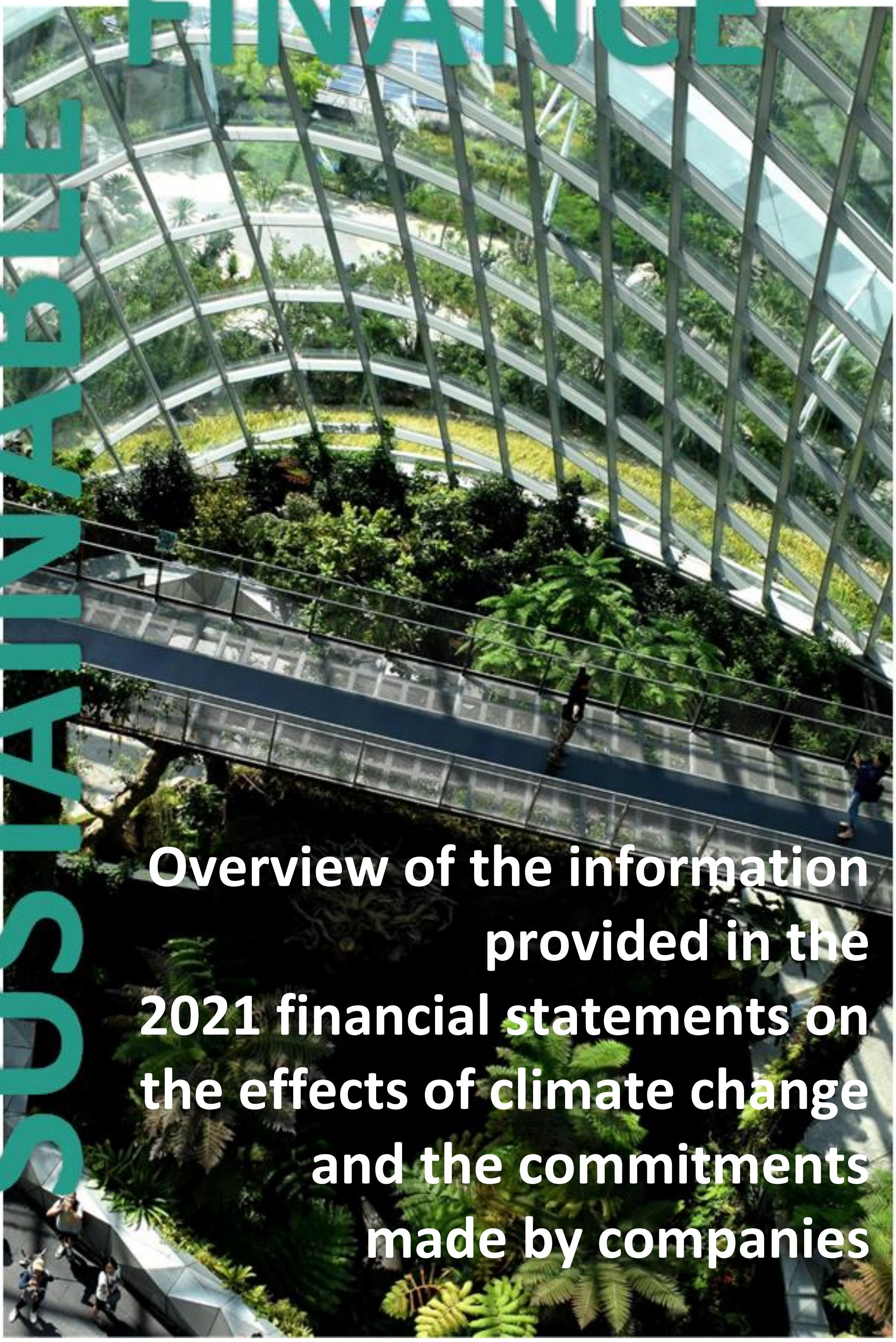
SUSTAINABLE FINANCE



Overview of the information provided in the 2021 financial statements on the effects of climate change and the commitments made by companies

November 2022

AUTORITÉ DES MARCHÉS FINANCIERS

AMF

INTRODUCTION

The 2022 overview of the information provided by companies on the effects of climate change follows on from of the one published by the AMF in 2021.[1] It is based on a sample of companies that is partially different, but with comparable profiles. Its purpose is to provide **a new assessment of how companies are taking the effects of climate change into account** in their financial statements, along with some **examples of current practices**. It does not contain any recommendations over and above those published by the AMF and ESMA for the 2022 financial statements[2]. Addressing the impacts of climate change in financial reporting and performance is central to these recommendations and remains an important topical issue.

The AMF reminds readers that IFRS standards do not deal specifically with the accounting consequences of climate change, but the **current general provisions of the IFRS do apply**. In November 2020, the International Accounting Standards Board (IASB) also published an educational document entitled *"Effects of climate-related matters on financial statements"*[3] which lists and illustrates, standard by standard, certain potential impacts and information to be provided in financial statements related to the effects of climate change.

[1] https://www.amf-france.org/sites/default/files/private/2021-12/financial-and-non-financial-overview-of-corporate-carbon-reporting.pdf

[2] https://www.amf-france.org/fr/reglementation/doctrine/doc-2022-06?from=b3f21baf-0d59-4443-9728-121437da7905|a13796ae-7a00-4c69-8327-80649af96284|09bc0e1e-cf0e-4786-9607-b0c52c0dee3f|e033c3c1-58c6-4c38-b2ef-f117ecb7843b

[3] https://www.ifrs.org/content/dam/ifrs/supporting-implementation/documents/effects-of-climate-related-matters-on-financial-statements.pdf

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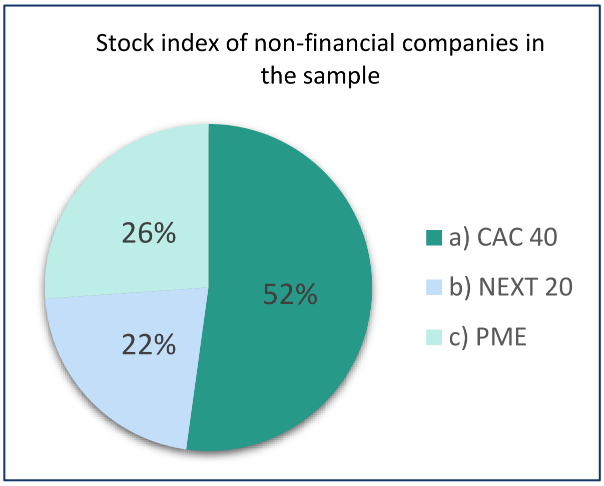
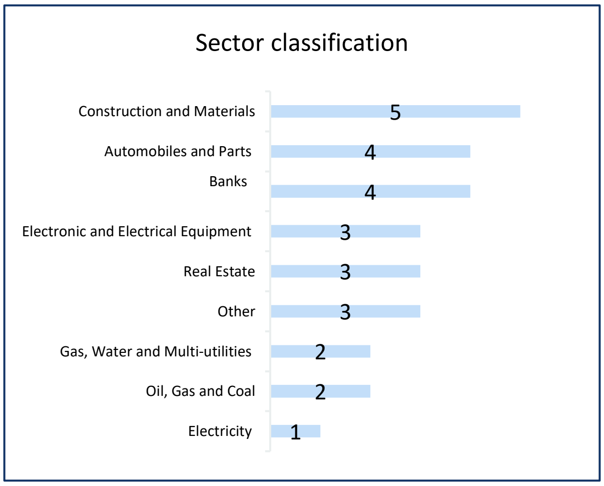
SAMPLE DETAILS





The sample used for the analysis of the 2021 financial statements is similar to the one used in the first part of the AMF's CSR report "Insights into the first taxonomy reporting by listed companies".[4]

The sample includes **17 non-financial companies from the CAC 40 or the CAC Next 20 index, 6 SMEs and mid-tier companies** (with market capitalisation of less than €1 billion) and **4 financial institutions**, together providing a diverse set of entities facing different issues. They were selected because of their potential exposure or contribution to the effects of climate change. These companies also come from a cross-section of sectors, providing a representative sample of company practices at this time.

The sample differs from the one presented in the 2021 Overview, which analysed the practices of 23 issuers. These all came from the SBF120, but no SMEs, mid-tier companies or financial institutions were included. The majority of the companies last year also came from the automotive, energy and construction sectors.

All companies in our sample have made commitments to reduce their net emissions in all or some of their businesses or scopes of business. In addition, 45% have made a commitment to be carbon neutral by 2050. Due to their sectors, size and commitments, all companies in the sample appear to be impacted by the effects of climate change and by the effects of their short-, medium- and long-term commitments.

The sample also includes four French listed financial institutions (BNPP, Crédit Agricole, Société Générale and BPCE). For the purposes of the study, examples taken from the financial statements of French and European companies not included in our sample were included where relevant.

The examples illustrate current practices resulting from the analysis of the 2021 financial statements and should be developed and adapted to the specific case of each company, based on the matters of interest identified, their materiality and the thoughts on each. Some of them may not be relevant to the specific characteristics of each company and, in other cases, the information could be improved.

