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Climate-related analysis of the Austrian financial market

Synthesis report

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Foreword

Norbert Totschnig

Mobilising private capital is a key pillar on the path towards climate neutrality, ensuring the necessary financial resources to support the transformation to a sustainable future.

Our goal must be to achieve green growth–combining economic progress with a simultaneous cut in emissions. This includes reducing our dependence on fossil fuel imports while strengthening the Austrian economy by promoting renewable energy sources and other key future technologies. These developments will generate added value and create new jobs within our country.

The financing required for this transformation cannot be provided by the public sector alone. The private capital market has a crucial role to play in delivering the investment needed. This publication analyses the extent to which Austria has already succeeded in closing financing gaps through the private financial sector.

This report is part of a regular series of publications aimed at monitoring the extent to which the Austrian financial market is aligned with the goals of the Paris Agreement. Monitoring of this kind plays a vital part in enabling targeted action–particularly when developments deviate from the intended path towards climate neutrality.

The transformation into a sustainable financial and economic system is an ongoing process that requires continuous monitoring, analysis and adjustment. This report is intended to serve as a guide for decision-makers in business, finance and public administration. Only through a shared understanding of current developments and challenges can we successfully shape the path towards climate neutrality.

Norbert Totschnig
Federal Minister of Agriculture and Forestry, Climate and Environmental Protection, Regions and Water Management

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Summary

The European Union (EU), and therefore Austria with it, has set a target of reaching climate neutrality by 2050, with Austria pursuing an even more ambitious target of becoming climate-neutral by 2040. Achieving this objective will require a comprehensive transformation of the economic system, which in turn, will necessitate substantial investment. In line with the Paris Agreement, therefore, financial flows must be aligned with a low-emission, climate-resilient development pathway.

Regular monitoring of financial portfolios across all areas of the financial sector is required in order to evaluate the alignment of financial sector capital flows with national and EU-wide climate and environmental objectives and to highlight the associated transition risks. This includes not only investments that support climate goals but also capital flows that may hinder efforts to achieve them.

This analysis is structured around a set of complementary modules, each focusing on a specific segment of the financial sector:

- Module 1: Analysis of the climate risk exposure of funds in the Austrian financial market
- Module 2: Austrian banks on their way to a green transition
- Module 3: Analysis of emissions financed by Austrian banks[1] and investment funds

The results draw on both qualitative and quantitative methods and are based on the current regulatory landscape (such as the EU Sustainable Finance Disclosure Regulation–SFDR[2]) as well as widely used analytical frameworks (including the Partnership for Carbon Accounting Financials–PCAF). The findings from this climate-related analysis of the Austrian financial market highlight not only areas of progress but also significant gaps requiring further action.

Overall, the CO_2e exposure of Austrian investment funds improved markedly in 2023 compared to 2018. The average CO_2e footprint declined by 17 per cent, while the CO_2e

[1] The terms “banks” and “credit institutions“ are treated as synonyms in this report.

[2] 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, Official Journal of the EU L 317/1. Available at Regulation - 2019/2088 - EN - sfdr - EUR-Lex

emission intensity of investee companies decreased by 10 per cent. Funds marketed as sustainable consistently exhibited the lowest greenhouse gas (GHG) exposure metrics. However, the average CO_2e exposure of Austrian funds is still considerably higher than European and international benchmarks. Given that these indicators are critical for assessing transition risks, efforts must be stepped up, sustainability factors made an even more integral part of investment strategies and the decarbonisation of the economy accelerated.

At an institutional level, the Austrian credit institutions included in the analysis have published climate strategies and incorporated climate-related considerations into their organisational structures. All of the banks studied offer green financial products in both their lending and their investment portfolios. Amongst the Austrian banks under direct supervision of the European Central Bank (ECB), however, only a few have made public commitments that clearly demonstrate an ambition to align their credit and investment portfolios with climate neutrality. By contrast, banks that are members of the Austrian Green Finance Alliance (GFA) have publicly committed to aligning their portfolios with the climate goals of the Paris Agreement through dedicated climate strategies and targets.

Decarbonisation targets are a key criterion for assessing the climate alignment of credit institutions. Equally important is the gradual phase-out of fossil fuel financing, which includes restricting new financing and committing to divest from existing exposures to coal, oil and natural gas. GFA members typically have detailed and comprehensive policies in this regard, whereas the fossil fuel policies disclosed by other major Austrian credit institutions are significantly more limited in scope.

