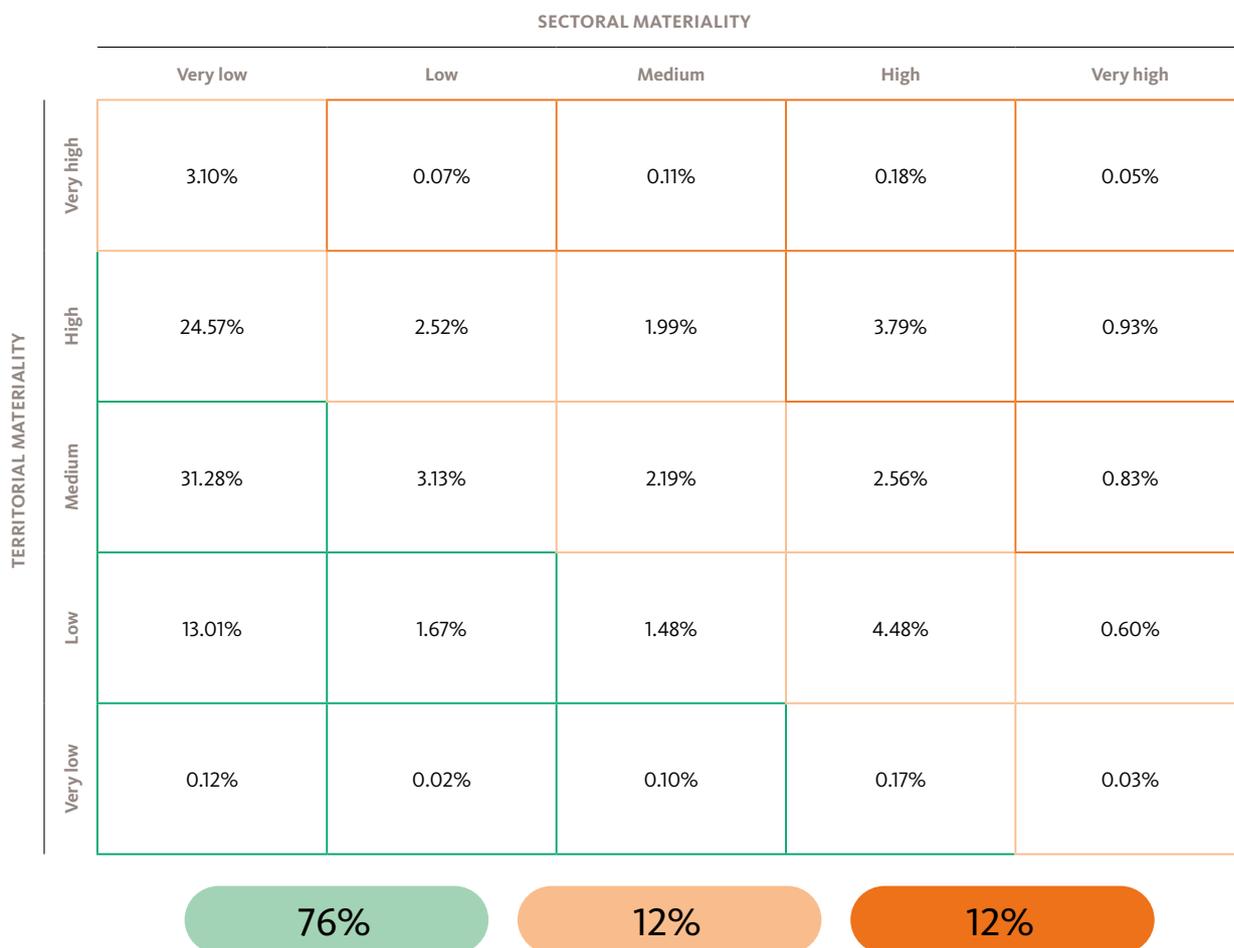
A variety of strategies have been adopted to create individual indicators, and especially:

- **Sectoral materiality:** sectoral scores for impact and dependency on nature are estimated using input-output matrices. The data provide a differentiated overview for the country and enable the effects on the "value chain" to be estimated for each country and for each sector for each of the indicators analysed.
- **Territorial materiality:** for each nature-linked risk, a map has been identified that represents the state of the ecosystem or of the natural resource being analysed. These maps have been used to establish the spacial risk levels associated with each impact/dependency indicator. The maps are used by considering the indicator as connected to the sectoral nature and relevance of the impact dependency (in other words whenever the sectoral score is considered "not relevant", the associated map is not activated).