It should be noted that this study is not intended to confirm the accuracy of the information published by the companies analysed. As such, the reference to or publication of an extract from the financial statements of a company in the sample are intended to illustrate a specific point of the analysis and have no bearing on the general quality of that company's non-financial reporting. All examples and figures are taken from the information provided in the financial statements (unless explicitly stated otherwise); additional information may be provided in other financial disclosures including the non-financial statement.

[4] "Insights into the first taxonomy reporting by listed companies" published on November 9th 2022

INITIAL FINDINGS

First of all, with regard to the accessibility of information, the AMF recommended in 2021 that issuers should group all financial information related to climate risks and impacts together in a specific note or establish a link between the various notes in the financial statements covering this issue. This year, 26% of issuers in the sample analysed published a specific note on the effects of climate change on their financial statements. Conversely, when information on the effects of climate change was not grouped together in a single note, companies did not provide references to improve readability, in most cases.

As the volume of information related to this topic is growing, it seems important to improve its readability.

Example 1 – Specific note on climate risk

Publication of a specific note grouping together all the topics and items in the financial statements identified by the issuer as being likely to be affected by the impacts of climate change.

NOTE 3 Climate issues

Given its activities in the renovation market, sustainability is essential in supporting the growth of the Saint-Gobain Group. Sustainability issues are therefore an integral part of the Group's growth outlook, in line with issues relating to the energy transition.

Responding to climate challenges is therefore at the heart of the Group's strategy, and its net-zero-carbon commitment is taken into account in its financial decisions.

3.1 The commitment to carbon neutrality is at the heart of the Group's strategy

In line with the Paris Agreement, Saint-Gobain signed the pledge of the UN Global Compact's "Business ambition for 1.5°C" on September 23, 2019 in New York, thereby affirming its commitment to achieving carbon neutrality (net-zero-carbon emissions) by 2050.

In order to achieve this goal by 2050, Saint-Gobain defined a 2030 roadmap in 2020. Besides confirming targets for reducing its environmental footprint by the end of 2025, the roadmap aims for a 33% reduction in CO_2 emissions in absolute terms compared with 2017 for scopes 1 and 2, and a 16% reduction for scope 3.

These new reduction targets through to 2030 reflect an acceleration in Group's ambitions. Its commitment to carbon neutrality places its response to climate change at the heart of its strategy, alongside its range of solutions enabling customers to address the environmental challenges that they face.

CO_2 emissions allowances

The Saint-Gobain Group was allocated 3.7 million tonnes of greenhouse gas emissions allowances by the European Commission at the end of 2021. These allowances will cover the Group's actual CO_2 emissions for 2021. As a result, no provision was recorded in this respect in the Group's financial statements (see note 5.5.4).

Sustainable investments, research and development expenditure, and other expenditure aimed at combating climate change and protecting the environment

In 2021, the Group set aside €55 million in capital expenditure and €44 million in research and development expenditure to further its environmental CO_2 emissions reduction strategy.

Executive Compensation policy

In stepping up its commitment to carbon neutrality, the Group increased since 2020 the weighting of CSR objectives in the criteria determining long-term executive compensation plans: CSR objectives now determine 20% of amounts paid out under such plans compared to 15% previously, while CO_2 objectives now account for 10% versus 5% previously (see note 6.2).

The consideration of climate change issues did not have a material impact on the judgments made or the key estimates required to prepare the financial statements.

The Group will continue to analyze the potential impacts of future changes in regulations related to climate change and the energy transition as part of its commitment to achieve carbon neutrality by 2050.

3.2 The commitment to carbon neutrality is taken into account when preparing the Group's financial statements

In line with these commitments and targets, the Group has taken into account climate change and sustainable development issues in its financial statements, mainly in the areas cited below.

Basis of measurement applicable to assets

The Group's commitments to carbon neutrality were taken into account when carrying out asset impairment tests and assessing the useful life of its non-current assets (see notes 7.3 and 7.5).

Source: Saint-Gobain, URD p. 284

Example 2 – Logo displayed alongside information on climate change impacts in the notes to the consolidated financial statements

Where there is no specific note, a visual cue is used to identify the items in the financial statements for which the issuer provides information relating to the impact of climate change.

Source: Société Générale, URD p. 387

With regard to the depth of the information provided, the AMF is pleased that, despite the backdrop of continuing rapid changes in the regulatory framework and investors' expectations, the information published in the 2021 financial statements on the impact of climate change on financial performance has increased significantly.

Generally speaking, **issuers have improved the quality of information, even though it is still brief in most cases.** There has been a quantitative increase in the information provided, although the level of detail still varies.

All the issuers in the sample also announced climate commitments to the market, most of them aiming for Net Zero by 2050 or intermediate commitments over a longer or shorter period (2030 to 2050). However, **the way in which these commitments are reflected in operational and financial terms in the financial statements is not always clear or sufficiently detailed**.

For example:

- 81% of the sample made at least one reference to the impact of climate change on their business in their financial statements (using a specific note or references);
- Almost all of them concluded that there was no material financial impact on their business;
- Only one issuer identified a financial impact that was deemed material (for a specific geographical area).

With the exception of this issuer, the information relating to there being no impact is stated in a general way at the group level and no information is provided on the analysis that might have been carried out at the activity or geographical level, for example.

These conclusions are consistent with the 2020 Overview, in which few issuers identified material impacts.

Example 3 – Highlighting the geographical impact of future environmental standards

Clarification of the impact of the political situation in a geographical area (the UK in this case) on the local revenue outlook and an indication of the resulting impairment. The information presented is consistent with the risk factors, which indicate that the risk of a world moving away from petroleum products may affect oil exploration in particular and hence the Group's multi-client surveys (high risk).

Impairment loss

In 2021, "Amortization and impairment on Multi-Client surveys" included US$(21.2) million of impairment loss in the UK library and related to the downward revision of expected sales of one survey due to United Kingdom's currently unfavorable stance on oil exploration.

Source: CGG, URD p. 205

Lastly, **18.5% of the sample mentioned the impact of climate change in the key audit matters**. This proportion is slightly higher than the previous year (17%). In general, the effects of climate risks are still mentioned for a specific aspect (e.g. asset valuation, impairment tests).

Recommendations/Key points

Recommendations for the 2022 financial statements:

- The AMF recommends that companies whose exposure to climate risks and commitments to combat global warming are likely to have a material impact provide more details on the judgements and assumptions used to assess the effects, or lack thereof, of climate change risks in their financial statements (on financial performance and the valuation of the company's assets and liabilities).

- To make it easier to understand the work and analysis carried out to assess the financial impacts of climate issues, the AMF recommends that companies group all this information together in a specific note or establish an explicit link between the various notes to the financial statements covering this topic.

In the explanation of the analysis carried out, an indication of the time frame(s) over which the judgements and conclusions regarding the impact or lack of impact are based and the climate change scenario(s) used for global warming provide useful information to readers.

The level of information and the topics mentioned should be proportionate to their materiality for each company. The AMF reminds issuers that **materiality analysis is not only quantitative but also qualitative.** Issuers should refer to the IASB Practice Statement "Making Materiality Judgments"[5] and to the provisions of IAS 1 on relevant information to be provided to the reader of financial statements.

Focus on the Standards 1

IAS 1 paragraph 112:

> *"The notes shall […] provide information that is not presented elsewhere in the financial statements, but is relevant to an understanding of any of them."*

IAS 1 paragraph 9:

> *"Financial statements are a structured representation of the financial position and financial performance of an entity. The objective of financial statements is to provide information about the financial position, financial performance and cash flows of an entity that is useful to a wide range of users in making economic decisions. Financial statements also show the results of the management's stewardship of the resources entrusted to it. To meet this objective, financial statements provide information about an entity's: (a) assets; (b) liabilities; (c) equity; (d) income and expenses, including gains and losses; (e) contributions by and distributions to owners in their capacity as owners; and (f) cash flows.*
>
> *This information, along with other information in the notes, assists users of financial statements in predicting the entity's future cash flows and, in particular, their timing and certainty."*

[5] https://www.ifrs.org/content/dam/ifrs/publications/amendments/english/2017/ifrs-practice-statement-2-making-materiality-judgements.pdf

- The three sections of this report analyse the sample's practices on the following three aspects respectively:
  - **Consistency and connectivity**[6] **of the information presented in other parts of the regulated information (including the** non-financial statement**) and in the notes to the financial statements;**
  - **Inclusion of the effects of climate change and of issuers' climate transition into their impairment test and asset valuation procedures;**
  - **Other specific topics related to the effects of climate change in financial statements.**

[6] Connectivity is the potential reconciliation or link between the non-financial information and the financial information disclosed in the financial statements.

KEY FIGURES


Companies making at least one reference to the impact of climate change on their business in their financial statements
81%
Issuers that published a specific note on the effects of climate change on their financial statements
26%
Issuers that set aside provisions for environmental obligations linked to legal obligations
37%
Companies that referred to other issues* affected by climate change (*other assets, excluding real estate)
15%
Issuers providing quantitative or qualitative information on their CO_2 allowances
22%
Issuers that issued green bonds or bonds linked to sustainability indicators
34%
Issuers indicating that they have taken climate change impacts into account in impairment testing
52%
Issuers indicating more specifically which assumptions were changed
40%
Companies that presented an analysis of the sensitivity of recoverable amounts related to the effects of climate change
11%
This 40% can be divided into two types of cumulative impact
The impact on cash flow is reflected in an expected slowdown/ discontinuation of a business
60%
50%
The impact on cash flow is reflected in additional capex

SECTION 1: CONSISTENCY AND CONNECTIVITY

FINANCIAL STATEMENTS AND OTHER REGULATED INFORMATION: ANALYSIS OF THE CONSISTENCY AND CONNECTIVITY OF THE INFORMATION PROVIDED

The analysis of the financial publications for the period highlights the difficulty in making the link between the trajectories announced by the companies and their effects in the financial statements as at 31 December 2021: **how and to what extent have these trajectories been taken into account and analysed when preparing the financial statements?**

- ☐ Research and development costs

As a reminder, 100% of our sample has made commitments to reduce its net emissions on all or some of their businesses or scopes of business. In addition, 45% of them have a commitment to be carbon neutral by 2050.