Sectoral analyses geared towards identifying emissions-intensive areas show that investments in companies from the industrial production sector are the main contributors to high CO_2e exposure in securities portfolios. In credit portfolios, the utilities sector–particularly energy, waste management and wastewater services–represents the most significant source of financed emissions. These sectors present both risks and opportunities, as emphasised in the EU's Clean Industrial Deal. Although energy-intensive industries face substantial challenges, their successful transition to green production is essential for sustaining Europe's long-term competitiveness and can benefit significantly from strong financial sector engagement.

1 Introduction

Through the European Climate Law, the EU has committed itself to becoming climate neutral by 2050. The Austrian Federal Government has likewise pledged to achieve this goal in its 2025–2029 government programme, although it is aiming to get there sooner –by 2040.

The transformation into a climate-neutral economy and society presents numerous opportunities, such as reducing dependence on fossil energy imports and increasing resilience against external price and supply shocks. If designed wisely, it will also be able to unlock economic potential, creating value and jobs.

However, this transformation will require significant investment, particularly over the next two decades. This investment will also strengthen Europe's competitiveness and its position as a business location. At an EU level, an estimated additional investment of around EUR 620 billion per year[3] is needed in order to meet the objectives of the European Green Deal[4]– which the European Commission (EC) is presenting as a growth strategy–as well as the REPowerEU[5] plan. This amount corresponds to 3.6 per cent of the EU's gross domestic product (GDP) in 2023.[6] For Austria, analyses estimate that additional investment of between EUR 6.4 and 11.2 billion will be required every year from 2024 to 2040 in the sectors of energy, industry, buildings and transport in order to reach climate neutrality by 2040. This equates to between approximately 1.1 per cent and 1.9 percent of Austria's modelled average annual GDP.[7]

This is more than the public sector can provide. As such, the financial sector has a crucial role to play in mobilising private capital to finance the transformation of the economic

[3] EC (2023)

[4] The European Commission's Green Deal aims to make Europe the first climate-neutral continent and sets it the goal of emitting no more net greenhouse gases by 2050, while at the same time decoupling economic growth from resource use and leaving neither people nor regions behind (a "just transition"). See: The European Green Deal - European Commission

[5] In response to the Russian invasion of Ukraine in 2022 and the associated volatility on the energy markets, the EC is pursuing the goal of gradually phasing out imports of fossil fuels from Russia. See: REPowerEU.

[6] See Eurostat: Statistics | Eurostat

[7] IHS, TU Vienna, Environment Agency Austria (2024)

system. The Green Finance Agenda[8] was launched in 2023 as a pioneering framework for aligning Austria's financial market with ecological sustainability. In cooperation with stakeholders from the financial and real economy, academia, politics and public administration, 25 concrete measures were developed to mobilise capital for climate action, manage climate-related risks[9] appropriately and promote transparency.

One of the measures outlined in the Green Finance Agenda is to assess financial flows regularly in terms of their alignment with climate goals. This serves both as a benchmark and a foundation for policymakers to identify and implement further initiatives. At the same time, macro-level analyses of climate-related risks offer valuable guidance for financial market participants and supervisory bodies. Analyses on the alignment of financial flows are already available for Austria.[10] The climate-related analyses of the Austrian financial market for 2024 that are presented in this report build on those efforts and represent a continuation of the work already done. For the first time, the analyses have adopted three complementary perspectives:

- Module 1: Analysis of the climate risk exposure of funds in the Austrian financial market in 2024[11]
- Module 2: Austrian banks on their way to a green transition[12]
- Module 3: Analysis of emissions financed by Austrian banks and funds[13]

This report presents a synthesis of selected content from these three modules and places the findings in context, taking developments in European and international financial markets into consideration.

[8] Joint publication by the then Federal Ministry for Climate Protection (BMK) and the Federal Ministry of Finance (BMF); source: BMK & BMF (2023)

[9] In the context of climate-related analyses of the Austrian financial market, climate risks are understood in connection with the CO_2e footprint and the associated transition risks.