Assess

The assessment of the exposure of the loan portfolio to environmental risk is then quantified by combining the sectoral and territorial vulnerability.

The underlying heatmap represents the level of sectoral risk on the horizontal axis and the territorial level of risk on the vertical axis. The boxes below the heatmap show the totals (exposure in percentage terms over the total sample) for the respective coloured areas: the green refers to low risk, the orange to average risk, while the red refers to high or very high risk.



In the pertinent sectors linked to overall nature-related risks (NRR) and only taking into account direct transactions, BPER is exposed to average-high sectoral and territorial risk for 24% of the sample portfolio.

The riskiness of the exposure is determined by the average territorial and sectoral scores associated to the local units and central offices of the assessed counterparties. The value of the exposure is associated with each counterparty taking into account direct and indirect exposures (group structure of the counterparty).

To take into account the effects resulting from the value chain, the next heatmap shows the exposure to nature-related risk by integrating the sectoral scores of the value chain within the sectoral score of the direct transactions.

Including the effects of the value chain, the NRR medium-high exposures drop by 3%. The sectoral scores of the direct transactions in this case have been adapted to take into account average commercial flows by country (for example, imports) in input percentage terms from each value chain supplier (sector-country) used to produce a product unit in the sector-country in question. As a result, the drop in riskiness is potentially attributable to the importing of production inputs with lower environmental impacts or dependencies. Currently, the methods are being fine-tuned to get a better understanding of this relationship and improve the approach.

SECTORAL MATERIALITY

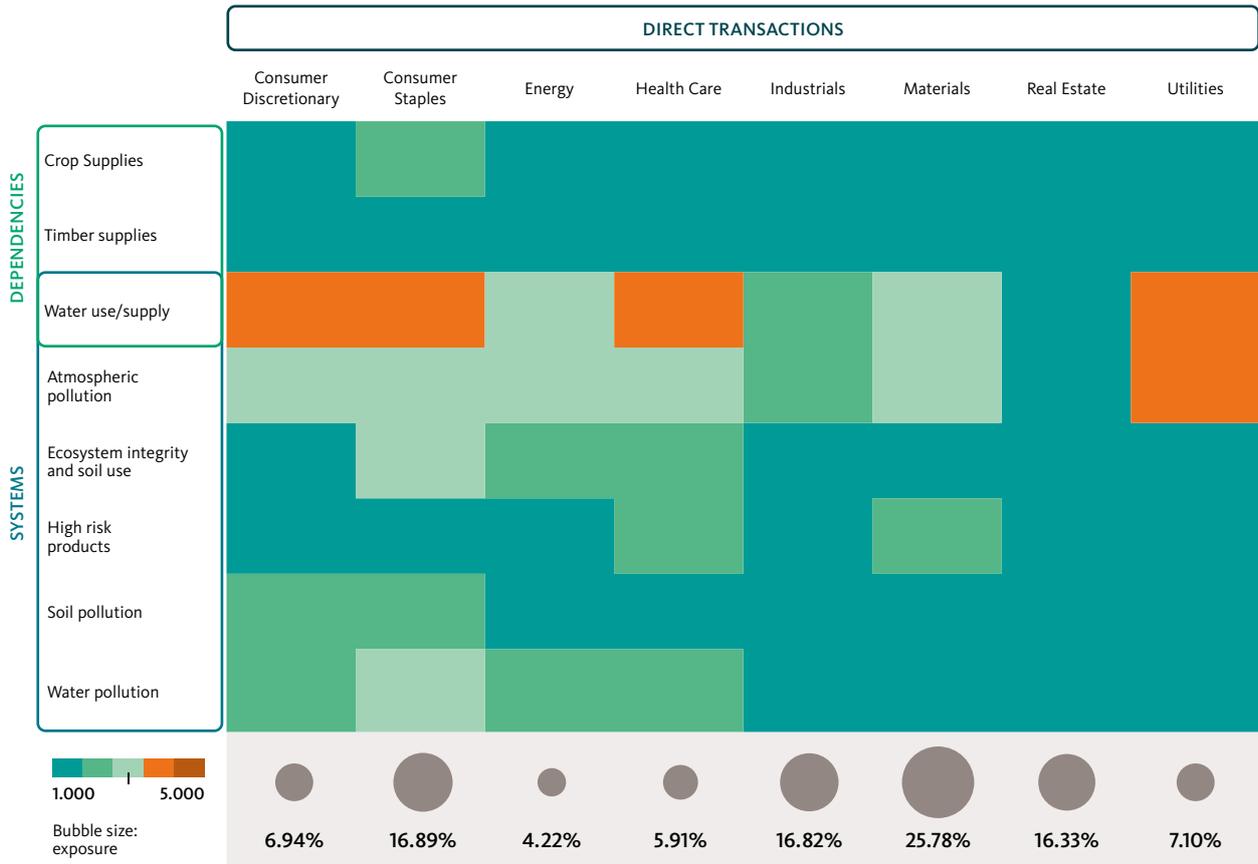
| | | Very low | Low | Medium | High | Very high |
|-------------------------|-----------|----------|-------|--------|-------|-----------|
| TERRITORIAL MATERIALITY | Very high | 2.96% | 0.20% | 0.29% | 0.07% | 0.00% |
| | High | 23.02% | 5.44% | 4.61% | 0.73% | 0.00% |
| | Medium | 29.04% | 6.78% | 4.50% | 0.66% | 0.00% |
| | Low | 11.95% | 4.19% | 4.38% | 0.74% | |
| | Very low | 0.04% | 0.13% | 0.13% | 0.14% | |

