



**Responsible Investment Report  
2023 (Article 29)  
CARDIF ASSURANCE VIE**

**REPORT ON ARTICLE 29 OF ACT NO. 2019-1147 ON  
ENERGY AND CLIMATE - CARDIF ASSURANCE VIE**



**BNP PARIBAS  
CARDIF**

**L'assureur  
d'un monde  
qui change**

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## Introduction

### Insurer BNP Paribas Cardif

BNP Paribas Cardif is the insurance company of BNP Paribas. Operating in 30 countries, BNP Paribas Cardif designs, develops and markets savings and protection offers to insure people, their projects and their assets.

As at 31 December 2023, the BNP Paribas Group's insurance business line managed €255 billion in assets worldwide. These assets include general funds and unit-linked funds offered to policyholders. Unit-linked products total €96 billion. Italy and Luxembourg<sup>1</sup> are BNP Paribas Cardif's two main markets in Europe after France, and their general funds represent around €18 billion and €6.5 billion in market value, respectively.

Responsible investment approaches are used for general funds in these countries.

### Cardif Assurance Vie "Article 29" report (scope)

This Responsible Investment report falls within the framework of Article 29 of the Energy and Climate Act no. 2019-1147. It presents the methods for managing criteria relating to compliance with environmental, social and governance objectives in the investment policy, as well as the means implemented to contribute to the energy and ecological transition.

This report presents the approach of Cardif Assurance Vie, subsidiary of BNP Paribas Cardif, for the financial and calendar year 2023.

The plan of this "Article 29" report complies with regulatory requirements. This 2024 publication covering the year 2023 includes the statement on the principal adverse impacts on the sustainability of Cardif Assurance Vie (Section II, information taken from the provisions of Article 4 of Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27/11/2019).

Components that could not fully meet the requirements of the Decree are explained and proposals are put forward for continuous improvement by the relevant parties.

The methodologies described in this report are common to the two BNP Paribas Cardif legal entities covered by the Article 29 Decree: Cardif Assurance Vie and Cardif Retraite. Cardif Retraite is a Supplemental Professional Pension Fund (FRPS) dedicated to individual and group pension contracts that was created at the end of 2022. A separate Article 29 report for Cardif Retraite is available on [BNP Paribas Cardif's website](#).

It should be noted that the BNP Paribas Cardif Group has put in place ESG commitments and approaches. It will be referred to as "BNP Paribas Cardif". As a result, these broad-based commitments or initiatives automatically apply to Cardif Assurance Vie.

Cardif Assurance Vie operates in France and abroad through 11 branches (Austria, Belgium, Bulgaria, Germany, Italy, the Netherlands, Portugal, Romania, Spain, Switzerland and Taiwan).

Cardif Assurance Vie's assets under management total €171.3 billion (market value<sup>2</sup>) as of 31 December 2023.

Unless otherwise stated, figures relate to equities and corporate bonds held directly in the general funds and equity of Cardif Assurance Vie, excluding unit-linked funds. For operational and materiality reasons, the analyses cover data for France and seven European branches.<sup>3</sup>

<sup>1</sup> CSR pages for BNP Paribas Cardif in Luxembourg and Italy, respectively: <https://cardifluxvie.com/notre-responsabilite:https://bnpparibascardif.it/responsabilita-sociale-d-impresa>

<sup>2</sup> In euros at closing price, including accrued interest

<sup>3</sup> Branches in the four countries not covered in this report (Bulgaria, Romania, Switzerland and Taiwan) represent €8.1 billion in assets (market value including accrued interest) at 31/12/2023

✦ For this year, the calculation of the indicators presented includes assets managed by an agent but does not include unit-linked funds or funds within the euro fund. Work is underway to gradually widen the calculation scope to other types of assets.

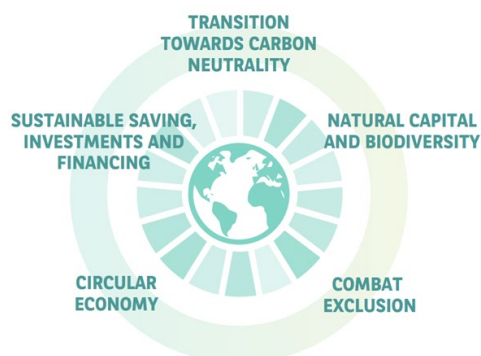
## SECTION I – INFORMATION FROM THE PROVISIONS OF ARTICLE 29 OF THE ENERGY AND CLIMATE ACT

### A. Cardif Assurance Vie's general approach to managing environmental, social and governance criteria

As a committed and responsible player, BNP Paribas Cardif endeavours to have a positive impact on society and the environment.

This ambition is at the heart of its 2022-2025 strategic plan, in line with that of the BNP Paribas Group and is structured around three pillars: Growth, Technology and Sustainability (GTS).

*The 5 priority areas<sup>4</sup> of the "Sustainability" pillar of the strategic plan*



The Group's social and environmental responsibility strategy, in line with the 17 United Nations Sustainable Development Goals, consists of supporting all customers, individuals, corporate clients and institutions, in their transition to a carbon-neutral economy that makes reasonable use of the planet's resources, facilitates inclusion of the most vulnerable and respects human rights.

The CSR strategy is based around four pillars and 12 commitments and forms part of a continuous improvement process, aiming to help to build a more sustainable world while boosting the Group's stability and performance. The entire CSR policy and voluntary commitments made by BNP Paribas are detailed in its [universal registration document<sup>5</sup>](#).

**BNP Paribas Cardif's corporate social responsibility** covers insurance and investment activities as well as the organisation as a whole.

BNP Paribas Cardif's **mission** is to **make insurance more accessible**. The organisation and its governance have been adjusted to implement a sustainable transformation. Operational changes to the Company's functions, key players in this transformation, have also been made (see Section B - *Internal resources*).

As an investor, BNP Paribas Cardif is convinced that it is essential to take a long-term perspective when managing policyholders' savings, by combining financial performance and a positive impact on society. The insurer is pursuing a responsible investment policy initiated in 2008 that takes into account environmental, social and governance criteria.

<sup>4</sup> <https://group.bnpparibas/en/our-commitments/transitions/natural-capital-and-biodiversity>; <https://group.bnpparibas/en/our-commitments/transitions/responsible-savings-and-investments>; <https://group.bnpparibas/en/our-commitments/inclusion/financial-and-social-inclusion>; <https://group.bnpparibas/en/our-commitments/inclusion/diversity-equality-and-inclusion>; <https://group.bnpparibas/en/our-commitments/transitions/energy-transition-and-climate-action>

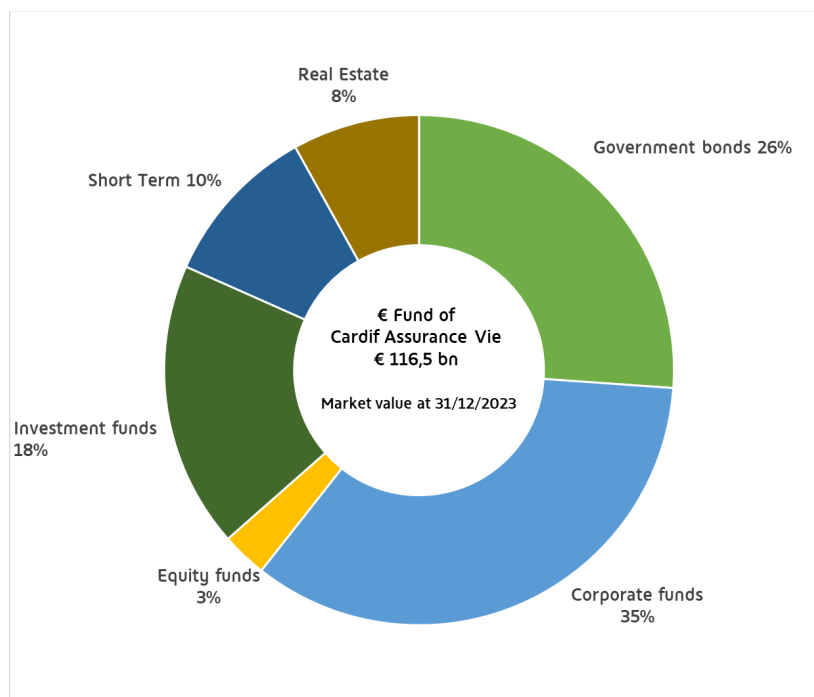
<sup>5</sup> <https://invest.bnpparibas/en/document/universal-registration-document-annual-financial-report-2023-pdf-reproduction-of-the-official-version-of-the-afr-which-has-been-prepared-in-xhtml-format-and-is-available-on-the-issuers-website> Chapter 7, p.631 and voluntary commitments made, p.643

## A1. Incorporating ESG criteria into the investment strategy

### Overview of Cardif Assurance Vie's assets

As of 31 December 2023, Cardif Assurance Vie had €171.3 billion in assets, broken down between €116.5 billion in euro funds and €54.8 billion in unit-linked funds.<sup>6</sup>

The euro fund breaks down as follows:



### A1.1 ESG approach within Cardif Assurance Vie's euro fund

#### ESG approach within Cardif Assurance Vie's euro fund

Cardif Assurance Vie's ESG approach is defined by BNP Paribas Cardif. Most aspects of this ESG policy are generic to all of the fund's assets in euros (sector policies, integration of ESG criteria, commitment to positive impact investments). ESG analysis methodologies adapted to the specificities of each asset class are described in this section.

#### SFDR classification of the Cardif Assurance Vie euro fund

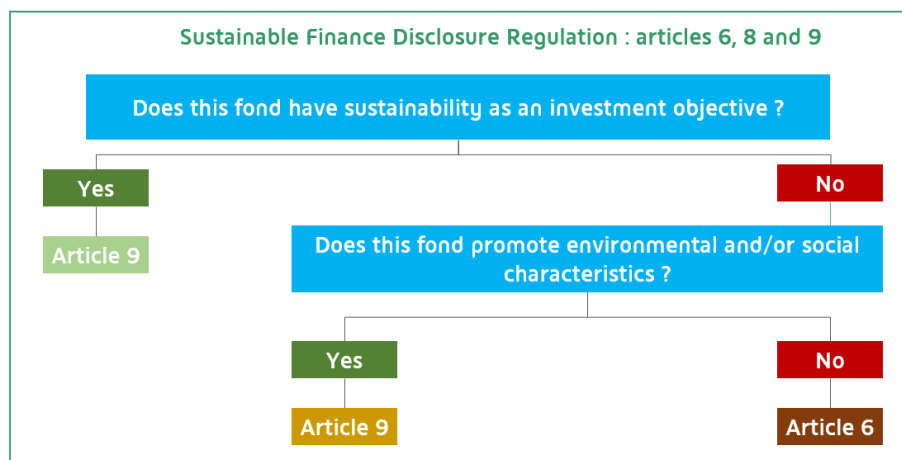
European Regulation (EU) 2019/2088 known as the "Sustainable Finance Disclosure Regulation" (SFDR) entered into force on 10 March 2021, and requires the disclosure of sustainability information for the financial services industry. It aims to harmonise and improve the transparency of the financial products offered. The Regulation distinguishes between two types of products with non-financial characteristics:

- Products that promote environmental or social characteristics ("Article 8" products);
- Products pursuing a sustainable investment objective ("Article 9" products).

<sup>6</sup> Based on a comprehensive scope for the entity Cardif Assurance Vie (including all foreign branches)



- **Cardif Assurance Vie's euro fund meets the definition of Article 8 of the European SFDR regulation:** It promotes a combination of environmental and social characteristics and verifies that the companies in which the investments are made apply good governance practices.



### Incorporating ESG into the investment strategy

When making investments, Cardif Assurance Vie examines Environmental (E), Social (S) and Governance (G) issues. This analysis can be qualitative and/or quantitative. To do this, the insurer collects ESG data specific to each asset class, which are then analysed and integrated into the investment process. The investment universe is thus reduced and compatible with its responsible investor approach.

- **In 2023, the non-financial analysis covered 95%** of the €116.5 billion in euro fund assets held by Cardif Assurance Vie.

### Sector-specific policies governing investments in sensitive sectors

These exclusions are based on the BNP Paribas<sup>7</sup> Group's sector policies and cover investments in sectors with environmental or social issues. They cover the fields of agriculture, palm oil, defence, nuclear energy, paper pulp, energy produced from coal, mining, oil and gas. These policies are regularly extended or revised and reflect a specific duty of vigilance in these sensitive sectors. (A brief description of each policy can be found in Section II, section *L1- Sector policies defined at BNP Paribas level*).

BNP Paribas Cardif applies the exclusions defined by the BNP Paribas Group based on these sector-specific policies. In addition, the insurer has made specific commitments for the tobacco and coal sectors.

The insurer applies these exclusions for corporate equities and bonds held directly in general funds in France, Italy and Luxembourg, for mandates and for internationally-held subsidiaries<sup>8</sup>. This approach therefore covers Cardif Assurance Vie, for both existing outstandings and new investments.

**Tobacco** exclusions: Since 2017, BNP Paribas Cardif has applied a "tobacco-fee" investment policy in its portfolios. The insurer has also been a signatory of the Tobacco Free Finance Pledge since 2018. BNP Paribas Cardif excludes manufacturers, wholesalers and distributors whose revenue is more than 10% derived from tobacco.

**Thermal coal** exclusions: In 2020, the insurer published a timetable for phasing out thermal coal. It applies to investments for electricity production and provides for a definitive exit from the sector by 2030 for the countries in the European Union and the OECD and by 2040 for the rest of the world. (These components will be included in the section *E2- Outstandings and investment restrictions in the fossil fuel sectors*.)

<sup>7</sup> <https://group.bnpparibas/en/our-commitments/transitions/financing-and-investment-policies>

<sup>8</sup> Subsidiaries in which BNP Paribas Cardif holds more than 50% of the voting rights + 1 vote

### Positive impact investment commitment

Regarding its investments, **BNP Paribas Cardif** has set itself the target of channelling an **average of €1 billion per year by the end of 2025 into positive impact investments** (since 2019).

Positive impact investments must meet specific criteria (intentionality, measurability), encompass different asset classes and can be broken down into social and/or environmental themes. They include sustainable bonds, renewable energy infrastructure and additional intermediate-rent housing.

- In 2023, **BNP Paribas Cardif<sup>9</sup> achieved €1.7 billion of positive impact investments<sup>10</sup>**, which corresponds to an average of €1.8 billion per year since 2019.

### A1.1 a. ESG approach to direct securities

Securities held directly include government and corporate securities such as equities or bonds.

#### Government bonds

As part of its financial security system,<sup>11</sup> BNP Paribas Group has established a country-based policy that applies to all Cardif Assurance Vie's investments.

BNP Paribas Cardif analyses the ESG performance<sup>12</sup> of countries and excludes the lowest performing countries on these issues. This ESG filter is applied to securities issued directly by the countries (government bonds) and securities issued by companies (corporate equities and bonds) whose registered office is in the excluded countries. Only countries with a satisfactory ESG score are retained in the investment universe:

- The Environment criterion takes into account the country's energy mix, the national carbon footprint as well as the ratification of treaties, in particular the Paris Agreement. The analysis also reflects indicators on greenhouse gas emissions, such as CO<sub>2</sub> emissions compared to gross domestic product.
- The Social criterion measures the policies implemented by the countries with regard to poverty, access to employment, access to electricity and the ratification of treaties on labour rights and children's rights.
- The Governance criterion includes respect for human rights and respect for labour rights.

#### Corporate equities and bonds

For any investment project, the ESG analysis includes three main steps: exclusions and treatment of sensitive sectors, ESG analysis and integration and the application of a carbon transition filter.

##### 1. Exclusions and treatment of sensitive sectors

The activity of the company or the country in which it operates must not be subject to an embargo or financial sanctions.

A specific filter based on external ratings assesses the proper integration of the four pillars of the United Nations Global Compact (compliance with international labour standards, human rights, environment and anti-corruption measures). Companies excluded by this filter are excluded from the investment universe.

<sup>9</sup> Including the euro funds of Cardif Assurance Vie, Cardif Retraite, Cardif Assurances Risques Divers

<sup>10</sup> Balance sheet figures

<sup>11</sup> [https://cdn-group.bnpparibas.com/uploads/file/engagement\\_letter\\_bnpp\\_group\\_financial\\_security\\_and\\_anti\\_bribery\\_corruption\\_program\\_oct\\_2021.pdf](https://cdn-group.bnpparibas.com/uploads/file/engagement_letter_bnpp_group_financial_security_and_anti_bribery_corruption_program_oct_2021.pdf)

<sup>12</sup> ESG rating provided by Moody's ESG: <https://esg.moody's.io/solutions>

The BNP Paribas Group's sector-specific exclusions and BNP Paribas Cardif's specific exclusions (thermal coal and tobacco commitments) are also applied.

## 2. ESG analysis and integration

The ESG analysis applies to directly held corporate equities and bonds and is based on the Moody's ESG Solutions rating methodology. This method uses 38 criteria to assess non-financial opportunities and risks. The criteria are grouped into six categories: environment, human resources, respect for human rights at work, market behaviour, civic engagement and corporate governance.

Cardif Assurance Vie uses a best-in-class sectoral approach. Each company is given a score according to its level of performance in each of the six categories, thus obtaining an overall ESG performance (ESG score). Companies are classified by decile according to an overall score. Within each sector, Cardif Assurance Vie excludes any new investment in companies with an ESG score in the bottom three deciles.

## 3. Carbon transition filter

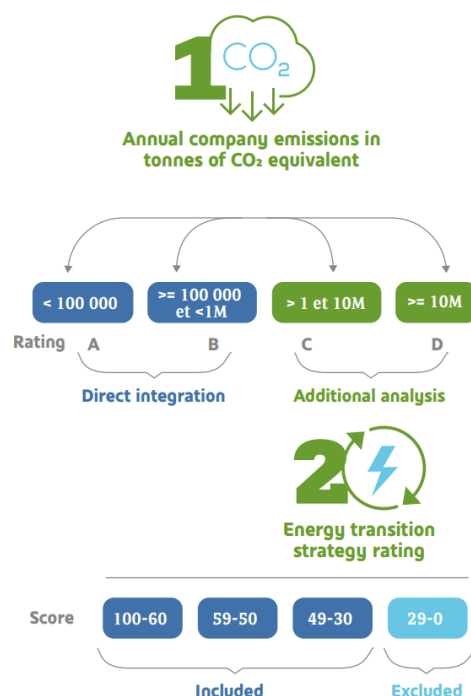
The carbon transition filter is also based on Moody's ESG Solutions rating methodology and reinforces the sector exclusion policies and ESG analysis. This filter identifies companies engaged in the transition to a low-carbon economy.

This carbon transition analysis examines:

**Carbon emissions of companies:** A carbon rating ranks companies according to their greenhouse gas emissions in tonnes of CO<sub>2</sub> equivalent (scopes 1 and 2<sup>13</sup>). Companies are rated from A to D, in ascending order of carbon emissions.

**Energy transition strategy:** Companies rated C and D are subject to an additional analysis that assesses:

- energy transition policies relevance;
- policies implementation consistency;
- results effectiveness.



Companies that emit more than 1 million tonnes of CO<sub>2</sub> equivalent and whose energy transition strategy is considered low (score less than 30) are excluded from the investment universe.

<sup>13</sup> The definition of the various scopes according to the GHG protocol can be found in Appendix

## A1.1 b. ESG approach for fund investments

The ESG approach used is different for listed and unlisted funds. The main components are presented below.

### Listed funds

Cardif Assurance Vie uses a due diligence questionnaire to analyse the non-financial process of the management companies and funds in which it invests. This analysis makes it possible to identify for each fund its level of ESG integration, any environmental or social theme, and to validate whether it is a positive impact fund. The exclusions which apply to a number of identified sensitive sectors are also included. The questionnaire includes questions on the shareholder engagement policy implemented. The Asset Management Department's SRI team sets an internal ESG rating for each fund.

### Unlisted funds

Unlisted funds include private debt, private equity and infrastructure funds. The ESG approach is specific because the nature of the investment is different: the investor comes in at the start of the process and makes a long-term commitment.

Before investment: The process of integrating ESG criteria is first analysed at the level of the management company and its governance, then at the level of the projects financed by the fund. This due diligence makes it possible to establish an ESG score that is taken into account by the Asset Management Department when validating the investment.

In addition to the subscription form, a binding side letter negotiated between the parties ensures that sector-specific restrictions can be implemented.

During the investment period, an ESG questionnaire is used to collect data that is regularly updated.

The diagram on the following page shows the steps in this process.

### Mandates

For its proprietary management, Cardif Assurance Vie may delegate pockets of investment *via* a mandate or *via* dedicated funds to partner management companies.

The two asset management companies appointed for Cardif Assurance Vie<sup>14</sup> are BNP Paribas Asset Management and OFI Invest Asset Management.

BNP Paribas Asset Management takes its share of responsibility and intends to drive this transformation by actively contributing to a successful energy transition, healthy ecosystems and greater equality in our societies. The management company OFI Invest Asset Management incorporates ESG criteria into its asset management.

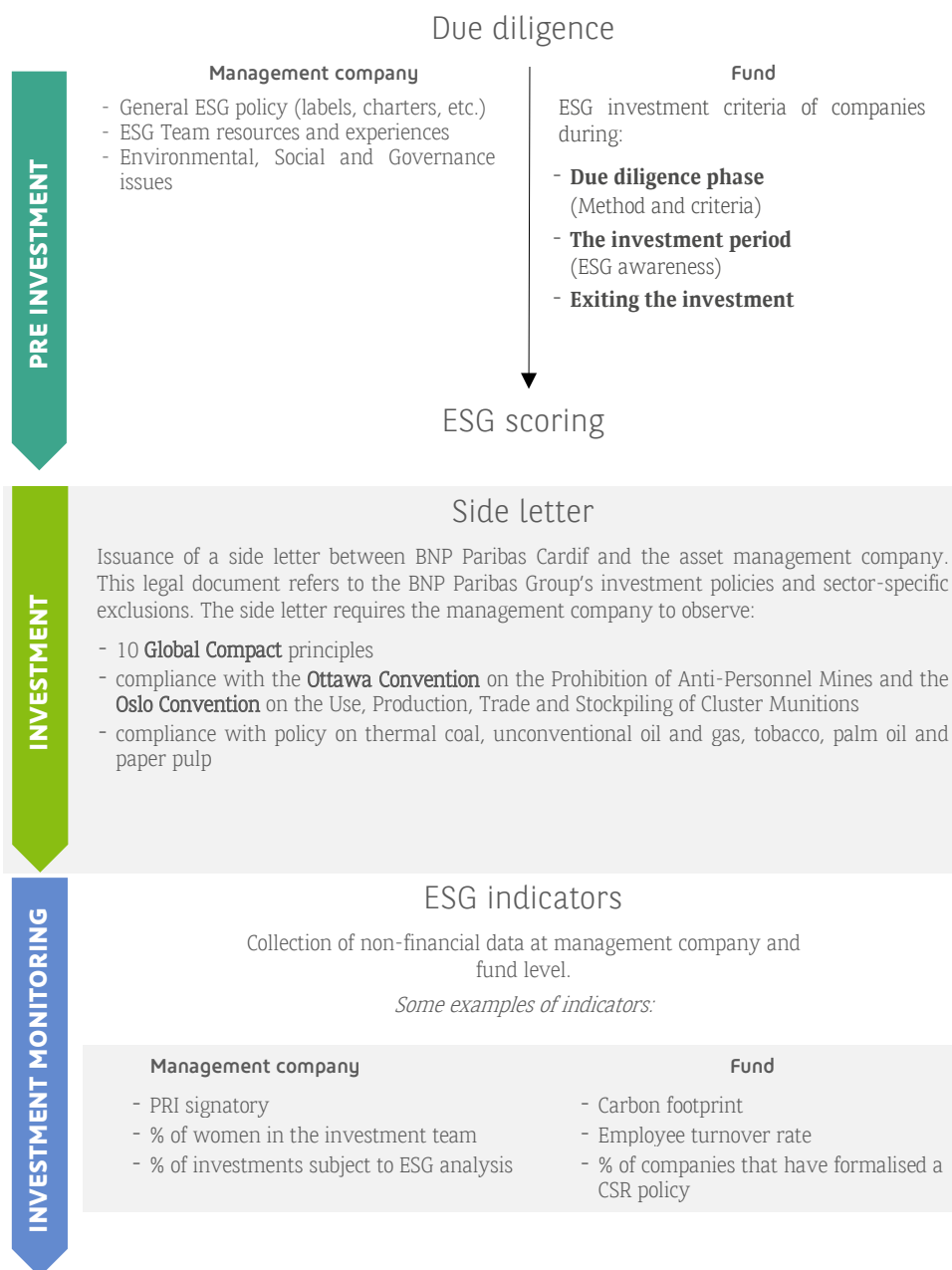
As part of the signing of a **mandate** with Cardif Assurance Vie, asset management companies are subject to a "due diligence" analysis, which includes consideration of ESG criteria. As part of the execution of the mandate, asset management companies are also required to comply with the **exclusion lists prepared by BNP Paribas Group** (based on sectoral policies) and BNP Paribas Cardif's **specific exclusions**<sup>15</sup>.

Information on shareholder engagement practices is provided in the section *D- Information on the engagement strategy*.

<sup>14</sup> Assets delegated to management through mandates represent less than 3% of the assets of Cardif Assurance Vie's euro fund.

<sup>15</sup> Based on regulatory and legal filters, ESG and carbon filters, carbon and tobacco exclusions, cf. section A1a

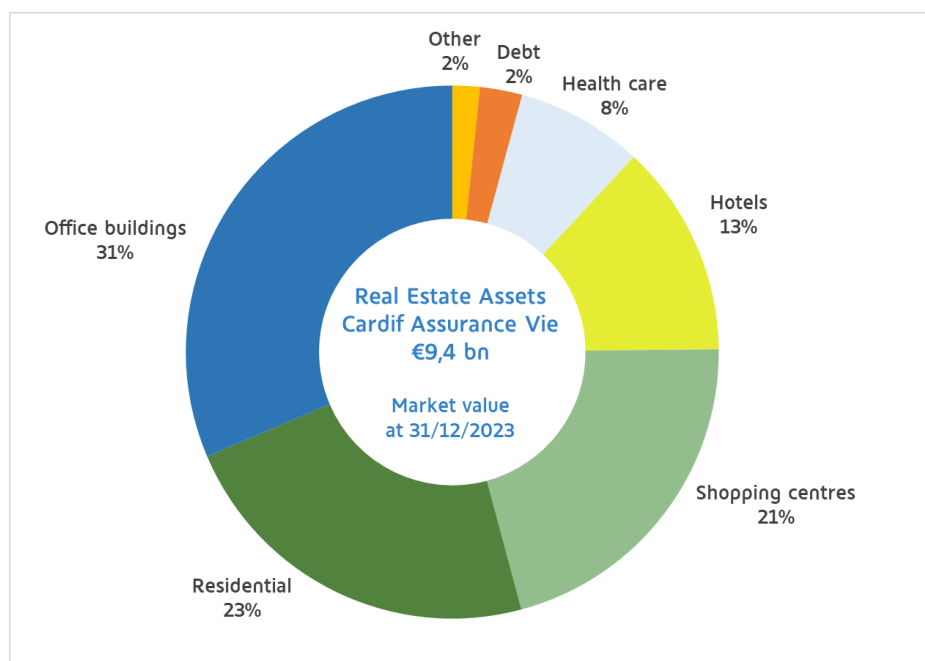
## Non-financial analysis of unlisted funds



## A1.1 c. ESG approach for real estate assets

### Allocation of Cardif Assurance Vie real estate assets (euro fund) by type

Within the Cardif Assurance Vie euro fund, the real estate portfolio includes the following categories:



The real estate assets of Cardif Assurance Vie's euro-denominated fund are composed of buildings held directly (47%), and indirect investments in real estate company funds (53%) that may be listed or unlisted.

### ESG approach for real estate assets

Real estate assets include an ESG approach that encompasses environmental and social and/or societal issues.

At 31 December 2023, **31% of Cardif Assurance Vie's real estate assets incorporated an ESG approach**, by meeting one of the criteria mentioned below. These criteria are characterised by the achievement of one or more predefined ESG objectives. The remaining buildings, representing 69%, do not yet meet these objectives.

**On the environmental theme**, the assets or funds must meet at least one of the following criteria:

- be aligned with European Taxonomy criteria;
- have an environmental label or certification;<sup>16</sup>
- hold the French SRI label (extended to real estate assets since 2020);
- be classified as Article 8 or 9 according to the SFDR regulation;
- have already achieved the next targets for reducing energy consumption provided for in the Tertiary Decree of 23 July 2019;
- comply with a greenhouse gas emissions reduction approach according to a defined trajectory;

**Social and societal themes** for which access to housing is a main criterion:

- developing affordable rental housing, particularly with capped-rent apartments;
- contributing to providing housing for vulnerable people.

<sup>16</sup> BBCA label, BREEAM certification (minimum level "very good"), HQE certification (minimum level "very good")

### ESG integration in the directly managed real estate portfolio

Direct management consists of the acquisition, management, marketing and sale of real estate assets held by Cardif Assurance Vie, usually through vehicles such as *Sociétés Civiles Immobilières* (SCIs). 47% of the euro fund's real estate assets are managed directly.

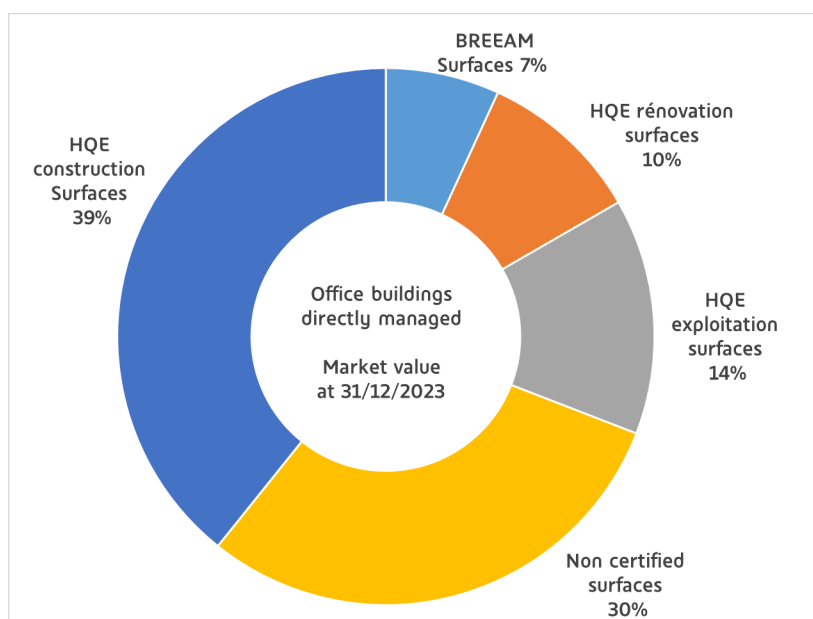
Cardif Assurance Vie manages its real estate portfolio with a view to improving its social and environmental performance. On environmental aspects, the following practices are deployed:

- buildings under construction are systematically certified;
- buildings undergoing renovation are certified if the technical and financial feasibility is sustainable;
- for the operational phase, some buildings are certified;
- for property management and works, an improvement in environmental performance is always sought. In the residential portfolio, actions are implemented to improve energy performance labels (DPE).

### Certification of Cardif Assurance Vie's directly managed real estate assets

Shopping centres represent 21% of Cardif Assurance Vie's real estate assets. 100% of shopping centre<sup>17</sup> surface areas were certified at the end of 2023.

The following chart shows HQE or BREEAM<sup>18</sup> certifications for Cardif Assurance Vie's office assets (31% of euro fund real estate assets) at the end of December 2023.



### Other components which contribute to the ESG approach of the directly managed real estate portfolio

In addition to monitoring certifications and labels, the environmental strategy for directly held real estate assets analyses the buildings' energy consumption and carbon footprint. To this end, Cardif Assurance Vie encourages construction methods that emit less CO<sub>2</sub> (wooden buildings) and energy-efficient designs (buildings without air conditioning).

<sup>17</sup> Shopping centres are shopping malls with a variety of shops. (Paris Turenne, Castorama and Monoprix are not Shopping Centres).

<sup>18</sup> The certifications are not cumulative: In the graph, HQE Construction and HQE Exploitation buildings are considered as HQE Construction; HQE Rénovation and Exploitation buildings are considered as HQE Rénovation; HQE Construction and BREEAM buildings are considered as HQE Construction; HQE Rénovation and BREEAM buildings are considered as HQE Rénovation.

In order to improve the environmental impact of its real estate portfolio, additional action drivers are implemented, including:

- assessing the physical risk of each directly managed building in the face of various climate-related hazards (heat waves, rainfall and flooding, extreme cold snaps, etc.);
- reinforcing indicators on water management and waste management;
- increasing the number of electric charging terminals in office building car parks, in order to reduce the use of petrol and diesel vehicles and encourage the use of soft mobility solutions;
- setting up "green energy" contracts. This is where an energy supplier undertakes to produce or purchase as much electricity or gas from renewable sources as the contract holder uses in the building.
- encouraging the use of less carbon-intensive green materials, promoting circular economy materials and better management of site waste during major restructuring work. A specific clause incorporates these criteria into the work specifications.

