GÖTEBORGS UNIVERSITET
HANDELSHÖGSKOLAN

Key Strategies for Leveraging Sustainable Finance

What strategies and impacts does the operations of financial institutions have in promoting sustainable finance?

GM1032 - Financial Institutions and Markets

Table of contents

1. Introduction

Development of Sustainable Finance in the EU

Over the past decade, sustainable finance has transitioned from being considered as a mere “cherry-on-top” discussion into a cornerstone of the European Union’s economic and policy agenda. This development reflects the growing recognition of the importance of the financial sector in the transitioning into a more sustainable economy and society which is driven both by top-down policymaking and by bottom-up demand from investors. The financial landscape is rapidly changing, by integrating sustainability aspects into one of the core questions in the context of capital allocation and investment decisions.

At the center of this development is the European Green Deal, which manifests the EU’s commitment to achieve climate neutrality by 2050 and sets out clear objectives such as promoting biodiversity and circular economy models. Due to the extensive funding needed to achieve the commitment, the financial sector has been recognized as having a key role in capital allocation.[1] To facilitate this development, the EU has introduced additional and complementary regulations as directives with the purpose of enhancing transparency and comparability. Together, they create a broader framework, shaping a nurturing environment for the promotion of sustainable finance.

The role of financial institutions extends beyond external funding into their day-to-day operations. Many European banks are now setting out internal commitments by setting net-zero targets for direct emissions, using renewable energy, etc. By leading by example, financial institutions can encourage clients, counterparties and competitors to follow. Furthermore, these internal commitments can strengthen reputation and credibility with stakeholders who are becoming increasingly diligent in not just where institutions invest, but also how they conduct their day-to-day business.[2]

Consequently, sustainable finance is no longer to be seen as a complement to or some niche field within what is considered as “traditional finance” (i.e., activities neglecting sustainability aspects). As sustainability has become a core aspect to be considered in decision making it can be seen as becoming the new norm and definition of what we have called “traditional finance”.

---

[1] European Commission, *European Green Deal, COM(2019) 640*. European Union (2019) https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52019DC0640 (Accessed 2025-01-03)

[2] United Nations Environment Programme, *UNEP FI Review 2022 and 2023.* UNEP FI (2023) *https://www.unepfi.org/industries/banking/unep-fi-review-2022-and-2023/* (Accessed 2025-01-03)

2. Methodology

The objective of this paper is to analyze the strategies and impacts of financial institutions in promoting sustainable finance, focusing on their investment portfolios, lending practices, and sustainability initiatives.

To achieve this, three large European financial institutions were selected: ING Group (Netherlands), BNP Paribas (France), and Allianz (Germany). These institutions, comprising two banks and one insurance/asset manager, were chosen based on the following criteria:

1. **Size and Market Influence**: Large, established institutions were prioritized due to their adherence to EU regulatory frameworks (e.g., Green Deal, SFDR) and significant financial strength, which enhances the study's relevance.
2. **ESG Leadership**: Institutions with strong ESG commitments were included to ensure reliable and comprehensive data for performance evaluation.
3. **Geography**: Focusing on European institutions ensures consistency in regulatory exposure, enabling accurate comparisons.
4. **Transparency**: EU-mandated disclosure requirements ensure access to sufficient and high-quality data.
5. **Sectoral Diversity**: Including both banks and an insurance/asset manager broadens the analysis to cover lending, investment banking, insurance underwriting, and asset management, facilitating both intra- and inter-sector comparisons.

Data Collection

The case study relied on a variety of sources, including journal articles, academic papers and institutional reports. The databases utilized included those provided by the University of Gothenburg, such as S&P Capital IQ Pro, and external databases that were not provided by the University such as Sustainalytics and MSCI. Reports such as annual reports, sustainability reports, earnings calls and quarterly reports were also extensively analyzed.

To ensure an efficient and targeted search process on databases, specific keywords were identified and applied, such as "Sustainable Financing," "ESG," and "Banks." The search results were refined using parameters like language (restricted to English) and relevance, with abstracts being reviewed to assess the suitability of each result. This systematic approach ensures that the selected literature directly supports the study's objectives and provides a solid theoretical foundation. Additionally, significant efforts were made to incorporate self-sourced materials, as emphasized by the case assignment requirements. This methodology ensures a balanced and comprehensive review of existing research in the field of sustainable finance.

3. Contextual Background

EU regulatory framework

The EU has introduced a number of regulations and directives that collectively creates an umbrella EU regulatory framework which directly addresses financial markets participants to integrate ESG aspects into their decision making processes.

At the center of the EU regulatory framework is the European Green Deal which establishes the commitment in achieving climate neutrality by 2050 through decoupling economic growth from resource use, reducing greenhouse gas emissions, protecting biodiversity and driving inclusive prosperity.[3] To facilitate the achievement of the European Green Deal, several regulations and directives have been introduced which converge into realizing the objectives of the commitment. A key regulation is the EU Taxonomy which provides a classification system for defining economic activities as "environmentally sustainable".[4] Under the EU Taxonomy, financial institutions are obligated to disclose how financial products, services lending practices aligns with the definitions set out by the regulation. In this sense, the EU Taxonomy serves the function of both a reporting tool by providing clear definitions for reporting purposes as well as guidelines for strategic business development, as new financial products and services can be developed with the regulation as point of departure.

A regulation that is closely tied to the EU Taxonomy, is the Sustainable Finance Disclosure Regulation (SFDR), under which financial market participants are obligated to publicly disclose how sustainability risks are considered and integrated into risk management. While the primary purpose of the EU Taxonomy is to serve as a classification system, the SFDR aims to increase transparency. For example, under the SFDR, for products that claim Taxonomy definition, it must be disclosed what percentage of their underlying investment that meet the Taxonomy criteria. Financial institutions must disclose how they identify, measure and manage sustainability risks that could arise from their operations and their potential impact on their portfolios or individual products.[5] As a complement to the SFDR, the Corporate Sustainability Reporting Directive is a recent EU directive that mandates companies to produce standardized, detailed and audited sustainability reports.[6] While the SFDR operates on a Financial product and firm-wide level, the CSRD operates on a corporate level meaning that the individual institution must produce reports containing extensive and robust ESG metrics. The CSRD therefore ensures that the institutions have sufficient data to fulfill their SFDR obligations. By

---

[3] European Commission, *European Green Deal, COM(2019) 640*. European Union (2019)

[4] European Commission, *Regulation (EU) 2020/852 on the establishment of a framework to facilitate sustainable investment (Taxonomy Regulation).* European Union (2020) https://finance.ec.europa.eu/sustainable-finance/tools-and-standards/eu-taxonomy-sustainable-activities_en (Accessed 2025-01-03)

[5] European Commission, *Regulation (EU) 2019/2088 on sustainability-related disclosures in the financial services sector.* European Union (2019) *https://eur-lex.europa.eu/eli/reg/2019/2088/oj* (Accessed 2025-01-03)

[6] European Commision, *Corporate Sustainability Reporting*. European Union (2022) https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en (Accessed 2025-01-03)

reporting how their activities and to what extent they align with the Taxonomy, it further facilitates transparency and comparability.

In conclusion, the umbrella EU regulatory framework is a developing framework with the European Green Deal as the core. Its purpose is to catalyze development of sustainable by providing guidelines and tools for enhancing transparency and comparability for market actors in order evaluate the performance of financial institutions

Market trends

In addition to regulatory development, there is a notable driving force stemming from increasing demand amongst investors and other market actors which is apparent both in the equity- and credit markets.

The Global Sustainable Investment Alliance (GSIA) reports that by 2022, 38% of all professionally managed assets were sustainable assets corresponding to a CAGR of 13.7% since 2016. This corresponds to $21.9 trillion in assets under management (AUM). The EU is at the forefront with approximately 53% of managed assets being sustainable followed by North America with approximately 25%.[7] An interesting aspect that GSIA highlights is that as the EU regulatory framework is progressing, there are challenges in providing a single consolidated figure for "sustainable assets". For example, the SFDR has led to reclassification of some asset categories. Therefore, year-on-year comparisons are to be considered as proxies. However, the general trend is an upward trajectory with regulatory changes, institutional demand and retail interest as highlighted key drivers.