79%

10%

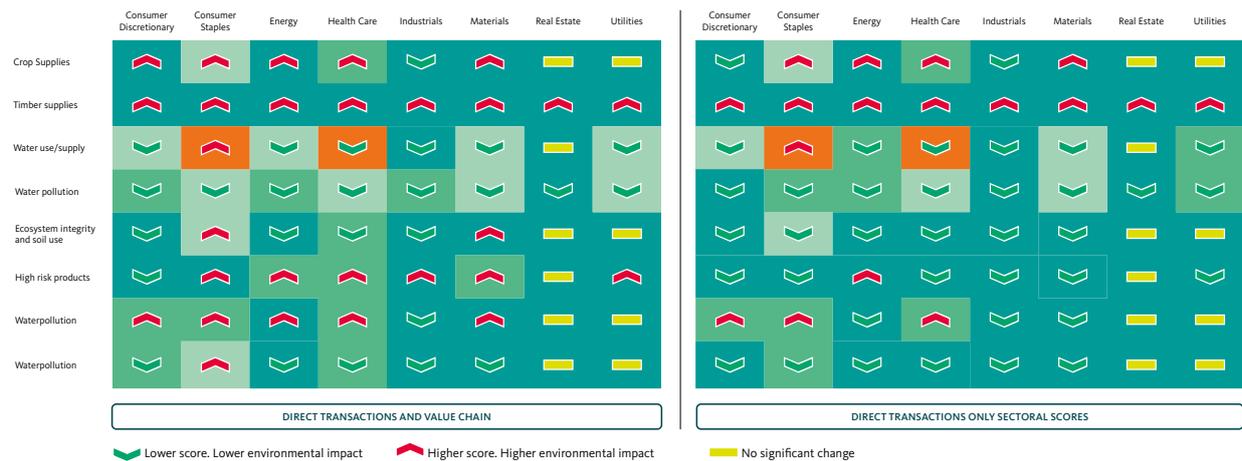
11%

To obtain an overview of the level of dependency or impact of the GICS sectors and of the single nature-linked indicators, the heatmap at the bottom shows the score, calculated as a weighted average of the sectoral and territorial scores for each GICS sector. The results show that the Consumer Discretionary, Consumer Staples, Health Care and Utilities sectors, for some indicators, carry high risk scores. The GICS sectors are made up of a number of industrial sub-sectors in which the level of intensity may vary quite considerably. The score shown is a weighted average of the risk indicators (both territorial and sectoral) based on the relative exposure of each aggregated sector.