BNP Paribas Cardif also pays particular attention to the possible social use of housing. A partnership was established with the Habitat et Humanisme association to rent out 32 homes in Paris to vulnerable people.

#### **ESG integration in the indirectly managed real estate portfolio**

Indirect management in real estate corresponds to shares in listed or unlisted companies. 53% of the euro fund's real estate assets are managed indirectly.

A questionnaire is sent out regularly and aims to establish consolidated reporting on the funds' ESG integration process.

In addition, BNP Paribas Cardif is continuing its **social investments** to promote affordable rental housing.<sup>19</sup>

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<sup>19</sup> Affordable rent: at least 10% lower than market rent



## A1.2 ESG approach for Cardif Assurance Vie's unit-linked vehicles

Cardif Assurance Vie's unit-linked vehicles represented €47.6 billion in France at the end of 2023.

### Breakdown of Cardif Assurance Vie unit-linked vehicles according to the SFDR classification

At 31 December 2023, of the unit-linked vehicles distributed by Cardif Assurance Vie, 57% promote environmental or social characteristics (Article 8) and 10% have a sustainable investment objective (Article 9).

31/12/2023	Outstandings in € Bn	As a % of outstandings
Article 8 Fund	27.0	57%
Article 9 Fund	4.9	10%
Total Art. 8-9	31.9	67%
Total unit-linked products	47.6	100%

In 2023, around 7% of these vehicles changed classification from an Article 9 to Article 8 statement. This change is comparable to what has generally been observed on the market for SFDR classifications of funds by management companies.

- In France, for new unit-linked vehicles approved for distribution in its contracts, BNP Paribas Cardif tends to select vehicles which promote environmental or social characteristics (SFDR Article 8) or those with a sustainable investment objective (SFDR Article 9).

The list of unit-linked vehicles declared in Article 8 or 9 of the Disclosure Regulation (SFDR) which BNP Paribas Cardif sells is available on its website (<https://www.bnpparibascardif.com/en/corporate-socility>).

### "Responsible" unit-linked vehicles

For unit-linked vehicles distributed in France, BNP Paribas Cardif deems them **"responsible"** if they meet at least one of the following criteria:

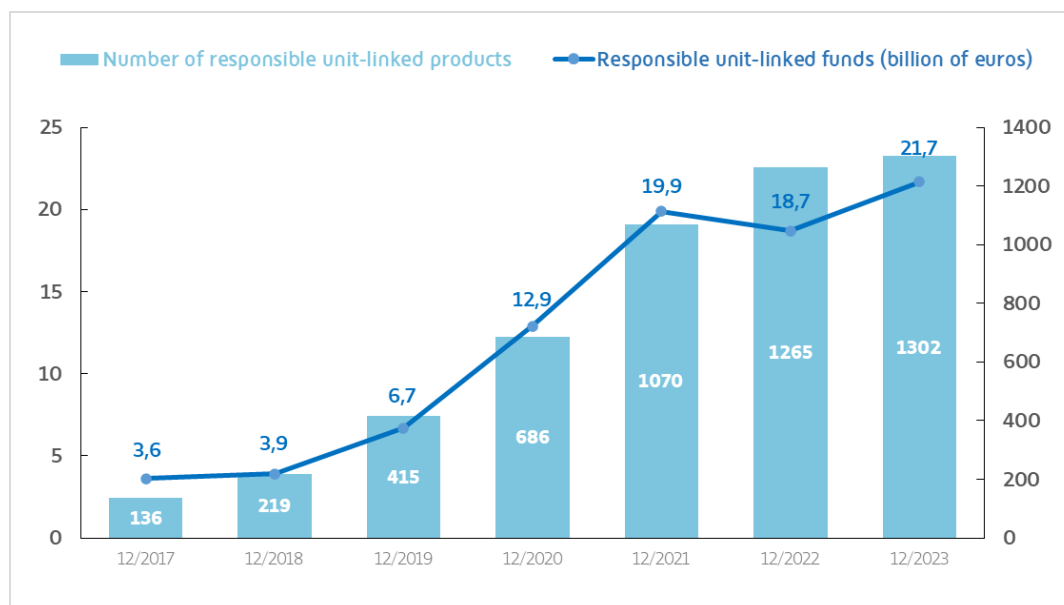
- be certified by an independent body;<sup>20</sup>
  - be declared Article 9 within the meaning of the SFDR regulation.<sup>21</sup>
- At the end of 2023, Cardif Assurance Vie recognised 44% of its investments under responsible unit-linked vehicles (approximately €21 billion).

The following graph shows the timeline of changes for responsible vehicles for BNP Paribas Cardif in France.

<sup>20</sup> Labels selected: SRI, Greenfin, FNG, Finansol, LuxFlag ESG or Towards Sustainability

<sup>21</sup> European Regulation (EU) 2019/2088 "Sustainable Finance Disclosure Regulation" (SFDR) concerning sustainability transparency obligations

## Change in responsible unit-linked products distributed in France by BNP Paribas Cardif<sup>22</sup>



The number of responsible unit-linked funds continues to grow. The increase in outstandings in responsible vehicles weakened slightly in 2022 (market effect on valuations) but recovered in 2023.

### A2. ESG information on subscribers, affiliates and contributors

BNP Paribas Cardif regularly publishes information on sustainable finance (press releases, social network publications, annual report, client and partner publications). Some documents are more in line with regulatory requirements, others reflect a wish for transparency and to explain the approaches and commitments made. These publications are aimed at all its stakeholders: financial market players, regulators, non-governmental organisations, partners, customers and civil society as a whole.

As part of its range of savings products, BNP Paribas Cardif markets life insurance products in France through its **distribution partners**:

- BNP Paribas' Commercial & Personal Banking in France (CPBF): BCEF Retail, BNP Paribas Banque Privée and Hello Bank<sup>(22)</sup>;
- BNP Paribas Cardif distributes life insurance, capitalisation and individual pension products through a network of brokers, wealth management advisors and private banking partners;
- the *Epargne & Retraite Entreprises* (Corporate Savings & Retirement) activity offers savings and retirement solutions to companies. It has been part of BNP Paribas Cardif since 2021.

Distribution partners and networks regularly communicate with policyholders to inform them about ESG criteria and the sustainable investment vehicles available.

#### A2 a. Regulatory communications on sustainability

In accordance with French and European regulations (SFDR Regulation, Energy Climate Act, IDD<sup>23</sup>), the CSR page of the BNP Paribas Cardif institutional website<sup>24</sup> provides public information on how sustainability is

<sup>22</sup> Due to the creation of Cardif Retraite in 2022, the historical development is presented for the two legal entities Cardif Assurance Vie and Cardif Retraite. The figures are based on France.

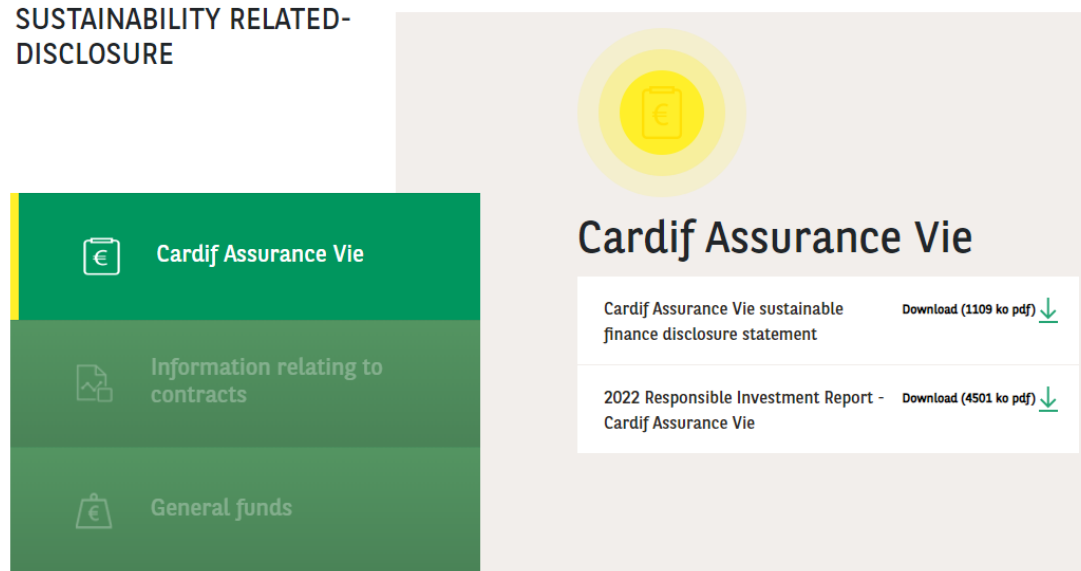
<sup>23</sup> Insurance Distribution Directive (IDD) <https://www.cardif.fr/partenaires/podcasts/dda-decryptage>

<sup>24</sup> <https://www.bnpparibascardif.com/en/corporate-social-responsability>

taken into account in its investment policy, for its legal entities and in the contracts and financial products offered to its clients.

The site contains legal documents required by its entities, Cardif Assurance Vie and Cardif Retraite, as well as those relating to their respective financial products (which promote environmental or social characteristics, or which have a sustainable investment objective).

## SUSTAINABILITY RELATED-DISCLOSURE



### Cardif Assurance Vie entity

*Target: All audiences*

*Distribution: Digital*

*Update frequency: Annual*

<b>Content</b>	Cardif Assurance Vie's transparency commitments in terms of sustainability (Article 3 of the SFDR Regulation)
	This responsible investment report pursuant to Article 29 of the Energy and Climate Act and Article 8 of the SFDR Regulation, including the statement on the principal adverse impacts of investment decisions on sustainability factors (Article 4 of the SFDR Regulation)
	Cardif Assurance Vie's shareholder engagement policy
	Annual report on the implementation of the shareholder engagement policy

### Products offered by Cardif Assurance Vie

Information on life insurance or capitalisation contracts, as well as on the financial products (offered through the contracts) of Cardif Assurance Vie classified as Article 8 or 9 within the meaning of SFDR is available on the BNP Paribas Cardif institutional website.

*Target: All audiences*

*Distribution: Digital*

*Update frequency: Annual*






<b>Content</b>	Information relating to Cardif Assurance Vie's financial products classified as Article 8 or 9 as defined by the SFDR Regulation <sup>25</sup>
	List of Article 8 or 9 unit-linked vehicles offered by BNP Paribas Cardif

<sup>25</sup> <https://www.bnpparibascardif.com/documents/348001/348117/Com+art+10+site+pdf2+Last+Version+vie.pdf/dc4d0abe-d210-3eae-efc7-de2608c1713b?t=1679676841754>

The SFDR documentation for the proposed vehicles is accessible by contract from the BNP Paribas Cardif sales site in France at <https://www.cardif.fr/placement-epargne><sup>26</sup>.

### Information réglementaire

---

-  Conformément aux réglementations relatives à l'ESG :  
**Accédez aux rapports de BNP PARIBAS CARDIF**
-  Conformément au règlement européen PRIIPS et au règlement SFDR :  
**Accédez aux documents d'information Clés et aux informations relatives à la durabilité des contrats d'assurance BNP Paribas Cardif**
-  Conformément aux exigences de la loi PACTE :  
**Consultez les taux moyens nets servis du fonds en euros (contrats commercialisés par Cardif Assurance vie)**
-  Conformément aux exigences de l'accord sur la transparence des frais :  
**Consultez les tableaux de synthèse des frais des contrats d'assurance BNP Paribas Cardif**
-  Conformément aux recommandations relatives aux Unités de Compte :  
**Consultez la liste des Unités de Compte (UC) des contrats d'assurance vie, de capitalisation et de retraite individuelle BNP Paribas Cardif, détaillant leurs frais et performances**

For Article 8 or Article 9 vehicles as defined by the SFDR Regulation, there is a link to the asset managers' websites (<https://www.cardif.fr/priips-documents-informations-cles-dic>), which publish:

- a description of the environmental or social characteristics or the sustainable investment target;
- information on the methods used to assess, measure and monitor the environmental or social characteristics or impact of the sustainable investments selected for the financial product, including the data sources used, the criteria for valuing the underlying assets and relevant sustainability indicators used to measure the environmental or social characteristics or the overall impact of the financial product on sustainability;
- information to be communicated during the pre-contractual phase;
- information provided in the periodic reports on these same products.


Informations réglementaires sur les contrats d'épargne du réseau Banque Commerciale France


L'assureur d'un monde qui change

Informations précontractuelles et périodiques
Taux moyens nets servis
Frais des contrats
Frais et Performances des UC

[Documents Contrats - DIC](#)
[Documents Supports Précontractuels \(DIS & SFDR\)](#)
[Documents Supports Périodiques \(SFDR\)](#)

Accueil > Informations précontractuelles et périodiques > Documents Contrats - DIC

Documents d'informations clés (DIC) des contrats BCEF;BNP BANQUE

**Filtres** ▼

Contrat

Type du contrat

Réinitialiser
Filtrer

<sup>26</sup> <https://www.cardif.fr/placement-epargne> (site for the retail French market and only available in French language)

**When taking out a contract**, a document attached to the documentation of the available investment vehicles is given to the customer. These “appendices” are prepared and updated monthly or quarterly by the marketing teams within the distribution channels. The annual information for 2023 included information on the share of labelled assets in the fund in euros, as well as a personalised QR code for each customer, thus meeting the SFDR **periodic information** requirement.

*Target: Subscribing customer*

*Update frequency: Monthly or quarterly*

*Delivery: Paper or digital*

<b>Vehicle appendices - Pre-contractual information</b>	Information on the Cardif Assurance Vie euro fund which promotes environmental or social characteristics
	List of vehicles and their Article 8 or 9 classification under SFDR
	List of vehicles with a label among those provided for in the PACTE Law (SRI, GreenFin, Finansol)
<b>Annual information - Periodic information</b>	Provides a detailed statement of the customer’s contract at the end of the year. Includes a personalised link and a QR code allowing each customer to access SFDR documents for their own specific range of products. The annual information also shows the proportion of labelled assets (SRI, GreenFin, Finansol) for each type of contract.

### Cardif Assurance Vie euro fund

Cardif Assurance Vie's **euro fund** is **classified under Article 8** because it promotes environmental or social characteristics (Article 10 of the SFDR Regulation).

*Target: All audiences*

*Published on: <https://www.bnpparibascardif.com/en/lal-responsability>*

*Update frequency: Annual*

<b>Content</b>	Information provided pursuant to Article 10 of Regulation (EU) 2019/2088 and Article 6 of Regulation (EU) 2020/852
	The SFDR pre-contractual documentation, which explains the commitments provided by the vehicle in terms of sustainability
	The periodic report, which describes how the vehicle's sustainability commitments have been achieved (Article 11 of the SFDR Regulation)

## A2 b. Other communications from the insurer on ESG and responsible investment approaches

### At institutional level (BNP Paribas Cardif)

In addition to regulatory communications, BNP Paribas Cardif informs its stakeholders about the inclusion of ESG criteria in its investment policy and strategy through multiple communications channels including press releases, social media, investor presentations<sup>27</sup>. These channels also include its activity report,<sup>28</sup> which has a chapter dedicated to the Sustainability pillar, including an article on pp16-17 on “Combining financial and non-financial performance to manage savings more sustainably”.

<sup>27</sup> <https://www.bnpparibascardif.com/en/financial-informations> Investor presentation, pages 11 and 18.

<sup>28</sup> <https://www.bnpparibascardif.com/fr/report-activite-2023>

In 2023, press releases or news directly related to the CSR or ESG approach were published on the institutional website. For example, since 2021, BNP Paribas Cardif has been committed to preventing excess weight and obesity (among its employees, partners and customers. In France, the insurer signed a **sponsorship partnership with the Imagine Institute** (AP-HP, Inserm, Université Paris Cité), a leading European centre for research, treatment and education on rare diseases.



**BNP Paribas Cardif**  
224 758 abonnés  
1 an(s) • Modifié •

**BNP Paribas Cardif** France a signé un partenariat de mécénat avec l'**Institut Imagine**, premier centre européen de recherche, de soins et d'enseignement sur les maladies génétiques ayant pour mission d'accélérer les découvertes vers des pistes thérapeutiques innovantes.

« Le travail de l'Institut Imagine est remarquable et nous sommes fiers de pouvoir contribuer à leurs recherches tout en faisant progresser nos offres de produits et services afin de mieux couvrir les populations touchées par les maladies rares », déclare **Fabrice Bagne**, Directeur général adjoint de BNP Paribas Cardif, responsable France et Luxembourg.

Pour en savoir plus sur ce partenariat [↓](#)

**BNP Paribas Cardif France signe un partenariat de mécénat avec l'Institut Imagine**  
bnpparibascardif.com • Lecture de 3 min

Date	Press releases or news published on <a href="http://www.bnpparibascardif.com">www.bnpparibascardif.com</a> (not exhaustive)
06/02/2023	<a href="#">Imagine Institute: a partnership to support medical research - BNP Paribas Cardif</a>
01/03/2023	<a href="#">500,000 families have already benefitted from BNP Paribas Cardif overweight and obesity prevention program - BNP Paribas Cardif</a>
07/03/2023	<a href="https://bnpparibascardif.it/-/giornata-mondiale-obesita">https://bnpparibascardif.it/-/giornata-mondiale-obesita</a>
08/06/2023	<a href="#">BNP Paribas Cardif facilitates access to insurance for people suffering from inflammatory bowel diseases (IBD) - BNP Paribas Cardif</a>
19/06/2023	<a href="#">Back Market partners with BNP Paribas Cardif and Bolttech to offer an ambitious upskilling program - BNP Paribas Cardif</a>
26/06/2023	<a href="#">BNP Paribas partners with Banque des Territoires and the European Investment Fund to launch a new marketplace initiative: a fund to support the rollout of Impact Bonds across the European Union - BNP Paribas Cardif</a>
28/06/2023	<a href="#">BNP Paribas Cardif Life Insurance holds a 'Credit Care Academy' for middle school students and vulnerable children</a>
30/06/2023	<a href="#">Net-Zero Asset Owner Alliance: BNP Paribas Cardif pursues and expands its commitments - BNP Paribas Cardif</a>
09/11/2023	<a href="#">BNP Paribas Cardif Life Insurance launches "Birdhouse hanging" activity through its green leader program to help birds in urban areas</a>
13/12/2023	<a href="#">BNP Paribas launches Climate Impact Infrastructure Debt fund - BNP Paribas Cardif</a>

On social media, BNP Paribas Cardif shared CSR and ESG content on its institutional LinkedIn, Twitter and Instagram accounts (around 50 posts in 2023).

Other types of media are also used: For example, a video on "how to make insurance accessible to as many

people as possible<sup>29</sup>; podcasts on commitment to the fight against obesity<sup>30</sup> or on chronic inflammatory bowel diseases (IBD)<sup>31</sup>.

### Communications via distribution networks

#### For all subscribing customers

- The Commercial & Personal Banking in France (CPBF) network communicates on responsible savings and investments, primarily through its webpage "Mabanque Epargner Responsable".<sup>32</sup>



#### All audiences

- At the end of 2021, BNP Paribas Cardif launched "MonDemain<sup>33</sup>" a digital platform dedicated to preparing for retirement. In addition to the "La retraite en clair<sup>34</sup>" website, which was already a leader in pensions information, MonDemain offers a simulation tool that allows customers to assess their situation and create a personalised savings plan.
- Also on the subject of pensions information, "Eclairons la retraite<sup>35</sup>" (Retirement made clear) podcasts are available on various channels (websites, social media and podcast listening platforms such as Spotify and Deezer).

#### Brokers and wealth management advisors

- Brokers and wealth management advisors distribute BNP Paribas Cardif life insurance products. They have access to the list of unit-linked products with a French sustainability label and/or classified as Article 8 or 9 under the SFDR Regulation on a dedicated extranet ("Finagora"). In 2023, an educational video on Article 9 was made available to these advisors, as well as an information kit on biodiversity and an analysis of four funds related to this theme.

<sup>29</sup> [https://www.linkedin.com/posts/bnp-paribas-cardif\\_collectif-accessible-coverstories-activity-7117819079524069377-2rf0/?utm\\_source=share&utm\\_medium=member\\_desktop](https://www.linkedin.com/posts/bnp-paribas-cardif_collectif-accessible-coverstories-activity-7117819079524069377-2rf0/?utm_source=share&utm_medium=member_desktop)

<sup>30</sup> <https://podcast.ausha.co/assurance-plus-accessible/eparticle-6-how-tackle-obesity-by-supporting-prevention-activities-and-medical-researches>

<sup>31</sup> <https://www.linkedin.com/feed/update/urn:li:activity:7087713500118032384/>

<sup>32</sup> <https://mabanque.bnpparibas/fr/epargner/epargner-responsable>; <https://mabanqueprivée.bnpparibas/fr/investissement/coeur-de-portefeuille/investissement-responsable>

<sup>33</sup> <https://home.mondemain.bnpparibas/>; <https://home.mondemain.bnpparibas/epargner/epargner-responsable>

<sup>34</sup> <https://www.la-retraite-en-clair.fr/>

<sup>35</sup> <https://podcast.ausha.co/eclairons-la-retraite/per-plan-epargne-retraite-devient-perp>

### Communications via its parent group BNP Paribas

The insurer also contributes to **BNP Paribas Group publications**. The most recent examples include the Integrated Report, the Universal Registration Document<sup>36</sup>, the Climate Report<sup>37</sup> and the “Sustainable Finance and CSR” section of the Growth Technology Sustainability (GTS) strategic plan 2025.

### Preventing the risk of “greenwashing”

Following Delegated Regulation (EU) 2021/1253 of the European Commission of 21 April 2021, the BNP Paribas Group issued an internal legal notice in 2022 containing seven principles to prevent any communications or practices that could be defined as greenwashing. These principles were accompanied by illustrations and operational advice for all stakeholders.

In 2023, BNP Paribas Cardif set up a project to prevent the risk of greenwashing when promoting non-financial characteristics in advertising communications<sup>38</sup>. In consultation with the teams concerned (marketing, communications, impact, legal, compliance and asset management), the action plan included a learning period to ensure that skills were developed on this subject and that highly operational criteria was available to teams. Based on this experience in France, the compliance department issued guidelines at the end of 2023, which were distributed internationally to all countries in which it operates.

## A3. Entity or product adherence to a charter, code or initiatives

BNP Paribas Cardif is involved in some key interest groups and initiatives around better adoption of ESG considerations in investment decisions.

### History of BNP Paribas Cardif's affiliations



#### Sustainable Building Plan (*Plan Bâtiment Durable*<sup>39</sup> – 2013)

This is a charter for the energy efficiency of public and private tertiary buildings, initiated by the Sustainable Building Plan (*Plan Bâtiment Durable*). The initiative helps to monitor regulatory changes and market advances.

#### Principles for Responsible Investment PRI<sup>40</sup> (2016)

The PRI, an initiative of the United Nations Environment Programme (UNEP Finance) and the Global Compact, have laid the foundations for a common structure to incorporate ESG themes in the financial sector.

This commitment by BNP Paribas Cardif Group forms part of a willingness to make a public commitment to its responsible investment practices. The initiative has allowed it to make use of tools and best practices, to be part of a strong network of committed actors and to position itself on ESG topics in relation to the financial

<sup>36</sup> <https://invest.bnpparibas/en/document/universal-registration-document-annual-financial-report-2023-pdf-reproduction-of-the-official-version-of-the-afr-which-has-been-prepared-in-xhtml-format-and-is-available-on-the-issuers-website>

<sup>37</sup> [https://group.bnpparibas/uploads/file/bnp\\_paribas\\_2023\\_climate\\_report.pdf](https://group.bnpparibas/uploads/file/bnp_paribas_2023_climate_report.pdf)

<sup>38</sup> As part of the implementation of recommendation ACPR 2022-R-02

<sup>39</sup> <https://www.planbatimentdurable.fr/>

<sup>40</sup> <https://www.unpri.org/>



market. The insurer monitors the work of the PRI and prepares an annual public report (“Transparency Report” available on the association’s website).

#### **Montreal Carbon Pledge<sup>41</sup> (2016-2023)**

This PRI initiative aims to raise awareness of climate issues in the financial marketplace, primarily by making the carbon footprint of the portfolios public. BNP Paribas Cardif has published this footprint since 2017 in its responsible investment reports. The initiative was closed in July 2023, as the publication of carbon footprints is now embedded in the financial sector.

#### **Green Building Observatory<sup>42</sup> (OID – 2017)**

The OID brings together private and public professionals from the French real estate sector to promote sustainable development and innovation. BNP Paribas Cardif participates in working groups and contributes to the sharing of data on the sector through its participation in the annual surveys managed by the Observatory. These include the responsible real estate survey<sup>43</sup> and the survey on the energy and environmental performance of buildings<sup>44</sup>.

#### **Tobacco-Free Finance Pledge<sup>45</sup> (2018)**

In 2017, BNP Paribas Cardif confirmed a tobacco-free investment policy within its euro fund and joined the Tobacco-Free Finance Pledge in 2018 with a coalition of investors, to mark the World Health Organization’s “World No Tobacco Day”. The BNP Paribas Group was one of the founding members of the initiative and set up an exit from the sector for producers, wholesalers and distributors whose income comes mainly from tobacco.

In 2023, BNP Paribas Cardif signed a declaration with other investors asking governments to take into account the WHO recommendations formalised in its Framework Convention on Tobacco Control.

#### **CDP<sup>46</sup> (formerly Carbon Disclosure Project) (2020)**

CDP encourages investors, companies and cities to measure and understand their impacts on the environment. It collects information on greenhouse gas emissions, water management and the impact on forests. The organisation holds the largest environmental performance database and is part of the data available for BNP Paribas Cardif’s ESG analyses.

#### **Initiative Climate Action 100+<sup>47</sup> (2021)**

This is a collective engagement initiative in which the signatories act together to encourage the world’s largest greenhouse gases emitters to take the necessary measures to combat climate change.

As indicated in section *D4- Review of the 2023 engagement strategy*, BNP Paribas Cardif engages, with other “leading” investors, target issuers defined upstream in their climate action plans and strategies. Details of the results obtained in 2023 are available in the “Report on the implementation of the shareholder engagement policy”, *part 3 Dialogue with companies*.

#### **Net Zero Asset Owner Alliance – NZAOA<sup>48</sup> (2021)**

<sup>41</sup> <https://www.unpri.org/montreal-pledge>

<sup>42</sup> <https://o-immobilierdurable.fr/>

<sup>43</sup> <https://o-immobilierdurable.fr/barometre-de-limmobilier-responsable-2023-comment-lesg-progresse-dans-un-contex-immobilier-chahute/>

<sup>44</sup> [https://o-immobilierdurable.fr/wp-content/uploads/2023/05/OID\\_BPE\\_Notice\\_2023.pdf](https://o-immobilierdurable.fr/wp-content/uploads/2023/05/OID_BPE_Notice_2023.pdf)

<sup>45</sup> <https://www.unepfi.org/insurance/insurance/projects/the-tobacco-free-finance-pledge/>

<sup>46</sup> <https://www.cdp.net/en>

<sup>47</sup> <https://www.climateaction100.org/>

<sup>48</sup> <https://www.unepfi.org/net-zero-alliance/>

This is a United Nations initiative. In order to help limit global warming to 1.5°C above pre-industrial temperatures, in accordance with the Paris Agreement, signatories commit to aligning their investment portfolios with a net zero carbon trajectory by 2050.

BNP Paribas Cardif joined the alliance in 2021 to strengthen the measures already taken to incorporate climate issues into its responsible investment policy. The initiative defines a framework for setting carbon neutral trajectory targets. Commitments include the measurement and reduction of the carbon footprint of portfolios, sector-specific targets, developing investments related to the energy transition and shareholder dialogue on climate issue– (details are available in the section *F - Paris Agreement alignment strategy*).

Significant work was carried out in the first year of membership to define the first commitments (published in 2022) which were completed in 2023. The teams take part in working groups within the Alliance that feed into discussions and progress on the market.

## B. Internal resources deployed by Cardif Assurance Vie

### B1. Description of the financial, human and technical resources dedicated to an ESG approach

#### B1 a. Dedicated ESG teams

Cardif Assurance Vie does not employ any employees apart from those from foreign branches. In France, the GIE BNP Paribas Cardif (Economic Interest Group) is the actual employer of all of the employees, *i.e.* 2,858 employees (full-time equivalent at the end of 2023).

The ESG and sustainability management of BNP Paribas Cardif's investments is carried out by the central teams. Human resources (full-time employees) and financial resources are those recorded for BNP Paribas Cardif in France. For the purposes of this reporting, an allocation key defined on the basis of assets under management has been applied to establish equivalent resources for each legal entity.

For Cardif Assurance Vie in 2023, **12 full-time equivalent (FTE) positions** are dedicated to ESG issues in the investment strategy. Employees from other functions are also involved in sustainable finance.

FTE per department	2023	2022
Asset Management Department	6.4	6.4
IMPACT, RISK, Marketing	6.0	6.4
<b>Total FTE ESG investment</b>	<b>12.4</b>	<b>12.8</b>
Legal, Compliance, Institutional Affairs, Finance	4.3	3.7
<b>Total FTE Sustainable finance</b>	<b>16.7</b>	<b>16.5</b>

BNP Paribas Cardif's investor activity is managed by the Asset Management department in conjunction with the Company's other functions, mainly Impact, Risk Management, Legal and Compliance.

#### Organisation of the ESG teams within the Asset Management Department

The Asset Management teams are actively involved in taking non-financial issues into account throughout the investment process.

The managers monitor the evolution of ESG indicators in their position-keeping tools and through dedicated reporting. Periodic meetings organised by the SRI team with the management teams of the three main general funds (France, Italy, Luxembourg) and the international supervision team enable the system to evolve and to make the managers aware of any new non-financial and regulatory issues.

The **SRI team** is responsible for integrating non-financial criteria into investment processes (data, indicators, exclusion lists, etc.) in collaboration with the management teams. It integrates regulatory developments in the field of sustainable finance into asset management and monitors BNP Paribas Cardif's commitments to responsible investment. Other employees in the Department are involved in the ESG management of real estate assets and the monitoring of unit-linked products.

**Asset management control teams** check the application and compliance with sector policies and exclusions on investments.

A responsible investment **coordinator** monitors changes in the non-financial environment and Sustainable Finance regulations that may impact asset management.

### **Organisation of teams within the Impact and Innovation Department**

A BNP Paribas Cardif Impact and Innovation Department, which reports to Executive Management, coordinates and monitors the CSR policy, in line with the guidelines defined at BNP Paribas Group level. It leads cross-functional strategic initiatives, monitors and coordinates internal and regulatory reporting on sustainability.

The IMPACT team relies on a network of ambassadors within each function, and in the regions and countries where the insurer is present:

- 15 IMPACT ambassadors in the functions;
- 5 IMPACT ambassadors in the regions;
- 44 local CSR correspondents (in the countries in which the insurer operates).

### **Organisation of the ESG teams within the Risk Department**

The Risk Department (RISK) has adapted its organisation and has appointed a RISK CSR Officer in charge of implementing the Department's roadmap. This roadmap addresses five main areas: the adaptation of the risk management framework, the mapping and assessment of risks, the organisation of regulatory reporting and finally the implementation of regulatory requirements in the ORSA. The RISK CSR Officer's expertise and cross-functional role help to ensure that sustainability issues are integrated into the Company's risk management framework.

### **Support for cross-functional teams within the BNP Paribas Group**

Lastly, the BNP Paribas Cardif teams also draw on the resources and expertise of the BNP Paribas Group (see section *B2- Strengthening internal resources*). Thus, the teams mentioned above have regular discussions with IPS (Investment and Protection Services) division teams, from the CSR and Commitment Departments responsible for sustainability issues.<sup>49</sup> In addition, there are inter-entity coordination points within each department. These cross-functional resources are not quantified.

## **B1 b. ESG budgets**

In 2023, Cardif Assurance Vie allocated the equivalent<sup>50</sup> of €1,756,000 for expenses related to the consideration of ESG issues in its investment activities. The increase in the ESG budget in 2023 is mainly due to the costs of providing customers with information related to the SFDR regulation (see Section *A2- ESG information on subscribers, affiliates and contributors* (purchase of additional data, consulting and IT development costs). The other items in the budget concern the purchase of ESG data, memberships of

<sup>49</sup><https://invest.bnpparibas/en/document/universal-registration-document-annual-financial-report-2023-pdf-reproduction-of-the-official-version-of-the-afr-which-has-been-prepared-in-xhtml-format-and-is-available-on-the-issuers-website> (invest.bnpparibas) p644

<sup>50</sup> Uses an allocation key in relation to the expenses covered by BNP Paribas Cardif

organisations or international alliances related to ESG. The budget for 2023 does not include internal staff costs.

## B2. Actions carried out to strengthen internal resources

BNP Paribas Cardif uses various levers to deploy its ESG strategy. In 2021, the reorganised in order to better support the deployment of its ESG strategy.

The **Impact and Innovation Department** defines and implements BNP Paribas Cardif's CSR strategy, as part of the BNP Paribas Group's Growth Technology Sustainability plan. This department interacts with various internal stakeholders, BNP Paribas Cardif functions, the BNP Paribas Group and external stakeholders. It relies on a network of ambassadors within each function, and in the regions and countries in which it operates. The IMPACT department leads cross-functional strategic initiatives, monitors and coordinates internal and regulatory reporting on sustainability.