With focus on the credit market, the Climate Bonds Initiative (CBI) reports that climate bonds reached a cumulative volume of $4.4 trillion in 2023 with a 3% growth YoY in 2023. Europe was the largest source representing 46% of the total 2023 volume. Climate Bonds is a collective term including green bonds, sustainability linked loans etc, but the majority (68%) of the total 2023 volume came from green bonds, corresponding to a 15% YoY Growth. CBI reports that the EU has held a leading position in green bond issuance, amounting to approximately 40-50% of the total annual volume during recent years. It is highlighted that a strong regulatory framework combined with increasing investor demand are primary reasons.[8]

[7] Global Sustainable Investment Alliance, *Global Sustainable Investment Review 2022.* GSI Alliance (2022) https://www.gsi-alliance.org/members-resources/gsir2022/ (Accessed 2025-01-03)

[8] Climate Bonds Initiative, *Market Data 2023.* Climate Bonds Initiative (2023) https://www.climatebonds.net/market/data/ (Accessed 2025-01-03) ;
Climate Bonds Initiative, *Global State of the Market Report 2023.* Climate Bonds Initiative (2023) https://www.climatebonds.net/resources/reports/global-state-market-report-2023 (Accessed 2025-01-03)

The MSCI provides extensive metrics on green bond issuance, sustainability-linked loans (SLLs), and ESG fund inflows in their report *2024 MSCI Sustainability and Climate Trends to Watch*.[9] The strong growth in the ESG theme is once again reoccurring. In the latest reporting period, MSCI reports a double-digit percentage growth YoY in Green Bonds. Europe is highlighted as a leader in green bond issuance corresponding to approximately 40-45% of total volume followed by North America and Asia-Pacific, amounting to approximately equal shares of the remainder. As regards to SSLs, an almost tripling in size is reported for the same period in comparison to a few years ago. Europe accounts for roughly 40% of the total value with energy, industrials, and consumer goods as leading industries. Furthermore, global ESG mutual funds and ETFs collectively amount to $4 trillion in AUM which corresponds to approximately 15-20% of total share. The EU is the largest ESG fund market which stands for roughly 50-55% of global net inflows in the most recent period. MSCI anticipates a sustained growth going forward as regulatory frameworks continue to provide standardized definitions together with increasing interest from market actors as well as internal recognition where ESG integration continues to gain a foothold in business strategy and risk management.

In summary, the ESG market is on an upward trajectory and shows no sign of inversing as regulatory changes are continuously introduced combined with increasing demand and interest both internally within firms as external amongst investors and market actors. Aligning with the regulatory framework may also gain competitive advantages from increased credibility, reputation and confidence.

[9] MSCI, *2024 MSCI Sustainability and Climate Trends to Watch*. MSCI ESG Research LLC (2024) https://www.msci.com/documents/1296102/42241274/2024++MSCI+Sustainability+and+Climate+Trends+to+Watch+Paper+Final+.pdf?3 (Accessed 2025-01-03)

4. Case Studies of Selected Financial Institutions

ING

An Overview of ING Group

ING Group is a Dutch multinational banking and finance company with headquarters in Amsterdam, Netherlands. Established in 1991 through the merger of Nationale-Nederlanden and NMB Postbank Groep, ING has evolved into a leading European bank with a global presence. Today the bank is led by CEO Steven Van Rijswijk.[10] ING is committed to assist society's transition to a low-carbon future through the means it can do best: financing. The bank actively participates in selection of whom to finance. In terms of sustainability, the bank aims to support a transition to a low-carbon economy through its net-zero target by 2050. This will be done through aligning lending and investing portfolios with the Paris Agreement.

The bank integrates sustainability into its strategy and has received strong environmental, social, and governance (ESG) ratings. As of December 2023, Sustainalytics rated ING's management of ESG material risk as 'Strong,' and MSCI reconfirmed ING's ESG rating as 'AA' in July 2023 for the fourth consecutive year.[11]

Investment Portfolios

ING Group has a strong commitment to sustainability through various investment strategies and policies. These policies are aimed at promoting environmental responsibility to support the transition to a low-carbon economy.

ING employs what it calls the ‘Terra-approach’, a plan on how to align its lending portfolio with the climate goals of the Paris Agreement, by focusing on reducing its most carbon-intensive portfolios to a net-zero emissions. This methodology involves steering financial activities toward sectors and clients that contribute to climate resilience and sustainability. By focusing on sectors such as energy, automotive, and real estate, ING aims to facilitate significant reductions in greenhouse gas emissions.[12]

As of late, in September 2024, ING announced plans to cease business with large clients that do not make significant progress in reducing their climate impact by 2026. This policy

[10] ING Group, *ING at a glance.* ING Group (2024) https://www.ing.com/About-us/ING-at-a-glance.htm (Accessed 2025-01-03)

[11] ING Group, *Ratings.* ING Group (2024) https://www.ing.com/Sustainability/Performance-and-reporting/Ratings-2.htm (Accessed 2025-01-03)

[12] ING Group, *Terra approach.* ING Group (2024) https://www.ing.com/Sustainability/Climate-action/Terra-approach.htm (Accessed 2025-01-03)

demonstrates ING's continued commitments to aligning its investment portfolio with the Paris Agreement, and promoting sustainable progress.[13]

Lending Practices

ING has implemented policies to restrict financing in sectors with high environmental impacts. For instance, the bank plans to phase out financing for upstream oil and gas activities by 2040 and has set restrictions on financing coal mining and its use in steelmaking. ING assesses its clients' climate transition plans to ensure they are making adequate progress in reducing their environmental impact. The bank has evaluated approximately 2,000 large clients based on their climate strategies and has set a deadline of 2026 for them to make sufficient progress. Clients failing to meet these standards may face discontinuation of financing.[14] Moreover, ING has already evaluated that around a third of its clients lack adequate disclosure, which implies that ING carefully analyses their clients efforts to contribute towards climate change.[15]

In terms of what the bank offers, ING issues green loans and bonds to finance projects with clear environmental benefits, such as renewable energy initiatives and energy-efficient buildings. These financial products are designed to support clients' sustainability efforts. The bank also provides sustainability-linked loans, where the terms are linked to the client's performance on predefined sustainability targets. This incentivizes clients to improve their environmental, social, and governance (ESG) performance in order to keep the door open for new financing through these green loans and bonds.

Sustainability Initiatives

ING finances sustainable projects through green loans, green bonds, and innovative financing structures like the Sustainability Improvement Loan, which links interest rates to a company's environmental, social, and governance (ESG) performance. This approach incentivizes companies to enhance their sustainability practices.[16] In 2023, ING mobilized €115 billion to support clients' transitions to more sustainable business models, an increase from €101 billion in 2022. The bank aims to grow this figure to €125 billion by 2025.[17] Furthermore, ING announced plans to triple its financing of renewable energy projects to €7.5 billion per annum by 2025, up from a previous target of €2.5 billion set in 2022.[18]

---

[13] Attracta Mooney, *Dutch bank ING to ditch climate laggards as clients*. Financial Times (2024-09-19) https://www.ft.com/content/56529549-ef9a-4cb2-b613-d2ba867a8e56 (Accessed 2025-01-03)
[14] Ibid.
[15] V. Furness & S. Jessop, *ING bank tightens restrictions on oil and gas lending.* Reuters (2024) https://www.reuters.com/sustainability/ing-bank-tightens-restrictions-oil-gas-lending-2024-09-18/ (Accessed 2025-01-03)
[16] ING Group, *Financing change in the world.* ING Group (2024) https://www.ingwb.com/en/sustainable-finance (Accessed 2025-01-04)
[17] ING Group, *2023: ING grows sustainable finance in muted markets.* ING Group (2023) https://www.ingwb.com/en/insights/sustainability/2023-ing-grows-sustainable-finance-in-muted-markets (Accessed 2025-01-04)
[18] ING Group, *ING publishes 2023 annual report.* ING Group (2023) https://www.ing.com/Newsroom/News/Press-releases/ING-publishes-2023-annual-report.htm (Accessed 2025-01-04)

An Overview of BNP Paribas

BNP Paribas is a French multinational universal bank and financial services holding company headquartered in Paris, France. It was founded in 2000 through a merger of Banque Nationale de Paris and Paribas. Today the bank is led by CEO Jean-Laurent Bonnafé.[19] Much like the ING Group, BNP Paribas is also committed to fostering a transition into a low-carbon economy, using the same means as ING to achieve this. Their main goal is to reach a net-zero carbon footprint in their portfolios by 2050 (following the Paris agreement), and intermediate reduce their portfolio footprint of fossil fuels by 80% until 2030.[20]