[10] The macro-level climate-related analyses for Austria include:

- Environment Agency (2020): Risk Fin Porto
- BMLUK (2021; in German): PACTA2020_Gesamtbericht

[11] BMLUK (2025a; in German): Finanzmarktanalyse: Fonds

[12] BMLUK (2025b; in German): Finanzmarktanalyse: Kreditinstitute

[13] BMLUK (2025c; in German): Finanzmarktanalyse: Finanzierte Emissionen

2 Framework and objectives

The Paris Agreement calls for financial flows to be aligned with climate goals to limit global warming to well below 2°C and to pursue efforts to limit the temperature increase to 1.5°C (Article 2.1c).[14] This formally established, at international level, the role and responsibility of the financial sector in the transition to a low-emission economy and society. This entails the comprehensive management of climate-related transition risks within financial portfolios as well as the mobilisation of capital to support the environmentally sustainable transformation of the economy. To provide guidance for adequately addressing sustainability risks, the Austrian Financial Market Authority (FMA) overhauled its cross-sectoral supervisory guidance and reissued it in March 2025.[15] The present analysis is focused on assessing the extent to which the financial market is fulfilling its responsibility to align financial flows with climate goals across all sectors. In the Austrian context, this includes banks, investment funds, other financial institutions (including company pension funds), insurance companies and pension funds.

Table 1 shows the dominant position of Austrian credit institutions, measured by financial assets held in the country and abroad.

[14] UNFCCC (2015)
[15] FMA (2025)

Table 1: Structure of the Austrian financial market (in EUR billion).

Financial market sectors	Financial assets in Austria and abroad (holdings as of end-2024, in EUR billion)	Market share (as a percentage)
Banks (MFIs;[16] excluding OeNB)	1,036	64 %
Investment funds	229	14 %
Financial institutions (other)	220	14 %
Insurance companies	108	7 %
Pension funds	30	2 %
Total	**1,623**	**100 %**

Source: Environment Agency Austria based on data from the Oesterreichische Nationalbank (OeNB)

The Green Finance Agenda calls for the climate alignment of financial flows to be measured at regular intervals (see Introduction). However, monitoring climate-relevant capital flows at the macro level places high demands on data availability, methodologies and analytical tools. Although these have been significantly improved across all relevant financial sectors in recent years, the ability to conduct comprehensive analyses of the climate and sustainability performance of financial flows remains limited due to the absence of a well-established, harmonised framework. Nonetheless, there is broad consensus at both European and international levels on the need to assess the climate alignment of capital flows regularly within the boundaries of what is currently feasible. This need is already being addressed in reports by the EU Platform on Sustainable Finance on behalf of the European Commission[17] as well as by the Organisation for Economic Co-operation and Development (OECD).[18]

Austria is one of the pioneers when it comes to establishing systematic assessments of financial flows. Under the leadership of Environment Agency Austria, the independent research project RiskFinPorto used fund data from 2018 to examine the risks posed by the climate crisis to the Austrian financial market and how that market is addressing them.[19] In

[16] Monetary financial institutions
[17] EC (2025)
[18] OECD (2024)
[19] For detailed results of the RiskFinPorto analysis, see Risk Fin Porto.

addition, a nationally coordinated analysis was carried out in 2020 under the aegis of the former Federal Ministry for Climate Action (BMK). Stakeholders from the Austrian financial sector were invited to participate in an assessment using the Paris Agreement Capital Transition Assessment (PACTA) methodology.[20] The portfolios submitted were analysed at sector level using a scenario approach in order to assess their alignment and were compared with decarbonisation pathways.[21]

To date, however, no single methodology has become established for a comprehensive climate assessment across all financial market sectors. Nevertheless, the rapid regulatory developments of recent years–particularly through the EU Sustainable Finance Framework[22]–are yielding results, with continuous improvements in data quality and scope,[23] methodologies and tools.

These conditions have shaped the current analysis–in addition to its main purpose of providing insights into market conditions, the report also aims to generate findings regarding the analytical relevance and limitations of the approaches applied that will serve as a foundation for the further development of methodological standards. A variety of analytical approaches were employed, therefore, and were guided in part by selected OECD principles (2024), including:

- Transparent disclosure of methodological assumptions
- Identification and application of complementary metrics for all financial sectors
- Assessment of the data quality and comparability of input parameters
- Benchmarking against established and ambitious reference values[24]