The **Risk Department** (RISK) has strengthened the expertise of all employees in the Risk Management Department so that they can integrate ESG risk factors into their scope of responsibility.

Employees of the **Asset Management Department in France and internationally** as well as the IMPACT ambassadors in the countries received training on sectoral policies. This training course, consisting of seven modules, provides information on the policies and position of the BNP Paribas Group, an understanding of the associated CSR issues and the involvement of the various business lines and functions. Each new employee in one of these functions must take this dedicated course.

### Dedicated ESG training for sales representatives and distribution networks

There is a dedicated internal collaborative digital space to share key CSR and ESG information and resources with employees.

In 2023, the sales teams were trained on the ESG approach implemented within the euro fund, and several of them took part in Climate Fresks (<https://climatefresk.org/world/>).

### CSR and ESG training for all employees

BNP Paribas Cardif, with the support of the BNP Paribas Group, has developed an ESG training programme targeting all of its employees.

In 2023, **employee training in sustainable development issues** focused on:

- The "Positiv'impact" training path: In 2023, BNP Paribas Cardif developed a training programme dedicated to sustainable finance and ESG issues for all employees worldwide. The training path, is divided into short online modules. It includes a specific insurance module aiming to develop employees' CSR for insurance skills in guiding customers towards a low-carbon economy and greater social justice, and to develop a shared culture;
- In 2023, around 30% of BNP Paribas Cardif employees (worldwide) completed this programme, which represents an average of 1.7 hours of training per person;
- "Bivwak! Upskill": a programme to develop the skills of BNP Paribas Group employees in the field of sustainability. This programme is broken down into modules based on different themes, including sustainable finance;
- External expert training courses leading to a certification, such as those offered by the Cambridge Institute for Sustainability Leadership (CISL<sup>(36)</sup>). Employees from different functions participated in these training courses:

- Climate Fresks<sup>51</sup>, which are group workshops to acquire an overarching vision of the challenges of climate change and their consequences. At BNP Paribas Cardif, around 25% of the French workforce took part in at least one Fresk.

The “ **Sustainability Academy** ”, launched at the end of 2022, puts into practice the BNP Paribas Group’s ambition to equip all its employees with the knowledge and skills necessary to achieve its sustainable development and finance objectives. Whatever their job, function or nature of their role, each employee can take ownership of these issues and understand the Group’s role and commitments on the five Sustainability pillar themes<sup>52</sup> under the GTS 2025 plan, using the “Shared Foundations” area.

The “Specific Content” area provides access to the knowledge and techniques required for each of the Group’s business scopes, to support its customers in their transition.

- As part of its Positiv’Impact programme, BNP Paribas Cardif offers content from the Sustainability Academy and its bespoke insurance module.

Finally, BNP Paribas Cardif also contributes to **NEST** (Network of Experts in Sustainability Transitions), a **network of internal experts** within BNP Paribas Group on ecological and social transition. This network now comprises more than 700 experts in the energy transition, the circular economy, biodiversity, social inclusion and sustainable finance in all BNP Paribas entities. The purpose of this international network is to strengthen and share expertise, by developing knowledge, supporting the Group’s various entities and promoting internal ecosystems, in order to accelerate the transition of its teams and customers. In 2023, NEST organised 25 internal webinars attended by more than 3,000 participants.

- 36 BNP Paribas Cardif employees are experts identified within the NEST network.

In addition, in November 2023, the Company Engagement and the RISK departments organised “48 Hours of Biodiversity”. These two days of conferences and internal discussions highlighted the Group’s major initiatives, shared challenges, talks by external experts as well as available training, and helped participants to understand how BNP Paribas’ business lines and functions incorporate biodiversity into their daily activities.

Lastly, CSR and impact-related topics are addressed through internal communication (71 news items published on the subject in 2023) and local events organised for employees (30 events dedicated to the theme of Impact, such as participating in workshops based on the community, the company allotment, the collection of electrical and electronic waste, clothing donations, bicycle repairs or dedicated days for climate or biodiversity fresks).

## C. ESG approach to the governance of Cardif Assurance Vie

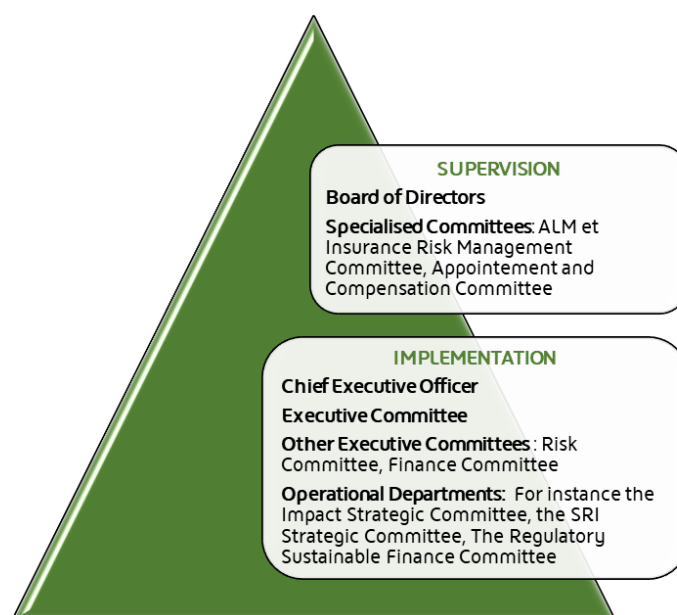
Within the BNP Paribas Cardif Group, a structure has been put in place to promote the proper integration of ESG issues into the management strategy of all insurance and reinsurance entities. The Impact and Innovation, Asset Management, RISK, Compliance, Finance, Financial Actuary and Capital departments play a key role in their operational implementation.

<sup>51</sup> [Climate Fresk, Biodiversity, the Circular Economy, Mobility and 2-ton workshop](#)

<sup>52</sup> Circular economy, Transition to carbon neutrality, Biodiversity conservation, Social inclusion and Development of sustainable savings, finance and investment

## C1. Knowledge and skills of governance bodies in ESG decision-making

### C1 a. Structure and governance of Cardif Assurance Vie



#### Supervision

The **Board of directors** plays a major role in controlling and supervising the management of the Company. It defines the strategic direction of the business and ensures that they are followed by Executive Management, taking into account the social and environmental challenges of the Company's business activities.<sup>53</sup> The roles of Chairman of the Board of directors and Chief Executive Officer are separated, in accordance with the highest governance standards.

The responsible investment strategy is defined as part of the investment strategy approved by Executive Management and the Board of directors. The Board of directors regularly monitors the implementation of the responsible investment strategy.

**The Board of directors of Cardif Assurance Vie relies on the committees of the BNP Paribas Cardif Group when carrying out its duties.**

Among the committees responsible for assisting the Board of directors, two are particularly involved in ESG matters:

The **ALM and Insurance Risk Management Committee** ("Comité ALM et Gestion des Risques Assurance" – CAGRA) ensures the effectiveness of the risk management system, including social and environmental risks. It regularly reviews the asset allocation strategy and its implementation.

The **Appointment and Compensation Committee** ("Comité de Nomination et de Rémunération" – CNR) is responsible for monitoring issues relating to the appointment of directors and corporate officers and heads of key functions. It ensures the integrity and skills of the candidates and reviews the directors' annual declarations on conflicts of interest. It ensures compliance with the parity criteria and maintains the collective expertise of the Board of directors in consideration of the strategy of Cardif Assurance Vie and the BNP Paribas Cardif Group.

<sup>53</sup> Internal rules of the Board of directors, Article 1

In terms of compensation, the CNR gives an opinion on the compensation policy, which incorporates sustainability criteria, and regularly monitors the progress of the “All Equal” action plan. This plan aims to reduce the pay gap between women and men and to increase the proportion of women in top management positions.

### Implementation

The committees, under the authority of Executive Management, are involved in the ESG approach, including the **Risk Committee** - in charge of identifying, monitoring and following up sustainability risks - and the **Finance Committee**.

The other management bodies described below operate at the level of the BNP Paribas Cardif Group and cover the legal entities Cardif Assurance Vie and Cardif Retraite.

**The Executive Committee** put sustainability at the heart of its 2025 strategic plan.<sup>54</sup> This plan defined BNP Paribas Cardif’s ambition to have a positive impact on the environment, society and its employees. The plan is structured around three pillars, in line with those of the BNP Paribas Group: Growth, Technology and Sustainability (GTS). Led by a diversified Executive Committee, BNP Paribas Cardif continues to accelerate its transformation, in the interests of its main mission: to make insurance even more accessible.

**The Asset Management Department (“Direction des Gestions d’Actifs” - DGA)** runs three committees in which ESG issues are discussed:

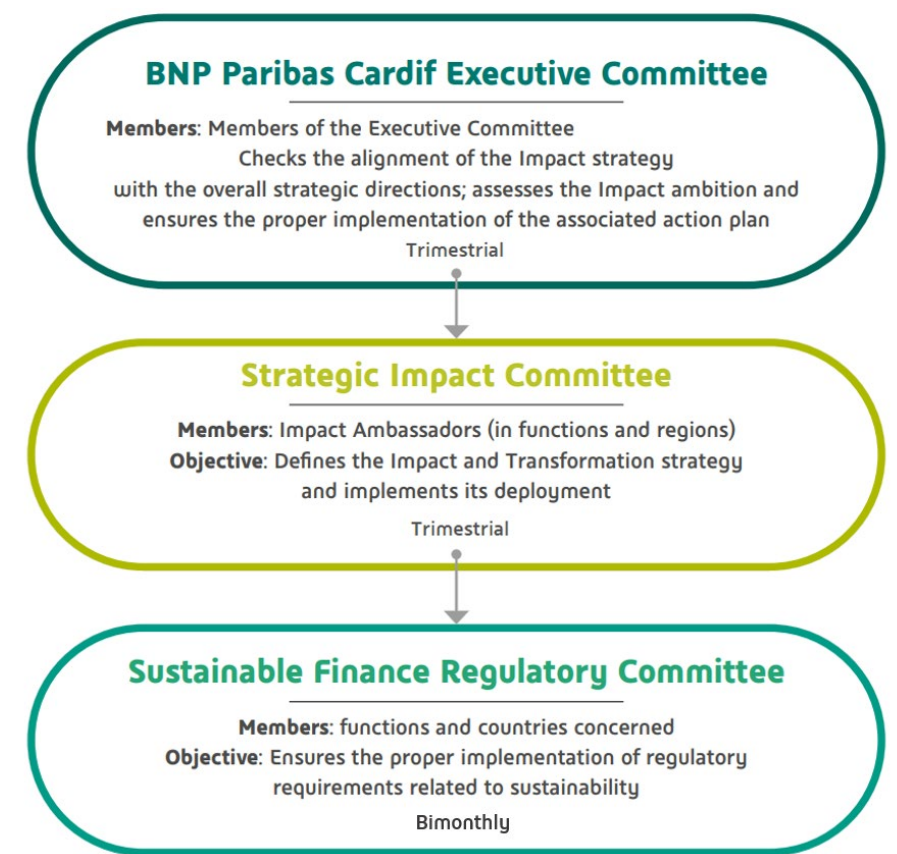
- the **Asset Management Committee** meets every month and brings together several managers and members of the Executive Committee. It regularly discusses ESG issues and those related to responsible investment;
- The **SRI List Validation Committee** whose mission is to validate BNP Paribas Cardif’s SRI exclusion lists and to validate the actions taken or to be taken in the event of the occurrence of significant ESG controversies;
- the **SRI Strategic Committee**, involving the heads of the RISK, IMPACT and DGA departments and meeting quarterly. Various topics are reviewed, including responsible investment, sustainable finance regulations, and the BNP Paribas Group’s ESG guidelines.

**The Impact and Innovation Department** places impact at the heart of BNP Paribas Cardif’s activities and operations. Its mission is to define the impact strategy, in line with the BNP Paribas Group’s CSR and commitment guidelines.

This strategy aims to make insurance products and services more accessible and pursues a responsible investment policy based on environmental, social and governance criteria. The IMPACT Department head is a member of BNP Paribas Cardif’s Executive Committee.

The Impact and Innovation Department has also set up a dedicated ESG governance with two committees (illustrated below). The action plans are defined with the internal functions responsible for their implementation, then rolled out in the regions in which the insurer is present.

<sup>54</sup> <https://www.bnpparibascardif.com/en/article/-/article/bnp-paribas-cardif-launches-ambitious-2025-strategic-plan-led-by-new-executive-committee>



### BNP Paribas Group ESG governance

The entire Group is involved in monitoring ESG issues.

A bimonthly Strategic Sustainable Finance Committee is chaired by the Director and Chief Executive Officer of BNP Paribas, validates the global strategy in terms of sustainable finance and decides on the commitments made by the Group. The Committee met five times in 2023.

The CSR policy is managed by the CSR Department, which reports to the Company Engagement Department, represented on the Group's Executive Committee which regularly decides on CSR issues.

The BNP Paribas Board of directors determines the direction of the Group's activities and ensures that they are implemented by Executive Management, taking into account the social and environmental challenges of BNP Paribas' business. CSR-related topics were specifically addressed 48 times at Board and Committee meetings in 2023, in particular by the Board of directors, during sessions of the Governance, Ethics, Appointments and CSR Committee (CGEN) or of the Internal Control, Risk Management and Compliance Committee (CCIRC).



## C1 b. ESG skills and knowledge of governing bodies

The entity is bound by regulations which state that the members of the Board of directors and the executive officers shall possess the good repute, knowledge, skills, experience required to perform their duties.

The directors of Cardif Assurance Vie all have a variety of skills and experience gained throughout their professional and personal careers. In an effort to strengthen the ESG knowledge and skills of the BNP Paribas Cardif Group's directors, training was provided at the end of 2022 on CSR and Impact topics, as well as on the latest regulatory changes in sustainability and on the risk of greenwashing.

A self-assessment of the members' skills of the Board of directors carried out at the end of 2023 confirmed that directors had a satisfactory level of knowledge regarding "Sustainable development and CSR".

### Work carried out in 2023 by the Board of directors of Cardif Assurance Vie

The **Asset Management Department** has reported to members at each Board meeting on their environmental and social contributions and on developments in ESG investment strategy.

The Board of directors of Cardif Assurance Vie:

- took note of the report on Article 29 of the Energy and Climate Act prepared for 2022, which presents methods for taking into account environmental, social and governance criteria in the investment policy as well as the means implemented to contribute to the energy and ecological transition;
- approved the investment policy update to take into account the potential long-term impacts of the strategy and investment decisions on sustainability factors, as well as sustainability risks in risk management.

## C2. Integration of sustainability risks in compensation policies

Since 2021, Cardif Assurance Vie's Compensation policy has included provisions relating to Article 5 of the SFDR Regulation. Cardif Assurance Vie's compensation policies and practices do not encourage staff - through variable compensation - to take excessive risks in terms of the sustainability of investments and financial products governed by the SFDR Regulation. The compensation policy was completed in 2022 following the update of the Solvency II regulations:

- a CSR criterion is included when calculating **collective variable compensation**, which means that efficient management can be combined with a positive impact on society and the environment;
- the compensation policy specifies that compliance with the code of conduct<sup>55</sup> used as a basis for individual variable compensation includes CSR criteria.

In addition, BNP Paribas Cardif's key employees<sup>56</sup> benefit from a three-year loyalty plan in which 10 indicators from the BNP Paribas Group's CSR scorecard<sup>57</sup> are included and account for 20% of the payment conditions. Three of these criteria are directly related to energy and climate change issues.<sup>58</sup>

<sup>55</sup> [https://group.bnpparibas/uploads/file/220204\\_bnpp\\_compliance\\_codeofconduct\\_2022\\_eng.pdf](https://group.bnpparibas/uploads/file/220204_bnpp_compliance_codeofconduct_2022_eng.pdf)

<sup>56</sup> Key employees: senior managers, high-potential employees or key local resources

<sup>57</sup> The ten indicators are presented on p717 of the Universal Registration Document (URD) <https://invest.bnpparibas/en/document/universal-registration-document-annual-financial-report-2023-pdf-reproduction-of-the-official-version-of-the-afr-which-has-been-prepared-in-xhtml-format-and-is-available-on-the-issuers-website>

<sup>58</sup> Amount of financing dedicated to the transition to a low-carbon economy, amount of financing contributing to the protection of terrestrial and marine biodiversity and assessment of greenhouse gas emissions related to the energy consumption of buildings and business travel in tCO2eq/FTE

### C3. Incorporating ESG criteria into internal regulations

Since 2019, the Board of directors' **internal rules** have indicated that the Board takes into consideration the social and environmental issues related to the Company's activity.

The directors undertake to respect and apply the provisions of the **Directors' Charter**, which sets out their obligations in terms of loyalty, honesty and integrity, compliance, prevention of conflicts of interest and transparency.

More generally, the BNP Paribas Group is committed through its **Code of Conduct** to abiding by a number of principles and standards that underpin the way it conducts its business (including the Global Compact Principles and the UN Sustainable Development Goals, the UN Guiding Principles on Business and Human Rights and the OECD Guidelines for Multinational Enterprises). Therefore, the BNP Paribas Group respects the highest standards of conduct and ethics, in terms of fight against corruption, respect for human rights and protection of the environment.

## D. Information on the engagement strategy

In accordance with the provisions of the PACTE law<sup>59</sup> and the European directive on shareholders' rights<sup>60</sup>, Cardif Assurance Vie publishes details of its shareholder engagement policy [on its corporate website](#), as well as an annual report on the implementation of this policy.

### D1. Scope of companies affected by the engagement strategy

The engagement strategy applies to corporate equities held directly by Cardif Assurance Vie, which represented 4% of its euro fund at the end of 2023.

As indicated in the section *A1.1 b- ESG approach to fund investments*, Cardif Assurance Vie has granted delegation mandates<sup>61</sup> to the management companies BNP Paribas Asset Management and OFI Invest Asset Management.

The BNP Paribas management company uses various shareholder engagement practices (voting, dialogue with corporate clients and with public authorities) to encourage corporate clients to improve their performance and transparency on sustainability issues. The BNP Paribas Asset Management voting policy<sup>62</sup> applies to the mandates granted by Cardif Assurance Vie.

The management company OFI Invest Asset Management communicates with the corporate clients in which it invests and exercises the voting rights attached to the shares it holds. Voting is an inseparable aspect of its shareholder engagement policy<sup>63</sup> and applies to the mandates granted by Cardif Assurance Vie.

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<sup>59</sup> Law no. 2019-486 of 22 May 2019 on the growth and transformation of businesses: <https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000038496102/>

<sup>60</sup> Shareholder Rights Directive

<sup>61</sup> Assets delegated to management through mandates represent less than 3% of the assets of Cardif Assurance Vie's euro fund.

<sup>62</sup> <https://doc.finder.bnpparibas-am.com/api/files/c0ba61da-9b99-4567-84af-8b6ac312fa67>

<sup>63</sup> <https://www.ofi-invest-am.com/pdf/principes-et-politiques/shareholder-engagement-and-voting-policy.pdf>

## D2. Overview of the voting policy

As an institutional investor for BNP Paribas Cardif, Cardif Assurance Vie pursues a long-term investment strategy. In order to achieve the desired performance, the investment strategy takes into account financial and non-financial criteria, which are closely linked.

Cardif Assurance Vie's responsible investment strategy takes into account requirements in terms of exclusion of countries and activities as well as minimum standards in terms of ESG risk management. Applying these rules helps to protect the value of investments made and to promote best ESG practices:

- prior to the investment, these requirements restrict Cardif Assurance Vie's investment universe;
- throughout the asset holding period, Cardif Assurance Vie votes at Annual General Meetings and engages a dialogue with selected issuers on specific issues.

Cardif Assurance Vie's responsible investment strategy policy, is structured around four principles:

- contributing to the development of the real economy: the financial sector is a key player in the transformation of the economy towards a more sustainable model. Insurers play an important role in financing the economy and participate in investment plans to support companies and individuals in the economic and energy transition. In this respect, Cardif Assurance Vie directs part of its investments<sup>64</sup> towards activities that contribute to the energy and environmental transition and the protection of ecosystems, and also to social and societal causes;
- being an economic player with a long-term investment horizon, limiting the impact of short-term financial market fluctuations, as Cardif Assurance Vie's investments are backed by long-term commitments;
- being a responsible investor: thanks to the integration of ESG criteria from the selection of vehicles and throughout the whole investment process;
- being an "active" investor: Cardif Assurance Vie votes at the Annual General Meetings of listed companies for which it holds shares and engages on specific issues with certain issuers.

Good corporate governance (the quality of its management, the independence of the supervisory bodies, the protection of its shareholders, aligning the interests of the various stakeholders) is a key criterion for Cardif Assurance Vie's investments. The implementation of this dynamic involves exercising voting rights at Annual General Meetings. The main types of resolutions submitted to a vote can be grouped into five themes, most of which have a proven link with ESG:

1. Approval of the financial statements and corporate management
2. Appointment of directors
3. Compensation policies
4. Financial transactions and shareholder rights
5. Other resolutions (e.g. related-party agreements, proposed shareholders).

More details on these voting themes are available in the "Shareholder commitment policy" ("Company Engagement Policy"), *part 4 Voting rights*.<sup>65</sup>

<sup>64</sup> These are investments identified as having a positive impact. See Section A1 - Integration of ESG criteria in the investment strategy

<sup>65</sup>The shareholder engagement policy is available at <https://www.bnpparibascardif.com/en/corporate-social-responsibility>

### D3. Review of the 2023 engagement strategy

In 2021, BNP Paribas Cardif joined the signatories of Climate Action 100+. Signatories work collectively to call on the world's largest greenhouse gases emitters to take the necessary measures to combat climate change. This initiative is part of the BNP Paribas Group's climate strategy and the responsible approach of Cardif Assurance Vie.

The objective of this initiative is threefold: encouraging companies to set up governance on climate change risks; asking them to set greenhouse gas emissions reduction targets consistent with the Paris Agreement; and promoting transparency in climate-related financial information.

Cardif Assurance Vie through BNP Paribas Cardif is a joint climate commitment leader alongside three major European companies (Stellantis, Saint-Gobain and Iberdrola). In 2023, dialogue with these companies continued on expected areas for improvement. Details of the results obtained are available in the "Report on the implementation of the shareholder engagement policy", *part 3: Dialogue with companies*.

### D4. Review of the 2023 voting policy

In 2023, Cardif Assurance Vie voted on all of the 1,540 resolutions put to the vote, *i.e.* the 82 "ballots" relating to the 53 2023 annual general meetings of listed corporate clients within the scope of application.

In 43 of the 53 AGMs which Cardif Assurance Vie participated in, the insurer voted against management or abstained from supporting it for at least one resolution, *i.e.* 81% of AGMs.

Of the 1,540 resolutions registered, 270 votes were not in favour of management (*i.e.* 18% of the resolutions registered).

These 270 votes mainly covered compensation policy, capital structure and shareholder rights, composition of the Boards of directors, and discharge to management for the past year's management. 13% of resolutions related to environmental or social issues.

More details on the votes are available in the annual voting report<sup>66</sup> "Report on the implementation of the shareholder engagement policy", *section 2.3 Guidance and explanation of votes cast*.

The "Say on Climate"-type climate resolutions still matter in corporate client general meetings. They aim to give shareholders the opportunity to vote on climate policies. To vote on these resolutions, Cardif Assurance Vie considers the following:

- Publication of greenhouse gas emissions (scope 1, scope 2 and scope 3 where applicable);
- Setting a "net zero" emissions target no later than 2050, as well as the implementation of intermediate targets to achieve this;
- Reporting on climate-related objectives, measures and risk management, in line with the standards of the Task Force on Climate-related Financial Disclosures (TCFD).

In 2023, two corporate clients submitted their climate strategy to a vote. Cardif Assurance Vie<sup>67</sup> expressed support for the approval of the proposed plans.

More details on the votes are available in the annual voting report "Report on the implementation of the shareholder engagement policy".

<sup>66</sup> <https://www.bnpparibascardif.com/en/corporate-social-responsibility>

<sup>67</sup> These voting indicators apply to the legal entity "Cardif Assurance Vie", a subsidiary of BNP Paribas Cardif, in respect of its general funds (hereinafter BNP Paribas Cardif)

## D5. Decisions taken and sector divestments

In 2023, Cardif Assurance Vie did not carry out any sectoral divestments for ESG reasons. The insurer applies the exclusions resulting from the sectoral policies and continues to comply with the timetable for the phase-out of thermal coal and the trajectory for reducing the carbon footprint of the portfolios as defined *via* the NZAOA alliance (*see Section F- Alignment strategy with the Paris Agreement*).

## E. European Taxonomy and fossil fuels

### E1. Outstandings related to Taxonomy Regulation activities

The European Taxonomy Regulation (2020/852 of 18 June 2020) has defined harmonised criteria to determine whether an economic activity is environmentally sustainable. For an activity to be sustainable within the meaning of the Taxonomy, it must contribute substantially to at least one of the following six objectives, without causing significant harm to the other five, while respecting minimum guarantees in terms of human rights and labour law. The six environmental objectives are:

- climate change mitigation,
- climate change adaptation,
- the sustainable use and protection of water and marine resources,
- the transition to a circular economy,
- pollution prevention and control,
- the protection and restoration of biodiversity and ecosystems.

BNP Paribas Cardif analysed **the share of investments eligible and those aligned with the climate change adaptation and mitigation objectives**, according to the criteria of the European Taxonomy Regulation. This share is calculated by weighting investments by the percentage of economic activities which are eligible/aligned with the Taxonomy, based on revenue on the one hand, and capital expenditure on the other.

At 31 December 2023, the analysis relates to Cardif Assurance Vie's portfolios in euros and does not cover unit-linked products. It is based on the following principles:

- assets taken into account include the investments of the insurance businesses (equities, corporate bonds, real estate investments, derivatives, mutual funds, cash and cash equivalents);
- the data covers all 12 countries in which Cardif Assurance Vie operates;
- information relating to the Taxonomy is that published by the companies, without the use of estimates. It was considered that unlisted European companies and non-European companies are not required to publish information relating to the Taxonomy, because they are not subject to Articles 19bis and 29bis of Directive 2013/34;
- green or sustainable bonds are not treated differently from other bonds;
- the following assets are considered eligible/aligned (or not): Shares and bonds of companies that are required to publish non-financial information, up to the percentage of their revenue/capital expenditure corresponding to economic activities eligible/aligned (or not) for the Taxonomy. These percentages are provided by the external data provider Bloomberg;
- if the non-financial data published by companies is missing for 2023, the data published in 2022 has been used where available;
- in the case of insurance and reinsurance companies, the minimum between the investment Taxonomy indicator and the underwriting Taxonomy indicator has been used when both data are available;

- real estate investments are considered eligible for the Taxonomy. Given the complexity of the alignment level calculation and the low level of alignment, real estate investments were considered as non-aligned;
- exposures not analysed are mainly shares of funds held. An analysis of assets held indirectly, known as "transparent", is not available.

### Outstandings related to activities eligible for/ aligned with the technical criteria of the "Taxonomy" Regulation (EU) 2020/852

Calculation basis: Total fund outstandings in euros<sup>68</sup>, excluding unit-linked products, at coupon market value including accrued interest, at 31 December 2023, *i.e.* €116.5 billion.

	REVENUES		CAPEX	
	In € bn	As %	In € bn	As %
At 31/12/2023				
<b>Exposures on economic activities eligible for the taxonomy</b>	<b>13.4</b>	<b>15.80%</b>	<b>13.9</b>	<b>16.30%</b>
of which share of exposures on aligned eligible activities	1.9	2.30%	2.8	3.30%
of which share of exposures on non-aligned eligible activities	11.5	13.50%	11	13.00%
<b>Exposures to non-eligible economic activities (revenues)</b>	<b>21.8</b>	<b>25.70%</b>	<b>21.3</b>	<b>25.10%</b>
<i>Sub-total investments analysed</i>	<b>35.2</b>		<b>35.2</b>	
Derivatives	0.2	0.30%		
Exposures on companies not required to disclose non-financial information	10.9	12.90%		
Exposures not analysed (UCITS and others)	38.5	45.40%		
<i>Total excluding sovereigns</i>	<b>84.8</b>	<b>100%</b>		
Exposures on central governments, central banks or supranational issuers	31.7	-		
<i>Total</i>	<b>116.5</b>			

- As of 31 December 2023, in Cardif Assurance Vie's euro fund, **share of assets** corresponding to exposures to **eligible/aligned economic activities** is respectively **15.8% and 2.3%** of assets covered, based on **their revenue**, and **16.3% and 3.3%** of hedged assets, based on their investments (**CAPEX**).

<sup>68</sup> Including branches in Bulgaria, Romania, Switzerland and Taiwan

## E2. Outstandings and investment restrictions in the fossil fuel sector

### Outstandings in the fossil fuel sector (Delegated Regulation 2022/1288) PAI

Article 4 of the SFDR Regulation (Delegated Regulation 2022/1288) concerning the calculation of the principal adverse impact indicators, taken up by the Article 29 Energy and Climate Act Decree requires the publication of outstandings invested in companies active in the fossil fuel sector (non-renewable carbon-based energy sources such as solid fuels, natural gas and oil). This applies to companies that derive revenues from prospecting, mining, extraction, production, processing, storage, refining or distribution, including transportation, warehousing and fossil fuel trading.

This regulation stipulates that the exposure considers 100% of the market value of the companies in the portfolio that generate part of their revenue in the value chain (coal and/or oil and gas) without weighting by share of its activity related to fossil fuels. This calculation, carried out by S&P Trucost Market Intelligence (Copyright © 2024, S&P Global Market Intelligence), is also included in *Section II - Statement of Principal Adverse Impacts*.

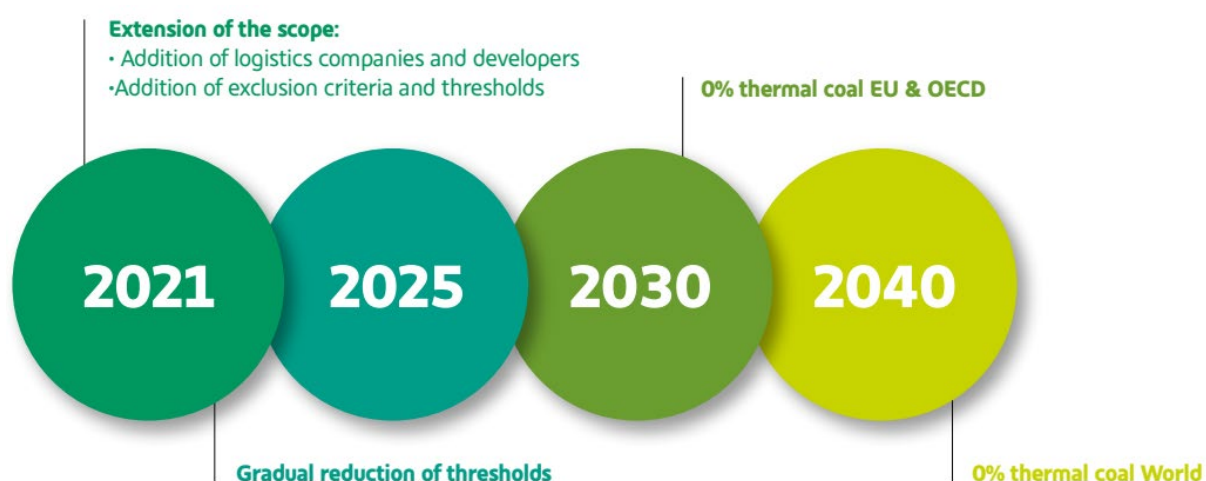
- Cardif Assurance Vie's exposure to the fossil fuel sector is 8.3% (equity portfolio and corporate bonds held directly with a coverage rate of 92.6%).

### E2 a. Thermal coal sector

BNP Paribas Cardif applies the sector exclusions defined by the BNP Paribas Group. For thermal coal, financing and investment activities are governed by two policies: "Production of electricity from coal<sup>69</sup>" and "Mining<sup>70</sup>".

Since 2018, BNP Paribas Cardif has implemented a policy of reducing exposure to thermal coal in its investment portfolios. Then, in 2020, the insurer published its own timetable for phasing out thermal coal. In 2021, the exclusion criteria were then reviewed and strengthened with the exclusion of developers and logistics companies, the addition of new criteria and thresholds (absolute and relative), and changes to the geographical area. The timeframe has not changed since its publication in the BNP Paribas Cardif's *Responsible Investment Strategy 2020*<sup>71</sup> report.

It applies to investments for electricity production and provides for a definitive exit from the sector by 2030 for the countries in the European Union and the OECD and by 2040 for the rest of the world.