Investment Portfolios

BNP Paribas includes a similar set of goals as ING to balance their investment portfolios for the future. The bank has set optimistic targets for its portfolio, which it describes as a fraction of investment in fossil fuels, and low-carbon. By 2030, the investment portfolio will consist of 90% low-carbon investments, which will correspond to a -80% financing of upstream Oil and -30% financing of upstream Gas in comparison with September 2022. The bank's entire portfolio is also set to reach a net zero target by 2050, thus aligning itself with the Paris Agreement.[21]

To increase their share in low-carbon investments, BNP Paribas will remain focused on energies such as renewable sources of energy (wind-,solar- and hydropower energy), nuclear energy, bioenergy, and hydrogen.[22]

Lending Practices

In terms of new financing, BNP Paribas aims to achieve its portfolio goals by excluding fossil fuels and including sustainable investments. This will be done by ceasing any new issuing of bonds for companies mainly involved in oil & gas exploration and production.[23] In terms of inclusion, the bank has been a leader in the development of Sustainability-Linked Loans (SLL's). These loans, created first in 2017, are constructed to tie the cost of borrowing for the firm to the achievement of sustainability targets through KPI's. This in terms means that

[19] BNP Paribas, *Company history.* BNP Paribas (2024) https://group.bnpparibas/en/group/about-us/company-history (Accessed 2025-01-06) ;
BNP Paribas, *The General Management and the Executive Committee.* BNP Paribas (2025) https://group.bnpparibas/en/group/our-governance/general-management-and-the-executive-committee (Accessed 2025-01-06)
[20] BNP Paribas, *Transitions.* BNP Paribas (2024) https://group.bnpparibas/en/our-commitments/transitions (Accessed 2025-01-05)
[21] BNP Paribas, *Climate report 2023: Strategy, risks & opportunities, net zero commitments*. BNP Paribas (2023) https://cdn-group.bnpparibas.com/uploads/file/bnp_paribas_2023_climate_report.pdf (Accessed 2025-01-05)
[22] Ibid.
[23] V. Furness, *BNP Paribas' fund arm to exclude new oil and gas bonds.* Reuters (2024-11-27) https://www.reuters.com/business/finance/bnp-paribas-fund-arm-exclude-new-oil-gas-bonds-2024-11-27/ (Accessed 2025-01-05)

companies are encouraged to set and meet ambitious ESG goals. The goals are not just meant for the finance department of the firm to achieve, but the firm as a whole, including the stakeholders that interact with the firm, claims Cécile Moitry, co-head of Sustainable Finance Markets.[24]

Sustainability Initiatives

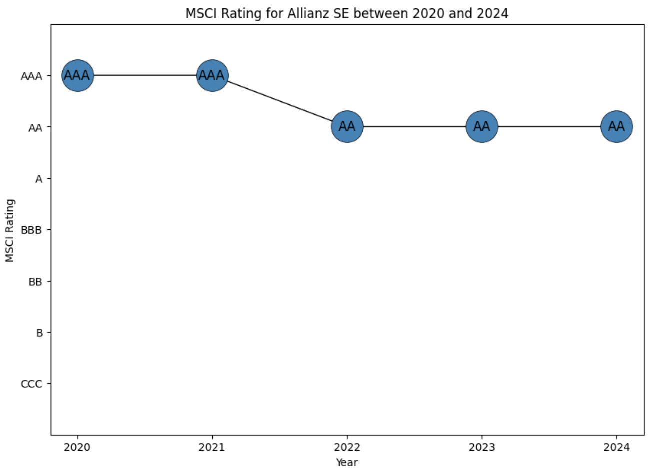
BNP Paribas primary initiative is to reach a net zero carbon emission portfolio by 2050. This will be done through aligning its investments, lending and financing activities to companies who already are, or are seeking to become more low-carbon intensive. In concrete terms, BNP aims to achieve €350bn in sustainable loans and bonds by 2025, €40bn credit exposure in low-carbon production by 2030 (with an €28bn already achieved as of today).[25]

[24] BNP Paribas, *Leading the evolution in sustainability linked loans*. BNP Paribas (2020-09-30) https://cib.bnpparibas/leading-the-evolution-in-sustainability-linked-loans/ (Accessed 2025-01-05)
[25] BNP Paribas, *Transitions.* BNP Paribas (2024)

An Overview of Allianz

Allianz, a multi-national financial services firm headquartered in Munich,[26] is led by Oliver Bäte, a former strategy consultant who served as COO and CFO before becoming CEO.[27] Over the years, Allianz has undergone multiple structural transformations and now operates as Allianz Group under the holding company Allianz SE.[28] Standing out as one of Europe's largest insurers and asset managers, Allianz shows a combined ratio[29] of 93.8 per cent and a solvency ratio[30] of 206 per cent as of 2023.[31] It serves around 125 million customers across 70 countries and has a total business volume of approximately €161 billion.[32] During the same year, it reported an operating profit of close to €15 billion, with around 21 per cent of that profit, equivalent to roughly €3.1 billion derived from its asset management division, despite only accounting for approximately five per cent of the total business volume.[33]

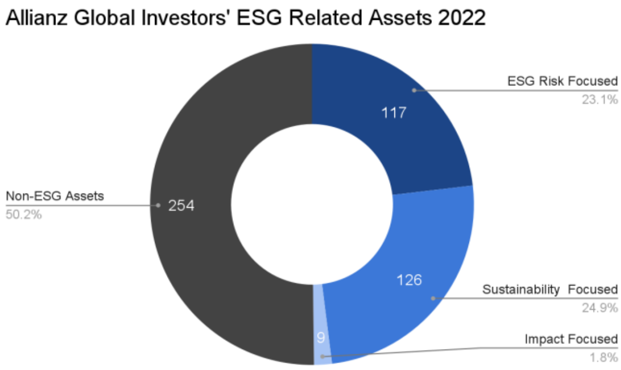
In addition to delivering strong financial performance, Allianz has established a clear leadership position in ESG integration, as evidenced by its MSCI ESG ratings ranging from AAA to AA between 2020 and 2024. In 2023, it secured an AA rating, driven by a robust and ambitious climate strategy that includes a net-zero decarbonisation commitment by 2050 and alignment with the Paris Agreement's 1.5°C target. [34] The MCSI ratings over the period are included here.



[26] Allianz SE, *Allianz contacts globally*. Allianz SE. https://www.allianz.com/en/about-us/company/contact.html (Accessed 2024-12-23).
[27] Allianz SE, *Members of the Board of Management*. Allianz SE. https://www.allianz.com/en/about-us/corporate-management/board-of-management/members.html (Accessed 2024-12-23).
[28] Allianz SE, *Rechtsform*. Allianz SE. https://www.allianz.com/de/ueber-uns/unternehmensfuehrung/corporate-governance/rechtsform.html (Accessed 2024-12-23).
[29] Adam Hayes, *Combined Ratio: Definition, What It Measures, Formula, Examples*. Investopedia. (Updated 2020). https://www.investopedia.com/terms/c/combinedratio.asp (Accessed 2025-01-04).
[30] Adam Hayes, *What Is a Solvency Ratio, and How Is It Calculated?*. Investopedia. (Updated 2024). https://www.investopedia.com/terms/s/solvencyratio.asp (Accessed 2025-01-04).
[31] Allianz SE, *Allianz Fact Sheet*. Allianz SE. (Updated 2024). https://www.allianz.com/content/dam/onemarketing/azcom/Allianz_com/about-us/who-we-are/at-a-glance/en-Allianz-fact-sheet.pdf (Accessed 2024-12-23), page 2.
[32] Ibid.
[33] Ibid.
[34] MSCI, *ESG Ratings and Climate Search Tool*. MSCI. https://www.msci.com/our-solutions/esg-investing/esg-ratings-climate-search-tool/issuer/allianz-se/IID000000002156841 (Accessed 2025-01-06).

Investment Portfolio Analysis

Allianz's asset management portfolio is divided into two main divisions, Allianz Global Investors (Allianz GI)[35] which operates globally and managed approximately €117 billion in ESG-risk-focused assets and €126 billion in sustainability-focused assets in 2022,[36] and PIMCO[37], which focuses on North-America and is therefore excluded in this analysis. The asset division of Allianz GI is included here.