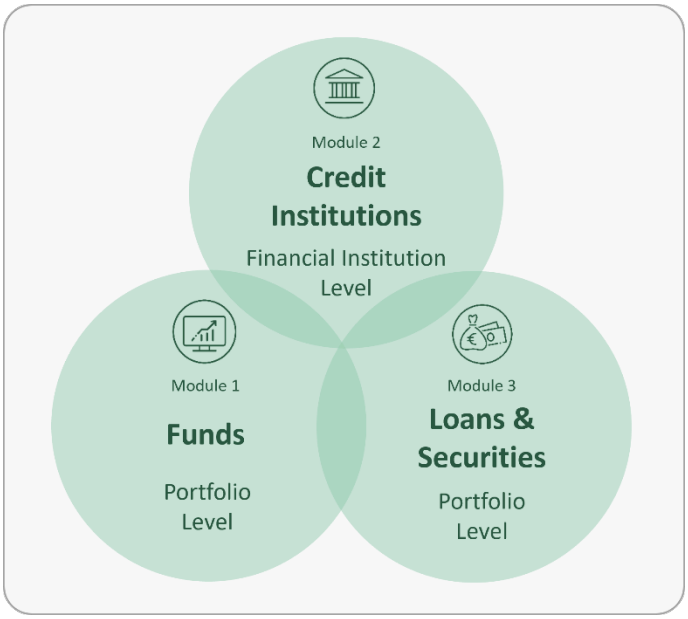
The present analyses focus on the largest sectors of the Austrian financial market (see Table 1). The following perspectives were selected for the current assessment (see Figure 1):

- Module 1: Analysis of investment funds, due to the availability of robust data and the comparability of the results over time

[20] PACTA was developed by the 2°Investing Initiative (now known as the Sustainable Finance Observatory). To increase the scope of the tool, it was transferred in 2022 to RMI – a non-profit organisation working to help bring about a sustainable transition in the energy sector.
[21] For detailed results of the PACTA analysis, see PACTA2020_Gesamtbericht (in German)
[22] See also: Sustainable finance - European Commission
[23] For example, through broader and higher-quality CO_2e reporting by companies.
[24] For example, the results of investment fund analyses can be interpreted using established stock indices such as the MSCI (see 3.1 Module 1: Analysis of the climate risk exposure of funds in the Austrian financial market in 2024.

- Module 2: Analysis of credit institutions as the largest sector of the Austrian financial market[25]
- Module 3: Analysis of emissions financed by Austrian banks and investment funds, using the GHG accounting standard of the PCAF and based on existing data availability

Figure 1: Overview of the areas covered in the climate-related analysis of the Austrian financial market.



Source: Illustration by Environment Agency Austria

In order to obtain the most comprehensive climate-related insights possible despite limited analytical capabilities, this approach was chosen. Although the present analysis provides a sound picture based on the available data and the latest methodologies, the limitation remains that comprehensive statements about the Austrian financial market–covering all relevant sectors–are not yet feasible. Likewise, conducting a robust and comprehensive assessment of the entire financial market in terms of its alignment with climate goals remains a challenge. For this reason, analyses in future monitoring cycles will be continuously aligned with the latest developments in data availability and methodological approaches. Watering down existing reporting requirements–both in terms of scope and depth–would therefore significantly narrow the data foundation for analyses of this kind.

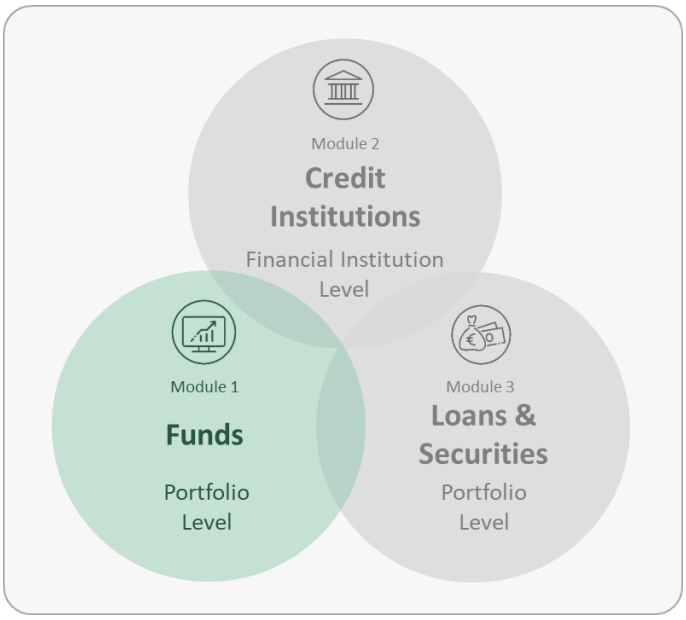
[25] Measured by financial assets held domestically and abroad (see Table 1).