<sup>69</sup> [https://cdn-group.bnpparibas.com/uploads/file/bnpparibas\\_csr\\_sector\\_policy\\_coal\\_fired\\_power\\_generation.pdf](https://cdn-group.bnpparibas.com/uploads/file/bnpparibas_csr_sector_policy_coal_fired_power_generation.pdf)

<sup>70</sup> [https://cdn-group.bnpparibas.com/uploads/file/bnpparibas\\_csr\\_sector\\_policy\\_mining.pdf](https://cdn-group.bnpparibas.com/uploads/file/bnpparibas_csr_sector_policy_mining.pdf)

<sup>71</sup> [https://www.bnpparibascardif.com/documents/348001/348117/Rapport\\_RSE\\_2020\\_Complet\\_EN\\_pajapage.pdf/03fc8efd-97c1-7815-556f-10573138d5c4?t=1634895856379](https://www.bnpparibascardif.com/documents/348001/348117/Rapport_RSE_2020_Complet_EN_pajapage.pdf/03fc8efd-97c1-7815-556f-10573138d5c4?t=1634895856379)

DEVELOPERS		2021	2025	2030	2040
New projects (coal mining, coal-related infrastructure, thermal coal-based power plants, transport capacities)		0 thermal coal			
MINING COMPANIES (exploration and extraction of thermal coal)		2021	2025	2030	2040
Percentage of thermal coal in revenue	As % of revenue	10%	0% (stock : 10%)	0%	0%
Thermal coal mining (millions of tonnes extracted)	In M Tonnes	10	0 (stock : 5 M)	0	0
LOGISTICS (transport and storage of thermal coal)		2021	2025	2030	2040
Share in revenue	As %	20%	15%	10%	0%
				0%*	
ELECTRICITY GENERATION FROM COAL		2021	2025	2030	2040
Share in revenue	As %	20%	15%	10%	0%
				0%*	
	As % of the mix	20%	20%	10%	0%
				0%*	
Electricity generation from coal (real generation)	In Giga W	10	8	5	0
				0*	

\* UE / OECD

### Outstandings in the thermal coal sector

Cardif Assurance Vie calculates its exposure<sup>72</sup> in the thermal coal value chain using a **relative methodology**<sup>73</sup>:

The calculation considers 100% of the corporate client's market value, multiplied by the percentage of revenue related to thermal coal. This approach makes it possible to accurately identify the real share of investments exposed to thermal coal. Green bonds are not included in this calculation. Indeed, green bonds make it possible to finance environmental projects (renewable energy, energy efficiency, low-carbon means of transport, etc.) contributing to a more low-carbon economy.

In order to determine the exposure of a corporate client in the thermal coal value chain, the list used<sup>74</sup> by BNP Paribas Cardif lists the corporate clients that meet the following criteria:

- corporate developing new activities in the coal sector;
- companies with a share of their revenue linked to coal (at least 10% of their revenue);
- electricity-producing companies, where the share of electricity produced from thermal coal is greater than 10%;
- electricity-producing companies with an installed capacity of coal-fired electricity production of more than 5 GW;
- corporate clients producing more than 10 million tonnes of thermal coal annually.

Some companies with residual activities related to thermal coal, whose thresholds are lower than those mentioned above, are therefore not included in the exposure calculation.

<sup>72</sup> Share of the entity's directly held shares and bonds

<sup>73</sup> The calculation of exposures is based on the Global Oil & Gas Exit List of the NGO Urgewald <https://www.coalexit.org>

<sup>74</sup> Urgewald: <https://www.coalexit.org/>



### Exposure to the thermal coal sector for the equity and corporate bonds portfolio held directly by Cardif Assurance Vie

At 31/12	2021	2022	2023
<i>In market value</i>	<b>€210 million</b> <i>i.e. 0.4 %</i>	<b>€13.3 million</b> <i>i.e. 0.04 %</i>	<b>€0 million</b> <i>i.e. 0 %</i>

\* Percentages express the exposure relative to the total investments in directly held shares and bonds

BNP Paribas Cardif is continuing to phase out thermal coal according to the due dates in its timeline.

The decrease in exposure over 2023 is linked to the thresholds in the data list. Corporate clients with residual activities related to thermal coal are not included. These may be European electricity production companies, strongly committed to a transition and having published a plan to phase out thermal coal before 2030.

## E2 b. Oil and gas sector

BNP Paribas Cardif applies the exclusions resulting from the BNP Paribas Group's sector policy on oil and gas.<sup>75</sup> The policy was created in 2017 and updated in 2022 and 2023. It covers in particular the unconventional oil and gas sectors: players whose main activity is exploration, production, pipeline transportation, the operation of LNG export terminals or the trading of shale gas and oil and/or oil from tar sands.

- Specialised unconventional oil and gas players have been excluded since 2017.

The policy published in 2023 defines the following criteria:

- lowering the exclusion threshold for companies whose share of activity<sup>76</sup> related to unconventional oil and gas<sup>77</sup> (oil sands and shale oil and gas) is greater than or equal to 10% (compared to 30% previously);
- the definition used to define the Arctic zone has been extended to the AMAP (Arctic Monitoring & Assessment Programme<sup>78</sup>), with the exception of Norwegian territories (environmental and operational laws and regulations as well as monitoring processes adopted by Norway are among the most rigorous in the world). BNP Paribas will no longer finance projects in the Arctic or companies where more than 10% of the activity<sup>79</sup> is derived from activities in the Arctic;
- no investment in energy companies with oil and gas reserves in the Amazon region<sup>80</sup> or actively developing infrastructure related to oil activities in this region.

<sup>75</sup> [https://group.bnpparibas/uploads/file/bnpparibas\\_csr\\_sector\\_policy\\_oil\\_gas.pdf](https://group.bnpparibas/uploads/file/bnpparibas_csr_sector_policy_oil_gas.pdf)

<sup>76</sup> The percentage of "non-conventional" activities is determined as follows: For companies specialising in upstream exploration production ("pure players"), the calculation is based on unconventional reserves expressed as a percentage of total reserves. For companies diversified in other energy sectors, the calculation is made on the basis of the "non-conventional ratio" defined as the share of revenue from upstream activities multiplied by the share of non-conventional reserves. BNP Paribas only finances diversified companies with a "non-contractual ratio" of less than 10%.

<sup>77</sup> See Appendix 2 of the policy: "Companies involved in unconventional oil and gas: companies in the energy sector that directly own or operate unconventional oil and gas exploration and production assets, unconventional oil and gas pipelines and/or LNG export terminals fuelled by unconventional gas; trading companies involved in unconventional oil and gas".

<sup>78</sup> The Arctic Monitoring and Assessment Programme ("AMAP") is the largest to date. It designates the working group of the Arctic Council (intergovernmental forum bringing together 8 Arctic States and 6 indigenous peoples' organisations).

<sup>79</sup> This is the upstream production activity.

<sup>80</sup> The Amazon region extends over territories belonging to Brazil, Ecuador, Bolivia, Colombia, Guyana, Venezuela and Peru. The Sacred Basins of the Amazon correspond to the sub-territory divided between Ecuador and Peru, formed by the courses of the Napo, Pastaza and Marañon. Within the framework of this policy, restrictions will be applied to all protected regions of categories I to IV of the classification established by the IUCN (International Union for the Conservation of Nature), to the sites registered on the list maintained by the RAMSAR Convention (Convention on Wetlands), World Heritage sites in the Amazon region, sites linked to the Zero Extinction Alliance and the Sacred Basins of the Amazon.

In addition, the policy exclude investments in:

- trading companies for which unconventional oil and gas resources represent a significant portion of their business portfolio;
- companies in the energy sector that directly own or operate pipelines or export terminals of Liquefied Natural Gas (LNG) supplied by a significant volume of unconventional oil and gas.

### Outstandings in the oil and gas sector

Cardif Assurance Vie calculates its exposure to corporate clients<sup>81</sup> active in the oil and gas sector using a **relative methodology**<sup>82</sup>:

The calculation considers 100% of the corporate client's market value, multiplied by the percentage of revenue related to fossil fuels. This approach makes it possible to accurately identify the real share of investments exposed to the oil and gas sector. Green bonds are not included in this calculation. Indeed, green bonds make it possible to finance environmental projects (renewable energy, energy efficiency, low-carbon transportation, etc.) contributing to a less carbon intensive economy.

In order to determine the share of revenue related to fossil fuels, the list used by BNP Paribas Cardif includes corporate clients that meet the following criteria<sup>83</sup>:

- operating in the upstream part of the oil and gas value chain (oil and gas explorers and producers);
- operating in the midstream of oil and gas (Liquefied Natural Gas pipelines and terminals);
- developing new gas power plants (new criterion in 2023).

### Unconventional Oil & Gas

Oil and gas said to be "unconventional" refers to different extraction and use methods than those from conventional drilling. These techniques are considered harmful to the environment.<sup>84</sup>

#### *Exposure of the equity and corporate bond portfolio held directly by Cardif Assurance Vie to the oil and gas sector*

<i>At 31/12</i>	2021	2022	2023
<i>In market value</i>	<b>€2,011 million</b> <i>i.e. 3.7 %</i>	<b>€1,467 million</b> <i>i.e. 3.9 %</i>	<b>€1,570 million</b> <i>i.e. 4 %</i>
	<b>Of which unconventional oil and gas:</b>		
	<b>€411 million</b> <i>i.e. 0.8 %</i>	<b>€290 million</b> <i>i.e. 0.8 %</i>	<b>€297 million</b> <i>i.e. 0.8 %</i>

\* Percentages express the share of the exposure in relation to the total investments in directly held shares and bonds

The change in exposure (in absolute value) is mainly due to market effects (valuation). The relative exposure to unconventional oil and gas was low and stable over the period.

<sup>81</sup> Share of the entity's directly held shares and bonds

<sup>82</sup> The calculation of exposures is based on the Global Oil & Gas Exit List of the NGO Urgewald <https://gogel.org/>

<sup>83</sup> All criteria are available on Urgewald's website at <https://gogel.org/>

<sup>84</sup> <http://geoconfluences.ens-lyon.fr/glossaire/conventionnels-non-conventionnels-hydrocarbures>

The slight increase in exposure to the oil & gas sector between 2022 and 2023 is mainly related to changes to the data list. In 2023, this list was extended to corporate clients developing new gas power plants. Thus, electricity production companies such as Electricité de France (EDF) were included in the list and in the calculation of exposures.

✦ BNP Paribas Cardif applies the exclusions resulting from the sectoral policies defined by the BNP Paribas Group. Specialised unconventional oil and gas players have been excluded since 2017. The oil and gas policy was reviewed and its scope of application was strengthened in 2022, and in 2023. Cardif Assurance Vie's exposure to the unconventional oil and gas sector represented 0.8% of its directly managed outstandings at the end of 2023.

BNP Paribas Cardif contributes to the financing of the economy and invests in the energy sector. The portfolio management balance is based on a diversified investment universe. The insurer supports the energy transition while remaining vigilant with regard to the fossil fuel sector. However, the main oil and gas players use unconventional energies. In order to limit investments in unconventional hydrocarbons, BNP Paribas Cardif excludes companies whose share of activity related to unconventional oil and gas is greater than or equal to 10% (according to the application criteria mentioned above).

## F. Alignment strategy with the Paris Agreement

The objectives of the Paris Agreement are to limit the increase to 2°C or even 1.5°C by 2100. The synthesis report of the sixth Intergovernmental Panel on Climate Change (IPCC) report in March 2023 is a reminder of the scientific consensus on climate change. The unprecedented acceleration of greenhouse gas emissions would result in a global warming trajectory of +4°C by 2100 compared to the pre-industrial era.

Faced with these global challenges, BNP Paribas Cardif is committed to its activity as an investor and contributes to the fight against global warming.

This contribution requires the assessment of the carbon footprint of the investment portfolios and their alignment with the Paris Agreement. The indicators for measuring the climate impact could be improved, but nevertheless help to guide the investment strategy.

The resulting actions include: the application of sectoral exclusions, investment restrictions in high-carbon sectors such as fossil fuels, participation in market initiatives working for carbon neutrality, engagement practices and shareholder dialogue with companies, in particular those with significant greenhouse gas emissions, and the selection of positive investments for the energy and ecological transition.

This section presents Cardif Assurance Vie's climate indicators for its equity and corporate bond portfolios (4% and 35% respectively of the euro fund) and real estate (7%), according to the levels of coverage available.

### F1. Climate indicators (methodological explanations)

In order to monitor its climate alignment strategy, Cardif Assurance Vie uses several climate indicators such as the footprint and implicit temperature of its directly held corporate equity and bond portfolios, and the carbon intensity for its real estate assets.

#### Portfolio carbon footprint

The carbon footprint (for financial products) represents the amount of emissions financed by the portfolio. This indicator makes it possible to identify the amount of greenhouse gas emissions that can be attributed to an investment. For investments in companies, greenhouse gas (GHG) emissions are weighted according to

the share of the investment in the enterprise value.<sup>85</sup> This indicator is used by the insurer to estimate the carbon footprint of corporate equities and bonds held directly.

The carbon footprint measures the emissions generated for each euro invested. Thus, if the investor owns 1% of the value of a company then the investor will be allocated 1% of the greenhouse gas emissions of that company.<sup>86</sup>

### Implied portfolio temperature

A company's carbon assessments are made at a given point in time. The "temperature" indicator enables a dynamic analysis.

The temperature indicator takes into account the company's past carbon trajectory as well as a projection of its performance in the future. The alignment of a portfolio can be described as its contribution to the transition to a certain economy, defined by a specific climate scenario, and leading to an implied temperature increase by the end of the century.

### The companies in Cardif Assurance Vie's corporate equity and bond portfolios have been analysed by Carbon4 Finance using the Carbon Impact Analytics methodology (CIA).<sup>87</sup>

The temperature alignment is based on the companies in the portfolio overall average scores weighted by assets managed. In order to rate companies, Carbon4 Finance carries out a quantitative analysis (evolution of the carbon footprint and avoided emissions<sup>88</sup>) and qualitative analysis (analysis of the climate strategy, investments in low-carbon projects, greenhouse gas emission reduction targets, etc.).

In order to establish the alignment of a portfolio with a climate trajectory, Carbon4 Finance uses two scenarios of temperature increase by 2100 from the latest IPCC report<sup>89</sup>, namely a 1.5°C scenario and a 5°C scenario.

In addition, two indices have been studied by Carbon4 Finance to identify reference points: a reference point at 2°C, through the Low Carbon 100 index representing a low-carbon economy; a benchmark of 3.5°C, through the World Large Cap Equity Index representing a "business-as-usual" scenario of the global economy.

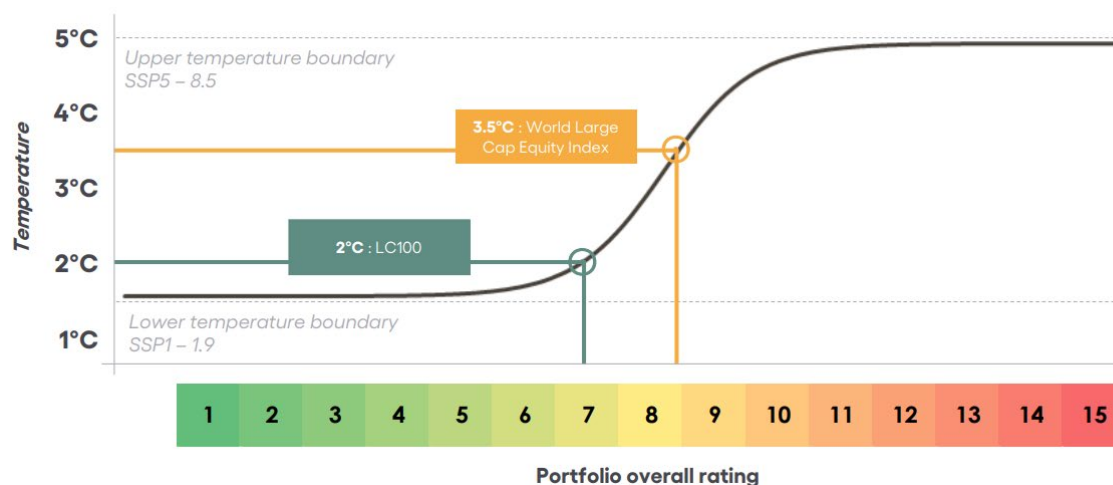
<sup>85</sup> The enterprise value is the market value of the market capitalisation and financial debt (in the SFDR formula, cash is not deducted).  
<sup>86</sup>

$$\sum_n^i \left( \frac{\text{Market value of the investment}_i (\text{€ m})}{\text{Value of the Company}_i (\text{€ m})} \times \text{Carbon emissions of the company}_i (\text{tCO}_2\text{eq}) \right) / \text{Market value of portfolio investments (€ m)}$$

<sup>87</sup> Carbon4 Finance's Carbon Impact Analytics methodology is available online: <https://www.carbon4finance.com/our-latest-carbon-impact-analytics-methodological-guide2>

<sup>88</sup> Avoided emissions are the difference between the greenhouse gas emissions induced (by a project, product or service) and the greenhouse gas emissions of a baseline scenario.

<sup>89</sup> <https://www.ipcc.ch/report/sixth-assessment-report-working-group-1/>



Source: Carbon4 Finance

This modelling makes it possible to identify whether the portfolios analysed fall more in line with one or other of these indices, and therefore whether the companies in the portfolio contribute more (on average) to a low-carbon economy or, on the contrary, to a business as usual economy.

### Carbon intensity of real estate assets

The carbon intensity of real estate assets is calculated based on the greenhouse gas (GHG) emissions of each building, divided by the corresponding gross leasable area, taking into account the occupancy rate as well as climate variations. It is used as a climate indicator for the portfolio of directly managed office buildings.

Greenhouse gas (GHG) emissions come from energy consumption (final energy<sup>90</sup>) using conversion factors specific to each type of energy.

## F2. Climate initiative at BNP Paribas Cardif level with the “Net Zero Asset Owner Alliance”

### Net Zero Asset Owner Alliance

As part of its participation to the “Net Zero Asset Owner Alliance” (NZAOA<sup>91</sup>), BNP Paribas Cardif has made commitments that meet the four pillars identified by the Alliance:

- measuring the alignment of investment portfolios with the Paris Agreement and reducing their carbon footprint;
- defining decarbonisation targets for the sectors that emit the most greenhouse gases;
- developing investments related to the climate transition;
- engaging in shareholder dialogue with companies and asset managers to steer them towards carbon neutrality.

<sup>90</sup> Final energy is the energy actually delivered, consumed and billed to the user.

<sup>91</sup> Presented in section A4- Entity memberships : <https://www.bnpparibascardif.com/en/article/-/article/press/commitments-climate-change-net-zero-asset-owner-alliance>

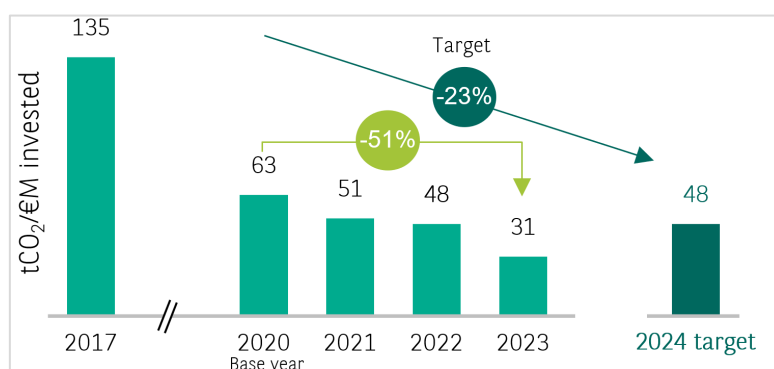
## Climate alignment strategy: objectives and monitoring of results

BNP Paribas Cardif has set targets for reducing the carbon impact of its investment portfolios, which were published in September 2022.<sup>92</sup> These targets are set by the BNP Paribas Cardif Group and apply to the Cardif Assurance Vie and Cardif Retraite entities.

### Monitoring greenhouse gas reduction targets

- Reduce the **carbon footprint** (scopes 1 and 2<sup>93</sup>) of the **directly held corporate equity and bond portfolios** by no less than 23% between the end of 2020 and the end of 2024.
  - The carbon footprint was reduced by 51% at the end of 2023.

### BNP Paribas Cardif's carbon footprint in tonnes of CO<sub>2</sub> equivalent (scopes 1 and 2) per million euros invested (directly held equities and bonds)



Data source: S&P Trucost Market Intelligence

The decrease recorded between 2022 and 2023 is mainly due to a more accurate modelling of the carbon emissions data of corporate clients within the sectors, particularly transport and electricity distribution, by our data provider S&P Trucost Market Intelligence.

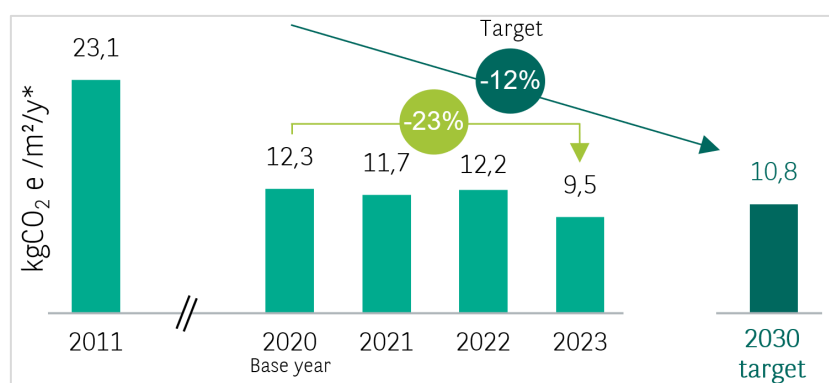
- Reduce by at least 12% the **carbon intensity** (scopes 1 and 2<sup>94</sup>) of directly held **office buildings** between 2020 and 2030.
  - The **carbon intensity** of directly held **office buildings** was reduced by 23% at the end of 2023 (47% reduction had previously been recorded between 2011 and 2020).

<sup>92</sup> <https://www.bnpparibascardif.com/en/article/-/article/press/commitments-climate-change-net-zero-asset-owner-alliance>

<sup>93</sup> Although the scope 3 measurement is not standardised, BNP Paribas Cardif is focusing on setting targets for scopes 1 and 2 (the definition of the scopes according to the GHG protocol is presented in Appendix 2), in order to be in line with the Alliance, while continuing to calculate and analyse the impact of its portfolios in all three scopes

<sup>94</sup> Reducing the carbon intensity of buildings also includes the consumption of electricity, heat and cooling by tenants.

### BNP Paribas Cardif's carbon intensity in kg of CO<sub>2</sub> equivalent (scopes 1 and 2) per m<sup>2</sup> of surface area (office buildings)<sup>95</sup>



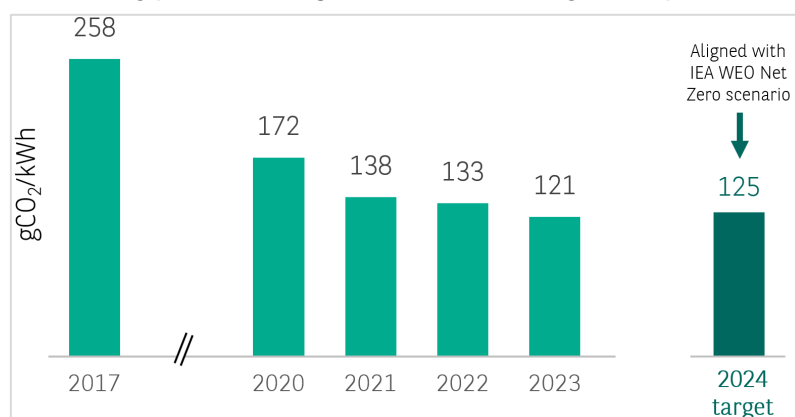
Source: Internal data and BNP Paribas Real Estate Property Management

There was a significant reduction in carbon intensity in 2023. This is due on the one hand to energy efficiency campaigns for buildings, thus reducing energy consumption, and on the other hand by a downward discounting of electricity carbon emissions factors.

### Sector targets

- Final exit from thermal coal value chain no later than 2030 for the European Union and OECD countries, and no later than 2040 in the rest of the world.
  - **see thermal coal phase-out schedule presented** (see Section E2. Share of outstandings and investment restrictions in the fossil fuel sector).
- Achieve a **carbon intensity below 125g of CO<sub>2</sub>/kWh by the end of 2024 for electricity producers** in directly held corporate equity and bond portfolios. This target is aligned with the International Energy Agency's (IEA) Net Zero Emissions scenario for power generation.
  - **The carbon intensity of equities and bonds for electricity producers** was reduced to **121g of CO<sub>2</sub>/kWh at the end of 2023**.

### Carbon intensity of electricity producers (in gCO<sub>2</sub>/kWh) for directly held equities and bonds



Source: Asset Impact<sup>96</sup> and International Energy Agency

<sup>95</sup> For 2011, the CO<sub>2</sub> equivalent emissions factor used for electricity is that of the Order of 8 February 2012, amending the Order of 15 September 2006 relating to the energy performance assessment for existing buildings offered for sale in mainland France. From 2020, the CO<sub>2</sub> equivalent emissions factor is taken from the ADEME database to reflect changes in the electricity energy mix

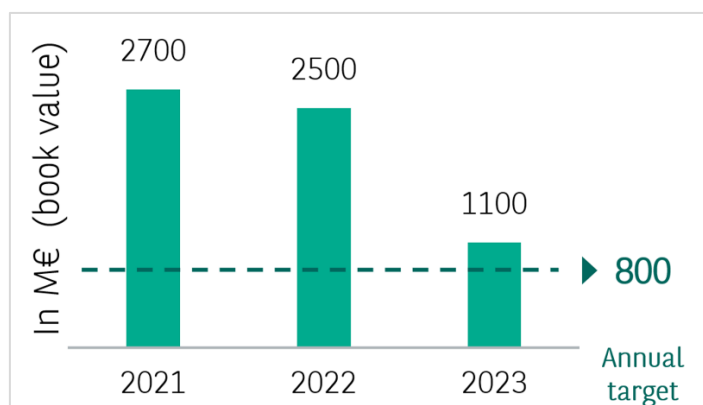
<sup>96</sup> Asset Impact | Asset-based data solutions for climate action (gresb.com)

This decrease in the carbon intensity of the electricity producers in the portfolio is mainly due to an increase in the share of green bonds in this sector<sup>97</sup>.

### Investment targets for the energy transition

- Invest at least €800 million in environmental-themed investments.
  - In 2023, €1.1 billion were allocated to **environmental-themed investments**.

### Environmental-themed investments



### Commitment target

- Dialogue with companies (*via* the Climate Action 100+ initiative) and asset managers to encourage them to implement a climate strategy consistent with the Paris Agreement.
  - In 2023, through the Climate Action 100+ initiative, Cardif Assurance Vie has been a co-leader in the commitment of three major European companies: Stellantis, Saint-Gobain and Iberdrola (see *Section D- Information on the engagement strategy*).

✦ As part of its climate alignment approach and its membership of the NZAOA, BNP Paribas Cardif has made commitments to reduce its carbon footprint. Among them, the objective of reducing the carbon intensity of directly owned office buildings was set by 2030.

The objective of reducing the carbon footprint of the directly held equity and corporate bond portfolios as well as the objective relating to the electricity production sector has been set for 2024.

In 2024, these commitments will be reviewed for the 2025-2030 cycle, and the quantitative objectives will be adjusted for 2030 and then reviewed every five years, thus coinciding with the regulatory timetable.

<sup>97</sup> The green bonds of electricity producers are used to finance the installation of renewable energy capacity. When generating electricity (scope 1), renewable energy does not emit greenhouse gases. In the calculation methodology, these green bonds benefit from a "discount" of 90% on the carbon intensity of the issuer.



### F3. Monitoring of climate indicators at Cardif Assurance Vie

#### F3 a. Measuring the portfolio's carbon footprint

Cardif Assurance Vie's carbon footprint at 31 December 2023 was estimated at 28 tCO<sub>2</sub> eq/€m invested compared to 88 tCO<sub>2</sub> eq/€m invested for its benchmark composite index. The comparison with a benchmark index enables the reader to assess the indicator in relation to a benchmark market. The index used as a benchmark is a composite of BB euro AG for corporate bonds and the Stoxx 600 for equities.

- In 2023, Cardif Assurance Vie's carbon footprint was reduced by 28%. The coverage ratio for the analysis of the portfolio is 99%.

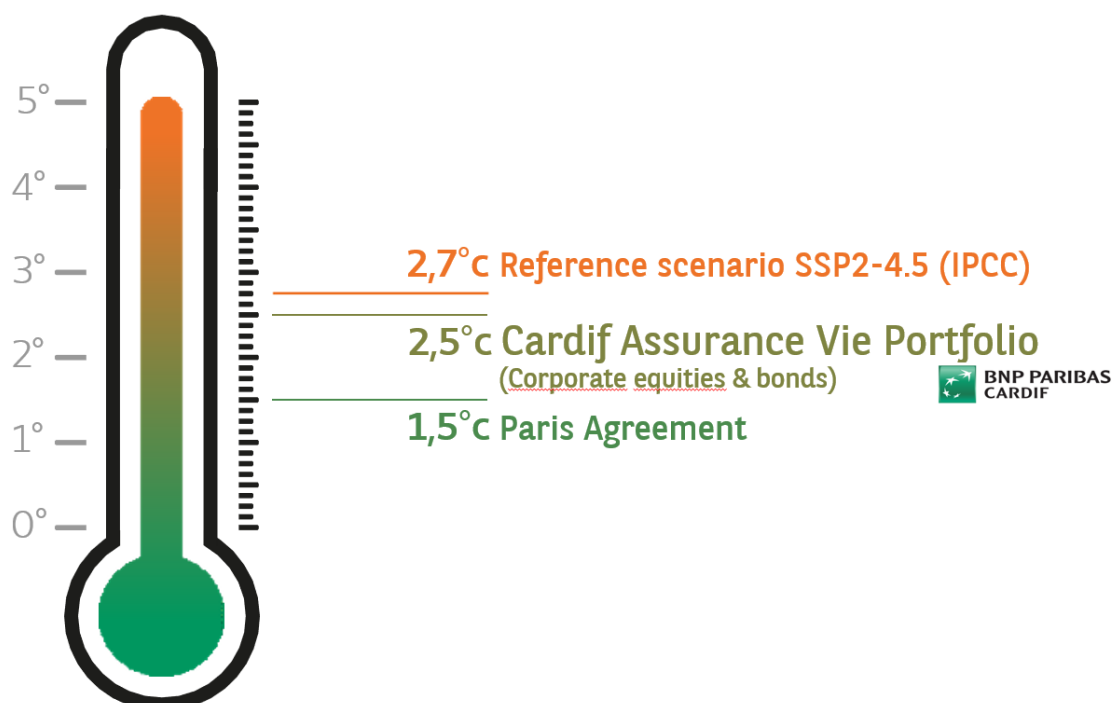
The assets included in this carbon footprint calculation (scopes 1 and 2) are those of the corporate equity and bond portfolio held directly by Cardif Assurance Vie. The calculation is based on data from S&P Trucost Intelligence Market Intelligence.

#### F3 b. Implied portfolio temperature measurement

Cardif Assurance Vie is continuing its efforts and is committed to contributing to the achievement of the Paris Agreement targets.

At the end of 2023, the temperature of Cardif Assurance Vie's corporate equity and bond portfolio was estimated at +2.5°C (Carbon Impact Analytics, Carbon4 Finance methodology). This temperature is equivalent to that calculated for the portfolio at the end of 2022.

**Portfolio temperature corporate equities and bonds held directly by Cardif Assurance Vie at 31 December 2023 (in market value), scopes 1, 2 and 3**



The temperature of the corporate equity and bond portfolio is similar to that of its benchmark composite index.<sup>98</sup>

The calculation of the temperature alignment of the portfolio by 2100 is based on a hedge of approximately 91% of the portfolio, broken down as follows:

- 74.2% through a “bottom-up” analysis methodology (scopes 1, 2 & 3) of each corporate client concerned, based on the physical data published in their public reports. This analysis results in a rating of the company based on its past carbon performance (calculation of the change in its carbon emissions in previous years), its present performance (calculated from its current carbon intensity) and its future performance (based on a qualitative analysis of its alignment strategy with transition needs). This analysis methodology is applied to the sectors with the strongest impacts on climate;
- 25.8% *via* a simplified methodology (using available scopes 1 and 2 emissions, published by companies, otherwise by estimating them, and by calculating scope 3 emissions using sector-specific statistical ratios).

**The current calculation methodology has several biases and limitations:**

- The use of different geographical perimeters between the two baselines:
  - the Low Carbon 100 index is composed of European companies representing a low-carbon economy;
  - the World Large Cap Equity index is composed of global companies, representing a business as usual scenario.

As the European economy is not representative of the world economy, the calibration of the formula is not homogeneous. Carbon4 Finance is considering the construction of a low-carbon index on a global scope.

- The model focuses on developed countries and listed assets: the Carbon4 Finance (CIA) database mainly covers companies in developed countries and applies only to the listed universe. This scope may bias the representation of a real economy made up of other types of assets, such as unlisted assets.

There are different methodologies for measuring the implied temperature of the portfolios that give different results. This is partly due to the forward-looking nature of this indicator (unlike the carbon footprint, which is a static indicator).

This indicator must therefore be approached with caution and should not be seen as a solid measurement of the portfolio’s alignment with the Paris Agreement. In addition, the temperature is calculated based on a constant portfolio. The projections do not take into account possible arbitrage transactions in the coming years.

### F3 c. Measuring climate alignment for real estate assets

The building sector accounts for a significant share of total energy consumption in France. Limiting energy expenditure and carbon footprint in the real estate portfolio is, therefore, a major challenge in the fight against global warming.

#### Tertiary buildings

This approach, measured annually, is in line with the objectives defined by the 2019 tertiary decree. This decree sets a reduction in energy consumption of 40% in 2030, 50% in 2040 and 60% in 2050 compared to a baseline year after 2010 or the achievement of a consumption threshold defined by a ministerial order.