However, despite being a member of the European Commission's Platform on Sustainable Finance, and having contributed to the European Financial Reporting Advisory Group on EU sustainability reporting standards,[38] it is sometimes unclear whether these assets meet the ESG criteria under the EU Sustainable Finance Disclosure Regulation (SFDR) (particularly article 8 and 9), and how these assets are structured.[39,40] A discrepancy that could create reputational and regulatory vulnerabilities, particularly as investor and governmental scrutiny over greenwashing intensifies.[41]

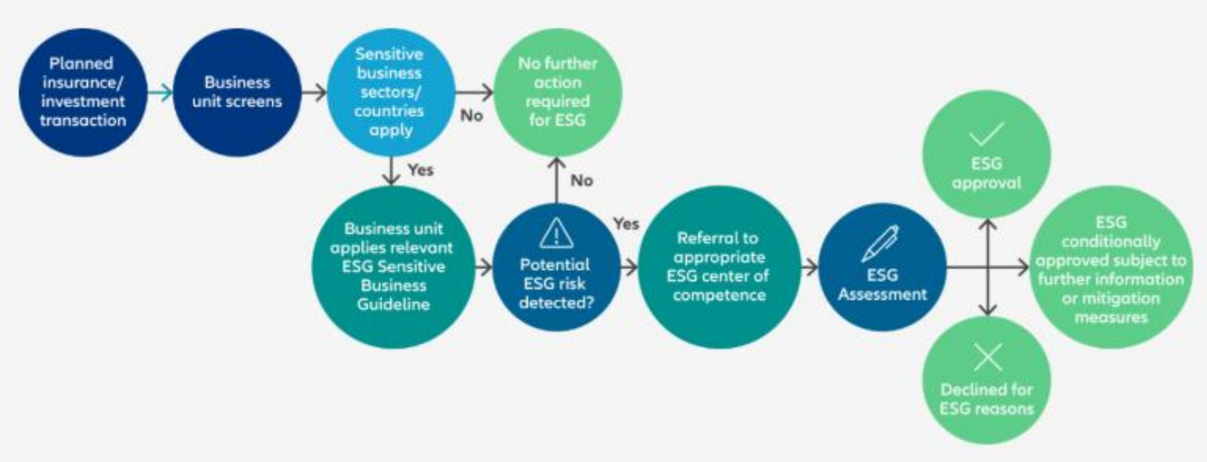
In terms of performance, publically available data disaggregating returns from the ESG-labeled assets versus the traditional holdings within Allianz GI remains limited. Despite the discrepancy in ESG classifications, the relatively large operating profit generated by Allianz GI suggests that from a profitability standpoint, ESG investments are not detracting from the company's broader financial performance. Nevertheless, given the evolving standards for classifying and reporting sustainable assets, Allianz faces the challenge of ensuring that this significant portion of its portfolio meets upcoming regulatory benchmarks to mitigate reputational risks and maintain investor confidence in its sustainable investments. Comparing the changes between 2022 and 2023, many discrepancies remain.

---

[35] Allianz Global Investors, *Our Firm*. Allianz Global Investors. (Updated 2024). https://www.allianzgi.com/en/our-firm (Accessed 2025-01-04).
[36] Allianz Global Investors, *Sustainability and Stewardship Report 2022*. Allianz Global Investors. (Updated 2023). https://www.allianzgi.com/en/our-firm/esg/sustainability-report-2022#e12ec607-1028-4f35-9b74-d71478b021bc_1. (Accesed 2024-12-23).
[37] PIMCO, *About us*. PIMCO. (Updated 2024). https://www.pimco.com/us/en/about-us (Accessed 2025-01-04).
[38] Allianz SE, *Annual Report 2023.* Allianz SE, p. 49.
[39] European Parliament, Council of the European Union, *Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector*. European Parliament. https://eur-lex.europa.eu/eli/reg/2019/2088/oj (Accessed 2024-12-03), article 8 and 9.
[40] Allianz Global Investors, *Sustainability and Stewardship Report 2022,* loc. cit.
[41] Juan Dempere, Ebrahim Alamash, Paulo Mattos, *Unveiling the Truth: Greenwashing in Sustainable Finance*. Frontiers in Sustainability 5, (2024): 1362051. https://doi.org/10.3389/frsus.2024.1362051 (Accessed 2025-01-04).

Lending Practices Analysis

Allianz operates under the purpose "we secure your future", reflecting its ambition to "shape the economy so that a social minimum is provided for all while preserving environmental boundaries".[42] To achieve this, the company targets three key U.N. Sustainable Development Goals (SDGs), namely 8, 13, and 17.[43] Allianz employs two ESG screening methods, one for listed and one for unlisted investments. For unlisted investments, Allianz identifies 13 business areas considered as sensitive.[44] For any new investment in these areas, the proposal must undergo an ESG referral process that assesses potential ESG risks. Below is a flow chart for how the ESG referral process looks.[45]



Listed assets, including sovereign bonds, corporate bonds, and public equity undergo separate scoring procedures based on 35 key ESG metrics provided by MCSI ESG Research. Companies in the bottom ten percent of this scoring are deemed ESG-critical and are subject to close monitoring by Allianz's sustainable investing team. If the rationale for retaining such an asset is weak, the asset manager must either divest or transition to a more suitable issuer. Notably, less than one per cent of Allianz's listed investments were classified under this ESG-critical threshold in 2023.[46] To fully align with its corporate purpose, Allianz has instituted exclusions for certain sectors, companies, and sovereigns. These exclusions typically target entities involved in the manufacture or use of controversial weapons, as well as those operating coal-centric business models. Since 2015, Allianz has refrained from making new commitments to coal-based businesses and has actively pursued divestments in this space, reaching a cumulative total of nearly €8 billion in divested assets as of 2023.[47] Due to the high solvency ratio, it is also reasonable that Allianz would be able to undertake these kinds of investment initiatives without overexposing themselves to financial risk related to their investments.

[42] Allianz SE, *Annual Report 2023,* op. cit., page 45.
[43] United Nations, *The 17 Goals*. United Nations. https://sdgs.un.org/goals (Accessed 2025-01-07).
[44] Allianz SE, *ESG Approach*. Allianz SE. https://www.allianz.com/en/sustainability/sustainability-hub/sustainability-at-allianz/our-approach-to-esg/esg-approach.html (Accessed 2025-01-07).
[45] Ibid.
[46] Allianz SE, *Sustainability Report 2023*. Allianz SE, page 33-34.
[47] Allianz SE, *Sustainability Report 2023*, op. cit., page 36.

Sustainability Initiatives Analysis

Allianz has adopted a comprehensive suite of sustainability initiatives to reduce its environmental footprint, enhance long-term resilience, and align with evolving stakeholder expectations. One of the most prominent initiatives is its net-zero transition plan. The company aims to achieve net-zero emissions from its proprietary investments, property and casualty insurance business, and its own business operations by 2050. Midway targets are also set for 2030 such as halving its investment portfolio greenhouse gas emissions.[48] In the 2023 sustainability report, Allianz further details an extensive climate-risk contingency plan that includes dual-sided balance-sheet stress tests linked to NGFS/IPCC scenarios. Projected market-value impacts over a 5–20 year horizon range from approximately -2.7 per cent under a "below 2°C" scenario to -13.6 per cent in a "delayed transition" scenario, highlighting the financial downside of insufficient decarbonisation progress. Below is the "estimated maximum adverse cumulative market value balance sheet impacts in NGFS/IPCC scenarios relative to a baseline scenario without climate change" which summarises the outcomes of the stress test.[49] This commitment shows that, despite potential areas for improvement in ESG financial

Scenario	Long-term 5–20 y
Net Zero 2050	(2.8)
Below 2°C	(2.7)
Delayed Transition	(13.6)
Nationally Determined Contributions	(5.2)
Current Policies	(5.5)

reporting, Allianz is determined to drive a long-term transition toward sustainability and position itself as a leader in the financial services industry.