While most issuers mention in their non-financial information that they are involved in research into solutions for decarbonising the atmosphere, reducing emissions from their products and services, or estimating the investments needed to achieve their carbon neutrality objective where applicable (this estimate is most often presented as an overall amount over the long term), few specifically mention research and development costs in this area in their financial statements.

Of the sample, 7% disclose the amount of research and development expenditure recorded annually in this area in their financial statements (of this proportion, half have made a commitment to be carbon neutral by 2050).

Example 4 – Indication of research and development costs specific to environmental risks in the financial statements

In both examples, the issuers refer to the R&D costs for the financial year directly related to implementing climate transition commitments. These issuers also mention R&D costs related to climate transition in other parts of their universal registration document (URD).

> Given the goal of carbon neutrality by 2050, and the fact that electricity is a major lever in action to decarbonise the French economy, R&D has a crucial role to play in the electricity, climate, digital and societal transition.
>
> In 2021, the EDF group's total R&D budget amounted to €661 million, 99% of EDF's R&D budget is dedicated to achieving the net zero goal, and the energy system transition.
>
> The R&D budget is particularly channelled into research into energy efficiency, uses of electricity as a substitute for fossil fuel-based energies, renewable energies and their insertion into the grid, energy storage and production, carbon-free hydrogen and its applications for decarbonising the economy, sustainable cities, the local impacts of climate change and other environmental issues such as biodiversity, water quality, and the mitigation of all forms of pollution.

Source: Electricité de France, URD p. 443

Sustainable investments, research and development expenditure, and other expenditure aimed at combating climate change and protecting the environment

In 2021, the Group set aside €55 million in capital expenditure and €44 million in research and development expenditure to further its environmental CO_2 emissions reduction strategy.

Source: Saint-Gobain, URD p. 284

Example 5 – Reference to the annual research and development budget taken into account in impairment test flows

Details of the annual R&D budget of €100 million taken into account in the impairment tests, in line with the information provided in the non-financial information.

The assumptions used in the asset impairment tests take into account the actions envisaged in connection with the Group's commitment to reduce by 2030 its scope 1 and 2 net carbon emissions by 33% compared to 2017 in order to limit its impact on the environment and contribute to the decarbonization of its markets, in particular an annual amount of €100 million in capital expenditure and research and development expenditure set aside to further its environmental strategy to reduce CO_2 emissions.

Source: Saint-Gobain, URD p. 312

- Consistency with risk factors

The AMF has again measured the consistency between issuers' risk factors and the information on the financial impact of these risks, where applicable. Within their risk factors:

- 26% of issuers identified climate change as a market risk;
- 55% of issuers identified a transition risk;
- 67% of issuers identified a physical risk.

These risks potentially involve financial impacts over time frames that may vary and need to be analysed to determine whether and how they should be reflected in the financial statements. As noted at the beginning of this report, most of our sample concluded that the financial risks associated with climate change were not material but did not specify the analyses performed, especially with regard to the risk factors they had identified. However, some companies mentioned that more detailed internal or external analyses were under way.

Also, some issuers mention, within their risk factors, the existence of physical and transition risks for annual amounts that are quantified and significant. In these cases, no information is included in the financial statements, which makes it difficult to determine whether and to what extent impacts have been recognised.

Example 6 – Reference to the existence of ongoing climate studies

The existence of an ongoing study on the impact of climate change is clarified in the risk factors; the risks associated with climate are considered high by the Group. Information on the existence of an ongoing study is not mentioned in the financial statements; however, this information may be helpful in understanding the judgements and assumptions for the 2021 financial year-end.

A study on the evolution of climate change and the associated potential physical risks for the Group has been commissioned for the first half of 2022.

Source: Faurecia, URD p. 191

However, of the issuers that refer to the impacts of climate change in their financial statements, 70% make an explicit or indirect distinction between physical and transitional risks and state that they have analysed these two risk categories.

Particular attention may be paid to the consistency between information provided outside the financial statements (including risk factors) and risk information provided within the financial statements. The existence of a risk does not necessarily have a financial impact but, where these matters are material to the company, additional explanations may be necessary to understand the work involved in achieving the conclusion regarding impacts (estimates made, time frame used).

Example 7 – Inclusion of climate risks in financial statements

The existence of physical climate risks over a significant part of the Group's operations is mentioned in the risk factors.

Physical risk

In 2021, the Group generated 48% of its revenues in the Caribbean zone, which is particularly exposed to natural and climate risks, the intensity of which is tending to increase (earthquakes, hurricanes, etc.). The occurrence of extreme events could affect the integrity of its sites, especially the import terminals necessary for the supply of petroleum products, which are generally located in coastal areas. This could disrupt the operations of the subsidiaries in question and in turn cause operating losses. Nevertheless, the most recent cyclones in the Caribbean had a moderate effect on the Group's earnings.

To a lesser extent, Rubis Énergie's Retail & Marketing activity is exposed to changes in temperature, mainly during mild winters in Europe (15% of Group consolidated revenues), which affects fuel sales volumes in the heating market.

Transition risk

Rubis is exposed to its sector's energy transition challenges. Changes – sometimes rapid – in the regulatory environment and in policies in support of a low-carbon economy (carbon tax, energy saving certificates, obligation to blend fuels) could impose a significant reduction in CO_2 emissions and make other less carbon-intense energies more competitive in the long term. In addition, growing concern among stakeholders (customers, investors, insurers, employees, civil society, etc.) about climate change is liable to have an adverse effect on the Group's petroleum product Retail & Marketing business, its financial position, its image, appeal and its outlook, with varying levels of uncertainty that are sometimes hard to measure over the long term. The immediate impact is considered to be low to moderate, depending on the products and areas in question.

Source: Rubis, URD p. 56 (risk factors)

Details of the analysis carried out on physical risks, the model used and the (non-material) exposures, specifying that the analysis covered both physical and transition risks.

10.4 Climate risk

The Group's main risks related to climate change stem from both a physical risk and a transition risk.

The physical risk relates to the occurrence of extreme events, the intensity of which tends to increase, and which could, on the one hand, damage the integrity of the sites and, on the other hand, disrupt the operations of the subsidiaries in question, and in turn cause operating losses.

The Group observes that the financial impact of deteriorations directly related to extreme weather events such as the latest cyclones in the Caribbean have had a moderate impact on results. The geographical diversification and broadening of the Group's scope, as well as the non-material nature of its sites individually, greatly limit exposure to climatic hazards that may occur in a given area.

Rubis is also exposed to the challenges of its sector in terms of energy transition. Occasionally rapid shifts in the regulatory environment and policies in support of a low-carbon economy could impose a significant reduction in CO2 emissions and make other less carbon-intensive energies more competitive in the long term. The short-term impact of climate risk is considered low to moderate depending on the products and regions concerned and, to date, to have had no material impact on the Group's consolidated financial statements.

These risks are managed by the Climate Committee in conjunction with the various subsidiaries and functional departments with the support of specialised consultants.

In 2021, the Group has set a target to reduce its carbon emissions (scopes 1 and 2) by 20% by 2030. It has also committed to setting additional objectives (reduction of scope 3A emissions, i.e. excluding products sold, reduction in the carbon intensity of products sold, etc.) in the 2022-2025 CSR roadmap. Analyses to precisely define the decarbonisation trajectory and implement the selected solutions are being finalised.

The Group has taken into consideration the impacts of potential climate issues and the consequences of its 2030 ambition **as identified to date** in connection with the closing of the financial statements at 31 December 2021. In particular, the Group has:

- considered the short-term effects of commitments made in determining the recoverable value of goodwill (see note 4.2);
- considered climate risks in the assessment of other provisions (see note 4.11).

To date, the Group has not identified any indication of impairment of its fixed assets and the impact related to climate issues had no material impact on the Group's financial statements at 31 December 2021.

Source: Rubis, URD p. 280

Recommendations/Key points

- The AMF recommends that companies ensure that the judgements and estimates used and described in the financial statements are consistent with the consequences of the risks and opportunities related to climate issues described in the management report and other information.

- It seems important to expand on information that provides an understanding of how the company's commitments and objectives (planned steps and milestones, actions taken) have been taken into account and analysed when preparing the financial statements, thereby better justifying the conclusions drawn regarding financial impacts, especially for companies that announce ambitious carbon neutrality strategies within a short time frame.