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<sup>98</sup> The corporate equities and bonds portfolio benchmark index is a composite of BB euro AG for corporate bonds and Stoxx 600 for equities

Cardif Assurance Vie has been carrying out energy mapping of the real estate portfolio since 2011 for office buildings, and since 2013 for shopping centres.

In 2023, energy efficiency campaigns achieved a significant reduction in energy consumption in tertiary buildings.

For office buildings, the reduction in greenhouse gas emissions is greater than the reduction in energy consumption. This is due to the improvement in the energy mix (reduction in CO<sub>2</sub> emissions factors) in France.

For shopping centres, the methodology for calculating the area ratios for energy consumption and greenhouse gas emissions has been amended. From now on, our baseline will be the surface of the mall (the communal areas) and the premises heated and/or cooled by the communal facilities, rather than that of the entire shopping centre.

### Observed trajectories of the reduction in energy consumption and carbon intensity of Cardif Assurance Vie's directly managed real estate portfolio

	Energy consumption	Greenhouse gas emissions		Scope	Corrections applied
Office buildings <sup>99</sup>	-35% between 2011 and 2023	-58% between 2011 and 2023 <sup>100</sup>		Communal areas and private areas	Area occupancy <sup>101</sup> Climate variations
		-47% between 2011 and 2020	-21% between 2020 and 2023 <sup>100</sup>	Communal areas and private areas	Area occupancy <sup>101</sup> Climate variations
Shopping centres	-53% between 2013 and 2023	-37% between 2019 and 2023 <sup>102</sup>		Communal areas and private areas with communal facilities	

#### Residential buildings

The law of 22 August 2021 on combating climate change and strengthening resilience to its effects provides for rental bans and rent freezes according to the following schedule:

- 2023: Ban on renting homes which consume more than 450 kWhEF/m<sup>2</sup><sup>103</sup>
- 2023: Rent freezes for F and G-rated housing
- 2025: Ban on renting for G-rated housing
- 2028: Ban on renting for F and G-rated housing
- 2034: Ban on renting for E, F and G-rated housing

<sup>99</sup> It was not possible to obtain a consumption equivalent restricted to Cardif Assurance Vie for office building energy consumption. It was replaced by the energy consumption for BNP Paribas Cardif's real estate assets. As a reminder, the Cardif Assurance Vie entity was isolated at the end of 2022.

<sup>100</sup> For office buildings, until 2019, the CO<sub>2</sub> equivalent emissions factor used for electricity was that of the Order of 8 February 2012, amending the Order of 15 September 2006 relating to the energy performance assessment for existing buildings offered for sale in mainland France. The ADEME database was used as a source from 2020, in order to reflect changes to the electricity energy mix.

<sup>101</sup> When a site is vacant, the surface area ratio of energy consumption takes into account the occupied area rather than the total surface area of the building.

<sup>102</sup> Before 2019, the breakdown of energy consumption by energy source was not available. It was therefore not possible to convert into CO<sub>2</sub> equivalent.

<sup>103</sup> Measured in final energy, *i.e.* the energy actually used by the user.

Breakdown of Cardif Assurance Vie housing, by surface area, according to the Energy Performance Assessment (EPA) energy consumption rating at the end of 2023

	In % of surface area
A	3%
B	3%
C	34%
D	45%
E	11%
F	0%
G	0%
Pending EPA label	3%

CARDIF ASSURANCE VIE does not own any residential buildings with F or G EPAs.  
40% of surface areas are rated between A and C and 57% of surface areas are rated D or E.

Breakdown of Cardif Assurance Vie housing, by surface area, according to the Energy Performance Assessment (EPA) rating for greenhouse gas emissions at the end of 2023

	In % of surface area
A	36%
B	21%
C	4%
D	34%
E	2%
F	0%
G	0%
Pending EPA label	3%

The main source of energy used is electricity, which, in France, emits few greenhouse gases, resulting in a significant proportion of low EPA labels for greenhouse gas emissions (57% of surface areas are rated A and B)

#### F4. Changes in the investment strategy in line with the alignment strategy implemented

The investment strategy aims to align the portfolios with a trajectory containing global warming below 2°C.

BNP Paribas Cardif plans a definitive exit from **thermal coal** no later than 2030 for European Union and OECD countries, and no later than 2040 for the rest of the world (see section *F- Alignment with the Paris Agreement*). Cardif Assurance Vie's (relative) exposure to this sector is zero (0%) for its outstandings (corporate equities and bonds) at the end of 2023.

In the **oil and gas** sector, BNP Paribas Cardif applies the BNP Paribas Group exclusions. Cardif Assurance Vie's (relative) exposure to the unconventional oil and gas sector represented 0.8% of its outstandings (corporate equities and bonds) at the end of 2023.

In connection with the NZAOA alliance, BNP Paribas Cardif has set **sector targets** (thermal coal, carbon intensity on electricity producers) and **greenhouse gas reduction targets** for its directly held corporate equity and bond portfolios and office buildings.

The insurer is continuing its investments in the **environment and energy transition**, and its commitment to the Climate Action 100+ coalition to encourage companies with the largest carbon emissions to reduce their footprint.

The indicators currently cover corporate equities and bonds, *i.e.* approximately 37% of the euro-denominated fund managed by Cardif Assurance Vie (as of 31/12/23). Asset coverage will be gradually extended in the coming years. Some data is not available, and the methodologies for calculating certain indicators are still under construction or being improved. BNP Paribas Cardif teams participate in various working groups within the BNP Paribas Group and externally (NZAOA, France Assureurs, OID, etc.) which look at non-financial issues in investments.

BNP Paribas Cardif will communicate annually, in future Article 29 reports, on the progress made in achieving these targets and any difficulties encountered in implementing them.

## G. Biodiversity alignment strategy

### Definition and context

Biodiversity is the network of all living, terrestrial, marine and aquatic organisms, and the ecological complexes to which they belong. This network produces oxygen, regulates the planet's water, temperature and air quality, as well as natural hazards. These are the ecosystem services that biodiversity provides.

In 1992, at the Earth Summit held in Rio de Janeiro, the international community adopted the Convention on Biological Diversity (CBD), which set three objectives:

1. Biodiversity conservation;
2. Sustainable use of its components;
3. The fair and equitable sharing of benefits arising from the exploitation of genetic resources and associated traditional knowledge.

In 2010, States agreed on "Aichi Targets" for the period 2011-2021. In 2020, the CBD Secretariat's fifth *Global Biodiversity Outlook* report found that none of the Aichi targets had been met.

In 2022, 196 countries at the 15<sup>th</sup> Conference of the Parties to the Convention on Biological Diversity (COP15) adopted a new strategic plan to guide international action, known as the "Kunming-Montreal Global Biodiversity Framework" (GBF). Its objective is to halt and reverse the decline in biodiversity in order to contribute to a "vision of living in harmony with nature by 2050".

The framework sets out four major long-term objectives (2050):

1. End the extinction of species threatened by humans and divide by ten the rate of extinction of all species by 2050;
2. Use and manage biodiversity sustainably;
3. Fairly share the benefits arising from the use of genetic resources;
4. Ensure that the technical and financial resources for the implementation of the Global Biodiversity Framework are accessible to all parties, in particular the least developed countries and small developing island States.

The Global Diversity Framework<sup>104</sup> sets out 23 2030 action targets, broken down into three areas:

1. Reducing threats to biodiversity;
2. Meeting people's needs through sustainable use and benefit-sharing;
3. Tools and solutions for implementation and mainstreaming.

<sup>104</sup> <https://www.cbd.int/gbf/targets>

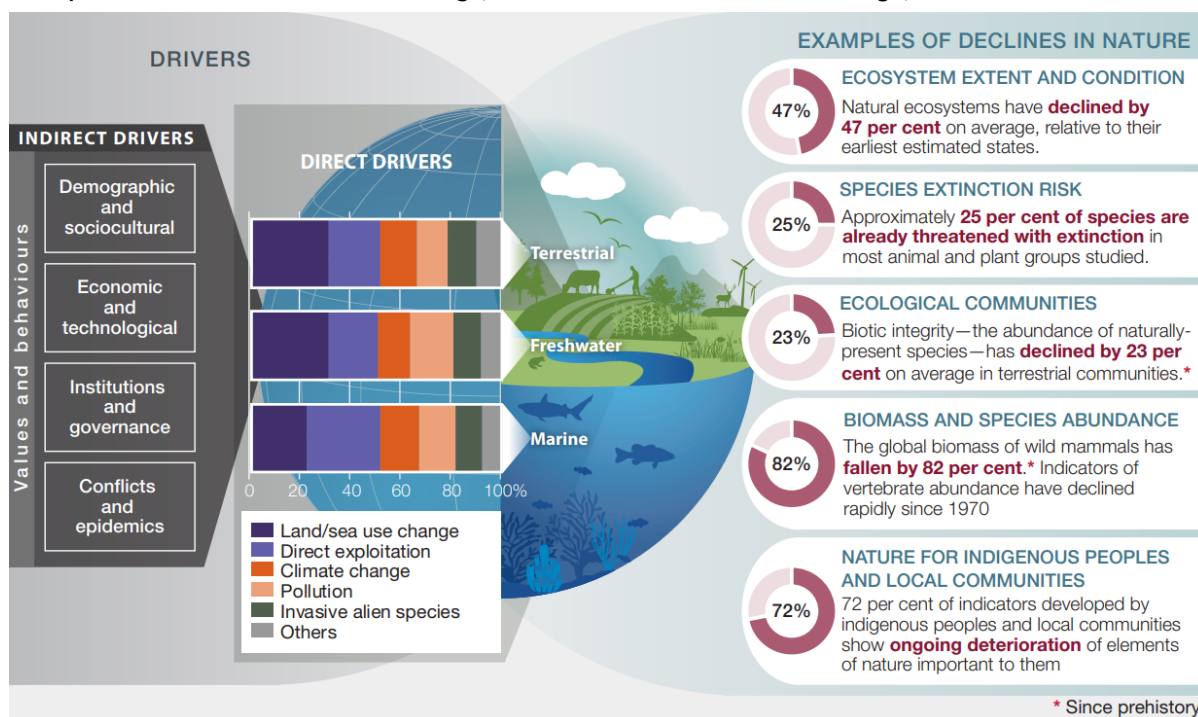
## G1. Meeting the objectives of the Convention on Biological Diversity

✦ Biodiversity is a priority area of action for BNP Paribas under the Sustainability pillar of its strategic plan, aligned with the objectives of customers and the United Nations Sustainable Development Goals. It will include sector policies addressing deforestation in South East Asia and more broadly issues related to the agriculture sector, publishing a public position on biodiversity<sup>105</sup>, dialogue with customers in the most sensitive sectors and contributing to the pilot project of the Taskforce on Nature-related Financial Disclosures (TNFD) framework on the agri-food sector with a sample of 123 companies operating worldwide<sup>106</sup>.

In 2024, the Investment & Protection Services (IPS) division initiated support for its business lines by developing a range of savings products on the theme of biodiversity, incorporating this theme into the management process, and consolidating its knowledge of the issues and concepts in this area. BNP Paribas Cardif uses these analyses to define quantifiable objectives contributing to targets 15, 18, 19 and 20 of the "Global Biodiversity Framework". However, this approach is hampered by the lack of recognised and shared tools and data to measure biodiversity performance.

## G2. Analysing the contribution to alleviating the main pressures and impacts on biodiversity (IPBES)

Main pressures observed on biodiversity (direct and indirect drivers of change):



Source: IPBES<sup>107</sup>

For several years, scientific reports, in particular IPBES reports, have warned of the collapse of global biodiversity and raised awareness of the significant threat to the stability of societies. The work of the

<sup>105</sup> [https://cdn-group.bnpparibas.com/uploads/file/biodiversity\\_position\\_2021.pdf](https://cdn-group.bnpparibas.com/uploads/file/biodiversity_position_2021.pdf)

<sup>106</sup> <https://www.i-care-consult.com/2023/03/tnfd-pilot-on-the-agrifood-sector/>

<sup>107</sup> <https://www.ipbes.net/global-assessment>

Taskforce on Nature-related Financial Disclosures (TNFD) is essential to creating a harmonised global reporting framework on biodiversity impacts.

From 2022 (for the 2021 period), BNP Paribas Cardif published the results of the measurement of a biodiversity footprint indicator, the MSA.m<sup>2</sup>/€k for its portfolio of directly held corporate equities and bonds, according to the model proposed by Carbon 4 Finance and developed by the French Deposits and Consignments Fund (*Caisse des Dépôts et Consignations* – CDC). Then, in 2023 for the year 2022, BNP Paribas Cardif added a second metric according to the methodology of the Iceberg Data Lab (IDL), as well as the ecosystem dependency matrix of its portfolio according to the model proposed by CDC Biodiversity. These measures have been applied again in 2024 and are described in the following section.

### Participation in a biodiversity market fund in 2024

In 2024, BNP Paribas Cardif is participating in a market initiative dedicated to the promotion of biodiversity in financial investment portfolios<sup>108</sup>. This unprecedented approach brings together 10 French institutional investors.

This collective initiative marks an important step in the definition of action plans and financial trajectories which incorporate biodiversity issues. Institutional investors have a major role to play in redirecting financial flows in favour of biodiversity. In compliance with the objectives of the Kunming-Montreal Global Biodiversity Framework, *via* target 19<sup>109</sup>, this is applied particularly by redirecting and guiding financial flows towards biodiversity.

In 2024, the 10 institutional investors will meet as a working group to launch a call for tenders to management companies, in order to select the institutions offering the most innovative methods to incorporate biodiversity issues into their financial management.

BNP Paribas Cardif takes account of **biodiversity issues in its real estate assets**. Several actions are planned to reduce the impact of real estate activities on biodiversity:

- promoting an increase in green spaces on existing sites;
- stopping the use of plant protection products by introducing a clause in maintenance contracts;
- developing links with ecologists to optimise actions to preserve and promote biodiversity for major renovation work.

## G3. Biodiversity footprint measurement indicators and meeting objectives

The models for assessing metrics related to biodiversity, the quality and level of detail of the data used by these models, are still being developed. They are partly based on a set of estimates, which change and are refined from one year to the next.

BNP Paribas Cardif has therefore chosen to assess the biodiversity footprint of its portfolio with two data suppliers. This makes it possible to use two different approaches with evolving methodologies and hedges. One provides an aggregated view of the biodiversity footprint, and the other a view by pressure over time.

<sup>108</sup> <https://www.bnpparibascardif.com/fr/article/-/article/accueil/10-investisseurs-institutionnels-francais-lancent-une-initiative-de-place-pour-constituer-des-fonds-d-investissements-cibles-sur-la-biodiversite>

<sup>109</sup> Target 19: Generating financial resources: Substantially and gradually increase the level of financial resources from all sources by 2030 by generating at least \$200 billion per year. Developed countries pledge at least \$20 billion per year by 2025, and at least \$30 billion per year by 2030 to help developing countries protect their biodiversity. Source: <https://www.novethic.fr/actualite/environnement/biodiversite/isr-rse/accord-de-kunming-montreal-voici-les-23-cibles-adoptees-a-la-cop15-biodiversite-151273.html> <https://www.novethic.fr/actualite/environnement/biodiversite/isr-rse/accord-de-kunming-montreal-voici-les-23-cibles-adoptees-a-la-cop15-biodiversite-151273.html>

### G3 a. The Company's corporate equity and bond portfolio biodiversity footprint

The **"Mean Species Abundance" (MSA) metric** is an indicator of the degree to which local biodiversity has been protected. It compares the average abundance of native species in an environment with their abundance in an undisturbed ecosystem. Its calculation is based on the comparison, for each individual species, between its abundance under the influence of a given pressure and its abundance in the absence of this pressure. Further principles of this metric are presented in the Appendices.

BNP Paribas Cardif uses two models to assess this metric:

- **the Global Biodiversity Score (GBS)** carried out by Carbon4 Finance and developed by CDC Biodiversité, already used in 2021;
- **the Corporate Biodiversity Footprint (CBF)** developed by Iceberg Data Lab and I Care & Consult, added in 2022.

These two models are used by a range of market players including insurers, reinsurers and asset managers. Banque de France also uses the GBS as part of its analysis of the exposure of the French financial system to biodiversity-related risks.<sup>110</sup> Details on the principles of the MSA metric and the models for calculating the GBS and CBF scores are available in the appendices.

#### Methodological limitations and biases

Ecosystems behave in a non-linear and complex way. Numerous interactions occur among ecosystems and with natural processes and living organisms, including humans. As a result, a metric such as the MSA.km<sup>2</sup> represents a simplified view of the impacts of human activities on biodiversity. The analyses based on this metric will therefore need to be supplemented by other metrics or indicators as and when required.

In addition, the metric itself remains complex to assess, as the different scopes and different pressures contribute in various ways to its final calculation.

The CDC model does not currently cover the static footprint of climate change pressure due to the difficulty in determining and allocating greenhouse gas emissions prior to the observation period by sector and region. As a result, the impact of corporate clients' activities on biodiversity may be underestimated.

Each step of the approaches used by CDC and IDL has limitations and biases, with the main ones being set out below.

The collection of corporate economic data and ecological inventory data is based on the financial and non-financial publications of the corporate clients that are counterparties of BNP Paribas Cardif.

Economic data is not necessarily published at a sufficient level of detail or may be published based on segmentation that does not align with the models. For example, revenue is often published by type of business activity and by region in different sections of the annual reports where reconciliation is not possible, whereas the model requires the cross-referencing of these two visions. Similarly, ecological inventory data is currently only partially published, and is based on estimates.

The use of EXIOBASE or Wunderpus to assess corporate clients' ecological inventories also has its limitations. Putting these databases together involves the use of methodological choices, assumptions and approximations that add complexity to the interpretation of the results.

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<sup>110</sup> Banque de France, working paper #826, "A "Silent Spring" for the Financial System? Exploring Biodiversity-Related Financial Risks in France" published on 27/08/2021



CDC and IDL's proprietary models which convert ecological inventory data into pressures are based on lifecycle models by commodity type. These models are themselves based on methodological choices, assumptions and approximations that add to the complexity of the overall model.

The GLOBIO model for assessing the impacts associated with pressures, used by the CDC and IDL models, uses scenarios and assumptions based on local studies or limited to certain types of species, which are then generalised.

In addition, the transition from the MSA.km<sup>2</sup> metric to the MSA.m<sup>2</sup>/€k (or MSA.km<sup>2</sup>/€M) metric is based on the CDC and IDL models on the division of the MSA.km<sup>2</sup> metric by the value of company. This value may not be available or easily estimable for certain corporate clients, particularly those that are not listed, which therefore limits the portfolio coverage ratio for the metric in question.

In conclusion, the sheer number of models, their level of development and the detail and quality of the data published by corporate clients means that it is not easy to identify in the metric analysis what is based on the specific activities of the corporate client in question, and what is based on approximations and estimates made on the data or by the model.

### Cardif Assurance Vie's corporate equity and bond portfolio biodiversity footprint

The CDC model covers 87% of the outstandings of the corporate equity and bond portfolio held directly by the Cardif Assurance Vie euro fund.

Biodiversity footprint in MSA.m <sup>2</sup> /€k invested, as of 31/12/2023	
Dynamic aquatic	0.04
Dynamic land	2.4
Static aquatic	2.2
Static land	31.1

Source: Carbon4Finance

As of 31 December 2023, for every €1 thousand invested, the impact of the corporate equity and bond portfolio is equivalent to:

- the artificialisation of 2.2 m<sup>2</sup> of aquatic biodiversity and 31.1 m<sup>2</sup> of land biodiversity based on a static impact;
- the artificialisation of 0.04 m<sup>2</sup> of additional aquatic biodiversity and 2.4 m<sup>2</sup> of additional land biodiversity based on a dynamic impact.

Approximately 70% of the static footprint, whether land or aquatic, is generated by five industries : beverage production, oil and gas extraction, food manufacturing, chemical production and transport and pipeline infrastructure, and activities related to financial services.

Approximately 55% of the dynamic footprint, whether land or aquatic, is driven by two business sectors: oil and gas extraction and financial services.

✦ The precise location of corporate client assets is required for a segmentation of the portfolio's exposure by geographical area, which is relevant for the analysis of the exposure to physical risks. BNP Paribas Cardif is studying the methods and solutions offered by its data suppliers in order to establish this mapping.

The MSA.km<sup>2</sup>/€M metric of the IDL model covers 61.3% of the corporate clients in the portfolio.

- **The footprint assessed by IDL for the corporate equities and bonds portfolio is -0.103 MSA.km<sup>2</sup>/€M.**

Both the CDC and IDL models identify land use and aquatic pollution as the most significant pressures in the portfolio. The CDC model also highlights the pressure related to climate change, which contributes

significantly to the dynamic land footprint by considering downstream Scope 3 emissions from corporate clients.

### G3 b. Biodiversity footprint of the sovereign bond portfolio

This year, Cardif Assurance Vie extended the scope of calculation of its biodiversity footprint to its portfolio of directly held sovereign bonds. This assessment was carried out by Iceberg Data Lab using the Carbon Biodiversity Footprint (CBF) methodology.

The sovereign biodiversity footprint makes it possible to assess the country's impact on the degradation of nature by estimating the contribution of the country's economic activities (products and services included in the Gross Domestic Product) to the factors of biodiversity loss.

As with corporate clients, this calculation is a first step in incorporating biodiversity issues into the investment strategy.

#### Methodological explanations

For countries, the assessment measures the impact of products and services included in the Gross Domestic Product (GDP), including imports and exports of products consumed or sold outside the national territory. This assessment is carried out according to the same sector methodology as that used to calculate the company footprint, which covers 272 level 3 economic sectors according to the European NACE classification<sup>111</sup>.

The results of these first country-level footprint calculations show that countries' impact on biodiversity largely depends on their economic structures, mainly related to gross domestic product. For example, countries in which agriculture represents a significant portion of their GDP tend to have impacts related to land use changes; countries whose GDP comes mainly from extractive activities may have significant pollution-related impacts, and lastly, countries with a GDP linked to service activities may have impacts linked to the use of land by upstream activities (scope 3), with the import of goods.

#### Methodological limitations and biases

The sovereign biodiversity footprint has the same limitations as those exposed for companies. In addition, the assessed impact is linked to the current state of the economy and does not take into account ongoing changes in government policies or future economic changes.

#### Biodiversity footprint of the sovereign bonds in the Cardif Assurance Vie's portfolio

The Iceberg Data Lab analysed 74% of the sovereign bond portfolio held directly by Cardif Assurance Vie.

- The estimated footprint of the sovereign bond portfolio is  $-0.066 \text{ MSA.km}^2/\text{€M of GDP}$ .

The footprint of the benchmark composite index is  $-0.108 \text{ MSA.km}^2/\text{€M of GDP}$ . The overweighting of France in the sovereign bond portfolio compared to the benchmark composite index contributes to a lower biodiversity footprint measurement on the portfolio than on the benchmark index<sup>112</sup>.

<sup>111</sup> NACE is the Statistical Classification of Economic Activities in the European Community, a classification system for economic activities covering 615 four-digit codes.

<sup>112</sup> IBOXX Euro Eurozone Sovereign Overall is the benchmark composite index of the government bond portfolio.

### G3 c. Risk of dependency on ecosystem services

For the second year running, Cardif Assurance Vie has published an assessment of the directly held corporate equity and bond portfolio's dependency on ecosystem services.

The dependency on ecosystem services represents the portfolio's exposure to biodiversity loss. This dependency is assessed by CDC *via* a dependency score taking into account upstream scope 1 and scope 3 (in CDC's BIA GBS methodology, upstream scope 3 includes energy purchases and therefore includes scope 2). It is established on the basis of the business sectors of the companies involved, as well as the business sectors of their upstream value chains (to include the upstream Scope 3 dependency). The industrial processes used in these sectors are associated with a dependency on the 21 ecosystem services derived from the "ENCORE" model, a database developed by the Natural Capital Financial Alliance, an alliance of financial institutions, in partnership with UNEP-WCMC (UN Environment Programme World Conservation Monitoring Centre). The database assigns levels of dependency on 21 ecosystem services (classified according to the Common International Classification of Ecosystem Services) to 86 production processes.

The analysis was carried out on approximately 87% of the equity and bond portfolio held directly.

The dependency score quantifies the dependency of portfolio companies on ecosystem services, *i.e.* services offered by nature (pollination, water purification, etc.). This score is based on the materiality tables from the ENCORE model.

The average dependency score expresses the portfolio's average dependency on all ecosystem services.

#### Cardif Assurance Vie's average dependency score

Scope 1	7%
Scope 3 Upstream	9%

Source: Carbon4Finance

Therefore, the average dependency of the Cardif Assurance Vie portfolio (directly held corporate equities and bonds) for all ecosystem services can be considered very low, both for Scope 1 and upstream Scope 3.

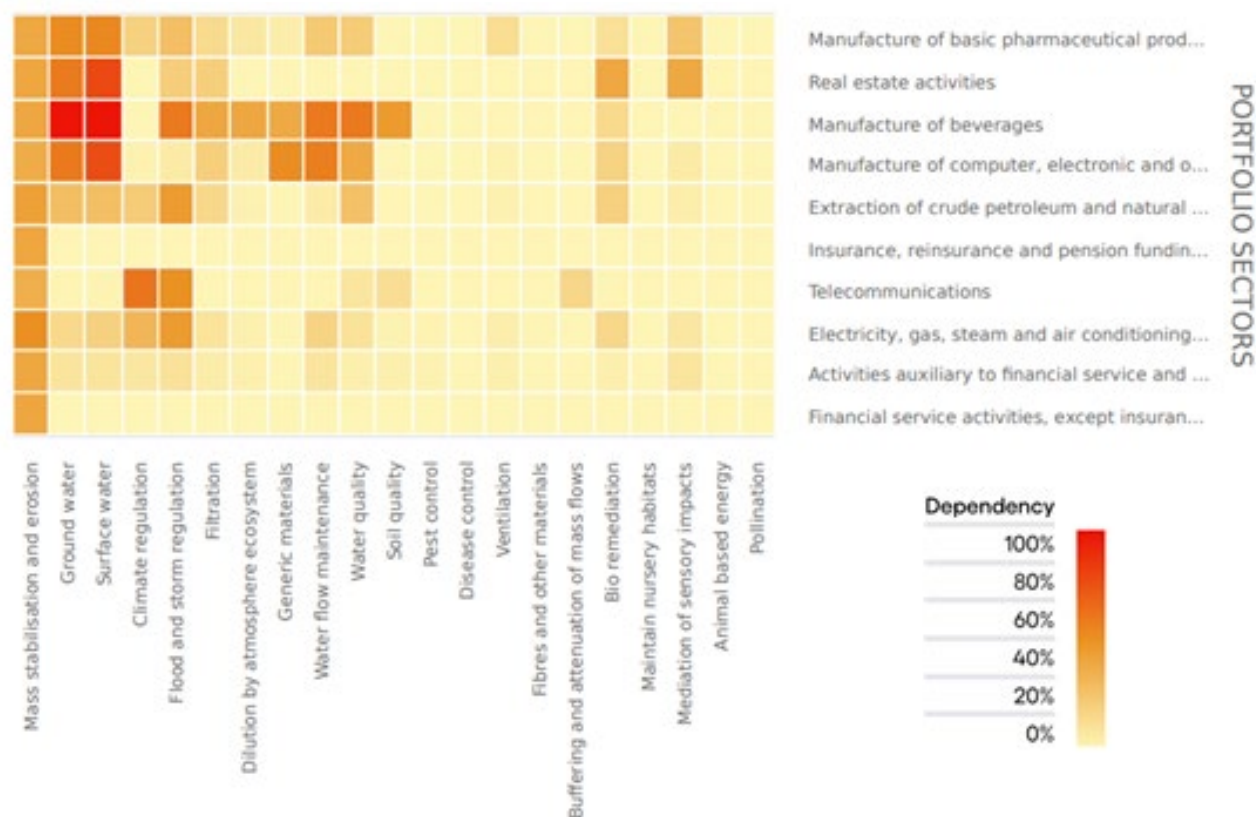
This average vision covers disparities that can be illustrated by the following Scope 1 dependency matrix.

This matrix shows that for the 10 most represented sectors<sup>113</sup> in the portfolio in terms of outstandings, the companies have a dependency score of around 40% linked to the ecosystem service "mass stabilisation and erosion control" and are therefore sensitive to erosion and landslides.

The companies in the Cardif Assurance Vie portfolio with a high average dependency score (greater than 80% on the matrix) on at least one ecosystem service carry out activities related to the manufacture of computers, electronic components and optical products, manufacturing of beverages or real estate-related activities. These companies are highly dependent on "groundwater" and "surface water" ecosystem services.

<sup>113</sup> Sectors identified on the basis of NACE codes

**Average dependency score by sector and ecosystem service area**  
**Corporate equities and bonds directly held, scope 1**



Source: Carbon4 Finance

The average dependency score can be supplemented, for Scope 1, by a **critical dependency score** which quantifies the share of the portfolio that is critically dependent (*i.e.* with a high or very high dependency score) on at least one ecosystem service.

**Cardif Assurance Vie critical dependency score**

Scope 1	<b>28%</b>
Scope 3 Upstream	<b>40%</b>

Source: Carbon4 Finance

The critical dependency of Cardif Assurance Vie's portfolio of directly held corporate equities and bonds on at least one ecosystem service is 28% for Scope 1. The main critical exposures are related to ecosystem services provided by surface water. The sectors most critically exposed to at least one ecosystem service are telecommunications, beverage manufacturing and pharmaceutical manufacturing<sup>114</sup>.

The dependency scores (average and critical) were relatively stable over the two consecutive years of analysis. Indeed, the scores are based on the business sectors and the sector allocation of the portfolio remained stable between 2022 and 2023. The scores are also based on the ENCORE database, which was last updated in 2018.

<sup>114</sup> Ibid

## H. Addressing ESG criteria in risk management

BNP Paribas has implemented a comprehensive approach to ESG risk management that reflects the Group's commitment at the highest level to combining performance, responsibility, ethics and transparency. BNP Paribas' approach to corporate social responsibility incorporates short-, medium- and long-term environmental and social risks.

The risk management framework enforced by BNP Paribas Cardif is derived from that of BNP Paribas, adapted to insurance specificities.

### H1. Process for identifying, assessing, prioritising and managing risks related to the consideration of environmental, social and governance quality criteria

BNP Paribas Cardif is gradually integrating ESG risk drivers into its management framework as drivers that may have a potential impact on existing financial risk categories. Given the ever-evolving nature of ESG methodologies, data and regulations, the system put in place is likely to be adapted accordingly.

The tools deployed and continuously improved cover the risk factors relating to the three pillars: "E", "S" and "G". Those relating to environmental and climate risk factors have seen greater progress.

#### H1 a. Overall risk management framework

BNP Paribas Cardif performs a risk inventory that consists of a set of "severe yet plausible" basic scenarios (called "risk events") that could affect the activities, operations and environments of Cardif Assurance Vie.

For each risk event, the methodology used requires an identification of the risk drivers underlying its occurrence, *i.e.* the drivers that promote, trigger or aggravate the event. Risk drivers that need to be considered include ESG-related risk drivers, including the sub-set of climate and environmental risk factors.

The materiality of these risk events is assessed according to their probability of occurrence and their severity over three years. The time-based target is aligned with financial planning target. The probability is now supplemented by the notion of imminence, which qualifies the probability of the risk event occurring over the next three years. This probability can be classified as "low", "medium", "high" and "very high". With this approach, both frequent and probable risk events as well as rare, distant, less probable and more severe events can be included in the risk inventory.

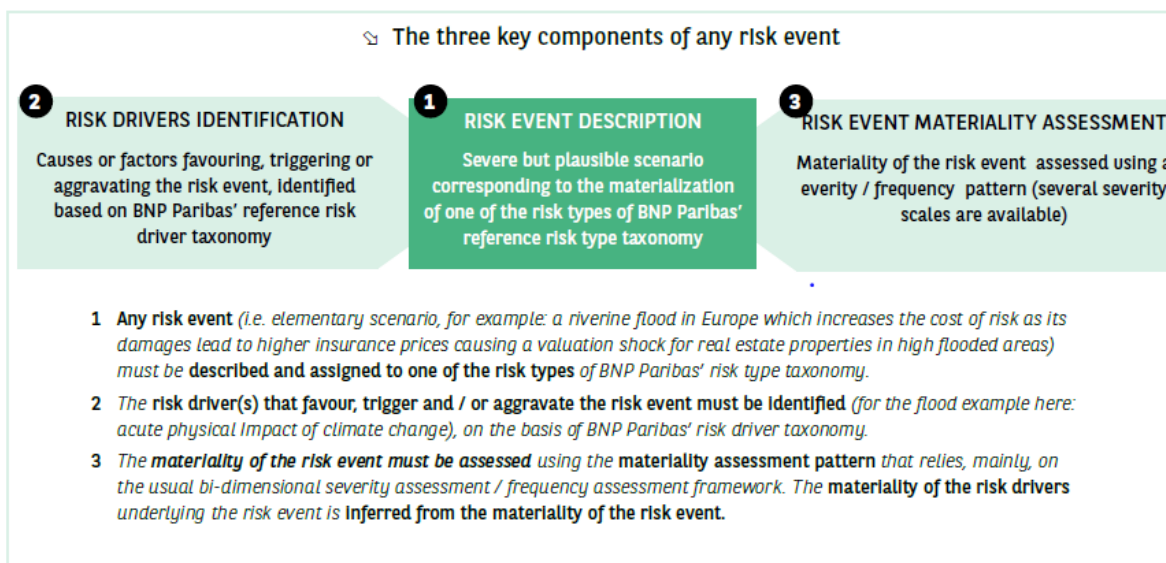
BNP Paribas Cardif's ESG risk management framework for climate risk management is consistent with the principles of the EIOPA application guide on conducting a materiality assessment of climate change risks and on the use of climate change scenarios in the ORSA.<sup>115</sup>

ESG risks are incorporated as risk drivers in the identifying process, likely to affect a wide range of risk events. Those risk events can be financial (market risk, credit risk, etc.) or non-financial (operational and strategic risk).