The integration of the considerations on the supply chain leads to an overall reduction of riskiness. On average the impacts and dependencies on nature attributable to suppliers of production inputs are relatively lower compared to the companies' direct transactions.

By analysing the sectoral riskiness (without considering the territorial scores), an overall drop in riskiness can be seen, especially in the sectors that are considered at higher risk in the heatmap.

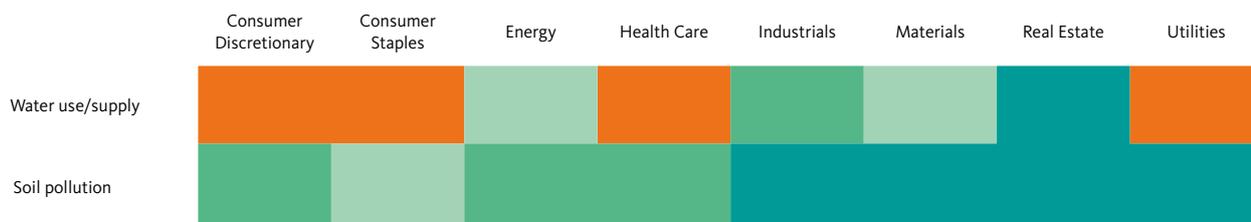


The direct transaction heatmap analyses the relationship between economic activities and water availability (Water supply), as well as their impact on water resources through use and pollution (water usage and water pollution).

The supply and use of water in the various sectors represent critical indicators of water use and, as a result, the dependency and impact on water resources, contributing to the concept of water stress. On the other hand, the sectoral indicator for water pollution reflects the impact of economic activities on the quality of water resources.

On a territorial level, the maps provide a complete overview of the environmental situation, showing both the level of water stress, linked to water availability, and the quality of water resources.

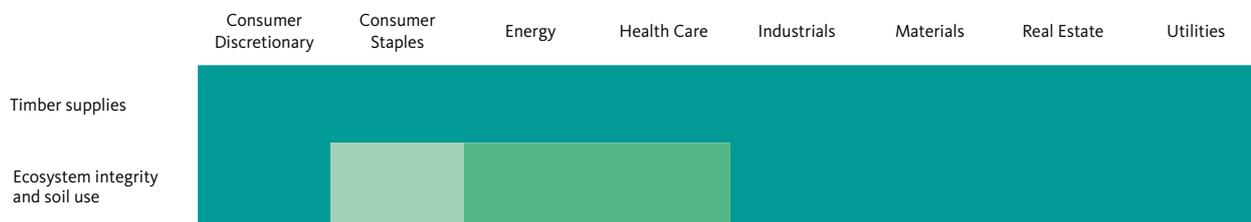
The sectors that show a high risk for some indicators, such as, for example, the supply/use of water (Consumer Discretionary, Consumer Staples, Health Care and Utilities) account for 37% of the total exposure of the sample counterparties.



As for the risks related to dependencies/impacts on forests, the indicators related to the nature-related risks (NRR) that take into account these effects have been identified. In particular, on a sectoral level for the supply of timber (dependency), reference is made to the amount of timber used, while the soil use (impact) indicates the amount of woodland involved (in addition to other times of soil consumption).

At a territorial level, we examine the availability of timber using a special map to analyse dependencies while the general health of the forests and other natural habitats are integrated within an ecosystem integrity index to account for impacts.

The heatmap shows that the counterparties belonging to the underlying GICS sectors to which BPER is exposed do not appear to have any significant dependency or impact on forests.



Lastly, an average representation at a provincial level of the conditions of the Italian territorial ecosystems is provided by geolocalising the central offices and local units of the sample counterparties.

With regard to the Italian territory, the average values of the ecosystemic integrity index provided by the observations of the BPER portfolio show fairly high values, which imply a good condition of the ecosystem.

The sizes of the bubbles show the extent of the counterparty's exposure. The Milan area shows the highest exposure concentration and a fairly low quality of the underlying ecosystem.

The scores, and therefore the colours on the map, should be read by considering 1 as a low ecosystem integrity value (red) and 5 (green), instead stands for a high ecosystem integrity value.