3 Climate-related analysis of the Austrian financial market

3.1 Module 1: Analysis of the climate risk exposure of funds in the Austrian financial market in 2024

Module 1 assesses the climate risk exposure of equity and bond funds in the Austrian financial market based on a range of indicators.[26]

Figure 2: Overview of areas covered as part of the climate-related analysis of the Austrian financial market–focus on Module 1



Source: Environment Agency Austria

[26] The methods, samples and selected main statements of module 1 are presented in excerpts below. Comprehensive explanations can be found in the corresponding analysis report (in German only).

Objective

The aim of this module is to develop a comprehensive understanding of the potential impact on the Austrian financial market of the decarbonisation of the economy and society. To achieve this, key indicators were identified and evaluated for selected samples. These indicators include calculating total greenhouse gas emissions for the largest equity and bond funds offered in Austria. The results are assessed based on their changes over time (2023 compared to 2018[27]) and are compared with selected international benchmarks to place the climate risk exposure of Austrian funds in context in relation to developments in international financial markets.

Methodology

The CO_2e emissions of investee companies analysed in this study are based on the EU's technical regulatory standards for disclosing information related to sustainability indicators, in particular the Delegated Act of the SFDR.

Key climate-related risk indicators include the CO_2e footprint and CO_2e emission intensity. In this module, these indicators were used to assess the largest equity and bond funds available for investment in Austria. The CO_2e footprint measures the greenhouse gas emissions financed by a financial portfolio per one million euros invested. Specifically, this means that the total emissions of the companies included in the portfolio are calculated proportionally to the investor's share of investment and then expressed in relation to the total amount invested. The CO_2e emission intensity indicates the amount of greenhouse gases emitted in relation to a company's revenue within the portfolio.

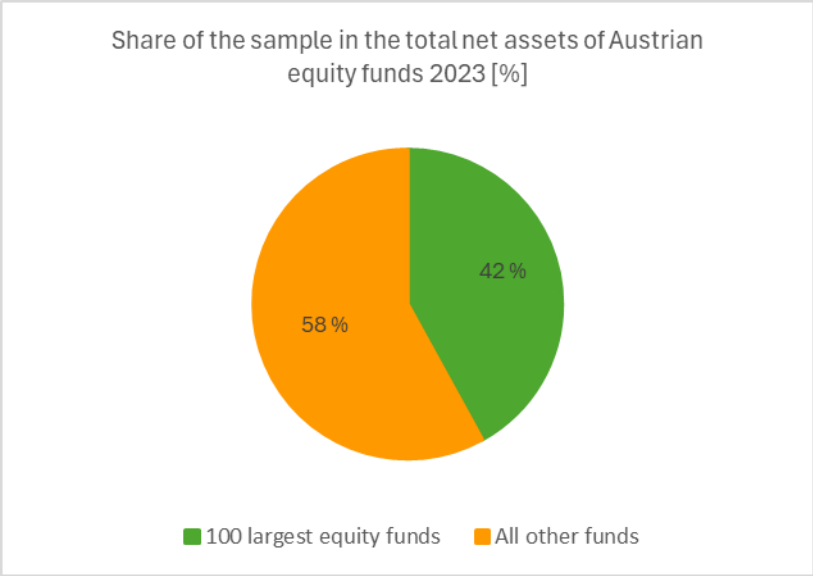
Sample description

Data on the composition of investment funds was retrieved on 30 June 2024. It was ensured that the data on fund holdings was no older than one year to guarantee the most up-to-date analysis possible. One key criterion for fund selection was fund size, which ensures that the analysis provides a representative overview of the largest investment funds in Austria.

[27] In line with the RiskFinPorto study, 2018 was chosen as the reference year in this analysis.

The 100 largest equity funds authorised for distribution in Austria manage approximately USD 1,128 billion (equivalent to EUR 992 billion based on the exchange rate as of 29 April 2025), representing 42 per cent of the total net assets of these funds (see Figure 3).