The possible links between ESG risk drivers and the occurrence of traditional risk types (transmission channels) are varied, as presented in the tables below:

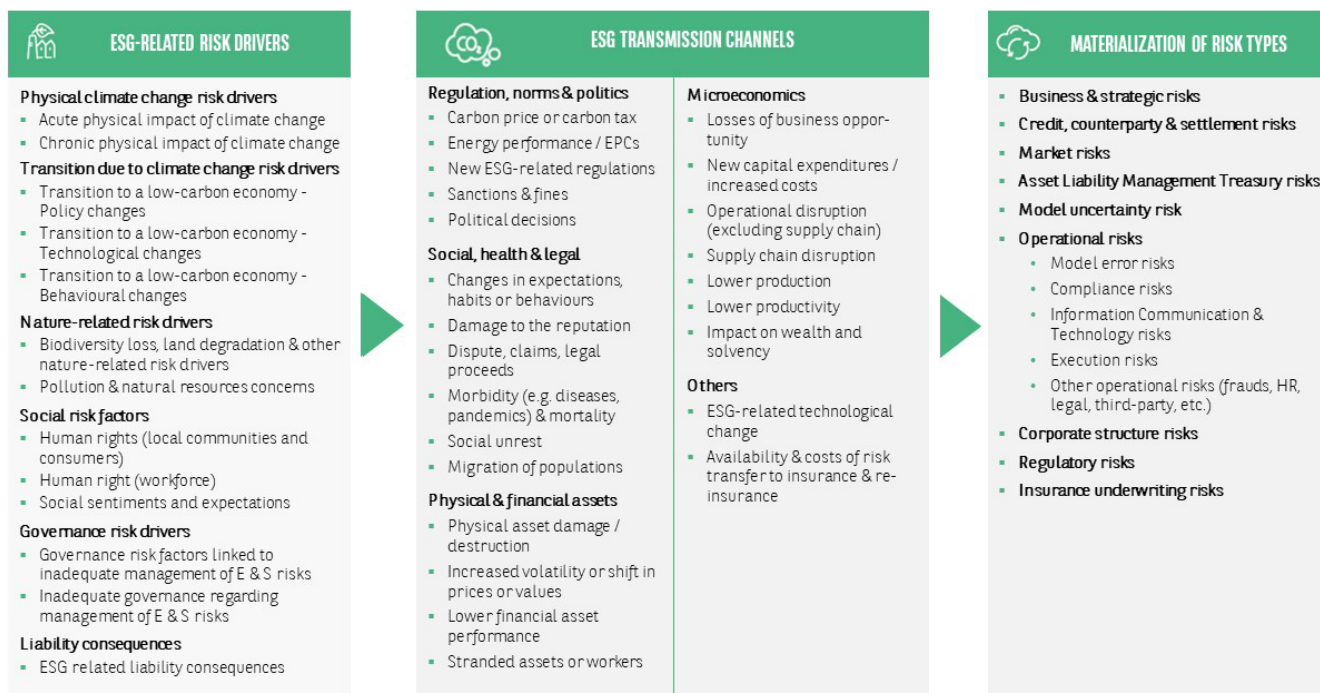
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<sup>115</sup> EIOPA, Application guidance on running climate change materiality assessment and using climate change scenarios in the ORSA, EIOPA-BoS-22/329, 02 August 2022



### Transmission channels extracted from the 2023 risk inventory

Environmental and social risk drivers are gradually integrated into the standard reporting processes, taking into account the progress of internal analyses relating to non-financial issues as well as any regulatory developments.



## H1 b. Monitoring and assessment of ESG risks in the investment process

Since 2008, BNP Paribas Cardif has gradually enhanced and widened its framework to manage ESG risks notably through:

- business activity restriction lists grouping together companies that do not comply with the Group's CSR requirements;
- setting a timeframe for a thermal coal exit;
- setting targets in line with the energy transition towards a neutral carbon economy, reinforced by joining the NZAOA;
- the engagement policy, reinforced by joining the Climate Action 100+.

### Roles and responsibilities

The operational entities and the RISK Function (RISK) are responsible for managing risks, including ESG-related risks.

Following the internal organisation of the permanent control framework, **the operational entities are the first line of defence**. They regroup the front-line in permanent control and are responsible for managing their risks including those linked to environmental and social factors.

The RISK entity is an independent control function which is responsible for organising and supervising the overall risk management system covering BNP Paribas Cardif's risk exposures within its remit, including those linked to ESG risk factors. To that end, RISK is tasked with defining, developing, implementing and maintaining the ESG risk management framework, in close collaboration with the IMPACT Department and the Asset Management Department.

RISK is a member of the **SRI Cross-functional Committee** and the **BNP Paribas Cardif Strategic Impact Committee** (see Section *B1 - Internal resources*).

The framework is strengthened by periodic reviews conducted by the third line of defence (audit of the Banking Group or BNP Paribas Cardif).

### Risk management tools

The monitoring of ESG risks linked to investments is framed by dedicated risk management tools.

BNP Paribas Cardif defines and applies its investment policies while managing the **restriction lists according to the observed level of ESG risks**. BNP Paribas Cardif can thus ban any investment relationship or apply a dedicated monitoring process. Controls are put in place during the pre-investment and post-investment phases.

### Controls

The ESG risk management framework also relies on dedicated controls.

BNP Paribas Cardif implements the CSR operational control plan from the BNP Paribas Group. **This control plan drives towards the continuous improvement that is necessary for an adequate management of ESG risks**. It incorporates the ESG risk management systems defined by the Group and has been adjusted to take into account the specific nature of BNP Paribas Cardif's activities.

## Stress tests

Regulatory climate stress tests complete the ESG risk management framework. These may be tests requested by the French Prudential Control and Resolution Authority (ACPR), or internally.

The traditional regulatory and internal stress testing implemented by insurers give them the tools and the expertise necessary to measure the consequences of a crisis scenario on their solvency situation. Gradually, this scenario analysis system is enriched for use in analysing the consequences of global warming and the energy transition on asset portfolios. They will make it possible to deal with longer horizons, differentiated scenarios according to a detailed sectoral segmentation and to take into account specific factors such as the cost of carbon emissions, technological innovation and physical risks in the long term.

In 2023, Cardif Assurance Vie took part in the second ACPR climate stress test, which follows the pilot test conducted in 2020-2021 but this time focused solely on the insurance sector<sup>116</sup>. This test, carried out on a voluntary basis, is based on the most recent projections of the IPCC and the NGFS, the network of supervisors and central banks for the greening of the financial system.

Compared to the previous year, a short-term horizon (2027) was added to the long-term horizon (2050) to explore scenarios combining physical risk and transition risk in a consistent manner. The impact of these risks is measured on assets, liabilities, balance sheet equilibrium and, for the short-term scenario, solvency.

The short-term scenario assumes an exceptional climate loss experience that leads to a sudden adjustment in the financial markets, linked to the anticipation of transition policies now considered inevitable. Two long-term scenarios, resulting from the work of the NGFS, transcribe the economic and financial impacts of transition trajectories, one ordered, the other delayed, targeting warming limited to below 2°C by 2050. The economic impacts affect the balance sheet of insurers and are combined with an intensification of the physical risk which manifests itself through natural disasters (drought, flooding, marine flooding and cyclones), health risks, and macroeconomic and sector impacts. The ACPR has favoured scenarios that are comparable in terms of their point of arrival at the target temperature and therefore their level of physical risk, but which differ in the timing of the transition, thus making it possible to measure the cost of inaction.

## H2. Description of the main environmental, social and governance risks

### H2 a. Explaining and categorising risks

Sustainability risks are events or conditions whose occurrence could have an actual or potential negative impact on the value of an investment or the liability of an insurance contract. BNP Paribas Cardif is more specifically exposed to risks related to climate change, both directly as regards its own operations and indirectly through its investment and insurance activities.

There are two main types of climate change-related risks:

- **transition risk drivers** that result from a change in the behaviour of economic and financial agents in response to the implementation of energy policies or technological changes;
- **physical risk drivers** resulting from the direct impact of climate change on people and property *via* extreme weather events, or long-term risks such as rising sea levels or rising temperatures.

In addition, **risks in terms of liability** may arise from these two risk factors. They correspond to claims for compensation, a legal entity could be held liable if it was held responsible for global warming.

BNP Paribas Cardif monitors the potential impact of the sustainability risk factors in the conduct of its business, in that of its counterparties or in its own investments. It gradually strengthens their assessment, as the methodologies for measuring and analysing these factors and their impact on traditional risks.

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[https://acpr.banque-france.fr/sites/default/files/medias/documents/20240527\\_main\\_results\\_of\\_the\\_climate\\_exercise\\_insurance\\_sector\\_2024\\_en.pdf](https://acpr.banque-france.fr/sites/default/files/medias/documents/20240527_main_results_of_the_climate_exercise_insurance_sector_2024_en.pdf)



## ESG risk drivers

ESG risk drivers are presented in the table below:

Level 1 Type of risk driver	Level 2 Type of risk driver	Level 3 Type of risk driver
Environmental, social and governance	Physical risk drivers related to climate change	1 Acute physical impact of climate change
		2 Chronic physical impact of climate change
	Transition risk drivers related to climate change	3 Transition to a low-carbon economy to mitigate climate change - policy changes
		4 Transition to a low-carbon economy to mitigate climate change - technological changes
		5 Transition to a low-carbon economy to mitigate climate change - behavioural changes
	Other environmental risk drivers	6 Loss of biodiversity, soil degradation and other nature-related risk drivers
		7 Pollution and other environmental risk drivers
	Social risk drivers	8 Human Rights (local communities and consumers)
		9 Human Rights (labour)
		10 Other social risk drivers
	Governance risk drivers	11 Governance risk drivers related to inadequate management of Environmental and Social risks
		12 Non-compliance with corporate governance frameworks or codes
	Consequences of ESG liability	13 Consequences of ESG liability

The risk inventory carried out in 2023 identifies six risks impacted by climate change-related risk drivers. This analysis is carried out comprehensively for the BNP Paribas Cardif scope. It applies in particular to Cardif Assurance Vie. The following table shows the results of this inventory by combining target time periods: short-term (ST), *i.e.* within two years, medium-term (MT), between three and ten years, and long-term (LT), beyond ten years.

	Risk	Description	Associated risk drivers	Target time period	Risk type
Transition risk	Market risk	Climate transition risk	Transition to a low-carbon intensity economy to mitigate climate change – political, technological and behavioural changes	MT/LT	External
	Operational risk	Risk of regulatory and legal non-compliance	Non-compliance with corporate governance frameworks or codes	ST/MT	External
	Strategic risk	Reputational risk	Governance risk drivers related to inadequate management of Environmental and Social risks	Non-compliance with corporate governance frameworks or codes	ST/MT
Intensification of regulatory changes			Consequences of ESG liability		
Physical risk	Strategic risk	Geopolitical uncertainties	Human Rights (local communities and consumers)	MT/LT	External
			Physical risk drivers related to climate change	MT/LT	External
	Major economic and social crisis	Human Rights (local communities and consumers)	MT/LT	External	

Among these risks, BNP Paribas Cardif identifies operational and strategic risks as current risks, based on a short-term timescale, while the other risks are considered as emerging given their medium or long-term timescale.

In 2023, BNP Paribas Cardif did not recognise any of these risks.

## H2 b. Indication of economic sectors and geographical areas concerned

Despite developments in recent years in terms of standardising methodologies for quantitative analysis of ESG factors and their impact on traditional financial risks, they must be interpreted with caution. As a result, the tables presented in this section can only be assessed on the date of publication of this document and must be interpreted taking into account the uncertainties related to the methodologies, projections and data used.

BNP Paribas Cardif segments its portfolio by sector to analyse its main exposures to physical and transition risks.

The following table presents this segmentation by sector on the basis of the outstanding amount of directly held corporate equities and bonds.

Sector	Weight in the portfolio at 31/12/23
Financial services	59.8%
Services to local authorities (energy, water, etc.)	5.9%
Communication services	5.4%
Energy	3.9%
Industry	3.5%
Supranational	3.4%
Consumer staples	3.1%
Information technology	2.8%
Discretionary consumption	2.5%
Other sovereigns	2.5%
Real estate	2.3%
Healthcare	2.2%
Agencies	1.9%
Construction and materials	0.8%
Provision of healthcare	<0.1%

## H3. Review frequency of the risk management framework

BNP Paribas Cardif is gradually integrating ESG risk drivers into its management framework as drivers that may have a potential impact on existing financial risk categories. Given the ever-evolving nature of ESG methodologies, data and regulations, the system put in place is likely to be adapted accordingly.

The tools being rolled out within the BNP Paribas Group cover the risk factors relating to all three pillars ("E", "S" and "G"). However, those related to environmental risk drivers, and climate in particular, are the most developed. This reflects, among other things, the expectations of supervisors who focus on identifying and managing climate and environmental risks, due to their significant potential impacts on the financial sector.

## H4. Action plan to reduce the entity's exposure to the main environmental, social and governance quality managed risks

BNP Paribas Cardif is implementing an action plan to reduce its exposure to ESG managed risks. The first step, carried out between 2023 and 2025, aims to develop its ESG risk management system, to finalise the choice of its risk measurement metrics, to refine its understanding of the associated methodologies, to continue its analysis of the information provided by these metrics, and to define its biodiversity strategy and objectives.

In 2024 and 2025, BNP Paribas Cardif will define the next steps of its action plan to use the metrics selected and the associated analyses and to use them to monitor the achievement of its strategy and objectives.

## H5. Quantitative estimate of the financial impact of the main environmental, social and governance quality identified risks

To analyse the exposure of its portfolios to climate risks, Cardif Assurance Vie relies on the prospective analyses of S&P Trucost Market Intelligence for its portfolio of directly held corporate equities and bonds, and on the analyses of the "R4RE" (Resilience for Real Estate) tool. The latter is a platform developed by the Green Building Observatory (OID) to carry out building resilience analyses for the directly held real estate portfolio.

### H5 a. Physical risks

#### Directly held corporate equity and bond portfolio

S&P Trucost Market Intelligence measures the financial impact of physical risks on the value of corporate client assets. This indicator describes **the financial consequences of changing the exposure to climate risks compared to a baseline** for more than 250 unique asset types. "Assets" represent any structure or real property owned or leased by a corporate client. S&P Trucost Market Intelligence takes the location of physical assets into account in its analysis.

For physical risks, the analysis covers seven major physical risks related to climate change: **coastal flooding, river flooding, extreme heat, tropical cyclones, forest fires, water stress and drought.**

Three factors determine the measurement of financial impact at the corporate level:

- **exposure** to physical risks depending on the location of the company's assets;
- **sensitivity** of each asset type to climatic hazards;
- **asset values** for each company.

The assessment of the financial impacts of physical risks uses impact functions that depend on the type of asset (among the 250 possible assets) and the climate risk in question. The impact assessments by asset and by risk are then aggregated at the level of a company by weighting its assets on its balance sheet, then at the portfolio level by weighting the portfolio investments in the company relative to the overall size of the portfolio.

The assessment of impacts also involves choosing a climate change scenario. BNP Paribas Cardif uses a **high climate change scenario** (SSP5-8.5) with a **2050 target**. For this scenario, the total greenhouse gas emissions triple by 2075 and global average temperatures increase by 3.3 to 5.7°C by 2100. This **scenario therefore makes it possible to identify the companies within the portfolio most exposed to physical risks** by choosing a warming scenario significant enough to highlight the highest risk exposures and by choosing a sufficiently long timescale to allow the increase in risks to occur.

The coverage ratio of Cardif Assurance Vie's corporate equity and bond portfolio is 99%, measured as a proportion of outstandings.

### Bias and limits

The physical risk impact model used has several biases and limits:

- the quality of the estimate depends on the quality of the database showing the physical location of the assets of the corporate clients in the portfolio. The asset data must be available and the number of assets identified must be sufficient. In addition, the connection of each asset to one of the 250 types of assets modelled must be as faithful as possible to its function, as otherwise the model will not work properly. In the absence of detailed data, the model is based solely on the location of the company's head office (this approach is far less precise). Approximately 87% of the corporate clients covered are processed using the detailed approach;
- whether the data is up to date is also an important factor, although for a large company, assets tend to be stable from one year to the next. Approximately 5% of the corporate clients covered have asset data updated before 2022, dating from 2020 or 2021. However, this year there was a significant improvement in the updating of data by the supplier S&P Trucost Market Intelligence.

✦ The physical risk impact model used assesses the impact of physical risks on the value of corporate clients' assets but does not estimate the impact of these risks on the valuation of securities in the portfolio. BNP Paribas Cardif is studying the available modelling solutions which are suited to its portfolio.

### Measuring the financial impact of Cardif Assurance Vie's physical risks

#### Corporate equity and bond portfolio (Coverage ratio: 99%)

Potential impact expressed as a percentage of corporate client asset value at 31/12/2023

4.7%

Source: S&P Trucost Market Intelligence - IPCC high climate change scenario: SSP 5 - 8.5 by 2050

This figure indicates that, during the 2050s, the corporate clients in the portfolio would suffer annual financial losses (additional costs of CapEx or OpEx, interruption of activities) estimated at **4.7% on average of the value of their assets** (analysed by S&P Trucost Market Intelligence). These potential losses are related to the exposure of the analysed assets to physical risks in a high climate change scenario (SSP5-8.5).

This measurement of the financial impact of the physical risks of corporate clients in Cardif Assurance Vie's equity and bond portfolio is broken down below by business sector and geographical area.

#### Measurement of the potential financial impact of physical risks by Cardif Assurance Vie sector (directly held corporate equities and bonds portfolio at 31/12/2023)

Economic sector	In % of market value
Communication services	8.05%
Industry	5.84%
Services to local authorities (production and distribution of electricity, water and gas)	5.65%
Information technology	4.50%
Consumer staples	4.45%
Financial services	4.44%

Discretionary consumption	3.54%
Healthcare	3.27%
Construction and materials	3.09%
Real estate	3.08%
Energy	2.81%

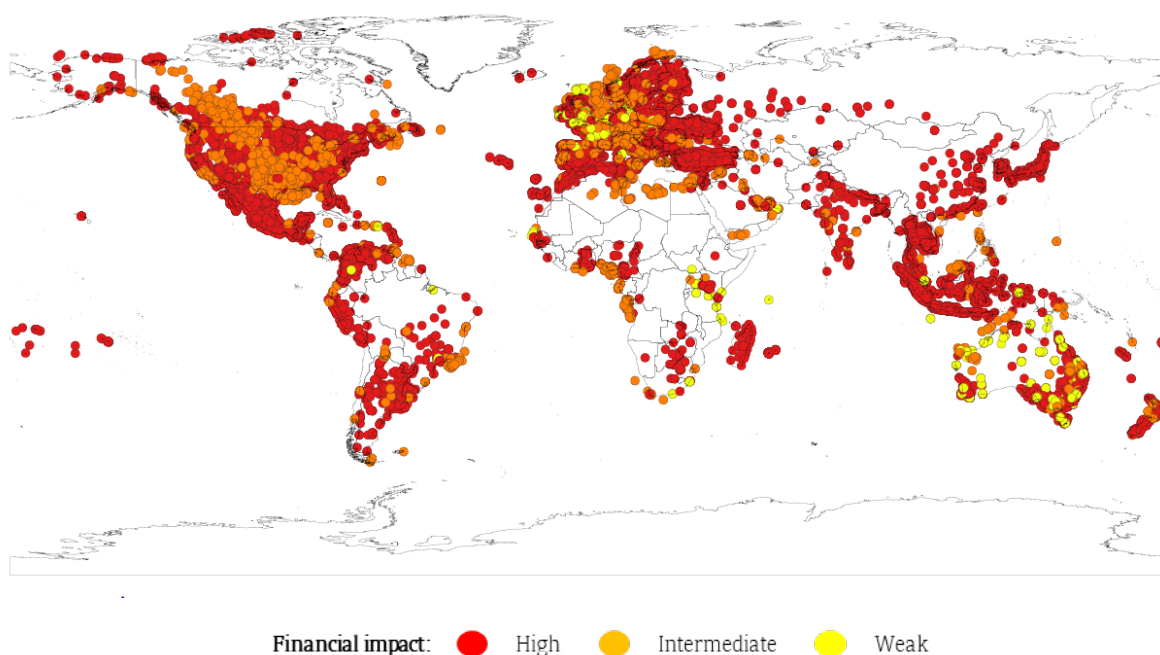
Source: S&P Trucost Market Intelligence - IPCC high climate change scenario: SSP 5 - 8.5 by 2050

The analysis for 2023 shows that the main sectors whose assets are the most financially exposed to physical risks are: communications services due to heat waves, and corporate clients in the industrial and services to local authorities sectors (production and distribution of electricity, water, gas, etc.) due to water stress. Within the services to local authorities sector, power plants are assets with a high value regarding the average financial impact in this sector.

The assets in the portfolio are mainly exposed to two types of physical risk: heat waves with a significant impact, and water stress with a moderate impact.

A geographical segmentation of the portfolio was carried out to assess the sensitivity of corporate clients to these two risks. They are represented in the map below.

**Exposure to heat waves of corporate client assets in Cardiff Assurance Vie's directly held equities and bonds portfolio at 31/12/2023**

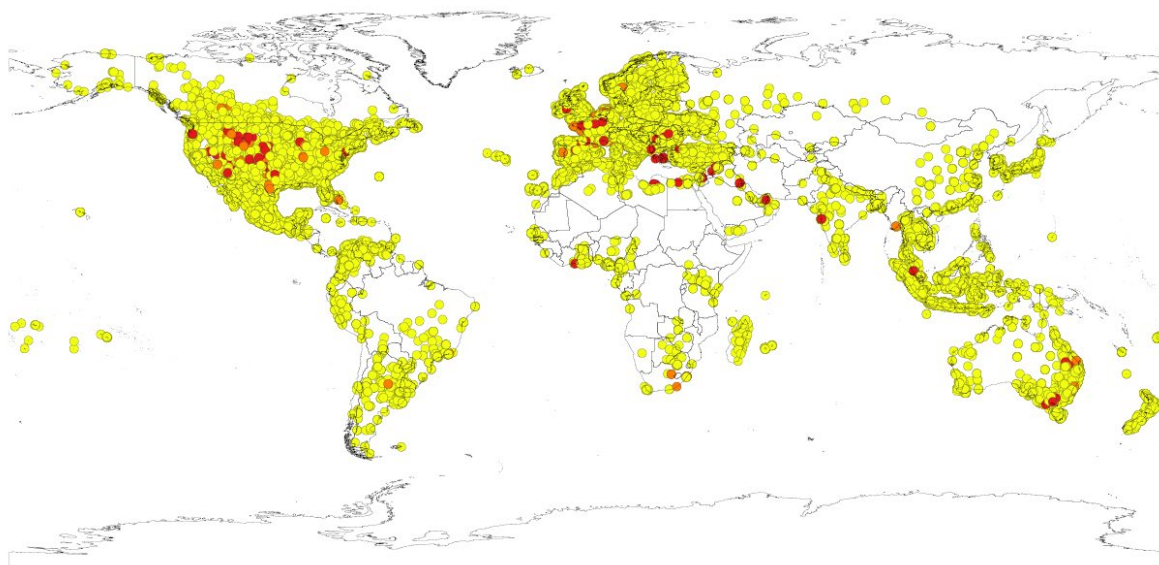


Source: S&P Trucost Market Intelligence -, IPCC high climate change scenario: SSP 5 - 8.5 by 2050

The assets of corporate clients in the portfolio have a high exposure to significant heat waves.

The geographical areas in which the corporate client assets in directly held equities and bonds portfolios are particularly exposed are concentrated in North America, Europe and South East Asia.

## Exposure to water stress of corporate client assets in Cardif Assurance Vie's directly held equities and bonds portfolio at 31/12/2023



Financial impact: ● High ● Intermediate ● Weak

Source: S&P Trucost Market Intelligence – IPCC high climate change scenario: SSP 5 - 8.5 by 2050

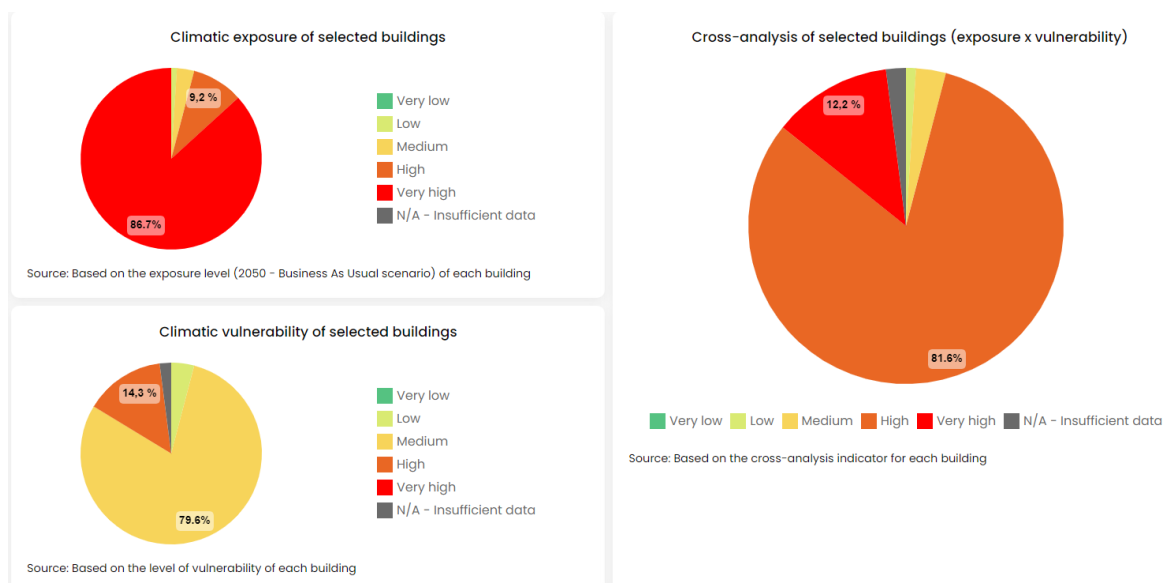
The exposure to water stress of the corporate client assets in the portfolio is moderate overall.

The geographical areas in which the corporate client assets in directly held equities and bonds portfolios are most exposed are concentrated in North America and Europe.

### Directly held real estate portfolio

The analysis of the real estate portfolio is carried out on all buildings directly owned by both Cardif Assurance Vie and Cardif Retraite. Cardif Assurance Vie includes all buildings subject to analysis. This analysis covers the exposure and vulnerability of buildings to the following climatic hazards: heatwaves, intense rainfall and flooding, extreme cold and forest fires. It is based on the same scenario and the same timescale as the analysis of the directly held corporate equity and bond portfolio, *i.e.* of a high climate change scenario (SSP5-8.5) by 2050.

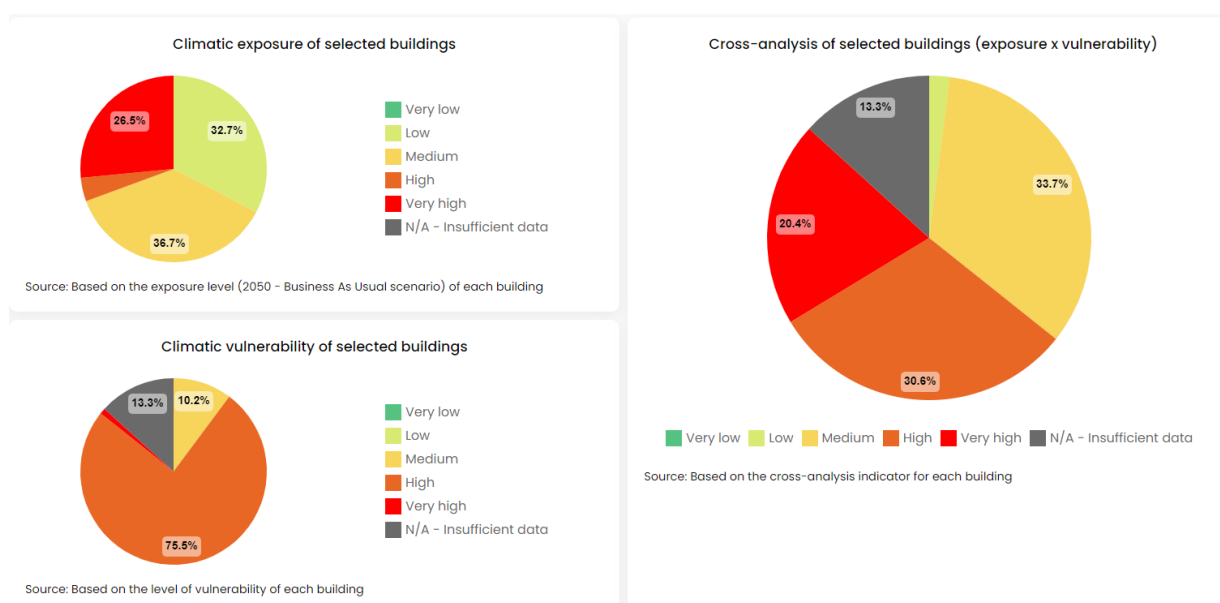
The following graphs show the results of the analysis for the "heatwave" hazard:



Source: R4RE - As a percentage of surface area at 31/12/2023

The directly managed real estate portfolio is mainly located in the Paris region. In fact, it is exposed to heat islands with a "high" level of vulnerability, which could cause significant levels of discomfort for the occupants during periods of extreme heat, and lead to overconsumption of energy related to air conditioning equipment, which is contrary to BNP Paribas Cardif's climate change mitigation approach.

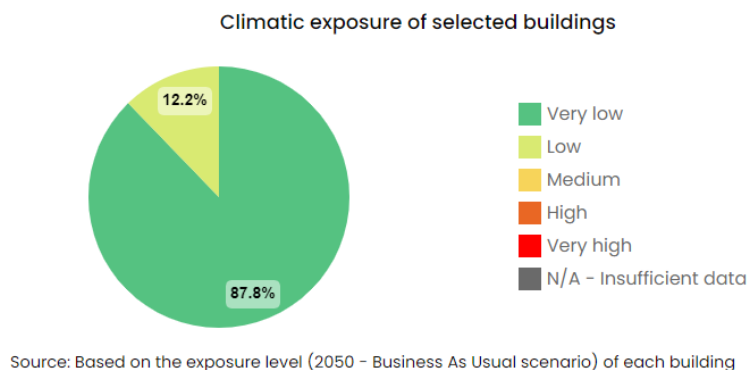
The following graphs show the results of the analysis for the "precipitation and flooding" hazard:



Source: R4RE - As a percentage of surface area at 31/12/2023

The level of exposure to the “precipitation and flooding” hazard is assessed mainly from low to medium, with a high sensitivity in the event of high vulnerability.

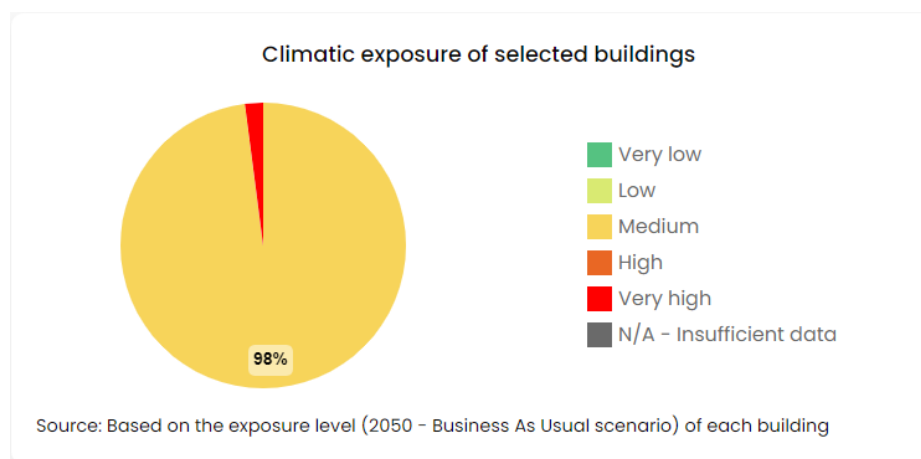
The following graph shows the results of the exposure analysis for the “extreme cold” hazard:



Source: R4RE - As a percentage of surface area at 31/12/2023

The real estate portfolio is not exposed to the “extreme cold” hazard.

The following graph shows the results of the exposure analysis for the “forest fire” hazard:



Source: R4RE - As a percentage of surface area at 31/12/2023

The real estate portfolio is moderately exposed to the “forest fire” hazard.