Taxonomy

The AMF also looked at the possible impact of the concept of taxonomy in the financial statements, even though this information is not required in the financial statements but in the non-financial information[7] and does not normally affect the information presented in the financial statements. The entire sample is eligible for the taxonomy and **one issuer mentioned this concept in its financial statements.** The AMF notes that, with the

[7] "Insights into the first taxonomy reporting by listed companies" published on November 9th 2022

exception of one issuer in the sample, the introduction of the taxonomy has had no impact on revenue disaggregations and the information provided on opex and capex.

Example 8 – Eligibility for the taxonomy of assets presented in the financial statements

The percentage of capex aligned with the taxonomy is reported in the financial statements, with details of the investment categories concerned.

20.4 Carbon-free investments

In 2021 the Group continued its programme of gross operating investments, which amounted to €18.3 billion and included €17.6 billion of gross investments in intangible assets and property, plant and equipment (see notes 4 and 10.7) and €0.7 billion of gross financial investments.

In 2021, nearly 94% of the Group's investments were in line with its net-zero trajectory (94% in 2020), with 50% of investments concerning the nuclear sector (51% in 2020). 40% of the Group's investments are aligned with the European sustainable taxonomy (43% in 2020 applying the method based on the March 2020 TEG (technical expert group) report). This notably covered investments in networks, renewable energy production (hydropower, solar power, wind power) and certain energy services (presented in the Group's report on its non-financial performance, in section 3.8.3 "Details on the taxonomy" of the 2021 Universal Registration Document).

Source: Electricité de France, URD p. 442

SECTION 2: IMPAIRMENT TESTS AND ASSET VALUATION

CONSIDERATION OF THE EFFECTS OF CLIMATE CHANGE IN THE COMPANY'S IMPAIRMENT TESTS AND ASSET VALUATION

☐ Analysis of indications of impairment

If there is any indication of impairment (or at least annually in the case of intangible assets with an indefinite useful life), companies must test their assets for impairment. When analysing whether there are any indications of impairment, different effects can be identified:

- **Physical risks to the assets;**
- **Expected financial impacts of the issuers' climate transition;**
- **Impacts on financial performance of consumer behaviour and expectations.**

Focus on the Standards 2

IAS 36 paragraph 12:

In assessing whether there is any indication that an asset may be impaired, an entity shall consider, as a minimum, the following indications: […]

*(b) **significant changes with an adverse effect on the entity have taken place during the period, or will take place in the near future, in the technological, market, economic or legal environment in which the entity operates or in the market to which an asset is dedicated.***

[…]

(e) evidence is available of obsolescence or physical damage of an asset.

*(f) **significant changes with an adverse effect on the entity have taken place during the period, or are expected to take place in the near future, in the extent to which, or manner in which, an asset is used or is expected to be used. These changes include the asset becoming idle, plans to discontinue or restructure the operation to which an asset belongs, plans to dispose of an asset before the previously expected date**, and reassessing the useful life of an asset as finite rather than indefinite.*
*(g) **evidence is available from internal reporting that indicates that the economic performance of an asset is, or will be, worse than expected.***

Recommendations/Key points

- The AMF recommends considering whether there are indications of impairment due to climate change that require impairment tests to be performed on certain assets or CGUs, in addition to the tests required annually on goodwill and other intangible assets with indefinite useful lives.
- The AMF encourages companies affected to consider the most appropriate way to reflect climate risks and commitments in impairment tests (cash flows, discount rate, growth rate and, more generally, terminal value).

☐ Impairment testing of intangible and tangible assets

In impairment testing and estimating the recoverable amount of assets, when the value-in-use method is used, risks (including those arising from climate change) should be reflected in cash flows or the discount rate. When projecting cash flows, **the standard requires to give greater weight to external evidence.**

Focus on the Standards 3

IAS 36 paragraph 33.a

In measuring value in use an entity shall:

(a) base cash flow projections on reasonable and supportable assumptions that represent management's best estimate of the range of economic conditions that will exist over the remaining useful life of the asset. Greater weight shall be given to external evidence.

IAS 36 paragraph 55

The discount rate (rates) shall be a pre-tax rate (rates) that reflect(s) current market assessments of:

(a) the time value of money; and

(b) the risks specific to the asset for which the future cash flow estimates have not been adjusted.

IAS 36 paragraph 134.d

An entity shall disclose the information required by (a)–(f) for each cash-generating unit (group of units) for which the carrying amount of goodwill or intangible assets with indefinite useful lives allocated to that unit (group of units) is significant in comparison with the entity's total carrying amount of goodwill or intangible assets with indefinite useful lives:

[...]

(d) if the unit's (group of units') recoverable amount is based on value in use:

(i) each key assumption on which management has based its cash flow projections for the period covered by the most recent budgets/forecasts. Key assumptions are those to which the unit's (group of units') recoverable amount is most sensitive.

(ii) a description of management's approach to determining the value(s) assigned to each key assumption, whether those value(s) reflect past experience or, if appropriate, are consistent with external sources of information, and, if not, how and why they differ from past experience or external sources of information.

In this context, it is still important to disclose all the information needed to understand how the scenarios used in the impairment tests have been built from these external sources.

With regard to the revision of cash flows, IAS 36 specifies whether and to what extent certain flows should or should not be taken into account (restructuring, performance improvements).

Focus on the Standards 4

IAS 36 paragraph 44:

Future cash flows shall be estimated for the asset in its current condition. Estimates of future cash flows shall not include estimated future cash inflows or outflows that are expected to arise from:

(a) a future restructuring to which an entity is not yet committed; or

(b) improving or enhancing the asset's performance.

IAS 36 paragraph 45:

Because future cash flows are estimated for the asset in its current condition, value in use does not reflect:

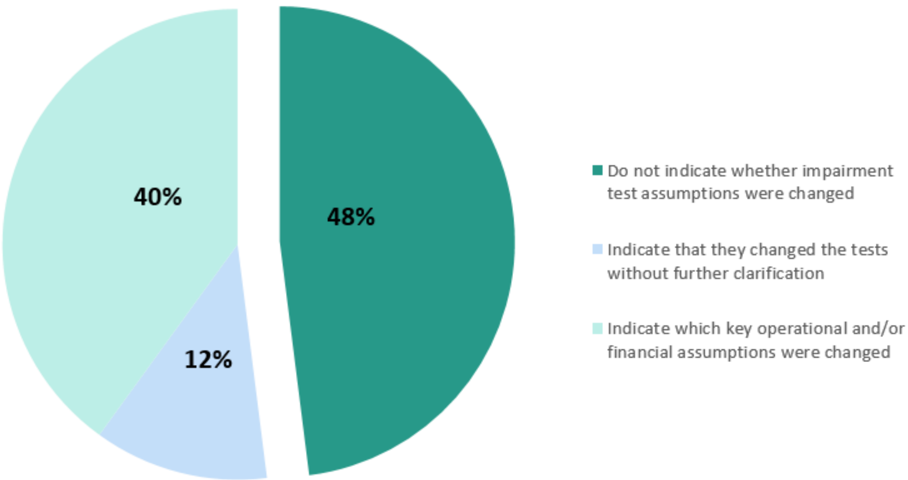
(a) future cash outflows or related cost savings (for example reductions in staff costs) or benefits that are expected to arise from a future restructuring to which an entity is not yet committed; or

(b) future cash outflows that will improve or enhance the asset's performance or the related cash inflows that are expected to arise from such outflows.

When analysing the recoverable amount of assets, several types of more specific information may also be provided, where applicable:

- Information on whether or not climate change will have an impact on the business plan assumptions used;
- Information on whether or not climate change will have an impact on the period beyond the business plan and how these effects have been captured in the flows where applicable;
- Information on whether or not climate change will have an impact on the financial assumptions used (growth and discount rates) and how these assumptions were built.

The main findings of the study on this topic are as follows:



Overall, 52% of issuers indicate that they have taken climate change impacts into account in their impairment tests:

- 40% indicate more specifically which of their assumptions have changed.
- 12% provide no further details on how their impairment tests have been adapted.

Some 33% explicitly state that, where their impairment tests have been adapted, these changes are aligned with their overall commitments.

Based on these findings, the AMF is pleased that some issuers have provided clearer explanations of how they have taken the company's carbon neutrality commitments into account in their impairment tests.

The practices identified include the following for each category of assumptions:

- Operational assumptions

In the sample, 37% of issuers specifically state that climate judgements and assumptions have been incorporated into the cash flow projections.

- In 50% of cases, the impact on cash flows is related to the inclusion of additional capex due to planned investments.
- In 60% of cases, companies indicate that they have factored in an expected slowdown in activity or the discontinuation of a business.

The majority of the companies in this last point are from the automotive and industrial sectors.

In addition, 15% of issuers mentioned assumptions relating to the price of certain raw materials (mainly oil and coal) and explained how these assumptions were derived (internal assessment or source used).

- Financial assumptions

- One issuer states that it has incorporated the energy price scenarios from the Paris Agreement into its growth rate.
- No issuers report changing their discount rates due to the effects of climate change or commitments made.

The analysis of the sample shows that issuers have increased the amount of information provided but that the level of detail on how and why the assumptions were changed is lacking. Few companies mention the temperature increase scenarios they used and the impacts of these (through the risks and opportunities this represents).

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Example 9 – Consideration of climate change in asset impairment testing

Statement that a high carbon price per tonne scenario is included in the assumptions without details of the price and sources used, with specific mention of a scenario that is not aligned with the 2050 carbon neutrality target for Europe.