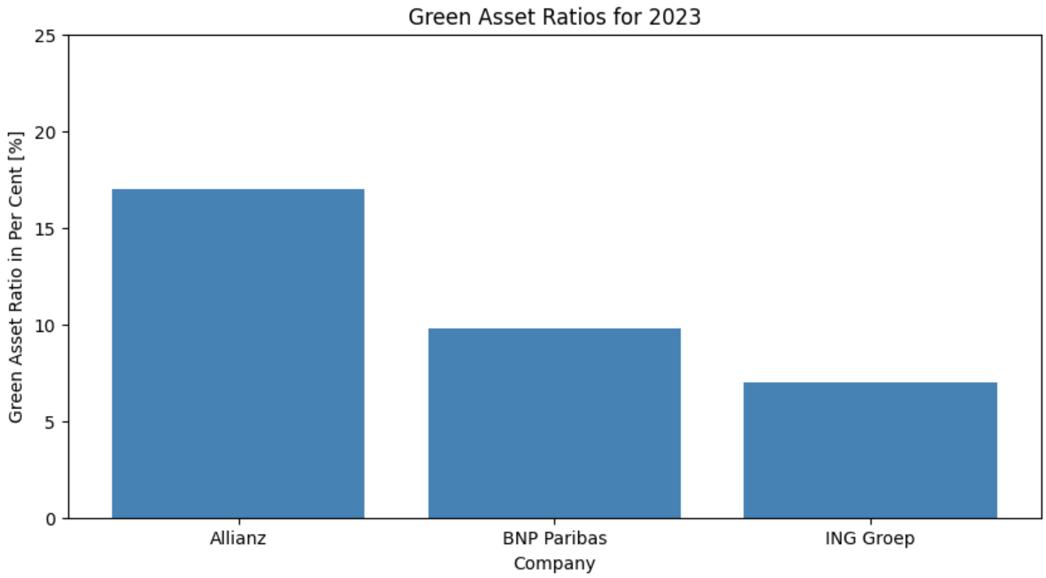
[48] Allianz SE, *Allianz Announces First Net-zero Transition Plan with 2030 Intermediate Targets for Core Business Segments*. Allianz SE. https://www.allianz.com/en/mediacenter/news/commitment/environment/230907_Allianz-announces-first-net-zero-transition-plan-with-2030-intermediate-targets-for-core-business-segments.html (Accessed 2025-01-07).
[49] Allianz SE, *Sustainability Report 2023*, op. cit., page 73.

Comparative Analysis

To assess and compare the sustainability practices of Allianz, BNP Paribas and ING, we employ a set of KPIs that provide insight into their investment portfolios, lending practices and sustainability initiatives. The selected five KPIs are *Green Asset Ratio (GAR%)* , *MSCI ESG Ratings, Reduction in Total Greenhouse Gas (GHG) Emissions, Tonnes of CO_2 Equivalent per Million Dollars ($mm)* and *ESG Risk Ratings* which will enable a comprehensive evaluation of their contributions to a low-carbon economy.

Green Asset Ratio (GAR%)

To assess how banks incorporate sustainability into their operations, we used the Green Asset Ratio (GAR), a metric that reflects the percentage of investments directed toward sustainable or ESG-focused assets[50]. As of 2023, Allianz demonstrated a strong focus on sustainable investments with €117 billion allocated to ESG-risk-focused assets and €126 billion in sustainability-focused assets. Their reporting GAR is 23.16% during 2023. BNP Paribas aims to achieve 90% low-carbon investments by 2030, and during 2023 achieved a GAR of 9.8%[51]. For ING Group, through its Terra approach, ING has prioritized sectors like energy, automotive, and real estate to reduce its portfolio's carbon intensity. ING's 2023 GAR% stands at 7%[52].



[50] Volker Brühl, *The Green Asset Ratio (GAR): A New Key Performance Indicator for Credit Institutions*, *Eurasian Economic Review*, 13 (2023), 57–83 https://doi.org/10.1007/s40822-023-00224-0 [accessed 6 January 2025]

[51] BNP Paribas, Sustainable Finance: Follow Our Progress in Figures.

BNP Paribas, *Sustainable Finance: Follow Our Progress in Figures* https://group.bnpparibas/en/our-commitments/sustainable-finance-follow-our-progress-in-figures [accessed 6 January 2025].

[52] ING Group, *2023 Climate Report*, ING Groep NV, 2023. p. 337

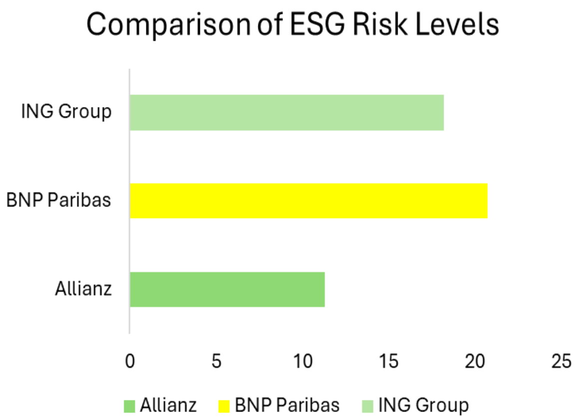
MSCI ESG Ratings

MSCI ESG Ratings are a key benchmark for evaluating how well companies manage ESG risks and opportunities. The rating ranges from CCC (poor) to AAA (leader)[53]. All three institutions, Allianz, BNP Paribas, and ING maintain an AA rating, indicating strong ESG performance, which highlights their effective integration of ESG principles into their operations and risk management practices.

MSCI	Rank
Allianz	AA
BNP	AA
ING	AA

ESG Risk Ratings

The ESG Risk Ratings, provided by Sustainalytics, measure the level of unmanaged ESG risks faced by each institution. Lower scores indicate better risk management and lower exposure to ESG-related issues. Allianz leads with an ESG risk score of 11.3 (Low Risk), highlighting its robust performance in mitigating ESG risks. ING Group follows with a score of 18.2 (Low Risk), reflecting a solid ESG management framework that aligns with its sustainability goals. BNP Paribas, with a score of 20.7 (Medium Risk), indicates room for improvement in addressing ESG challenges compared to Allianz and ING[54].



Reduction in Total GHG Emissions

The commitment of Allianz, ING Group and BNP Paribas to reducing their environmental impact is evident through measurable reductions in GHG emissions and improvements in the carbon efficiency of their portfolios comparing 2022 with 2023.

ING Group has a 13.3% reduction, reflecting its proactive approach to aligning financing with climate goals. This includes stringent policies, such as restricting funding for coal and upstream oil and gas activities[55]. Allianz achieved an 11.3% reduction, driven by the application of stringent ESG criteria in its lending practices and the exclusion of high-carbon sectors, such as coal-based businesses[56]. BNP Paribas reported a 10.58% reduction, consistent with its long-

[53] MSCI.. *MSCI ESG Ratings Methodology*. p. 5

[54] Sustainalytics, *Know Your ESG Score* https://www.sustainalytics.com/corporate-solutions/know-your-esg-score [accessed 6 January 2025].

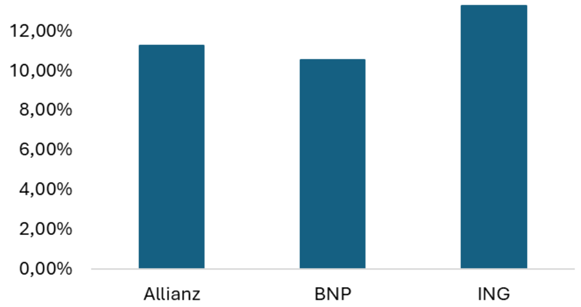
[55] ING Group, *2023 Climate Report*, ING Groep NV, 2023. p. 43

[56] Allianz Group, *Sustainability Report 2023*, Allianz SE, 2023, p. 61

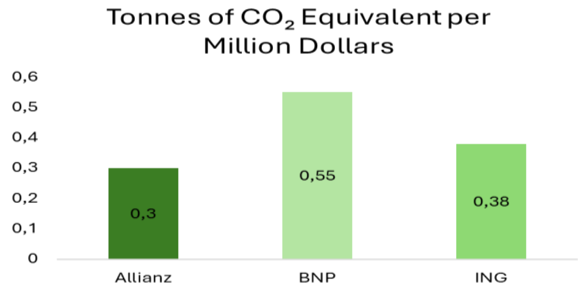
term goal of achieving a net-zero carbon portfolio by 2050. This was supported by increased investments in renewable energy and hydrogen technologies[57].

Carbon Efficiency (Tonnes of CO_2 Equivalent/$mm)

To evaluate environmental efficiency, the carbon intensity of each institution's portfolio is assessed using tonnes of CO_2 equivalent per million dollars ($mm):



Allianz emerged as the most efficient, with 0.3 tCO_2e/$mm, showcasing its significant progress in aligning its financial activities with low-carbon objectives. ING Group recorded 0.38 tCO_2e/$mm, reflecting its focus on directing financial activities toward climate-resilient sectors such as renewable energy and energy-efficient projects. BNP Paribas reported 0.55 tCO_2e/$mm, indicating that while progress is being made, there remains room for improvements[58].



[57] BNP Paribas Asset Management, *Sustainability Report 2023*, BNP Paribas, 2023, p. 54
[58] S&P Capital IQ, *Sustainability Home* https://www-capitaliq-spglobal-com.ezproxy.ub.gu.se/web/client?auth=inherit#sustainability/sustainabilityHome [accessed 7 January 2025].