On the basis of this assessment, BNP Paribas Cardif will continue its analysis of the climate change adaptation of its portfolio in 2024. This approach will be based on setting out an adaptation plan to reduce the risks and implementing this plan. It also provides for a periodic reassessment of risks.



## H5 b. Transition risks

### Directly held corporate equity and bond portfolio

Cardif Assurance Vie focuses its transition risk analysis on: **the portfolio's exposure to the "unpriced carbon cost" via a future carbon price** provided by S&P Trucost Market Intelligence.

Unpriced Carbon Cost (UCC) is the additional financial cost generated per tonne of greenhouse gas emissions in a given future year. Specifically, it is the difference between potential future and current carbon prices for a given sector, geographic region and year.

The increase in the price of carbon could have **direct financial consequences for corporate clients when regulations impose a higher price on greenhouse gas emissions from their direct activities**. Corporate clients also face indirect financial risks related to the impact of higher carbon prices on the emissions of suppliers who, in turn, seek to absorb these additional costs, in part or in full, through an increase in their own prices. Factors have therefore been developed to estimate the proportion of additional costs that would be passed on from suppliers to corporate clients.

**The risk premium linked to the carbon price varies according to three factors:**

- **geographies** due to differences in government policies;
- **sectors** due to the different treatment of economic sectors in many climate change policies;
- **scenarii** selected.

The S&P Trucost Market Intelligence model converts this risk premium into the at-risk EBITDA<sup>117</sup> of the corporate clients in the portfolio. This metric describes the share of portfolio corporate client profits exposed to an increase in the carbon price; it is expressed as a percentage of the EBITDA of the company in question. By assessing the share of corporate clients in the portfolio whose at-risk EBITDA is greater than 10%, it is possible to identify the share of the portfolio most exposed to transition risks.

### Bias and limits

The model used for the impact of transition risks has a number of biases and limits:

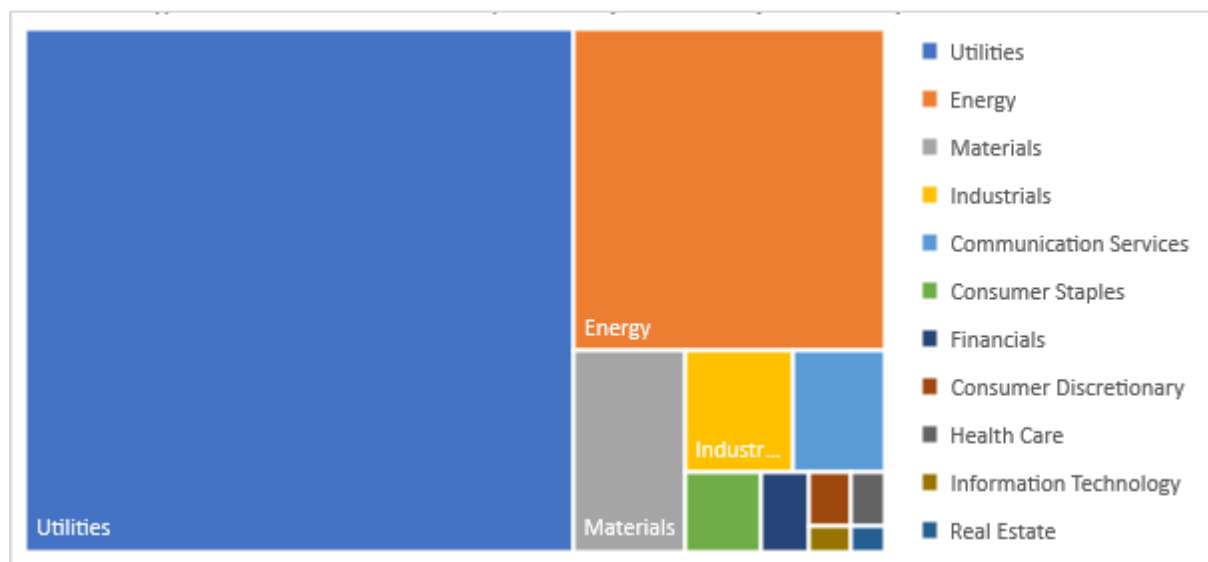
- future carbon prices are estimated using projection models starting in 2020. Projected prices do not necessarily reflect current or future prices. For example, the carbon price projected for 2030 in the OECD, under the high carbon price increase scenario, is close to the prices observed at the end of 2022 in this same region;
- whether the financial data is up to date is also an important factor, although for a large company, the assets may be fairly stable from one year to the next. 20% of the corporate clients in the covered portion of the portfolio have data from 2019 or 2020;
- corporate clients are classified by primary business sector for the model's projections and, if the regional breakdown of their emissions is not available, it is replaced by the regional breakdown of their revenue. These components can generate bias if a significant part of a company's business activities are not linked to its primary sector, or if a company generates a significant portion of its revenue in a region other than the one in which the majority of its emissions are concentrated.

The analysis of the Cardif Assurance Vie portfolio was carried out using a **scenario with a high increase in the carbon price** for a timescale set at 2030, with the starting year of the S&P Trucost Market Intelligence model projections being in 2020. One **scenario with a high increase in the carbon price** assumes the implementation of policies considered sufficient to reduce greenhouse gas emissions in line with the Paris Agreement target of limiting climate change to below 2°C by 2100 (Paris Agreement) (RCP 2.6). This scenario is based on research by the OECD and the International Energy Agency (IEA).

<sup>117</sup> EBITDA: "Earnings Before Interest, Taxes, Depreciation and Amortization".

✦ The transition risk impact model used assesses the impact of transition risks on corporate clients' EBITDA but does not estimate the impact of transition risks on the valuation of the securities in the portfolio. BNP Paribas Cardif is studying modelling solutions but remains dependent on progress made by suppliers in this area.

**Breakdown by sector of the cost in millions of euros of the “allocated” future carbon as at 31/12/2023 (high carbon price scenario, timescale 2030), Cardif Assurance Vie, directly held corporate equities and bonds**



Source: S&P Trucost Market Intelligence – High carbon price scenario by 2030

The coverage ratio of Cardif Assurance Vie's corporate equity and bond portfolio is 75%, measured as a proportion of outstandings.

As is the case for the previous year, the sectors most exposed to an increase in the price of carbon, and therefore to transition risks, are the sectors emitting the most greenhouse gases:

- **services to local authorities** and more specifically electricity producers within the sector;
- **energy**, *i.e.* oil and gas corporate clients.

#### At-risk EBITDA

Cardif Assurance Vie's at-risk EBITDA (corporate equity and bond portfolio) at 31/12/2023

Medium-risk Ebitda (%)	4.42%
Share of corporate clients (% of market value) whose at-risk EBITDA is > 10%	7.74%

Source: S&P Trucost Market Intelligence

On average, 4.42% of the EBITDA of the corporate clients in Cardif Assurance Vie's equity and bond portfolio is exposed to the increase in the carbon price. The most exposed sectors are services to local authorities, energy and construction and materials.

The share of corporate clients whose at-risk EBITDA is greater than 10% represents 7.74% of Cardif Assurance Vie's corporate equity and bond portfolio.

#### Directly held real estate portfolio

✦ A directly held real estate portfolio is primarily exposed to the physical risks of climate change. BNP Paribas Cardif will study an approach to assess the exposure of its portfolio to transition risk, in order to implement the associated valuation.

## H6. Changes in methodological choices and results

BNP Paribas Cardif does not have a measurement of the impact on the valuation of its physical and transition risk portfolios, because such a measurement is not provided by S&P Trucost Market Intelligence.

In 2023, BNP Paribas Cardif is once again publishing the at-risk EBITDA metric, which can be used as a first step towards an assessment model to measure the impact of transition risk on the valuation of portfolios. The insurer also publishes a new measure of the impact of physical risk on the valuation of the assets of companies issuing directly held equity securities or bonds in the portfolios.

In addition, the methodologies of Cardif's data suppliers for physical and transition risks did not change significantly between 2022 and 2023.

## I. List of financial products mentioned under Articles 8 and 9 of the Disclosure Regulation (SFDR)

Cardif Assurance Vie's euro fund meets the definition of Article 8 of the European SFDR regulation, see Section *A1.1 ESG approach within the Cardif Assurance Vie's euro fund*.

At 31 December 2023, based on outstandings, 57% of unit-linked vehicles distributed by Cardif Assurance Vie promote environmental or social characteristics (Article 8) and 10% of unit-linked products have a sustainable investment objective (Article 9), see *Section A1.2 ESG approach for Cardif Assurance Vie's unit-linked vehicles*.

The list of unit-linked products declared in Article 8 or 9 of the Disclosure Regulation (SFDR) marketed by Cardif Assurance Vie is available on the BNP Paribas Cardif website (<https://www.bnpparibascardif.com/en/corporate-social-responsability>).

## SECTION II – PRINCIPAL ADVERSE SUSTAINABILITY IMPACT STATEMENT CARDIF ASSURANCE VIE

INFORMATION FROM THE PROVISIONS OF ARTICLE 4 OF REGULATION (EU) 2019/2088 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 27 NOVEMBER 2019

Entities subject to SFDR shall make a statement on due diligence policies regarding the principal adverse impacts regarding sustainability, taking into account their size, the nature and extent of their activities and the types of financial products they offer. Sustainability impacts refer to the adverse impacts of investment decisions on sustainability factors.

### J. Description of the principal adverse impacts on sustainability factors

Cardif Assurance Vie (LEI Legal Entity Identifier Code: 969500G544G7SX1R1Z44) considers the principal adverse impacts of its investment decisions on sustainability factors (Principal Adverse Sustainability Impacts).

This 2023 statement includes the adverse impact indicators for 2023 and 2022 covering a reference period from 1 January to 31 December.

Consideration of adverse sustainability impacts applies to the assets of the Cardif Assurance Vie euro fund. With regard to unit-linked products offered in life insurance contracts, information relating to the consideration of the principal adverse impacts is mentioned by the management companies in the prospectuses of the investment vehicles.

Cardif Assurance Vie has identified the principal adverse impacts of its investment management activities and is seeking to mitigate these impacts by continuing to strengthen the extra-financial approach of its investment policy. The principal adverse impacts are taken into account at two levels: through the application of sector exclusions and through an ESG analysis and integration process. This system is complemented by a shareholder engagement policy.

The purpose of this statement is to assess the Principal Adverse Impacts (PAIs) generated by the corporate clients or countries in which Cardif Assurance Vie invests.

PAIs are quantitative indicators enabling this evaluation. They require a large amount of data for their calculation, the reliability of which may vary depending on whether they are based either (i) on the declarations of issuers (companies, states, etc.) or (ii) on estimates made by data providers.

### K. Description of the principal adverse impacts on sustainability factors and historical comparison

The indicators were calculated on securities held directly in the Cardif Assurance Vie euro fund (including equity), excluding unit-linked funds.

- For the Companies perimeter: Equities and bonds
- For the Sovereign perimeter: Bonds
- For the Real Estate perimeter: Buildings managed directly

Ratios are calculated on each relevant sub-perimeter.

As of 31/12/23, these assets represented: 70% of investments in the Cardif Assurance Vie **euro funds** and 49% of Cardif Assurance Vie **total investments** (euro funds and unit-linked funds).

Within the corporate scope, 2% of issuers (in market value) are not covered by the data supplier and are not taken into account in the impact indicator calculations.

In accordance with EU delegated regulation 2022/1288, Cardif Assurance Vie presents the 18 mandatory PAI indicators (Table 1) on environmental and social issues applicable to investments in corporate clients, sovereign or supranational issuers and in real estate assets, as well as two optional indicators: one indicator related to climate and environmental issues (Table 2) and one indicator related to social and staffing issues, human rights compliance or the fight against corruption (Table 3).

#### **Prioritisation of principal adverse impacts:**

The prioritisation of the principal adverse impacts is analysed by a combination of:

- the perception of major environmental, social and societal, and governance issues;
- the nature of the investments;
- the availability and reliability of the data necessary for their follow-up.

Cardif Assurance Vie manages and ranks the adverse impacts as follows:

<i>ESG policies/Adverse impacts</i>	Exclusions by standard and sector	ESG analysis and integration	Shareholder engagement	Indicators
<i>Social Violations</i>	x	x		- Countries subject to social violations (PAI 16)
<i>Greenhouse gases</i>	x	x	x	- Carbon emissions (PAI 1) - Carbon footprint (PAI 2) - Carbon intensity (PAI 3) - Exposure to companies active in fossil fuels (PAI 4) - Share of non-renewable energy production (PAI 5)
<i>Global Compact principles</i>	x	x	x	- Specific filter assessing the proper integration of the Global Compact pillars (PAI 11)
<i>Controversial weapons</i>	x	x		- Companies identified in the controversial arms sector (PAI 14)
<i>Energy efficiency</i>		x		- Exposure to energy-inefficient real estate assets (PAI 18)

Table 1 - Indicators for investment in corporate

Climate indicators and other environment related indicators						
Adverse sustainability indicators		Metric	2023 impact	2022 impact	Explanatory note for 2023	Actions taken, planned actions and targets set for the next reporting period
Greenhouse gas emissions	1. GHG Emissions	Scope 1 GHG emissions in tonnes of CO2 equivalent	845,507 tCO2eq	1,018,121 tCO2eq	Coverage of upstream scopes 1, 2 and 3: 93% Coverage of scope 3 downstream: 80% Data Provider: S&P Trucost Market Intelligence	<u>Taken and planned actions:</u> - Target of aligning investment portfolios with a trajectory in line with the Paris Agreement (member of the Net Zero Asset Owner Alliance) - ESG Process and Carbon Transition Filter - Sector policies: Energy production from coal, Oil and Gas - Shareholder engagement policy  <u>Targets set:</u> - Reduce the carbon footprint of directly held corporate equity and bond portfolios by at least 23% between end 2020 and end 2024 (53% reduction was already achieved between 2017 and 2020) - Achieve a carbon intensity below 125 gCO2/kWh by end 2024 on power producers in directly held corporate equity and bond portfolios - Continue the exit from thermal coal with a definitive exit from the thermal coal value chain no later than 2030 for European Union and OECD countries, and no later than 2040 in the rest of the world - Engage in dialogue with corporate clients that emit the most greenhouse gases through the Climate Action 100+ initiative
		Scope 2 GHG emissions in tonnes of CO2 equivalent	171,184 tCO2eq	176,380 tCO2eq		
		Scope 3 GHG emissions in tonnes of CO2 equivalent	9,809,623 tCO2eq	11,128,022 tCO2eq		
	2. Carbon footprint	Carbon footprint in tonnes of CO2 equivalent per million euros invested	290 tCO2eq/MEUR invested	326 tCO2eq/MEUR invested		
	3. GHG intensity of investee corporate clients	GHG intensity of investee companies in tonnes of CO2 equivalent per million euro of turnover of investment recipient companies	1,373 tCO2eq/MEUR of turnover	1,460 tCO2eq/MEUR of turnover		
4. Exposure to active companies in fossil fuel sector	Share of investment in companies active in the fossil fuel sector (%)	8.3%	8.4%	This exposure is calculated according to SFDR regulations. It takes into account the full value of investments made in corporate clients when part of their activities are related to the fossil fuel sector. This exposure therefore includes companies - of especially electricity producers - with activities in fossil fuels and other energies including renewable energies.	<u>Taken and planned actions:</u> - Target of aligning investment portfolios with a trajectory in line with the Paris Agreement (member of the Net Zero Asset Owner Alliance) - ESG Process and Carbon Transition Filter - Sector policies: Energy production from coal, Oil and Gas - Shareholder engagement policy  <u>Targets set:</u> - Continue the exit from thermal coal with a definitive exit from the thermal coal value chain no later than 2030 for	

Table 1 - Indicators for investment in corporate

Climate indicators and other environment related indicators					
Adverse sustainability indicators	Metric	2023 impact	2022 impact	Explanatory note for 2023	Actions taken, planned actions and targets set for the next reporting period
				Coverage : 93% Data Provider: S&P Trucost Market Intelligence	European Union and OECD countries, and no later than 2040 in the rest of the world. - Achieve a carbon intensity below 125 gCO <sub>2</sub> /kWh by end 2024 on power producers in directly held corporate equity and bond portfolios.
5. Share of non-renewable energy consumption and production	Share of energy consumption and production of investee companies stemming from non-renewable energy sources, compared to those from renewable energy sources, expressed as a percentage of total energy sources (%)	Share of consumption: 49.9%  Share of production: 52.3%	Share of consumption: 57.9%  Share of production: 52.1%	Coverage: 88% Data Provider: S&P Trucost Market Intelligence	<u>Taken and planned actions:</u> - Target of aligning investment portfolios with a trajectory in line with the Paris Agreement (member of the Net Zero Asset Owner Alliance) - ESG Process and Carbon Transition Filter - Sector policies: Energy production from coal, Oil and Gas - Shareholder engagement policy  <u>Targets set:</u> - Continue the exit from thermal coal with a definitive exit from the thermal coal value chain no later than 2030 for European Union and OECD countries, and no later than 2040 in the rest of the world - Achieve a carbon intensity below 125 gCO <sub>2</sub> /kWh by end 2024 on power producers in directly held corporate equity and bond portfolios - Invest at least €800 million per year in environmental investments including renewable energy projects
6. Energy consumption intensity by high climate impact sector	Energy consumption in GWh per million euros of turnover of investee companies, per high impact climate sector	Sector NACE A: 0.16 Sector NACE B: 1.94 Sector NACE C: 0.39 Sector NACE D: 13.99 Sector NACE E: 2.83 Sector NACE F: 0.59 Sector NACE G: 0.17 Sector NACE H: 0.29 Sector NACE L: 0.50	Sector NACE A: 0.18 Sector NACE B: 2.10 Sector NACE C: 0.57 Sector NACE D: 2.88 Sector NACE E: 3.14 Sector NACE F: 0.48 Sector NACE G: 0.20 Sector NACE H: 0.82 Sector NACE L: 0.27	The data supplier is currently reviewing energy consumption data in GWh in order to improve their quality (in particular for the NACE D sector).  Coverage : 93% Data provider: S&P Trucost Market Intelligence	<u>Taken and planned actions:</u> - Target of aligning investment portfolios with a trajectory in line with the Paris Agreement (member of the Net Zero Asset Owner Alliance) - ESG Process and Carbon Transition Filter - Sector policies: Energy production from coal, Oil and Gas - Shareholder engagement policy  <u>Targets set:</u>

Table 1 - Indicators for investment in corporate						
Climate indicators and other environment related indicators						
Adverse sustainability indicators		Metric	2023 impact	2022 impact	Explanatory note for 2023	Actions taken, planned actions and targets set for the next reporting period
			Unit : GWh/MEUR of turnover	Unit : GWh/MEUR of turnover		<ul style="list-style-type: none"> <li>- Continue the exit from thermal coal with a definitive exit from the thermal coal value chain no later than 2030 for European Union and OECD countries, and no later than 2040 in the rest of the world</li> <li>- Achieve a carbon intensity below 125 gCO2/kWh by end 2024 on power producers in directly held corporate equity and bond portfolios</li> <li>- Invest at least €800 million per year in environmental investments including renewable energy projects</li> <li>- Engage in dialogue with corporate clients that emit the most greenhouse gases through the Climate Action 100+ initiative</li> </ul>
Biodiversity	7. Activities negatively affecting biodiversity-sensitive areas	Share of investments in investee companies with sites/operations located in or near to biodiversity-sensitive areas, where activities of those investee companies negatively affect those areas (expressed in %)	99.6%	84.6%	<p>Only corporate clients belonging to sectors with a high climate impact were analysed (21% of the corporate equity and bond portfolio) by S&amp;P Trucost Market Intelligence, which considers that the other sectors do not have a material impact on biodiversity, which limits the scope of the analysis.</p> <p>In addition, S&amp;P Trucost Market Intelligence considers that corporate clients that have at least one of their assets in a biodiversity-sensitive area systematically have an adverse impact on biodiversity.</p> <p>These methodological choices have led to the high value of this PAI.</p> <p>The coverage rate on this indicator being relatively low, the result should be interpreted with caution.</p>	<p><u>Taken and planned actions:</u></p> <ul style="list-style-type: none"> <li>- ESG Process</li> <li>- Sector policies: Coal-based energy production, Oil and Gas, Mining, Agriculture, Palm oil, Wood pulp</li> <li>- Measuring the biodiversity footprint of portfolios</li> <li>- Continuing investments in biodiversity-themed funds: BNP Paribas Cardif is participating in the biodiversity market fund in 2024)</li> </ul> <p><u>Targets set:</u></p> <ul style="list-style-type: none"> <li>- No target set on this indicator to date</li> </ul>



Table 1 - Indicators for investment in corporate						
Climate indicators and other environment related indicators						
Adverse sustainability indicators		Metric	2023 impact	2022 impact	Explanatory note for 2023	Actions taken, planned actions and targets set for the next reporting period
					Coverage: 17.3% Data provider: S&P Trucost Market Intelligence	
Water	8. Emissions to water	Tonnes of emissions to water generated by investee companies, per million euros invested, expressed as a weighted average	0.05 t/MEUR invested	0.05 t/MEUR invested	The coverage rate on this indicator being relatively low, the result should be interpreted with caution.  Coverage: 15% Data Provider: S&P Trucost Market Intelligence	<u>Taken and planned actions:</u> - ESG Process - Sector policies: Agriculture, Wood pulp, Mining industry  <u>Targets set:</u> - No target set on this indicator to date
Wastes	9. Hazardous waste and radioactive waste ratio	Tonnes of hazardous and radioactive waste generated by investee companies, per million euros invested, expressed as a weighted average	3.24 t/MEUR invested	2.54 t/MEUR invested	The coverage rate on this indicator being relatively low, the result should be interpreted with caution.  Coverage: 37% Data Provider: S&P Trucost Market Intelligence	<u>Taken and planned actions:</u> - ESG Process - Sector policies: Nuclear energy, Mining industry  <u>Targets set:</u> - No target set on this indicator to date
Indicators related to social, staff, human rights, anti-corruption and corruption actions issues						
Social and staff issues	10. Violations of the principles of the UN Global Compact principles and OECD Guidelines for Multinational Enterprises	Share of investments in companies that have been involved in violations of the UN Global Compact principles or the OECD Guidelines for Multinational Enterprises (expressed in %)	6.4%	8.3%	Coverage: 70% Data Provider: S&P Trucost Market Intelligence	<u>Taken and planned actions:</u> - ESG process and exclusion filter related to non-compliance with the Global Compact principles - Shareholder engagement policy  <u>Targets set:</u> - No target set on this indicator to date
	11. Lack of compliance processes and mechanisms to monitor compliance with the UN Global	Share of investment in companies without policies to monitor compliance with the principles of the UN	0.07%	0.3%	Coverage: 59% Data Provider: S&P Trucost Market Intelligence	<u>Taken and planned actions:</u> - ESG process and exclusion filter related to non-compliance with the Global Compact principles

Table 1 - Indicators for investment in corporate						
Climate indicators and other environment related indicators						
Adverse sustainability indicators		Metric	2023 impact	2022 impact	Explanatory note for 2023	Actions taken, planned actions and targets set for the next reporting period
	Compact principles and OECD Guidelines for Multinational Enterprises	Global Compact principles or OECD Guidelines for Multinational Enterprises, or grievance/complaints handling mechanisms to address such violations (expressed in %)				<u>Targets set:</u> - No target set on this indicator to date
	12. Unadjusted gender pay gap	Average unadjusted gender pay gap of investee companies (expressed as monetary amount converted into euro)	20.4%	19.9%	Coverage: 87% Data Provider: S&P Trucost Market Intelligence	<u>Taken and planned actions:</u> - ESG Process  <u>Targets set:</u> - No target set on this indicator to date
	13. Gender diversity in governance bodies	Average ratio of female to male in the governance bodies of investee companies, expressed as a percentage of the total number of members	39.2%	39.2%	Coverage: 89% Data Provider: S&P Trucost Market Intelligence	<u>Taken and planned actions:</u> - ESG Process - Shareholder engagement policy  <u>Targets set:</u> - No target set on this indicator to date
	14. Exposure to controversial weapons (anti-personnel mines, cluster munitions, chemical weapons or biological weapons)	Share of investment in companies involved in the manufacture or sale of controversial arms (expressed in %)	0.0%	0.0%	Coverage : 93% Data Provider: S&P Trucost Market Intelligence	<u>Taken and planned actions:</u> - ESG Process - Sector policy: Defence and Security  <u>Targets set:</u> - No target set on this indicator to date
Indicators applicable to investments in sovereign or supranational issuers						
Environmental	15. GHG intensity	GHG intensity of investee countries in tonnes of CO2 equivalent per million euros of gross domestic product	355 tCO2eq/MEUR of GDP	356 tCO2eq/MEUR of GDP	Coverage: 100% Data Provider: S&P Trucost Market Intelligence	<u>Taken and planned actions:</u> - ESG Process  <u>Targets set:</u> - No target set on this indicator to date

Table 1 - Indicators for investment in corporate						
Climate indicators and other environment related indicators						
Adverse sustainability indicators		Metric	2023 impact	2022 impact	Explanatory note for 2023	Actions taken, planned actions and targets set for the next reporting period
Social	16. Investee countries subject to social violations	Number of investee countries subject to social violations as referred to in international treaties and conventions, United Nations principles or, where applicable, national law (numerical value)	0	0	Coverage: 100% Data Provider: S&P Trucost Market Intelligence	<u>Taken and planned actions:</u> - ESG Process - Embargo and financial sanctions policy  <u>Targets set:</u> - No target set on this indicator to date
		Proportion of the total investee countries subject to social violations as referred to in international treaties and conventions, United Nations principles or, where applicable, national law (expressed in %)	0.0%	0.0%	Coverage: 100% Data Provider: S&P Trucost Market Intelligence	<u>Taken and planned actions:</u> - ESG Process - Embargo and financial sanctions policy  <u>Targets set:</u> - No target set on this indicator to date
Indicators applicable to investments in real estate assets						
Fossil fuels	17. Exposure to fossil fuels through real estate assets	Share of investment in real estate assets involved in the extraction, storage, transport or manufacture of fossil fuels (expressed in %)	0.0%	0.0%	The entity does not invest in such assets	The entity does not invest directly in this asset type
Energy efficiency	18. Exposures to energy-inefficient real estate assets	Share of investment in energy-inefficient real estate assets (expressed in %)	45.0%	60.0%	This exposure represents the share of directly managed real estate assets* whose EPAs are classified D, E, F, G or missing  Coverage: 100% of directly held assets Data Provider: Internal data	<u>Taken and planned actions:</u> - Establishing energy audits and action plans to improve the energy performance of buildings - During heavy renovation work, drive to improve environmental performance and EPA labels  <u>Targets set:</u> - Tertiary buildings: comply with the tertiary decree by reducing energy consumption by 40% between 2011 and 2030.

Table 1 - Indicators for investment in corporate						
Climate indicators and other environment related indicators						
Adverse sustainability indicators		Metric	2023 impact	2022 impact	Explanatory note for 2023	Actions taken, planned actions and targets set for the next reporting period
						The EPAs of existing tertiary buildings are based on the sites' energy consumption

Table 2 - Additional climate and other environment-related indicators						
Adverse sustainability indicators		Metric	2023 impact	2022 impact	Explanation	Actions taken, planned actions and targets set for the next reporting period
Greenhouse gas emissions	4. Investments in companies without carbon emission reduction initiatives	Share of investment in companies without carbon emission reduction initiatives aimed at aligning with the Paris Agreement	44.5%	34.9%	Coverage: 72.7% Data Provider: S&P Trucost Market Intelligence	Taken and planned actions: - Shareholder engagement policy  Targets set: - Engage in dialogue with corporate clients that emit the most greenhouse gases through the Climate Action 100+ initiative
Table 3 - Additional indicators related to social and staff issues, respect for human rights and anti-corruption and corruption actions						
Social and staff issues	20. Average human rights performance	Average human rights performance of investee countries, measured by a quantitative indicator as explained in the dedicated column	87.0	87.0	This indicator is measured using a score ranging from 0 to 100 (100 representing excellent human rights performance)  Coverage: 100% Data Provider: S&P Trucost Market Intelligence	Taken and planned actions: - ESG Process - Embargo and financial sanctions policy  Targets set: - No target set on this indicator to date

### Historical comparison, calculation methodologies and margins of error

This statement presents the values of the Principal Adverse Impact (PAI) indicators for 2022 and 2023. It makes the following observations:

#### For corporate clients:

- The PAIs related to greenhouse gas emissions (PAIs 1, 2 and 3), scopes 1, 2 and 3, improved overall and the PAIs related to non-renewable energies (PAIs 4 and 5) remained stable;
- The PAIs related to biodiversity (PAI 7), water pollution (PAI 8) and waste production (PAI 9) show a low coverage ratio over the two years, because the availability of data related to these issues is still limited;
- The social PAIs (PAIs 10, 11, 12 and 13) are stable in their results. Cardif Assurance Vie is not exposed to the PAI 14 on controversial weapons.

#### For sovereigns:

- PAIs 15 and 20 remained stable. Cardif Assurance Vie is not exposed to PAI 16 for countries with violations of social standards.

#### For real estate investments:

- Cardif Assurance Vie does not invest in real estate assets related to fossil fuels (PAI 17).
- PAI 18 has improved significantly (EPA labels for certain assets and the reliability of the PAI calculation process).

**The change in PAI over the two years must be interpreted with caution:** several limits have been identified and detailed below, which may have a significant impact on the value of the indicators calculated and may affect their comparability from one year to another.

- For two indicators, the methodologies used have changed:
  - PAI 6 in Table 1 "Energy consumption intensity by high-climate impact sector" was calculated for 2022 using mixed data from S&P Trucost Market Intelligence and BNP Paribas Cardif, whereas for 2023, the indicator is calculated directly by S&P Trucost Market Intelligence.
  - PAI 4 in Table 2 (*Investments in corporate clients without carbon emission reduction initiatives*) is an indicator calculated by S&P Trucost Market Intelligence. In 2023, methodological changes led to a decrease in the coverage ratio.
- More generally, the indicators are based on **financial data** ("EVIC<sup>118</sup>", Revenue, GDP) and non-financial data whose availability, quality or volatility may vary.
- With regard to **non-financial data**:
  - The variability of the **data quality is due to the following factors**: Some data reported by corporate clients is not yet standardised and is heterogeneous. Other data not reported by the corporate clients is estimated by the data providers with models that may change from one year to the next.
  - The **coverage ratio** has not yet stabilised and varies from one year to the next. Therefore, the data for some PAIs is not available, because it is not yet reported or modelled by corporate clients. Indicators with a low coverage ratio should be interpreted with caution, as they are not representative of the portfolio as a whole.

Consistency analysis was carried out with the data supplier for the production of the indicators in order to better understand their variation between two years. This work, the underlying methodologies, as well as their quality should gradually improve in the coming years.

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<sup>118</sup> EVIC: "Enterprise Value Including Cash", as defined in the glossary

## L. Description of policies identifying and prioritising principal adverse impacts on sustainability factors

Cardif Assurance Vie takes into account adverse sustainability impacts in its investment strategy, in line with its risk management policy. Its investment policy is broken down by asset class. Distinct approaches and methodologies are applied to the different asset classes according to their specificities. In order to analyse investments from an extra-financial perspective, Cardif Assurance Vie collects ESG data from external providers for each asset class.

The investment process, which includes non-financial criteria as well as the consideration of the principal adverse impacts, is described in the investment policy. It is submitted at least once a year to Cardif Assurance Vie's Board of directors. The investment strategy is also reviewed annually by the Board of directors.

Cardif Assurance Vie takes into account the Principal Adverse Impacts, based on:

- the application of sector exclusions defined by the BNP Paribas Group;
- specific sector commitments (tobacco, thermal coal, electricity production);
- ESG analysis and integration process;
- commitments to reducing the carbon footprint of its portfolios;
- its shareholder engagement policy.

Cardif Assurance Vie regularly strengthens its extra-financial approach with new topics and information available from data providers.

### L1. Sector policies defined by BNP Paribas

Cardif Assurance Vie applies investment restrictions resulting from the BNP Paribas Group's sector policies<sup>119</sup>. These policies provide a framework for investments in sectors with environmental or social issues as they allow to identify companies or issuers to be excluded from the investment universe. They get regularly extended or revised and reflect a committed position with regard to these sectors.

#### BNP Paribas Group sector policies governing exclusions applied by BNP Paribas Cardif

<i>Defence</i>	Published in 2010 and updated in 2017, BNP Paribas' defence policy provides for strict exclusion criteria, notably regarding weapons regulated by major international conventions, such as anti-personnel mines and cluster munitions. It also provides specific human rights protection mechanisms by excluding the financing of arms exports to countries where the United Nations have found serious violations of children's rights in armed conflict.
<i>Palm oil</i>	Since 2017, the palm oil policy has included an assessment of new palm oil plantations, based on the HCS (High Carbon Stock) approach. The policy aims to protect forests possessing a high stock of carbon and is one of the financial sector's most advanced policies.
<i>Wood pulp</i>	As an important source of revenues for thousands of people, wood pulp production can also have environmental impacts, in particular on deforestation. BNP Paribas' wood pulp policy is based mainly on the standards of FSC (Forest Stewardship Council) and PEFC (Program for Endorsement of Forest Certification Schemes) to ensure sustainable management of forests.
<i>Nuclear energy</i>	According to the International Atomic Energy Agency, nuclear power accounted for 10% of global electricity production in 2020. Moreover, all IPCC net-zero scenarios incorporate nuclear power into the projected energy mix. Through its policy, BNP Paribas wants to ensure that the projects it helps finance, are in compliance with global principles of monitoring and attenuating environmental and social impacts for the nuclear energy sector.
<i>Coal-fired power generation</i>	Released for the first time in 2011, this sector policy has been updated regularly over the years to incorporate criteria that are more binding. Its latest commitment, made in May 2020, announced a full exit from thermal coal by 2030 in European Union and OECD countries and by 2040 in the rest of the world.