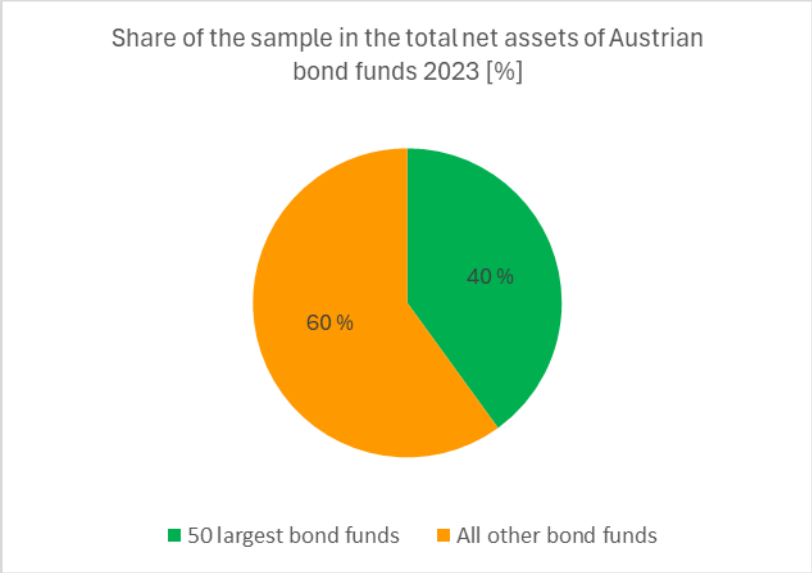
Figure 3: Share of the 100 largest equity funds licensed for distribution in Austria in total net assets of Austrian equity funds, expressed as a percentage, for 2023.



Source: The Value Group GmbH

The 50 largest bond funds licensed for distribution in Austria account for approximately 40 per cent of total net assets, representing USD 158 billion (equivalent to EUR 139 billion based on the exchange rate as of 29 April 2025) (see Figure 4).

Figure 4 : Share of the 50 largest bond funds licensed for distribution in Austria in total net assets of Austrian bond funds, expressed as a percentage, for 2023.



Source: The Value Group GmbH

No restrictions were applied regarding the investment strategies of the funds included in the analysis, meaning that globally oriented, regionally oriented and sector-specific funds were all taken into account.

The sample of equity funds was divided into three groups based on fund type and investment classification:[28]

- Equity Funds AT: this group comprises the 100 largest equity funds licensed for distribution in Austria.
- Equity Funds AT–AM: this group comprises the 100 largest equity funds managed by Austrian asset management companies under the Austrian Investment Fund Act 2011.[29]
- Equity Funds AT–Sustainable: this group comprises the 50 largest equity funds licensed for distribution in Austria that consider sustainability criteria in their investment approach. These funds are classified under “Article 8” or “Article 9” of the SFDR.

[28] A fund may be represented in several groups provided it fulfils the criteria for each group.
[29] Investment Fund Act 2011 (InvFG 2011), Federal Law Gazette I No. 77/2011. Last accessed on 28.10.2024: RIS - BGBLA_2011_I_77 - Federal Law Gazette authentic as of 2004

For the asset class of bond funds, two groups were defined:

- Bond Funds AT: this group comprises the 50 largest bond funds licensed for distribution in Austria. To be included in the sample, funds had to invest at least 60 per cent of their assets in corporate bonds.
- Bond Funds AT–AM: this group comprises the 50 largest bond funds managed by Austrian asset management companies under the Austrian Investment Fund Act 2011. The focus was placed on corporate bonds here too, with funds investing less than 60 per cent in these securities excluded from the sample.

Several benchmark indices were used in order to better assess the climate risk exposure of Austrian funds. These benchmarks enable comparisons at both a global and a European level and include an index for low-emission companies. All benchmarks used are based on the MSCI index family to ensure consistency across comparisons.

The following equity-based benchmarks were applied:

- Global Equity Benchmark: this index captures the largest companies from 23 developed countries and reflects the performance of the global equity market in terms of market capitalisation. With over 1,500 companies, it covers approximately 85 per cent of the market capitalisation in these countries.
- European Equity Benchmark: this index reflects the performance of the largest companies from 15 developed European countries. It includes over 400 companies and covers around 85 per cent of the market capitalisation in these countries.
- Sustainable Equity Benchmark (in accordance with the EU Benchmark Regulation[30]): this index is based on the Global Equity Benchmark but excludes companies that are not aligned with the goals of the Paris Agreement[31] or that fail to meet specific sustainability criteria.[32] It complies with the requirements of both the Paris-Aligned Benchmarks (PABs) and the Climate Transition Benchmarks (CTBs) under the EU