5. Key Strategies for Leveraging Sustainable Finance

Strengthened ESG Integration in Investment Portfolios

To strengthen ESG integration in their investment portfolios, Allianz, BNP Paribas and ING Group can adopt targeted strategies to align more rigorously with the EU Taxonomy.

Focus Areas	ALLIANZ	BNP	ING Group
4.1.1 ESG Integration	€37bn in climate solutions by 2029; lacks taxonomy-aligned % disclosure	90% of funds under SFDR 8/9; improve taxonomy transparency	Net-zero by 2050 via Terra approach; needs taxonomy-aligned % reporting
4.1.2 SFDR Expansion	Strong ESG focus; expand Article 9 funds and improve AUM transparency	€281.5bn in SFDR 8/9; grow Article 9 and thematic funds	Expand Article 9 products and improve AUM clarity; align with SDGs

Encouraging Rigorous Taxonomy Alignment

Allianz has committed to investing €37 billion in climate solutions by 2029, focusing on renewable energy, green mobility, and sustainable forestry[59]. However, the company should consider disclosing explicit percentages of taxonomy-aligned assets to enhance transparency and regulatory compliance[60].

BNP Paribas has 90% of funds classified under SFDR Article 8 and 9, amounting to €281.5bn[61]. However, in order for them to enhance transparency and regulatory compliance, BNP Paribas could enhance transparency by disclosing the specific percentage of EU Taxonomy-aligned assets within its portfolios. This would provide greater clarity on the alignment of these funds with EU sustainability criteria and reinforce their leadership in sustainable finance[62].

ING Group focuses heavily on steering its portfolio toward net-zero alignment target by 2050 using its Terra approach, which incorporates science-based sector-specific pathways for

---

[59] Allianz Group, *Sustainability Report 2023*, Allianz SE, 2023, p. 7

[60] European Commission. *Sustainable Finance: FAQ on Taxonomy Article 8 Reporting for Eligible Activities and Assets*. p. 10

[61] BNP Paribas Asset Management, *Sustainability Report 2023*, BNP Paribas, 2023, p. 4

[62] European Commission. *EU Taxonomy for Sustainable Activities*

decarbonization[63]. To encourage rigorous taxonomy alignment, ING could benefit from reporting the proportion of taxonomy-aligned assets within its total portfolio[64].

Expanding SFDR Article 8 and 9 Product Offerings

Allianz has demonstrated a strong commitment to sustainability, emphasizing climate-related investments and integrating ESG principles into its asset management strategies[65]. Allianz Global Investors has over 200 sustainable funds classified under SFDR Article 8 or 9, accounting for 61% of its total mutual fund assets under management (AUM)[66]. *Recommendations 1*, develop new Article 9 Funds by Focus on renewable energy, circular economy, and biodiversity preservation. *Recommendation 2*, improve transparency by clearly disclose AUM under Articles 8 and 9 to align with investor and regulatory expectations[67].

BNP Paribas demonstrates strong leadership with 90% of its European open-ended funds classified under SFDR Article 8 or 9[68]. However, there is potential for growth by increasing the share of Article 9 funds, which have a clear sustainable investment objective, and diversifying product offerings aligned with specific Sustainable Development Goals (SDGs).

Recommendation 1 is to Increase Article 9 fund offerings to meet rising investor demand for impact-focused products. *Recommendation 2* is to develop thematic funds targeting renewable energy, biodiversity, or social equity[69].

ING Group showcases sustainability through its Sustainability Improvement Loans (SIL)[70] and Terra approach[71] but provides limited details on its SFDR Article 8 and 9 products. Expanding these offerings could strengthen its competitive position.

Recommendation 1 ING should focus on developing Article 9 funds targeting renewable energy and biodiversity, increasing transparency on assets under management (AUM) classified under Articles 8 and 9[72]. *Recommendation 2* creating thematic funds aligned with SDGs.

---

63 ING Group, *2023 Climate Report*, ING Groep NV, 2023, p. 47
64 European Commission. *Sustainable Finance: FAQ on Taxonomy Article 8 Reporting for Eligible Activities and Assets*. p. 10
65 Allianz Group, *Sustainability Report 2023*, Allianz SE, 2023, p. 54
66 Allianz Global Investors. *AllianzGI publishes its Sustainability and Stewardship Report 2023*.
67 Reuters. *EU regulators propose shake-up of sustainable investment labels*.
68 BNP Paribas Asset Management, *Sustainability Report 2023*, BNP Paribas, 2023, p. 4
69 Karen Wendt, "Product Innovation in the Financial Industry in Response to the EU Action Plan and Green Deal," pp. 123–134
70 ING Group, *2023 Annual Report*, ING Groep N.V., 2023, p. 332
71 ING Group, *2023 Climate Report*, ING Groep NV, 2023, p. 47

72 Reuters. *EU regulators propose shake-up of sustainable investment labels*.

Refined Sustainable Lending Practices and Incentives

To enhance sustainable lending practices, Allianz, BNP Paribas and ING Group should align more closely with EU climate goals. This involves implementing robust sector-specific policies, phasing out fossil fuel financing on a defined timeline, encouraging sustainability-linked loans with EU Taxonomy-aligned KPIs and integrating ECB climate stress test scenarios into credit risk models.

Phasing Out Fossil Fuel Financing

Allianz incorporates sustainability into its underwriting and investment processes, leveraging science-based targets to align its portfolio with net-zero ambitions by 2050. Allianz has yet to set a clear timeline for completely phasing out fossil fuel financing[73]. By establishing time-bound exit targets across all fossil fuel sectors would enhance its commitment to the Paris Agreement and align better with EU climate objectives[74].

BNP Paribas has pledged to end coal financing by 2030 and is actively shifting funds from high-emission industries to low-carbon solutions by supporting low-carbon transition projects and initiating targeted actions for other fossil fuels[75]. Expanding policies to phase out all fossil fuels, supported by a roadmap with measurable milestones, would further strengthen BNP Paribas's alignment with a sustainable economy [76].

ING is progressively reducing its fossil fuel exposure. By 2026, it will no longer finance utilities clients deriving more than 5% of their energy from coal unless funds are allocated to non-coal power projects[77]. The Terra approach guides its alignment with science-based pathways to achieve net-zero targets. ING could adopt more specific phase-out targets for all fossil fuels within its lending portfolio to solidify its leadership in fostering a low-carbon economy[78].

Sustainability-Linked Loan Structures

Allianz, BNP Paribas and ING Group are actively engaging in sustainability-linked loan offerings to promote environmental objectives. Alianz contributes to defining sustainable investments under the EU Taxonomy framework, aiming to steer capital toward environmentally sustainable projects[79]. BNP Paribas has been instrumental in developing and promoting the Sustainability Linked Loan Principles, which align with the EU Taxonomy

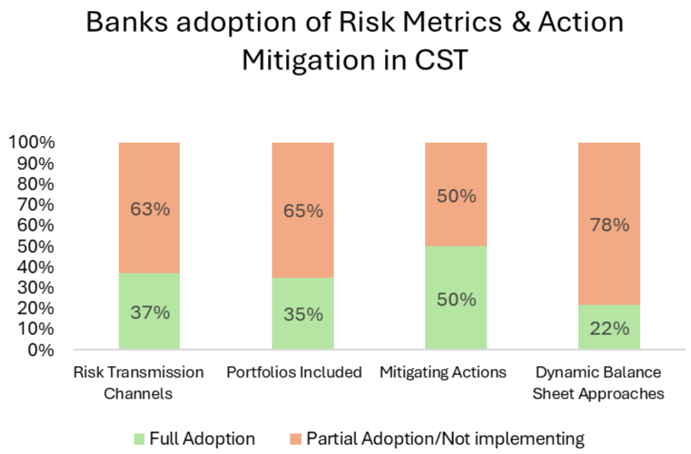
[73] Allianz Group, *Sustainability Report 2023*, Allianz SE, 2023. p. 31
[74] European Commission. *Delivering the European Green Deal*.
[75] BNP Paribas. *Integrated Report 2023*. p. 38
[76] International Institute for Sustainable Development*, Transitioning Away From Oil and Gas: A production phase-out primer.* IISD (2024) https://www.iisd.org/system/files/2024-05/transitioning-away-from-oil-gas.pdf *(Accessed: 4 January 2025). p. 21*
[77] ING Group, *2023 Climate Report*, ING Groep NV, 2023, p. 24
[78] ESG Today. *ING stops financing for companies developing new oil and gas projects*.
[79] *Allianz. Allianz contributes to defining sustainable investments under the EU Taxonomy framework*

standards to ensure transparency and credibility in sustainable finance[80]. ING's Sustainability Improvement Loans connect interest rates to borrowers ESG performance, showcasing its commitment to sustainable finance. By refining these products with more precise KPIs aligned to EU Taxonomy criteria, ING could amplify their impact, driving more robust environmental outcomes[81].