> The long-term scenarios constructed for electricity prices in countries where the Group does business are consistent with the trajectories of European decarbonisation targets, as defined in the 2015 Paris climate agreement, then the June 2021 "Fit for 55" package, setting a target 55% reduction in greenhouse gas emissions (compared to 1990 levels) by 2030. The scenarios used mainly include high CO_2 prices that can lead to carbon-free electricity production in Europe, and the economy more generally through electrification of uses. At this stage, however, the scenarios used for impairment testing do not include an assumption that the net-zero target for Europe will be attained by 2050.

Source: Electricité de France, URD p. 380

Statement that the expected impacts of aligning with the Paris Agreements have been taken into account in the growth rate (however, the issuer does not provide details of the analysis carried out, nor does it indicate whether this has led to a revision of the growth rate and the extent of this revision).

> The growth rates to infinity used in the tests at December 31, 2021 and 2020 include the impacts of commitments made by the States that are signatories to the Paris Agreement on climate change.

Source: Renault, URD p. 440

Presentation of the energy prices used (oil, coal, CO_2 and gas) and indication of the sources used and other existing scenarios.

Source: Enel, annual financial report p. 85

Consideration of electricity demand scenarios over the 2020-2050 period in determining the growth rate and mention of the fact that the costs of exiting from fossil fuels are taken into account (without any figures).

Note also that the Group took account of the impacts of climate change in the long term. More specifically:

- we consider a long-term growth rate in the estimation of the terminal value that is in line with the change in electricity demand over the 2022-2050 period, based on the specific features of the businesses concerned, adopting certain assumptions concerning the increase in temperature due to climate change and trends connected with the energy transition;
- we assume that the Group will incur the costs provisioned for decommissioning of fossil fuel generation plants in line with the goal of zero direct (Scope 1) and indirect emissions from retail activities (Scope 3);
- we perform a sensitivity analysis of the estimation of the long-term growth rate, as detailed below.

The value in use calculated as described above was found to be greater than the amount recognized on the statement of financial position for all CGUs, with the exception indicated below.

In order to verify the robustness of the value in use of the CGUs, sensitivity analyses were conducted for the main value drivers, in particular WACC, the long-term growth rate and margins, the outcomes of which fully supported that value.

The table below reports the composition of the main goodwill values for the companies within each CGU, along with the discount rates applied and the time horizon over which the expected cash flows have been discounted.

Source: Enel, annual financial report p. 334

Consideration of the CO_2 hedging costs up to 2030 in the long-term assumptions and of the costs of the energy transition after the period covered (no indication of the method used and no figures).

The Group's CO_2 emission rights and energy prices (gas/electricity/coal) are an important element of the cost structure, especially for the Soda Ash business. The Group has hedged a significant portion of its expected use through 2030. The hedges were taken into consideration in the goodwill impairment test performed and the long-term assumptions considered the higher capex required by the energy transition of the business after the hedged period. Considering the significant headroom on the Soda Ash CGU, no sensitivity is provided. See Note F24 Impairment.

The same exercise was done for the other cash generating units and management believes there are no realistic scenarios regarding climate change today, which would lead to an impairment of these assets.

Source: Solvay, annual financial report p. 225

Clarification that the cash flows needed to acquire emission carbon allowances have been taken into account.

arises in the relevant jurisdiction. Additionally, the Company's assumptions for future cash flows include an estimate for costs that the Company expects to incur to acquire emission allowances, which primarily impacts the flat steel operations in the EU and in Canada. The assumption for carbon emission

Source: ArcelorMittal, annual financial report p. 285

Recommendations/Key points

- The AMF also recommends that companies increase the level and detail of the information provided on the main judgements and estimates used and on any changes made to the impairment test by explaining, where applicable, the new assumptions used and the extent of the changes.
- When key assumptions have not been changed even though the company is in a sector that is particularly sensitive to the consequences of climate change, changes in customer behaviour and regulations in this area and/or has made significant commitments to reduce greenhouse gas emissions, the AMF recommends that companies explain why they believe that their exposure to the consequences of climate change is not likely to impact their impairment test assumptions (business plans and/or terminal value).

As part of the explanations given, companies may indicate, for example, whether and how climate change risks have been reflected in the flows (e.g. increased cost of certain supplies and/or operating costs, expenditure to meet the company's decarbonisation targets, climate scenarios used, external sources used, new key assumptions related to energy prices, etc.), the discount rate (e.g. factoring in climate risks using a risk premium) and/or the growth rate or terminal value (e.g. reduced or zero growth beyond a certain period).

☐ Sensitivity analysis

The AMF also reviewed the sensitivity analysis performed by the 27 issuers in the sample. It found that **11% of issuers presented an analysis of the sensitivity of recoverable amounts to a change in assumptions directly related to the effects of climate change.**

Focus on the Standards 5

IAS 36 paragraph 134 (f):

"If a reasonably possible change in a key assumption on which management has based its determination of the unit's (group of units') recoverable amount would cause the unit's (group of units') carrying amount to exceed its recoverable amount:

(i) the amount by which the unit's (group of units') recoverable amount exceeds its carrying amount.

(ii) the value assigned to the key assumption.

(iii) the amount by which the value assigned to the key assumption must change, after incorporating any consequential effects of that change on the other variables used to measure recoverable amount, in order for the unit's (group of units') recoverable amount to be equal to its carrying amount."

There are two types of assumptions to which companies have indicated they are sensitive.

Firstly, there is the **sensitivity to external climate-related assumptions over which issuers have no control**. These are based on scientific or governmental sources and are intended to test the resilience of recoverable values to an increase in climate disruption. For example, if an issuer considers that a 1°C or 2°C increase in temperature above the assumptions used in its test is a reasonable possibility and is able to quantify the expected impact (through the risks and opportunities this represents), it should present these sensitivities to illustrate the financial impact of such a trajectory.

Secondly, **sensitivity to internal assumptions that the issuer is likely to be able to influence**, such as revenue in sectors exposed to climate change or the investment flows required to achieve its carbon neutrality trajectory.

Example 10 – Inclusion of a more adverse global warming scenario in the sensitivity analysis

Presentation of sensitivity to a 2°C increase in temperature and description of the risk categories considered in this scenario (the external source on which the scenario is based is not indicated).

Changes in cash flow forecasts, discount rates and terminal growth rates have the most significant impact on the Group's financial statements. Imerys conducted simulations to measure the impairment that would be recognized as a result of adverse changes to the assumptions retained in the mid case at December 31, 2021. Executive Management deems the various adverse changes used for the sensitivity tests to be reasonably possible in the context of the test. They are as follows: 5.00% decrease in cash flow forecasts (5.00% decrease at December 31, 2020); 1.00% increase in the discount rate (1.00% increase at December 31, 2020); and 1.00% decrease in the terminal growth rate (1.00% decrease at December 31, 2020). Furthermore, Imerys calculated its sensitivity to risks and opportunities arising from climate change with respect to the global warming scenario of 2°C by 2050. The risks taken into account in this model include uninsurable physical risks, energy price risks as well as market risks and opportunities. As summarized in the table below, the sensitivity calculated in the mid case and with respect to climate change did not indicate any impairment.

(€ millions)	Mid case: 5% decrease in cash flow	Mid case: 1% increase in the discount rate	Mid case: 1% decrease in the terminal growth rate	Risks and opportunities arising from climate change
Performance Minerals (PM)				
Performance Minerals, Europe Middle East and Africa (PMEMEA)	None	None	None	None
Performance Minerals Americas (PMA)	None	None	None	None
Performance Minerals, Asia Pacific (PMAPAC) excl. G&C	None	None	None	None
Graphite & Carbon (G&C)	None	None	None	None
High Temperature Materials & Solutions (HTMS)				
High Temperature Solutions (HTS)	None	None	None	None

Source: Imerys, URD p. 219

Sensitivity to scenarios with temperatures higher than the one used by the group to determine electricity demand (the link to the impairment tests and impacts are not clearly mentioned).

In order to investigate the effect of temperature on transition scenarios further and at the same time expand the range of assumptions regarding climate change, a sensitivity analysis was carried out by associating the *Slow Transition* scenario with RCP 8.5, in addition to RCP 4.5. An assumption of a further temperature increase, without changing the energy transition, results in a more limited change in demand equal to -0.8% for Italy and -0.6% for Spain.

Effect of temperature and transition on electricity demand, average over specified period of temperature and transition contributions for different combinations of transition scenarios and climate pathways

		***Paris** to **Slow Transition** RCP 4.5*			***Paris** to **Slow Transition** RCP 8.5*			***Paris** to **Best Place***		
		Transition effect	Temperature effect from RCP 2.6 to RCP 4.5	Total impact	Transition effect	Temperature effect from RCP 2.6 to RCP 8.5	Total impact	Transition effect	Temperature effect from RCP 2.6 to RCP 2.6	Total impact
Italy	2022-2030	-1.3%	0.0%	-1.3%	-1.3%	0%	-1.3%	2.7%	0.0%	2.7%
	2031-2050	-2.1%	0.8%	-1.3%	-2.1%	1.3%	-0.8%	19.0%	0.0%	19.0%
Spain	2022-2030	-0.9%	0.0%	-0.9%	-0.9%	0.0%	-0.9%	3.1%	0.0%	3.1%
	2031-2050	-1.6%	0.5%	-1.1%	-1.6%	0.9%	-0.6%	15.2%	0.0%	15.2%

As a final consideration, however, note that, in the future, greater than forecast electrification of residential heating could change both the sign and the size of the temperature effect in both countries. It is therefore necessary to monitor developments in the share of electrification of heating during the annual review.