[30] Regulation (EU) 2019/2089 of the European Parliament and of the Council of 27 November 2019 amending Regulation (EU) 2016/1011 as regards EU climate change benchmarks, Official Journal of the EU L 317/17. Last accessed on 28.10.2024: Regulation - 2019/2089 - EN - EUR-Lex

[31] Paris Agreement of 12 December 2015, Official Journal of the EU L 282/4. Last accessed on 28.10.2024: EUR-Lex - 22016A1019(01) - EN - EUR-Lex

[32] The companies excluded are those that are active in the areas of fossil fuels (oil, gas, coal), controversial weapons, tobacco and thermal coal as well as if there is proof of serious environmental violations or violations of the principles of the UN Global Compact. In addition, companies must demonstrate a reduction in their CO_2e footprint in line with the Paris Agreement.

Benchmark Regulation, which specify strict exclusion criteria and clear decarbonisation targets.

The following bond-based benchmarks were used:

- Bonds Benchmark: this index tracks the performance of liquid, euro-denominated corporate bonds issued by large companies. It focuses primarily on European investment-grade bonds[33] and provides a comprehensive overview of the European corporate bond market.
- Sustainable Bonds Benchmark (in accordance with the EU Benchmark Regulation): this index is based on the euro-denominated Bonds Benchmark but excludes companies that are not aligned with the goals of the Paris Agreement or that fail to meet certain sustainability criteria.[32]

Selected key messages from Module 1

Table 2 provides an overview of the CO_2e footprint and CO_2e emission intensity for Scope 1–3 emissions across the different samples, broken down by asset class (equities and bonds). It presents values for the years 2018 and 2023 as well as the percentage change over this period.

[33] Bonds with good to very good creditworthiness (credit rating).

Table 2: CO_2e footprint (in tonnes of CO_2e per EUR 1 million invested) and CO_2e emission intensity (in tonnes of CO_2e per EUR 1 million in revenue) of Scope 1–3 emissions across the different samples by asset class, including the change from 2018 to 2023.

Samples and benchmarks	CO_2e footprint (t CO_2e / EUR 1 million invested)			CO_2e emission intensity (t CO_2e / EUR 1 million revenue)		
	2018	2023	Δ	2018	2023	Δ
Equity Funds AT	341	312	-9 %	767	733	-4 %
Equity Funds AT–AM	518	409	-21 %	1.221	716	-41 %
Equity Funds AT–Sustainable	306	217	-29 %	679	599	-12 %
Global Equity Benchmark	415	345	-17 %	930	792	-15 %
European Equity Benchmark	659	533	-19 %	1.172	901	-23 %
Sustainable Equity Benchmark	175	83	-52 %	569	398	-30 %
Bond Funds AT	505	529	+5 %	812	991	+22 %
Bond Funds AT–AM	522	344	-34 %	1.088	1.089	+0 %
Bonds Benchmark	556	478	-14 %	841	816	-3 %
Sustainable Bonds Benchmark	415	183	-56 %	667	557	-16 %

Source: The Value Group GmbH

For 2023, the CO_2e footprint across all asset classes, including samples and benchmark indices, ranged from 83 to 533 tonnes of CO_2e per EUR 1 million invested. When considering only the samples related to the Austrian financial market, this range narrows to between 217 and 529 tonnes of CO_2e per EUR 1 million invested.

The values presented in Table 2 indicate an overall positive trend in CO_2e metrics between 2018 and 2023. With the exception of the group of the largest bond funds licensed for distribution in Austria (Bond Funds AT), all sample groups showed an improvement in their CO_2e footprint. Particularly noteworthy is the Sustainable Bonds Benchmark, which achieved a reduction of 56 per cent. The highest CO_2e footprint was recorded by the European Equity Benchmark, at 533 tonnes of CO_2e per EUR 1 million invested. Among the equity fund samples, the Equity Funds AT–AM (managed by Austrian asset management companies) exhibited the highest CO_2e exposure at 409 tonnes per EUR 1 million invested.