Integrating Climate Stress Testing (CST)

Integrating advanced climate stress test scenarios, such as those developed by the European Central Bank (ECB), into credit risk models could significantly enhance the risk management frameworks of Allianz, BNP Paribas and ING Group. While BNP Paribas already incorporates ESG risks into its credit assessments and ING employs NGFS climate scenarios, closer alignment with ECB guidelines would provide greater depth, sophistication, and resilience to their methodologies.

Moreover, many banks include only one or two balance sheet climate risk transmission channels, such as credit or market risks, in their frameworks (37%) with only 35% incorporating one to three portfolios, such as corporate loans or retail household loans. Half of these banks lack mitigating actions, such as hedging with financial derivatives, and just 22% are applying or considering a dynamic balance sheet approach to model both transition and physical risks.[82] Enhancing these practices would improve their ability to manage climate-related risks effectively and advance their broader sustainability objectives.



[80] BNP Paribas. *Sustainability-Linked Loan Principles. p. 5*
[81] ING. *Sustainability-Linked Loans*
[82] *European Central Bank. 2022 Climate Risk Stress Test Report. p. 22*

6. Discussion

A key challenge in sustainable reporting is the inconsistency across institutions. Despite regulatory efforts like SFDR and CSRD to standardize practices, varying interpretations and implementations lead to discrepancies. Misreporting or selective disclosure of sustainability metrics can mislead stakeholders about the actual impact of investments, undermining trust and confidence in sustainable finance. Such inconsistencies also hinder accurate benchmarking, as banks and institutions may not utilize comparable variables.

Additionally, comparing ESG performance across companies is difficult due to differences in applied metrics and methodologies, such as those for carbon footprints, diversity ratios, or governance scores. This lack of standardization complicates investor decisions by limiting the ability to make fair comparisons. While EU regulations offer a framework, widespread adoption and refinement are essential to enhance transparency, reliability and comparability in sustainable finance.

7. Conclusion

In concluding remarks, this paper highlights the pivotal role of financial institutions within the European Union in advancing sustainable finance under a robust and continuously evolving regulatory framework. The findings presented in this paper show that Allianz, BNP Paribas, and ING Group are not only directly responding to EU policies such as the European Green Deal, the EU Taxonomy, and the SFDR, but they are also driving innovations to meet the ambitious climate and sustainability goals. This reflects their dual responsibilities, where on the one hand, they are tending to external investments that mitigate climate impacts, and on the other, they are strengthening internal commitments to sustainability. Together, these efforts demonstrate their capacity to shape the future of sustainable finance while setting standards for the broader financial sector.

The strategies of enhanced ESG integration in investment portfolios, improved sustainable lending practices, and comprehensive corporate sustainability initiatives demonstrate a pragmatic alignment with EU policy goals and evolving market expectations. By attentively aligning with taxonomy criteria, expanding SFDR Article 8 and 9 product offerings, and prioritizing transparent reporting, these institutions can significantly strengthen their market leadership and credibility. Furthermore, refining lending practices to focus on sustainability-linked incentives ensures that financial institutions contribute meaningfully to the European Union's transition toward a net-zero economy. These practices not only reinforce regulatory compliance but also position financial institutions to address stakeholder expectations, mitigate risks of greenwashing, and adapt to competitive pressures in the ESG investment landscape.

The research also underscores the importance of continuous improvement and innovation in sustainable finance. The rapidly changing regulatory environment and the increasing materiality of climate risks demand proactive responses from financial institutions. To maintain their leadership positions, Allianz, BNP Paribas, and ING Group must deepen their stakeholder engagement, enhance the transparency and accuracy of ESG data reporting, and align their strategies with emerging EU standards. These actions will not only mitigate reputational and regulatory risks but also ensure long-term profitability and resilience. For example, investments in green and transition finance products, science-based net-zero targets, and advanced risk assessment models will enable financial institutions to stay ahead of the dynamics in the evolving market and climate-related challenges.

Ultimately, the transformative potential of sustainable finance lies in its ability to bridge policy ambitions and market realities. By serving as a critical link between regulatory frameworks and capital allocation, financial institutions have the unique opportunity to drive systemic change while generating economic and societal value. Through the attentive execution of these strategies, institutions like Allianz, BNP Paribas, and ING Group can solidify their roles as enablers of a sustainable future. In doing so, they will enhance their competitiveness and adaptability in an increasingly ESG-conscious global landscape while fostering the trust of regulators, investors, and broader society.

References

Adam Hayes, 'Combined Ratio: Definition, What It Measures, Formula, Examples', *Investopedia*, updated 2020. Available at: https://www.investopedia.com/terms/c/combinedratio.asp (Accessed: 4 January 2025).

Adam Hayes, 'What Is a Solvency Ratio, and How Is It Calculated?', *Investopedia*, updated 2024. Available at: https://www.investopedia.com/terms/s/solvencyratio.asp (Accessed: 4 January 2025).

Allianz, 'Allianz contributes to defining sustainable investments under the EU Taxonomy framework'. Available at: https://www.allianz.com/en/mediacenter/news/commitment/environment/220727_Allianz-contributes-to-defining-sustainable-investments-under-the-EU-Taxonomy-framework.html (Accessed: 4 January 2025).

Allianz Global Investors, *AllianzGI publishes its Sustainability and Stewardship Report 2023*. Available at: https://www.allianzgi.com/en/press-centre/media/press-releases/20240425-allianzgi-publishes-its-sustainability-and-stewardship-report-2023 (Accessed: 5 January 2025).

Allianz Global Investors, *Our Firm*. Updated 2024. Available at: https://www.allianzgi.com/en/our-firm (Accessed: 4 January 2025).

Allianz Global Investors, *Sustainability and Stewardship Report 2022*. Updated 2023. Available at: https://www.allianzgi.com/en/our-firm/esg/sustainability-report-2022#e12ec607-1028-4f35-9b74-d71478b021bc_1 (Accessed: 23 December 2024).

Allianz Group, *Sustainability Report 2023*. Allianz SE, 2023. Available at: https://www.allianz.com/content/dam/onemarketing/azcom/Allianz_com/sustainability/documents/Allianz_Group_Sustainability_Report_2023-web.pdf (Accessed: 4 January 2025).

Allianz SE, 'Allianz Announces First Net-zero Transition Plan with 2030 Intermediate Targets for Core Business Segments'. Available at: https://www.allianz.com/en/mediacenter/news/commitment/environment/230907_Allianz-announces-first-net-zero-transition-plan-with-2030-intermediate-targets-for-core-business-segments.html (Accessed: 7 January 2025).

Allianz SE, 'Allianz Contacts Globally'. Available at: https://www.allianz.com/en/about-us/company/contact.html (Accessed: 23 December 2024).

Allianz SE, *Allianz Fact Sheet*. Updated 2024. Available at: https://www.allianz.com/content/dam/onemarketing/azcom/Allianz_com/about-us/who-we-are/at-a-glance/en-Allianz-fact-sheet.pdf (Accessed: 23 December 2024), p. 2.

Allianz SE, 'ESG Approach'. Available at: https://www.allianz.com/en/sustainability/sustainability-hub/sustainability-at-allianz/our-approach-to-esg/esg-approach.html (Accessed: 7 January 2025).

Allianz SE, 'Members of the Board of Management'. Available at: https://www.allianz.com/en/about-us/corporate-management/board-of-management/members.html (Accessed: 23 December 2024).

Allianz SE, 'Rechtsform'. Available at: https://www.allianz.com/de/ueber-uns/unternehmensfuehrung/corporate-governance/rechtsform.html (Accessed: 23 December 2024).

Attracta Mooney, 'Dutch Bank ING to Ditch Climate Laggards as Clients', *Financial Times*, 19 September 2024. Available at: https://www.ft.com/content/56529549-ef9a-4cb2-b613-d2ba867a8e56 (Accessed: 3 January 2025).