Source: Enel, annual financial report p. 94

Example 11 – Consideration of a slowdown or halt in growth in the automotive sector

Sensitivity of recoverable amounts to a more pessimistic scenario in which the terminal value is limited to 20 years with no growth beyond the fifth year (no explanation of the scenario(s) that would lead to such impacts or of their risk of occurrence).

The long-term consequences of climate risk on future cash flows are difficult to predict. They could include, for example, the interruption of operations at plants exposed to natural disaster risks or price increases designed to pass on green taxes decided by governments to encourage the energy transition. They are taken into account in the analyses resulting from the Group's risk mapping. For CGUs or groups of CGUs to which goodwill is allocated, a simulated impairment test has been performed based on an extremely pessimistic scenario. The simulation consisted of determining projected future cash flows over a period of just twenty years and setting the projected growth rate to zero beyond the fifth year. On this basis, an impairment loss of approximately €180 million would be recognized.

Source: Michelin, URD p. 311

Sensitivity of recoverable amounts based on zero terminal growth (no explanation of the scenario(s) that would lead to such impacts or of their risk of occurrence).

At December 31, 2021, no reasonably possible change in the main assumptions used should result in a recoverable value lower than the book value of the assets tested. The recoverable value of the assets tested would remain higher than the book value in the event of the following changes in those assumptions:

- A growth rate to infinity of 0%.
- An after-tax discount rate of 10%.

Source: Renault, URD p. 440

Recommendations/Key points

- As climate risks may also affect sensitivity analyses, the AMF recommends that companies consider the appropriateness of adapting the key assumptions and ranges used in these sensitivity analyses to the risk factors and opportunities taken into account in the impairment tests.

☐ Useful life and impairment of tangible assets

While the effects of climate risk are increasingly included in impairment test assumptions and related sensitivity analyses, some issuers are already experiencing the effects of climate change and have reviewed the useful lives of their tangible assets or performed specific impairment tests. Of the issuers in our sample, 11% mentioned that they had analysed the relevance of revising the useful lives of their tangible assets in light of climate change and one had actually already revised the useful lives of its tangible assets.

For depreciable assets, a revision of the useful life and residual value of an asset is performed if the expectations differ from previous estimates.

Focus on the Standards 6

IAS 16 paragraph 51:

"The residual value and the useful life of an asset shall be reviewed at least at each financial year-end and, if expectations differ from previous estimates, the change(s) shall be accounted for as a change in an accounting estimate in accordance with IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors."

IAS 38 paragraph 104

"The amortisation period and the amortisation method for an intangible asset with a finite useful life shall be reviewed at least at each financial year-end. If the expected useful life of the asset is different from previous estimates, the amortisation period shall be changed accordingly. If there has been a change in the expected pattern of consumption of the future economic benefits embodied in the asset, the amortisation method shall be changed to reflect the changed pattern."

Example 12 – Consideration of climate risks in the closing process and review of the useful life of certain assets

Reference to the review of the useful life of certain physical assets.

In its accounts closing process, VINCI now identifies the main climate risks in order to assess their potential impact on its financial statements. Specific information was provided in the accounts closing instructions and disseminated to all Group subsidiaries and mainly related to:
- reviewing the useful lives of certain assets;
- reviewing margins on completion for certain construction contracts;
- factoring expected impacts on future cash flows into impairment tests for non-current assets;
- assessing risks to determine the amount of contingency provisions (including provisions for major repairs in certain concessions).

The Finance Department works with the Environment Department, which has been allocated specific resources for this purpose, to ensure that the commitments made by the Group are consistent with their recognition in the financial statements.

Source: Vinci, URD p. 284

Issuers with depreciable assets whose remaining life suggests that they may be sensitive to climate-related risks (e.g. physical risk, regulations or corporate transition plans) can be more explicit about how the estimated remaining life of the assets has taken these risks into account.

- Valuation of other assets

  - Fair value

Including the effects of climate risks in the valuation of assets carried at fair value is likely to impact companies in the property sector. All of the companies in our sample state that they consider climate change when calculating the fair value of their investment properties. However, these issuers do not provide details on the impact of climate change and how they take it into account (assumptions used, sources, impacts, etc.).

Focus on the Standards 7

IAS 13 paragraph 11:

"A fair value measurement is for a particular asset or liability. Therefore, when measuring fair value an entity shall take into account the characteristics of the asset or liability if market participants would take those characteristics into account when pricing the asset or liability at the measurement date. Such characteristics include, for example, the following:

(a) the condition and location of the asset; and
(b) restrictions, if any, on the sale or use of the asset."

Where the fair value of an investment property may be affected by environmental restrictions or the environmental characteristics of the building, it is useful for companies to state whether and how the environmental investment strategy for their property portfolio impacts future cash flows (e.g. thermal renovation programme) and fair value.

↗ Other assets

The assessment of climate change impacts is likely to have implications for assets other than tangible and intangible assets. Some issuers, albeit fewer in number, specifically mentioned some of the topics analysed. In the sample, 15% of issuers, mainly credit institutions, mentioned other asset classes affected by climate change (expected credit loss model, see section 3).

One issuer mentioned the impact of the energy transition on the **value of deferred tax assets**. No issuer mentioned the effect or analysis of the impact of climate change on **inventories valuation**.

The level of detail provided on these topics is limited, with most issuers mentioning that the effects of climate risk are taken into account (not significant) without indicating the type of analysis performed.

Example 13 – Consideration of climate risk in the valuation of other assets

Reference to the consideration of climate commitments in the budgets used for the valuation of tax loss carry forwards.

> The Group performs an annual review of its capacity to use tax loss carry-forwards, taking into account the tax system applicable to each tax entity (or tax group) concerned and a realistic forecast of its tax results. For this purpose, the tax results are determined based on the projected performance of the businesses. This performance corresponds to the estimated budget (scenario SG Central) over four years (from 2022 to 2025), extrapolated to 2026, which corresponds to a "normative" year.
>
> These budgets notably take into account the impacts of the commitments to energy and environmental transition and regional development detailed in the Declaration of Non-Financial Performance.

Source: Société Générale, URD p. 474

SECTION 3: OTHER TOPICS

SPECIFIC ACCOUNTING ISSUES RELATED TO CLIMATE CHANGE

- CO_2 emission allowances and other carbon credits

The IFRS standards do not specifically address the accounting of greenhouse gas emission allowances, energy savings certificates (ESCs) and in general the emission rights related to pollutant emission plans or other carbon credits used in voluntary offsetting mechanisms, which results in a potential diversity of accounting treatments. The French Accounting Standards Authority (ANC), for its part, **has published a regulation relating to the recognition of greenhouse gas emission allowances and similar units**,[8] which can be applied in IFRS pending clarification of the accounting treatment.

The study shows that there has been little qualitative improvement in the information provided by companies in terms of carbon accounting. Only **22% of the issuers in the sample provide any quantitative or qualitative information on their CO_2 allowances** (regardless of the nature of the information).

The study highlights that the lack of a specific regulatory framework under IFRS results in a level of detail that varies among issuers. While some issuers specify the accounting line items and valuation and derecognition methods, including details of any impairment and provisions made, others provide only a narrative commentary.

Some 78% of issuers do not provide any information in the financial statements.

However, a growing number of companies are turning to instruments for purchasing carbon credits, contributing to carbon offsetting funds (in addition to free allowances) or, more generally, using voluntary offsetting strategies. The question of how to account for these allowances, which still seems immaterial, will become more significant in the years to come.

The AMF's 2021 report detailed some examples identified. The AMF therefore recommends that issuers refer to it.[9]

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[8] ANC, Regulation 2014-03 of 5 June 2014: https://www.anc.gouv.fr/files/live/sites/anc/files/contributed/ANC/1_Normes_fran%c3%a7aises/Reglements/2014/Reglt2014-03/Reglt%202014-03_Plan%20comptable%20general.pdf

[9] https://www.amf-france.org/sites/default/files/private/2021-12/financial-and-non-financial-overview-of-corporate-carbon-reporting.pdf

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Example 14 – Accounting for greenhouse gas emission allowances

In both examples, information is provided on the accounting treatment adopted for CO_2 allowances, the hedging instruments held if any, and the amounts at stake at the balance sheet and income statement closing date.

Greenhouse gases

Regulatory constraints and management policy

As a combustion plant operator, the Group is exposed to the risks inherent to the Emissions Trading Scheme (EU ETS) introduced by the European Union in 2005. Phase 4 (2021-2030) has just commenced, reducing available allowances (free allowance grants) under the EU Emissions Trading Scheme on a straight-line basis by 2.2% annually.

Under European regulations, the actual emissions position is determined each year and the corresponding rights surrendered. The Group then purchases or sells emission rights, depending on whether actual emissions are greater or lesser than emission rights allocated, under the hedging policy described above.

In addition, China also officially launched a country-wide Emissions Trading Scheme in 2021, focusing initially on electricity producers. The impacts are not material at this stage for the Group.