<sup>119</sup> <https://group.bnpparibas/en/our-commitments/transitions/financing-and-investment-policies>

<i>Agriculture</i>	In February 2021, BNP Paribas incorporated new criteria into its agricultural policy to combat deforestation in the Amazonia and the Cerrado. BNP Paribas now pledges to encourage its customers producing or buying beef or soy from Amazonia and the Cerrado in Brazil to have a "zero deforestation" strategy in place by 2025 and to demonstrate their progress in a transparent fashion.
<i>Mining industry</i>	Mining is a source of GDP for many countries and also supplies basic elements to most economic sectors. Many ores are also key for the energy transition, for example in playing a predominant role in the production of electric vehicles or wind and solar energy. The Financing and Investment policy governs BNP Paribas' activities in the mining industry, including within its strategy for exiting the thermal coal value chain.
<i>Oil &amp; Gas</i>	As part of its policy, BNP Paribas has stopped financing dedicated to oil projects since 2016. The Group has also discontinued its commercial relations with unconventional hydrocarbon specialists (shale gas, oil from tar sands) and no longer provides dedicated funding for projects to develop new oil or gas fields, regardless of financing methods. Moreover, BNP Paribas has stepped up its restrictions on financing ecosystems that are especially sensitive in Amazonia and the Arctic. In May 2022, for example, BNP Paribas extended its definition of the Arctic by adopting the definition of the Arctic Monitoring and Assessment Programme. This policy was reviewed in May 2023.

## L2. Specific sector commitments (tobacco, thermal coal)

BNP Paribas Cardif has made commitments concerning business sectors that are particularly harmful in terms of public health and the environment, hence avoiding or mitigating adverse impacts.

**Tobacco exclusions:** Since 2017, BNP Paribas Cardif has applied a "tobacco-free" investment policy in its portfolios. The insurer has also been a signatory of the Tobacco Free Finance Pledge since 2018. BNP Paribas Cardif excludes manufacturers, wholesalers and distributors whose revenue is more than 10% derived from tobacco.

**Thermal coal exclusions:** In 2020, the insurer published a timetable for phasing out thermal coal. It applies to investments for electricity production and provides for a definitive exit from the sector by 2030 for the countries in the European Union and the OECD and by 2040 for the rest of the world. (These components will be included in part I of section *F- Alignment strategy with the Paris Agreement.*)

## L3. An ESG analysis and integration process

When making investments, Cardif Assurance Vie examines Environmental (E), Social (S) and Governance (G) issues. This analysis can be quantitative and/or qualitative. To do this, Cardif Assurance Vie collects ESG data specific to each asset class, which is then analysed and integrated into investment process. The investment universe is thus reduced and compatible with its responsible investor approach.

This ESG analysis and integration process is part of a continuous improvement process based on: regulations, marketplace practices and data availability (ability of data providers to collect and analyse data).

Specific factors for ESG analysis and integration for the different asset classes are briefly summarised here. More details are available in section *A1. Incorporating ESG into the investment strategy*

Investments in sovereign and supranational securities are subject to a financial security system (country policy) defined by BNP Paribas Group. States are then analysed in terms of their ESG performance<sup>120</sup> (for example, the energy mix, social policies implemented, respect for human and labour rights) and may be excluded from the investment scope.

This ESG filter is applied to securities issued directly by countries (government bonds) and securities issued by corporate clients (equities and corporate bonds).

<sup>120</sup> ESG rating provided by Moody's ESG: <https://esg.moody's.io/solutions>

### Investments in corporate clients

For investments in corporate clients (equities and bonds) the ESG analysis includes three main steps: the application of exclusions and treatment of sensitive sectors, ESG analysis and integration and the application of a carbon transition filter.

### Real estate investments

These are direct investments (buildings, retail, etc.) and indirect investments (through investments in real estate companies).

At 31 December 2023, 31% of Cardif Assurance Vie's real estate assets incorporated an ESG approach. These criteria are characterised by the achievement of one or more predefined ESG objectives: for example, for environmental aspects, environmental labelling or certification, SFDR classification, alignment with the European Taxonomy or an approach to reducing greenhouse gas emissions; on social and societal aspects, a range of affordable housing for people in difficulty.

## L4. Commitments to reduce the carbon footprint of its portfolios

As part of its membership of the "Net Zero Asset Owner Alliance" (NZAOA), BNP Paribas Cardif has made commitments to reduce the carbon footprint of its portfolios and defined decarbonisation targets in the sectors with the most greenhouse gas emissions:

- reducing the carbon footprint of the directly held corporate equity and bond portfolios by no less than 23% between the end of 2020 and the end of 2024 (scopes 1 and 2). At the end of 2023, the footprint had been reduced by 51%;
- reducing the carbon intensity (scopes 1 and 2) of directly owned office buildings by at least 12% between 2020 and 2030 (23% reduction achieved by the end of 2023, and 47% reduction between 2011 and 2020);
- A full exit from thermal coal value chain by 2030 at the latest for European Union and OECD countries, and at the latest by 2040 in the rest of the world; BNP Paribas Cardif is continuing to phase out thermal coal according to the due dates in its schedule;
  - o for 2023, BNP Paribas Cardif is aligned with its schedule for phasing out thermal coal;
- achieving a carbon intensity below 125g of CO<sub>2</sub>/kWh by the end of 2024 for electricity producers in directly held corporate equity and bond portfolios. This target is aligned with the International Energy Agency's (IEA) Net Zero Emissions scenario for power generation. At the end of 2023, the carbon intensity was 121g of CO<sub>2</sub>/kWh.

More information is available in part I section *F2. BNP Paribas Cardif's climate approach*

## M. Shareholder engagement policy

Shareholder engagement complements previous actions to take into account adverse impacts.

In accordance with the provisions of the PACTE law and the European directive on shareholders' rights, Cardif Assurance Vie's shareholder engagement policy is available on the BNP Paribas Cardif website, as well as an annual report on the implementation of this policy.

The engagement strategy applies to corporate equities held directly by Cardif Assurance Vie, which represented 4% of its euro fund at the end of 2023.

As an institutional investor for BNP Paribas Cardif, Cardif Assurance Vie pursues a long-term investment strategy. To achieve the desired performance, the investment strategy takes into account financial and non-financial criteria, which are closely linked.

Throughout the asset holding period, Cardif Assurance Vie votes at the Annual General Meetings of listed companies in which it is a shareholder and engages on specific issues with certain issuers.



Good corporate governance (the quality of its management, the independence of the supervisory bodies, the protection of its shareholders, aligning the interests of the various stakeholders) is a key criterion for Cardif Assurance Vie's investments. The exercise of voting rights at Annual General Meetings allows investors to express their views on the governance implemented. The main types of resolutions submitted to a vote can be grouped into five themes, most of which have a proven link with ESG:

- approval of the financial statements and corporate management;
- appointment of directors;
- compensation policies;
- financial transactions and shareholder rights;
- other resolutions (e.g. related-party agreements, proposed shareholders).

In addition to the shareholder lever, Cardif Assurance Vie regularly engages in a dialogue with management companies.

Cardif Assurance Vie analyses the shareholder engagement policy through a due diligence questionnaire sent to the asset management company and measures the incorporation of ESG criteria at fund level. For example, the fund's exclusions to several identified sensitive sectors are checked.

## **N. References to international standards**

Cardif Assurance Vie incorporates social issues into its non-financial process, such as the measurement of the State policies with regards to poverty, access to employment, access to electricity as well as the ratification by these States of treaties on labour rights and children's rights.

Through BNP Paribas Cardif which is a member of the following initiatives and international bodies, Cardif Assurance Vie relies on major principles and international treaties to qualitatively select its investments, supporting the inclusion of principal adverse impacts in its investment decisions. Additional information on these memberships is available in part 1 section *A3. Entity's adherence to charters, codes and initiatives*.

<i>International standards</i>	Date	Description	Principal Adverse Impacts		
			Table 1	Table 2	Table 3
<i>Net-Zero Asset Owner Alliance</i> <sup>121</sup>	2021	Alignment of investment portfolios on a carbon neutrality trajectory by 2050.	PAI n° 1, 2, 3, 4, 5, 6, 15, 17, 18	PAI n° 4	
<i>Initiative Climate Action 100+</i> <sup>122</sup>	2021	Collective commitment to the world's largest emitters of greenhouse gases.	PAI n° 1, 2, 3, 4, 5, 6	PAI n° 4	
<i>CDP (formerly Carbon Disclosure Pledge)</i> <sup>123</sup>	2019	Environmental database on companies (greenhouse gas emissions, water management and the impact on forests).	PAI n° 1, 2, 3, 4, 5, 6, 7, 8, 17	PAI n° 4	
<i>Tobacco-Free Finance Pledge</i> <sup>124</sup>	2018	Initiative supporting the WHO to address the issue of tobacco in the financial sector.	The nature of this international initiative does not allow any linkage to a specific PAI.		
<i>Green Building Observatory (OID)</i> <sup>125</sup>	2017	Promotion of sustainable development and innovation in the French real estate sector.	PAI n° 17, 18		
<i>Principles for Responsible Investment</i> <sup>126</sup>	2016	United Nations initiative to promote the incorporation of ESG criteria in the financial sector.	The nature of this international initiative does not allow any linkage to a specific PAI (holistic vision of adverse impacts).		
<i>Sustainable Building Plan</i> <sup>127</sup>	2013	Charter for the energy efficiency of public and private tertiary buildings, initiated by the Sustainable Building Plan.	PAI n° 17, 18		

BNP Paribas Cardif also complies with the internal Code of conduct<sup>128</sup> governing its activities. The Code states that the BNP Paribas Group respects the highest standards of conduct and ethics, in terms of the fight against corruption, respect for human rights and protection of the environment.

<sup>121</sup> <https://www.unepfi.org/net-zero-alliance/>

<sup>122</sup> <https://www.climateaction100.org/>

<sup>123</sup> <https://www.cdp.net/en>

<sup>124</sup> <https://www.unepfi.org/insurance/insurance/projects/the-tobacco-free-finance-pledge/>

<sup>125</sup> <https://o-immobilierdurable.fr/>

<sup>126</sup> <https://www.unpri.org/>

<sup>127</sup> <https://www.planbatimentdurable.fr/>

<sup>128</sup> [https://group.bnpparibas/uploads/file/220204\\_bnpp\\_compliance\\_codeofconduct\\_2022\\_eng.pdf](https://group.bnpparibas/uploads/file/220204_bnpp_compliance_codeofconduct_2022_eng.pdf)

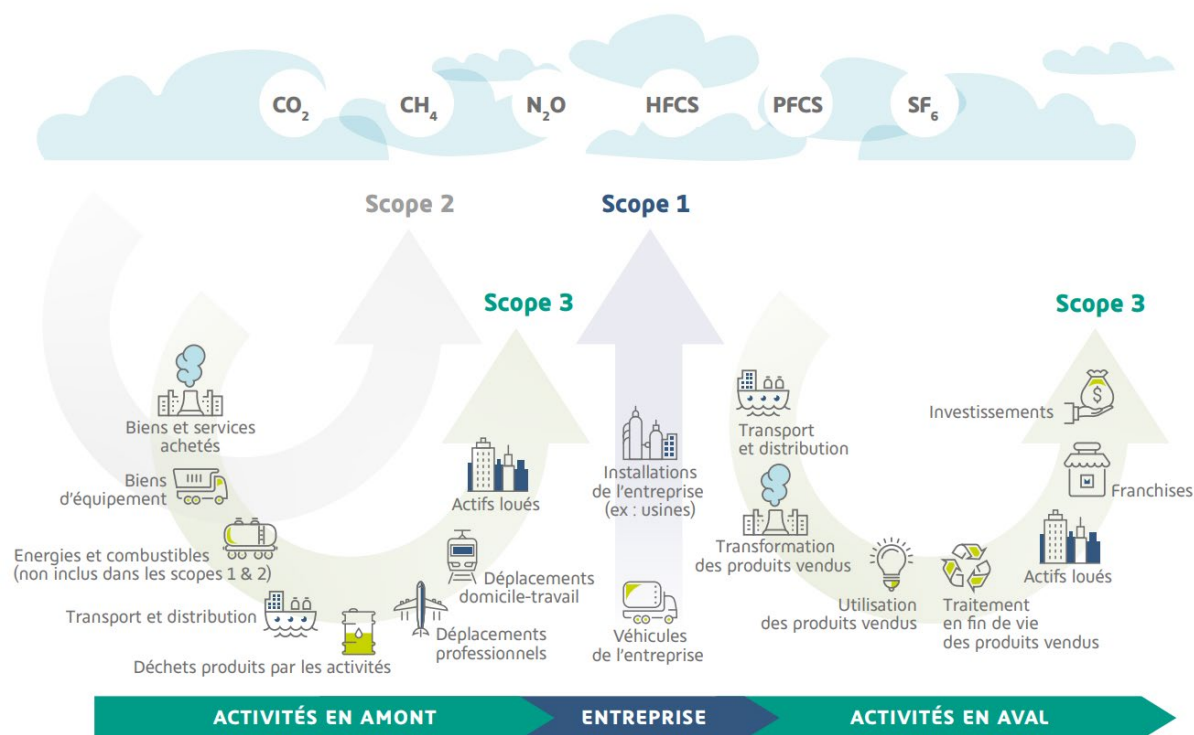
## Appendix 1: The three carbon emission scopes

The three scopes 1, 2, 3 (GHG Protocol, <https://ghgprotocol.org>):

**Scope 1:** Greenhouse gas emissions This includes all emissions generated directly by the company and its activities, including factories, facilities, warehouses, offices, vehicle fleets owned by the company.

**Scope 2:** Indirect emissions linked to energy (consumption of electricity, cooling and heat).

**Scope 3:** All other indirect emissions, upstream and downstream of the corporate client's value chain.



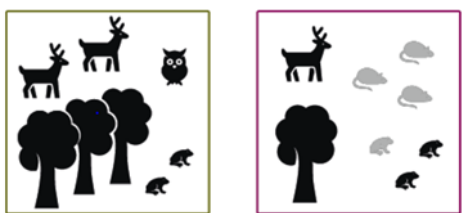
## Appendix 2: Methodology of biodiversity indicators

### Biodiversity footprint of corporate clients - Methodological explanations

Principles of the MSA (Mean Species Abundance) metric

Only species native to an environment are considered, as the presence of other species may result from environmental disturbances. The MSA metric is based on a scale from 0% (total extinction of native species) to 100% (complete preservation of the biodiversity of native species). The MSA is recognised by IPBES as a means of assessing ecosystem integrity.

The diagram below illustrates the principles for calculating the MSA. Pressure on biodiversity will reduce an undisturbed population of native tree and animal species (left-hand diagram) in proportions which result in a population disturbed by this pressure (right-hand diagram).



In this example, populations of native species evolved as follows:

- the deer population decreased from 2 to 1 individual(s) once disturbed;
- the owl population decreased from 1 to 0 individual(s);
- the tree population decreased from 3 to 1 specimen(s);
- the frog population is maintained at 2 individuals (after an intermediate growth of 3 individuals).

This change is reflected in the following calculation of the MSA:

$$\text{MSA} = (1/2 + 0/1 + 1/3 + 2/2) / 4 = 0.46$$

Source: GLOBIO

The MSA.m<sup>2</sup>/€k metric relates this metric to an area of one square metre and the value of the corporate clients in an investment portfolio expressed in thousands of euros. This metric may, alternatively, be expressed in MSA.km<sup>2</sup>/€M to relate the MSA to an area of one square kilometre, with the value of corporate clients expressed in millions of euros. The models calculate the MSA.km<sup>2</sup> for each pressure on biodiversity, and then aggregate them by company. This metric is then compared to the value of the company to determine the MSA.m<sup>2</sup>/€k or the MSA.km<sup>2</sup>/€M. The portfolio footprint is obtained by cumulating these footprints by company, weighted by the weight of investments in the portfolio.

#### Modelling principles of GBS and CBF methods for assessing the biodiversity footprint

These two suppliers use similar modelling steps:

- collecting corporate clients' economic data (revenue and sales volumes) from their financial reports;
- estimating their ecological inventories (consumption of commodities, greenhouse gas emissions and polluting substances) from this data, or collating them from corporate clients' financial reports if they include these inventories (EXIOBASE or WUNDERPUS);
- converting the ecological inventory data into pressures on biodiversity (CDC or IDL proprietary models);
- assessing the impacts associated with these pressures (GLOBIO);
- aggregating these impacts by company and then at the investment portfolio level.

The modelling states that a company's impacts on biodiversity are based on its activity: to generate revenue (step 1), a company must consume commodities and is responsible for greenhouse gas emissions or pollution (step 2). These emissions generate pressure on biodiversity (step 3) which translates into impacts on ecosystems (step 4). The impact on biodiversity of an investment portfolio is the cumulative impact of the corporate clients in which the portfolio has invested (step 5).

The estimating ecological inventories step is based on trade models (purchases and sales) between the various business sectors, taking into account the region as well as the consumption of commodities by sector and greenhouse gas emissions volumes.

The conversion of ecological inventory data into biodiversity pressures is based on CDC and IDL proprietary models, modelling the life cycle of products, which convert ecological inventories into pressure data. For example, the consumption of a given volume of wheat can be translated into land occupancy pressure by modelling the transformed surface area necessary for its production, and into nitrogen pollution pressure by modelling the nitrogen emissions associated with its production.

For both suppliers, the assessment of the impacts related to pressures is based on GLOBIO, a modelling tool developed by the PBL Netherlands Environmental Assessment Agency. This tool is based on a set of research articles and academic studies on the impacts of various biodiversity pressures.

To calculate these impacts, CDC uses a static-dynamic approach:

- static impacts, which include all cumulative impacts prior to the assessment period;
- dynamic impacts, which include the impacts that occurred during the period assessed.

CDC - Global Biodiversity Score (GBS) - also distinguishes footprints related to land pressures from those related to aquatic pressures.

IDL - Corporate Biodiversity Footprint (CBF) - uses a time-based integration approach that assesses the biodiversity impacts of corporate clients' activities over a 100-year period.

## Appendix 3: PAI SFDR methodology

Methodologies relating to regulatory indicators for the Principle Adverse Impacts (PAI SFDR)

### Calculation methodology

The indicators published are calculated based on the average of the calculation of these adverse impacts over the four quarters of the period under analysis, *i.e.* 2023. The calculations were carried out at the end of each quarter and then averaged for publication.

### Financial data

To calculate adverse impact indicators, financial data is used:

- corporate client revenue: This figure is expressed in millions of euros per year;
- the value of the corporate client (or Enterprise Value Including Cash - EVIC): This figure is quarterly and expressed in millions of euros;
- the Gross Domestic Product of the countries: This figure is annual, comes from various sources (World Bank, IMF, etc.) and is expressed in millions of euros.

### Adverse impact indicators

18 PAIs in Table 1, and 2 PAIs in Tables 2 and 3.

#### PAI 1 – Greenhouse gas (GHG) emissions

These indicators provide scope 1, 2 and 3 emissions for all corporate clients in the portfolio. They are calculated on the basis of the company value (EVIC). For scopes 1, 2 and 3 downstream, S&P Trucost Market Intelligence selects the most relevant data according to the various sources used (data published by the issuer, or by the CDP or an estimated value based on modelling). For upstream scope 3, S&P Trucost Market Intelligence is based solely on estimated data.

These indicators are calculated as follows:

$$\sum_n^i \left( \frac{\text{valeur actuelle de l'investissement}_i}{\text{valeur d'entreprise de la société}_i} \times \text{émissions de GES de niveau (x) de la société}_i \right)$$

#### PAI 2 – Carbon footprint

The carbon footprint is calculated based on the carbon emissions of corporate clients, the value of corporate clients (EVIC), weighted by the portfolio's outstandings for the pocket in question. It is expressed in tCO<sub>2</sub> equivalent per million euros invested.

$$\frac{\sum_n^i \left( \frac{\text{valeur actuelle de l'investissement}_i}{\text{valeur d'entreprise de la société}_i} \times \text{émissions de GES de niveau 1, 2 et 3 de la société}_i \right)}{\text{valeur actuelle de tous les investissements (MioEUR)}}$$

#### PAI 3 – GHG intensity of investee corporate clients

Carbon intensity is calculated based on the company's carbon emissions compared to its revenue. The corporate clients in the portfolio (equities and bonds) are then aggregated according to the weight of each of them in the portfolio under analysis. It is expressed in tCO<sub>2</sub> equivalent per million euros of revenue.

$$\sum_n^i \left( \frac{\text{valeur actuelle de l'investissement}_i}{\text{valeur actuelle de tous les investissements (MioEUR)}} \times \frac{\text{émissions de GES de niveau 1, 2 et 3 de la société}_i}{\text{chiffre d'affaires (MioEUR) de la société}_i} \right)$$

#### PAI 4 – Exposure to active companies in fossil fuel sector

The calculation of the exposure of corporate clients active in the fossil fuel sector takes into account the values of investments made in corporate clients when part of their activities are related to the fossil fuel sector. This exposure therefore includes corporate clients (especially electricity producers) with activities in fossil fuels

and other energy sources (including renewable energy). For this indicator, S&P Trucost Market Intelligence relies only on data reported by companies. Activities related to the fossil fuel sector by S&P Trucost Market Intelligence are as follows:

- Bituminous coal and lignite surface mining
- Bituminous coal underground mines
- Extraction of crude oil and natural gas
- Oil sands extraction
- Natural gas liquid extraction
- Support activities for oil and gas operations
- Oil and gas well drilling
- Pipeline transportation
- Oil refineries
- Natural gas distribution
- Coal-fired electricity generation
- Natural gas electricity production
- Petroleum energy production
- Service stations

#### **PAI 5.1 – Share of non-renewable energy consumption**

This indicator makes it possible to assess the consumption of energy from non-renewable sources for portfolio companies. S&P Trucost Market Intelligence relies on reported data and estimates (in the absence of reported data) using the energy consumption intensity value of the economic sector and the geographical area of the corporate client. S&P Trucost Market Intelligence's definition of renewable energy includes:

- Wind energy production
- Solar energy production
- Wave and tidal energy production
- Geothermal energy production
- Hydroelectric power generation
- Energy production from biomass

#### **PAI 5.2 – Share of non-renewable energy production**

This indicator makes it possible to assess the share of energy production from non-renewable sources for the companies in the portfolio. S&P Trucost Market Intelligence uses the share of non-renewable energy in energy production reported by corporate clients, and aggregates these results at the portfolio level.

#### **PAI 6 – Energy consumption intensity by high climate impact sector**

This indicator makes it possible to assess the energy intensity of a corporate client's activities. It is calculated by dividing the energy consumption in Giga Watt-hours (reported by corporate clients) by the corporate client's revenue in millions of euros. This intensity is calculated for companies whose NACE code is linked to one of the sectors with a high climate impact (NACE sectors used: A, B, C, D, E, F, G, H & L).

#### **PAI 7 – Activities with an adverse impact on biodiversity-sensitive areas**

This indicator makes it possible to assess the proportion of portfolio corporate clients' activities that have an adverse impact on biodiversity-sensitive areas.

For this indicator, S&P Trucost Market Intelligence analyses corporate clients that belong to sectors with a high climate impact (NACE1 sectors used: A, B, C, D, E, F, G, H & L). Among these companies, those that have at least one of their assets (real estate) identified in an area defined as sensitive for biodiversity according to S&P Trucost Market Intelligence, are considered to have an adverse impact on biodiversity.

#### **PAI 8 – Emissions to water**

This indicator makes it possible to assess the metric tonnes of waste discharged into water by portfolio companies per million euros invested.

S&P Trucost Market Intelligence relies on metric tonnes of (direct) emissions into water and the following categories of waste:

- nutrients and organic pollutants: Emissions of organic effluents such as wastewater discharges and discharges from industrial sectors;
- acid emissions: Emissions of organic and inorganic acid in water;
- metal emissions: Emissions to water of metals such as mercury, cadmium, arsenic, chromium, copper, zinc and lead;
- pesticides and fertilisers.

For this indicator, S&P Trucost Market Intelligence relies on reported data and estimates (in the absence of reported data).

#### **PAI 9 – Hazardous waste and radioactive waste ratio**

This indicator assesses the metric tonnes of hazardous waste and radioactive waste produced by portfolio companies per million euros invested.

S&P Trucost Market Intelligence identifies four categories of waste: nuclear waste, recycled waste, incinerated waste and landfill waste.

For this indicator, S&P Trucost Market Intelligence relies on reported data and estimates (in the absence of reported data).

#### **PAI 10 – Violations of the principles of the UN Global Compact principles and OECD Guidelines for Multinational Enterprises**

This indicator assesses the proportion of portfolio companies that have participated in violations of the United Nations Global Compact principles or the OECD Guidelines.

S&P Trucost Market Intelligence relies on data provider RepRisk to assess whether corporate clients are involved in a controversy. These controversies may be related to the corporate client's activities or their supply chain over the last two years.

#### **PAI 11 – Lack of compliance processes and mechanisms to monitor compliance with the UN Global Compact principles and OECD Guidelines for Multinational Enterprises**

For this indicator BNPP Cardif uses data from S&P Trucost Market Intelligence. The methodology is based on the number of policies linked to the four pillars of the Global Compact:

- Human rights
- International labour standards
- Environmental
- Fight against corruption

S&P Trucost Market Intelligence's methodology makes it possible to identify corporate clients with no policy on at least one of the above four pillars.

#### **PAI 12 – Unadjusted gender pay gap**

This indicator makes it possible to assess the average unadjusted gender pay gap in the portfolio corporate clients.

S&P Trucost Market Intelligence relies on data collected by a questionnaire sent to corporate clients. This questionnaire collects salaries by gender and by level in the company (executive, management, non-management). In the event of missing data, S&P Trucost Market Intelligence relies on estimates using the average value of the gap for that economic sector, combined with the geographical area of the company.

#### **PAI 13 – Gender diversity in governance bodies**

This indicator presents an average ratio of women to men in the governance bodies of the portfolio corporate clients. It is expressed as a percentage of the number of women in relation to the total number of members in the governance bodies.



**PAI 14 – Exposure to controversial weapons (anti-personnel mines, cluster munitions, chemical weapons or biological weapons)**

This indicator makes it possible to calculate the share of investment in corporate clients involved in the manufacture or sale of controversial weapons.

S&P Trucost Market Intelligence calculates this indicator in a binary manner depending on whether the company is involved in the manufacture or sale of controversial weapons.

**PAI 15 – Greenhouse gas intensity**

The average greenhouse gas intensity of the sovereign portfolio is the sum of the carbon intensities of investments (sovereign bonds) generated in the countries, weighted by their weight in the portfolio under analysis. The carbon intensity of a country is calculated based on its carbon emissions (regional emissions and imported emissions), compared to its GDP in millions of euros.

$$\sum_i \left( \frac{\text{valeur actuelle de l'investissement}_i}{\text{valeur actuelle de tous les investissements (MioEUR)}} \times \frac{\text{émissions de GES de niveau 1, 2 et 3 du pays}_i}{\text{produit intérieur brut}_i \text{ (MioEUR)}} \right)$$

**PAI 16 – Investee countries subject to social violations**

This indicator makes it possible to calculate the investment countries experiencing violations of social standards within the meaning of international treaties and conventions and the principles of the United Nations.

S&P Trucost Market Intelligence identifies countries sanctioned by the European Union or the UN for social violations committed. Moreover, the data provider only considers sanctions that are justified by systematic human rights violations by the ruling party.

**PAI 17 – Exposure to fossil fuels through real estate assets**

Cardif Assurance Vie does not invest in such assets.

**PAI 18 – Exposures to energy-inefficient real estate assets**

This exposure represents the share of directly managed real estate assets whose EPAs are classified D, E, F, G or missing. This calculation is carried out internally by BNP Paribas Cardif.

**PAI 4 Table 2 (climate option) - Investment in corporate clients without initiatives to reduce their carbon emissions**

This indicator indicates the share of portfolio corporate clients that are not aligned with a global warming limit below 2°C in 2100 compared to pre-industrial levels set under the Paris Agreement.

The approach adopted by S&P Trucost Market Intelligence is a transition trajectory assessment, which examines the relevance of emission reductions over time required to achieve a carbon budget to limit global warming to below 1.5°C or 2°C.

**PAI 20 Table 3 (social option) - Average human rights score**

This indicator provides the average score of the countries invested in the portfolio according to the level of protection and human rights compliance.

S&P Trucost Market Intelligence is based on a score between 0 and 100 provided by the American think tank Fund for Peace (in particular the P3 indicator - Human Rights and Rule of Law under the Fragile State Index).

## Glossary

**ARTICLE 8:** Refers to, according to the SFDR Regulation, products that promote sustainable characteristics, incorporating environmental and/or social criteria.

**ARTICLE 9:** Refers to, under the SFDR Regulation, products with a sustainable investment objective, contributing to an economic activity with an environmental and/or social objective.

**BEST-IN-CLASS:** The Best-in-Class approach aims to select companies with the best ESG practices, within the same business sector. Thus, the best-in-class principle does not exclude any sector or industry.

**BREEAM (BUILDING RESEARCH ESTABLISHMENT ENVIRONMENTAL ASSESSMENT METHOD) AND HQE (HIGH ENVIRONMENTAL QUALITY):** These two environmental assessment methods cover the construction, renovation and operation of buildings. The first is British and the second French.

**CARBON FOOTPRINT:** This is the measurement at a given moment of “the quantity of greenhouse gases (expressed in terms of CO2 equivalent), released into the atmosphere by an individual, process, organisation, event, or product from within a specified boundary”. (Authors: Pandey, Agrawal and Pandey, 2011; Source: ScienceDirect)

**CSR:** Corporate Social Responsibility.

**DEDICATED FUNDS:** Funds reserved for a maximum of 20 holders enabling customised management to be set up.

**DIRECTLY HELD SECURITIES:** These securities are held directly by BNP Paribas Cardif. They may be equities or bonds.

**DUE DILIGENCE:** This is the procedure whereby an investor reviews the documents of a target company before investing.

**EBITDA:** “Earnings Before Interest, Taxes, Depreciation and Amortisation”. This measure is used to calculate the share of portfolio corporate client profits exposed to an increase in the carbon price.

**EVIC (Enterprise Value Including Cash):** The enterprise value including cash is defined as the sum of the market capitalisation of the ordinary shares at the end of the year, the market capitalisation of the preferred shares at the end of the year and the carrying amount of the total debt and non-controlling interests. There is no deduction of cash or cash equivalents to avoid the possibility of negative enterprise values.

**GENERAL FUNDS:** Also known as “euro funds”, these funds are life insurance vehicles, traditionally comprising bonds, equities, and real estate assets. For general funds, the amount of the insurer’s commitment is expressed in euros.

**GREEN BOND:** A green bond is a debt security issued by the financial markets to finance a specific project with high environmental added value. They may be issued by companies, entities or governments.

**MARKET VALUE:** This metric is representative of the total capital employed. It includes stock market capitalisation, net financial debt, and minority interests, plus other assets and minus other liabilities.

**NZAOA:** Net Zero Asset Owner Alliance.

**OECD:** The mission of the Organization for Economic Co-operation and Development (OECD) is to promote policies that will improve economic and social well-being around the world.

**PAI (Principal Adverse Impacts):** Constitute a set of indicators detailed in the report of the technical review criteria associated with the SFDR Regulation, which provide a framework to assess the adverse impacts of the sustainability of investments.

**POSITIVE IMPACT INVESTMENTS:** These are investments made with the intention of generating a positive and measurable social, societal and/or environmental impact, while generating a return on investment. Intentionality is the desire to achieve one or more sustainable development goals (for example, contributing to the energy transition through the installation of renewable energy infrastructure). Measurability corresponds to the evaluation of the implementation of this intention through environmental and/or social indicators (e.g. GWh produced by these renewable energies).

**PRI:** Principles for Responsible Investment. More information can be found at [www.unpri.org](http://www.unpri.org).

**RESPONSIBLE INVESTMENT:** This is a generic term which refers to the various approaches considering Environmental, Social and Governance aspects in financial management. Responsible investment can take a structured and systematic approach in terms of stock-picking for a given fund and, moreover, support the players in an inclusive, low-carbon economy. This is known as Socially Responsible Investment (SRI) fund. (Source: Novethic).

**SFDR:** Sustainable Finance Disclosure Regulation.

**THERMAL COAL:** This is the coal used to generate electricity.

**UN CONVENTION OF BIODIVERSITY (UNCBD):** Multilateral treaty ratified by 196 nations at the 1992 Earth Summit in Rio de Janeiro. Its objective was to develop national strategies for the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing resulting from resource use.

**UNIT-LINKED FUNDS:** Like general funds, unit-linked funds are life insurance investment vehicles. For unit-linked contracts, the insurer's commitment is expressed in units, the value of which varies according to market fluctuations.

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