BNP Paribas Asset Management, *Sustainability Report 2023*. BNP Paribas, 2023. Available at: https://docfinder.bnpparibas-am.com/api/files/2818EAAE-D3CF-4482-A3BA-A2EA898AFD0D (Accessed: 4 January 2025).

BNP Paribas, *Climate Report 2023: Strategy, Risks & Opportunities, Net Zero Commitments*. BNP Paribas, 2023. Available at: https://cdn-group.bnpparibas.com/uploads/file/bnp_paribas_2023_climate_report.pdf (Accessed: 5 January 2025).

BNP Paribas, *Company History*. BNP Paribas, 2024. Available at: https://group.bnpparibas/en/group/about-us/company-history (Accessed: 6 January 2025).

BNP Paribas, 'Leading the Evolution in Sustainability Linked Loans'. 30 September 2020. Available at: https://cib.bnpparibas/leading-the-evolution-in-sustainability-linked-loans/ (Accessed: 5 January 2025).

BNP Paribas, *The General Management and the Executive Committee*. BNP Paribas, 2025. Available at: https://group.bnpparibas/en/group/our-governance/general-management-and-the-executive-committee (Accessed: 6 January 2025).

BNP Paribas, *Sustainability-Linked Loan Principles*. Available at: https://cib.bnpparibas/app/uploads/sites/2/2021/06/sustainability-linked-loan-principles-may-2021.pdf (Accessed: 4 January 2025).

BNP Paribas, *Sustainable Finance: Follow Our Progress in Figures* https://group.bnpparibas/en/our-commitments/sustainable-finance-follow-our-progress-in-figures [accessed 6 January 2025].

BNP Paribas, *Transitions*. BNP Paribas, 2024. Available at: https://group.bnpparibas/en/our-commitments/transitions (Accessed: 5 January 2025).

Brühl, V., *The Green Asset Ratio (GAR): A New Key Performance Indicator for Credit Institutions*, *Eurasian Economic Review*, 13 (2023), 57–83 https://doi.org/10.1007/s40822-023-00224-0 [accessed 6 January 2025].

ESG Today, 'ING Stops Financing for Companies Developing New Oil and Gas Projects'. Available at: https://www.esgtoday.com/ing-stops-financing-for-companies-developing-new-oil-and-gas-projects (Accessed: 5 January 2025).

European Central Bank, *2022 Climate Risk Stress Test Report*. Available at: https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.climate_stress_test_report.20220708~2e3cc0999f.en.pdf (Accessed: 4 January 2025).

European Commission, 'Corporate Sustainability Reporting'. European Union, 2022. Available at: https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en (Accessed: 3 January 2025).

European Commission, 'Delivering the European Green Deal'. Available at: https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/delivering-european-green-deal_en (Accessed: 4 January 2025).

European Commission, *European Green Deal*. COM(2019) 640. European Union, 2019. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52019DC0640 (Accessed: 3 January 2025).

European Commission, 'EU Taxonomy for Sustainable Activities'. Available at: https://finance.ec.europa.eu/sustainable-finance/tools-and-standards/eu-taxonomy-sustainable-activities_en (Accessed: 5 January 2025).

European Commission, *Regulation (EU) 2019/2088 on Sustainability-related Disclosures in the Financial Services Sector*. European Union, 2019. Available at: https://eur-lex.europa.eu/eli/reg/2019/2088/oj (Accessed: 3 January 2025).

European Commission, 'Sustainable Finance: FAQ on Taxonomy Article 8 Reporting for Eligible Activities and Assets'. Available at: https://finance.ec.europa.eu/system/files/2022-01/sustainable-finance-taxonomy-article-8-report-eligible-activities-assets-faq_en.pdf (Accessed: 5 January 2025).

European Parliament and **Council of the European Union**, *Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on Sustainability-related Disclosures in the Financial Services Sector*. Available at: https://eur-lex.europa.eu/eli/reg/2019/2088/oj (Accessed: 3 December 2024), articles 8 and 9.

Global Sustainable Investment Alliance, *Global Sustainable Investment Review 2022*. GSI Alliance, 2022. Available at: https://www.gsi-alliance.org/members-resources/gsir2022/ (Accessed: 3 January 2025).

Huw Jones, ‘EU Regulators Propose Shake-up of Sustainable Investment Labels’, *Reuters*, 18 June 2024. Available at: https://www.reuters.com/sustainability/eu-regulators-propose-shake-up-sustainable-investment-labels-2024-06-18 (Accessed: 5 January 2025).

ING Group, *2023 Annual Report*. ING Groep N.V., 2024. Available at: https://www.ing.com/Sustainability.htm (Accessed: 4 January 2025).

ING Group, *2023 Climate Report*. ING Groep N.V., 2024. Available at: https://www.ing.com/Sustainability.htm (Accessed: 4 January 2025).

ING Group, ‘2023: ING Grows Sustainable Finance in Muted Markets’. Available at: https://www.ingwb.com/en/insights/sustainability/2023-ing-grows-sustainable-finance-in-muted-markets (Accessed: 4 January 2025).

ING Group, *Financing Change in the World*. ING Group, 2024. Available at: https://www.ingwb.com/en/sustainable-finance (Accessed: 4 January 2025).

ING Group, ‘ING at a Glance’. ING Group, 2024. Available at: https://www.ing.com/About-us/ING-at-a-glance.htm (Accessed: 3 January 2025).

ING Group, ‘ING Publishes 2023 Annual Report’. Available at: https://www.ing.com/Newsroom/News/Press-releases/ING-publishes-2023-annual-report.htm (Accessed: 4 January 2025).

ING Group, ‘Ratings’. ING Group, 2024. Available at: https://www.ing.com/Sustainability/Performance-and-reporting/Ratings-2.htm (Accessed: 3 January 2025).

ING Group, *Sustainability-Linked Loans*. Available at: https://www.ingwb.com/en/sustainable-finance/sustainability-linked-loans (Accessed: 4 January 2025).

ING Group, ‘Terra Approach’. ING Group, 2024. Available at: https://www.ing.com/Sustainability/Climate-action/Terra-approach.htm (Accessed: 3 January 2025).

International Institute for Sustainable Development, *Transitioning Away From Oil and Gas: A Production Phase-out Primer*. IISD, 2024. Available at: https://www.iisd.org/system/files/2024-05/transitioning-away-from-oil-gas.pdf (Accessed: 4 January 2025).

Juan Dempere, **Ebrahim Alamash**, and **Paulo Mattos**, ‘Unveiling the Truth: Greenwashing in Sustainable Finance’, *Frontiers in Sustainability*, 5 (2024): 1362051. Available at: https://doi.org/10.3389/frsus.2024.1362051 (Accessed: 4 January 2025).

Karen Wendt, 'Product Innovation in the Financial Industry in Response to the EU Action Plan and Green Deal', in *Green Finance and Investment*, pp. 123–134.

MSCI, 'ESG Ratings and Climate Search Tool'. Available at: https://www.msci.com/our-solutions/esg-investing/esg-ratings-climate-search-tool/issuer/allianz-se/IID000000002156841 (Accessed: 6 January 2025).

MSCI, *MSCI ESG Ratings Methodology* https://www.msci.com/documents/1296102/34424357/MSCI%2BESG%2BRatings%2BMethodology.pdf [accessed 5 January 2025].

PIMCO, *About Us*. Updated 2024. Available at: https://www.pimco.com/us/en/about-us (Accessed: 4 January 2025).

Sustainalytics, *Know Your ESG Score* https://www.sustainalytics.com/corporate-solutions/know-your-esg-score [accessed 6 January 2025].

United Nations, 'The 17 Goals'. Available at: https://sdgs.un.org/goals (Accessed: 7 January 2025).

United Nations Environment Programme, *UNEP FI Review 2022 and 2023*. UNEP FI, 2023. Available at: https://www.unepfi.org/industries/banking/unep-fi-review-2022-and-2023/ (Accessed: 3 January 2025).

V. Furness and **S. Jessop**, 'ING Bank Tightens Restrictions on Oil and Gas Lending', *Reuters*, 18 September 2024. Available at: https://www.reuters.com/sustainability/ing-bank-tightens-restrictions-oil-gas-lending-2024-09-18/ (Accessed: 3 January 2025).

V. Furness, 'BNP Paribas' Fund Arm to Exclude New Oil and Gas Bonds', *Reuters*, 27 November 2024. Available at: https://www.reuters.com/business/finance/bnp-paribas-fund-arm-exclude-new-oil-gas-bonds-2024-11-27/ (Accessed: 5 January 2025).