Accounting treatment adopted by the Group

In the absence of specific IFRS provisions, the Group has adopted the "net liability approach," which involves the recognition of a liability at the period end if actual emissions exceed allowances held, in accordance with IAS 37.

Allowances are managed as a production cost and, in this respect, are recognized in inventories at:

- nil value, when they are received free of charge;
- acquisition cost, if purchased for valuable consideration on the market.

Transactions in these allowances performed on the forward market are generally recognized outside the application scope of IFRS 9 ("own use" exemption), except for certain specific transactions related to the hedging of electricity production activities. See also Note 6.3.1.

The position in **2021** is as follows:

Volume *(in thousands of metric tons)*	As of January 1, 2021 re-presented	Changes in consolidation scope	Granted	Purchased/Sold/ Canceled	Used	As of December 31, 2021
TOTAL	569	(36)	4,290	7,010	(11,556)	277

The inventory of 277 thousand metric tons is equivalent to approximately €22.1 million as of December 31, 2021, based on a spot price of €80 per metric ton.

Source: Veolia, URD p. 434

3.15.1 CO_2 emission allowances

The Group participates in the European Union's Emissions Trading System. The emission allowances received or purchased are recognized as an intangible asset at their price on the transaction date. For emission allowances that are received rather than purchased, a government grant is recognized in liabilities for the same amount. The cost and liability corresponding to actual emissions and the income corresponding to the use of the government grant are accounted for using the price on the grant date.

13.2.4 CO_2 emission allowances

Emission allowances at December 31, 2021 totaled 2.3 million tons (2020: 2.7 million tons) and were carried in the consolidated statement of financial position for an amount of €59 million (2020: €44 million). The liability corresponding to actual emissions in 2021 amounts to 0.7 million tons (2020: 0.7 million tons) representing a value of €22 million (2020: €13 million). It will be offset by the delivery of the acquired allowances.

Source: Michelin, URD p. 320/336

3.15.1 CO_2 emission allowances

The Group is subject to the European Union's CO_2 emission allowance trading system. The allowances allocated or purchased are recorded as intangible assets using the price on the day of the transaction. The consideration for the allowances allocated is recorded as a subsidy in the liabilities of the consolidated statement of financial position. The expense and liability relating to the actual emissions and the income corresponding to the use of the subsidy are recorded at the price on the day the allowances are allocated.

13.2.4 CO_2 emission allowances

The balance of allowances recognised in the consolidated statement of financial position on 31 December 2021 is 2.3 million tonnes (2020: 2.7 million tonnes) with a value of €59 million (2020: €44 million). The liability corresponding to actual emissions in 2021 is 0.7 million tonnes (2020: 0.7 million tonnes) with a value of €22 million (2020: €13 million). This will be settled by the delivery of the acquired allowances.

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Recommendations/Key points

- When emission rights related to pollutant emission plans, including greenhouse gas emission rights and energy saving certificates, are material for the company, the AMF recommends specifying the amounts involved, the accounting treatment adopted, and the impact on the financial statements.
  (Source: Recommendation for the 2021 financial statements)

This topic seems more specifically relevant to companies whose carbon neutrality strategy relies mainly on voluntary offsetting.

☐ Provisions and contingent liabilities related to environmental obligations

Of the issuers in the sample, 37% have set aside provisions for environmental obligations that are linked to legal obligations (mainly decommissioning or clean-up). The analysis did not reveal any cases in which an issuer's carbon neutrality commitments constituted an obligation that should be covered by a provision or a contingent liability within the meaning of IAS 37.

Of the 37% of the sample with provisions for environmental obligations:

- 24% stated that these provisions are the result of a change in legislation (without providing further information), and;
- 13% did not provide any information.

In addition, one issuer mentioned that they had contingent liabilities for ongoing climate litigation (oil sector).

The recognition of climate-related provisions and contingent liabilities is at present almost exclusively covered by issuers in the energy sector (primarily nuclear) and, to a lesser extent, the automotive sector. The scale of the clean-up and decommissioning commitments in these sectors cannot be compared with the significance of these issues in other sectors, which warrants very detailed, specific information. Nevertheless, other companies may be affected by the issue due to current regulations and expected changes to them.

Some 11% of issuers mention unquantified contingent liabilities related, for example, to potential future shutdowns or site closures.

Example 15 – Recognition of an "environmental" provision due to a change in regulations or litigation

Quantified information for provisions recognised as a result of regulations.

At December 31, 2021, other provisions include €98 million of provisions established in application of environmental regulations (€91 million at December 31, 2020). These include provisions to cover expenses relating to end-of-life vehicles and used batteries, and environmental compliance costs for industrial land in the Europe Region and for industrial sites in the Americas and Eurasia Regions.

Source: Renault, URD p. 462

Non-quantified information relating to contingent liabilities linked to ongoing climate litigation, with details of the status of the proceedings.

A class action, launched to seek damages from these three companies, was dismissed by a judgment of the US District court of New York issued on March 15, 2017. The Court of Appeal upheld this judgment on May 4, 2018. In September 2019, a California city initiated another class action against the same parties based on the same legal ground. This class action was dismissed by the US District court of New York on June 8, 2020. This judgment was confirmed on appeal by a ruling issued on December 3, 2021.

DISPUTE RELATING TO CLIMATE

In France, the Corporation was assigned in January 2020 before Nanterre's Court of Justice by certain associations and local communities in order to oblige the Company to complete its Vigilance Plan, by identifying in detail risks relating to a global warming above 1.5 °C, as well as indicating the expected amount of future greenhouse gas emissions related to the Company's activities and its product utilization via third parties. TotalEnergies estimates that it has fulfilled its obligations regarding vigilance duty.

In the United States, two subsidiaries of TotalEnergies were assigned in 2017 by certain communities and associations for their liability in climate change before a California Court. These two subsidiaries, as well as the 34 other companies and professional associations, are contesting the State Court's competence to rule this request. In September 2020, the Attorney General of the State of Delaware launched an indemnity claim based upon climate change against the Corporation, Total Specialties USA (now known as TotalEnergies Marketing USA, Inc.) and about 30 other oil companies before a court of this State. These companies are contesting the competence of such court to rule this request.

Source: TotalEnergies, URD p. 461

Recommendations/Key points

- The AMF recommends that companies whose exposure to climate risks is likely to have a material impact consider the effects of climate change, new regulations and commitments they have made on the amount of provisions (decommissioning, restoration work, new risks), contingent liabilities, deferred taxes and share-based payments, for example.

For example, companies may wish to highlight significant environmental regulatory requirements that have been analysed and that have implications for their performance and financial statements.

Green financing

The AMF paid particular attention to what has become known as "green" financing, the use of which is on the rise. This kind of financing includes several types of instrument, in particular ESG-linked loans, green credit lines, green bonds and sustainability-linked bonds.

The main findings on the take-up of "green" financing or financing linked to sustainable development objectives among the sample of issuers analysed (excluding financial institutions) are as follows:

- 9% of the sample uses ESG-linked loans;
- 34% of the sample has issued green bonds or bonds indexed to sustainability indicators.

In most of the cases analysed, however, the information in the notes to the financial statements does not provide a detailed explanation of the criteria associated with this type of financing.

Example 16 – Issuance of sustainable bonds and their inclusion in financial statements

Detailed information on the characteristics and criteria of bonds linked to non-financial indicators.

In addition, the Group has issued a bond that is convertible into or exchangeable for a new or existing shares (OCEANEs) for EUR 650 million at a rate of 0.00%, maturing in June 2026. The OCEANE has a debt component, assessed on inception date on the basis of the market interest rate applied to an equivalent non-convertible bond, is recognized in non-current financial debts and an optional component recognized in equity. At end of December 2021, the debt component recorded amounts to EUR 651 million and the optional component to EUR 42 million.

The initial conversion and/or exchange ratio of the Bonds is one share per Bond with a nominal value set at EUR 176.44. According to Sustainability-Linked Financing Framework, if the average sustainability performance score (calculated as the arithmetic average of the scores of the three key performance indicators) does not reach a certain level by December 31, 2025, the Group will pay an amount equal to 0.50% of the face value.

The three key performance indicators from the 11 new Schneider Sustainability Impact (SSI) 2021-2025 indicators are the following:

- Climate: Deliver 800 megatons of saved and avoided CO_2 emissions to our customers;
- Equality: Increase gender diversity, from hiring to front-line managers and leadership teams (50/40/30);
- Generation: Train 1 million underprivileged people in energy management.

The detailed rating methodology and approach are presented in the Group's Sustainability-Linked Financing Framework.

For all those transactions, issue premium and issue costs are amortized per the effective interest rate method.

Source: Schneider Electric, URD p. 383

It is appropriate for the issuers concerned to provide an explanation of the characteristics of the products and the corresponding accounting treatment. With regard to the accounting treatment:

- For lenders, it is helpful to indicate whether these loans are measured at fair value or amortised cost, with an explanation of the analysis that determined whether the contractual cash flows relate solely to principal repayments and interest payments on the outstanding principal (the SPPI test under IFRS 9.4.1.2). This topic is currently under discussion at the IASB.
- For borrowers, it is helpful to explain the analysis that determined whether the characteristics related to sustainable development meet the definition of a capitalised derivative and the relevant information about those characteristics.

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Example 17 – Accounting for green financing on the borrower side

Detailed information on the characteristics and criteria of loans linked to non financial indicators.

		Cash movements		Non-cash movements		
(in €m)	12/31/2020	Increase	Decrease	Changes in exchange rates	Other	12/31/2021
of which bank borrowings	347.8	20.4	(34.3)	0.1	(1.8)	332.2
Short-term bank loans	6.5	-	(0.1)	0.5	-	6.9
Overdrafts	1.7	2.2	-	0.2	-	4.1
Total gross debt	356.0	22.6	(34.4)	0.8	(1.8)	343.2
Cash and cash equivalents	209.0	40.0	(32.5)	2.7	-	219.2
• *Term deposits*	*16.6*	*40.0*	*(1.8)*	*0.1*	-	*54.9*
• *Cash at bank*	*192.4*	-	*(30.7)*	*2.6*	-	*164.3*
Other short-term financial receivables [1]	20.3	1.5	(18.8)	-	3.7	6.7
NET CASH POSITION/(NET DEBT POSITION)	**126.7**	**(18.9)**	**16.9**	**(1.9)**	**(5.5)**	**117.3**

(1) Cash investment in the shares of listed companies (see Notes 7 & 14).

There were no restrictions on the use of the cash and cash equivalents held by the Group at December 31, 2021.

In 2021, the Chargeurs group issued a further €20 million subscription in private placement bonds (Euro PP), with a maturity of eight years, as part of the program issued at end-2020, thereby increasing the total amount of this Euro PP financing to €120 million.

The *sustainability-linked* Euro PP incorporates two environmental and social commitments selected from the four pillars on which the Group's CSR strategy is based:

- Reducing work accident frequency;
- Increasing revenue generated by sustainable products.

The following main changes were made to bank financing arrangements during this period:

- the repayment of a €7.5 million short-term bilateral financing facility;
- the €20.1 million amortization of its syndicated loan credit facility.

Source: Chargeurs, URD p. 191

☐ Specific characteristics of financial institutions

The AMF stresses the specific characteristics of financial institutions, which have a key role to play in including climate risk in their investments and lending policies.

Taking the effects of climate risks into account when assessing their clients' expected credit losses is a major challenge.

Of the four banks in the sample, none provided details of the relationship between their clients' exposures and climate risks in the analysis of expected credit losses. The amount of public data available to help with incorporating climate exposures into risk analysis is starting to increase. **Two banks stated that they had taken the potential impact of climate risks into account when estimating their model and post-model adjustments as part of the assessment of expected credit losses.**

Example 18 – Indication that climate risks have been considered in the assessment of expected credit losses

Indication that climate risks have been considered in the assessment of expected credit losses (no detailed indication in the financial statements of the methodology and assumptions used).

Expected credit losses on climate risks have been recorded by certain institutions, in application of general principles defined by the group, and mainly concern physical climate risk. These provisions are made in anticipation of direct losses, by sector or by geographic area, caused by extreme or chronic weather events resulting in an increased risk of default following a cessation or reduction in activity.

The total expected S1/S2 credit losses at December 31, 2021 amounted to €5,133 million and broke down as follows:

in millions of euros	12/31/2021
Central model	**3,621**
including overweight of the pessimistic scenario	*103*
Post-model adjustments	**215**
Complements to the central model	**1,297**
including credit losses due to climate risks	*37*
TOTAL EXPECTED CREDIT LOSSES S1 / S2	**5,133**

Source: BPCE, URD p. 310

As a reminder, several recent reports stress the importance of improving the information provided on how climate risks are reflected in the assessment of expected credit losses, including the second ECB report on climate and environmental risk disclosures published this year[10] and ESMA's report on the application by banks of the expected credit loss provisions (IFRS 7 and IFRS 9).[11]

Recommendations/Key points

- The AMF recommends that financial institutions continue to work on including climate data in their estimates of expected credit losses and increase the information they provide on this subject.

Companies could, for example, indicate whether environmental risks are taken into account in the rating system, by calibrating certain model parameters, building one or more dedicated macroeconomic scenarios or making post-model adjustments. With regard to their work, the information that could be presented is, for example, a breakdown of exposure to climate risk by sector, details on whether or not climate risks are taken into account in the probability of default and/or losses in the event of default.

☐ Other

Of the 15% of issuers that mentioned other elements of the financial statements affected by climate change, one third mentioned the impact on the valuation of **share-based benefit plans** and one issuer referred to the impact on **income/loss at completion**.

[10] https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.ECB_Report_on_climate_and_environmental_disclosures_202203~4ae33f2a70.en.pdf

[11] https://www.esma.europa.eu/sites/default/files/library/esma32-339-169_report_on_the_application_of_the_ifrs_7_and_ifrs_9_requirements_regarding_banks_expected_credit_losses.pdf

Example 19 – Consideration of climate risk in the valuation of share-based payment expenses

Reference to the increase in the weight of non financial objectives in the valuation of share-based payment plans and clarification that this revision has no material impact.

Executive Compensation policy

In stepping up its commitment to carbon neutrality, the Group increased since 2020 the weighting of CSR objectives in the criteria determining long-term executive compensation plans: CSR objectives now determine 20% of amounts paid out under such plans compared to 15% previously, while CO_2 objectives now account for 10% versus 5% previously (see note 6.2).

The consideration of climate change issues did not have a material impact on the judgments made or the key estimates required to prepare the financial statements.

The Group will continue to analyze the potential impacts of future changes in regulations related to climate change and the energy transition as part of its commitment to achieve carbon neutrality by 2050.

Source: Saint-Gobain, URD p. 284

CONCLUSION

This second overview of the effects of climate change on financial statements shows an increase in the information provided on the financial impacts of climate issues, with the vast majority of companies in the sample indicating that these factors are taken into account when preparing their financial statements.

This is a complex and difficult exercise for companies, particularly because of the difficulty in determining what the effects of climate change will be, over what time frame, and therefore how best to capture them in the financial statements.

Given the high expectations of investors and the growth of information in other communication media, companies will continue to reflect on and discuss the subject and develop the information provided in the financial statements accordingly. The assumptions used by companies in their analysis and the uncertainties that may arise are still rarely presented. The use and mention of climate scenarios from external sources (through the risks and opportunities they represent) can help in the analyses.

The information provided depends in part on the materiality of these issues, which varies, and on the extent to which the sector and the company have made progress. The AMF is also aware that the operational procedures and impact of transition trajectories may be difficult to understand, and this gives rise to further uncertainty. The way in which the commitments made by companies are reflected in operational and financial terms in their financial statements is still difficult to understand.

The AMF will continue to monitor the information provided and to assist companies in their deliberations. It emphasises the importance of involving governance bodies and audit committees in analysing the financial effects of climate change on a company’s activities, and of ensuring that the information presented in the financial statements is consistent with the company’s other communications.

ANNEXES

1. ANNEX 1 – SAMPLE

Company	ICB Sector	Source (URD 2021)
Non-financial		
Bouygues	Construction and Materials	Link
CGG	Oil, Gas and Coal	Link
Chargeurs	General Industrials	Link
Eiffage	Construction and Materials	Link
Electricité de France (EDF)	Electricity	Link
Engie	Gas, Water and Multi-utilities	Link
Faurecia	Automobiles and Parts	Link
Gecina	Real Estate	Link
Klépierre	Real Estate	Link
Latécoère	Aerospace and Defence	Link
Legrand	Electronic and Electrical Equipment	Link
Maisons du Monde	Consumer Products and Services	Link
Mersen	Electronic and Electrical Equipment	Link
Michelin	Automobiles and Parts	Link
Plastique du Val de Loire	Construction and Materials	Link
Renault	Automobiles and Parts	Link
Saint-Gobain	Construction and Materials	Link
Schneider Electric	Electronic and Electrical Equipment	Link
TotalEnergies	Oil, Gas and Coal	Link
Unibail	Real Estate	Link
Valeo	Automobiles and Parts	Link
Veolia Environnement	Gas, Water and Multi-utilities	Link
Vinci	Construction and Materials	Link
Financial		
BNP Paribas	Banks	Link
BPCE	Banks	Link
Crédit Agricole S.A.	Banks	Link
Société Générale	Banks	Link

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About the Finance ClimAct

The Finance ClimAct project contributes to implementation of France's National Low-Carbon Strategy and the European Union's Sustainable Finance Action Plan. It aims to develop new tools, methods and knowledge enabling (1) retail investors to take the environmental objectives into consideration in their choice of investments, and (2) financial institutions and their supervisors to take climate issues into consideration in their decision-making process and align financial flows with the energy-climate objectives.

The consortium coordinated by ADEME also includes the Ministry of the Ecological and Solidarity Transition, the Autorité des marchés financiers, the Autorité de Contrôle Prudentiel et de Résolution, 2° Investing Initiative, Institut de l'Economie pour le Climat, Finance for Tomorrow and GreenFlex.

Finance ClimAct is an unprecedented programme with a total budget of 18 million euros and provided with €10 million in funding by the European Commission.

Duration: 2019-2024

About the Autorité des marchés financiers

The AMF is a French independent public authority responsible for ensuring that savings invested in financial products are protected, providing investors with adequate information and supervising the orderly operation of markets.

Avec la contribution du programme LIFE de l'Union Européenne

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