The CO_2e emission intensity has also improved across all samples and benchmarks. In 2023, the lowest emission intensity was recorded by the Sustainable Equity Benchmark at 398

tonnes of CO_2e per EUR 1 million in revenue. Looking just at the Austrian fund samples once again, the minimum value increases to 599 tonnes of CO_2e per EUR 1 million in revenue. The highest intensity was observed in the Bond Funds AT–AM sample, with 1,089 tonnes of CO_2e per EUR 1 million in revenue. This figure has remained virtually unchanged since 2018 and can be attributed to the greater focus that Austrian bond funds place on investments in emissions-intensive sectors such as raw materials, energy, utilities and consumer discretionary. These sectors account for nearly one-third of total emissions, while sustainable benchmarks exhibit significantly lower exposures to such industries. As a result, Austrian bond funds may face higher transition risks compared to globally diversified or sustainability-oriented benchmarks.

Equity funds are generally less exposed than bond funds to sectors with stable returns such as utilities and industrials, which tend to be more emissions-intensive–as reflected in the higher CO_2e emission intensities. Nevertheless, the largest equity funds managed by Austrian asset managers (Equity Funds AT–AM) reduced their CO_2e emission intensity by 41 per cent between 2018 and 2023. This progress may be attributed to factors such as stricter regulations, emissions trading schemes, rising CO_2 prices and a growing awareness of sustainability. Macroeconomic factors such as higher energy prices may also have given companies an incentive to adopt more efficient technologies.

Sustainability-labelled funds consistently exhibit the lowest GHG exposure metrics. This can be attributed to several factors: funds of this kind often pursue more active investment strategies that deliberately consider companies making progress towards more sustainable business practices. Two key aspects are the consistent application of exclusion criteria–particularly regarding fossil fuels–and the use of best-in-class approaches that favour the most sustainable companies within each sector. External influences such as increased regulatory pressure and stakeholder expectations for transparent and ambitious sustainability goals may also play a role. Ideally, however, the reduction in GHG exposure will stem from actual emission reductions achieved by the investee companies in the real economy. Companies actively engaged in sustainable practices may also be better positioned to mitigate regulatory risks, benefit from technological innovation and secure their long-term performance.

Conclusions

Compared to earlier analyses, recent years have seen significant progress in calculating CO_2e footprint and CO_2e intensity indicators for investment portfolios thanks to the

harmonisation of methodologies at EU level (see EU SFDR). The consistent inclusion of Scope 3 emissions from companies in the portfolios analysed is crucial, as these emissions are essential for comprehensive risk assessments.

Further improvements are still needed in expanding the underlying database, however, particularly by having companies report their climate-related indicators. EU regulations– such as the SFDR and the Corporate Sustainability Reporting Directive (CSRD)[34] –have a key role to play in enabling the collection of relevant data at company level. Limiting reporting obligations to large companies would significantly weaken the database for analysing transition risks.

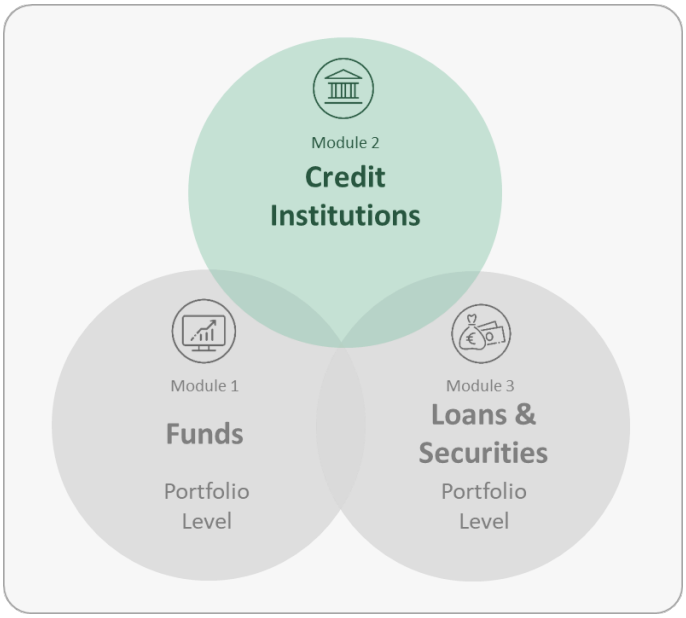
There also remains a need for further development and harmonisation of methodologies at international level to enable results to be directly compared with studies from other countries.

[34] Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014 and Directives 2004/109/EC, 2006/43/EC and 2013/34/EU as regards corporate sustainability reporting. Available at Directive - 2022/2464 - EN - CSRD Directive - EUR-Lex

3.2 Module 2: Austrian banks on their way to a green transition

Module 2 examines the extent to which credit institutions in Austria have already implemented climate-related measures into their corporate policies.[35]

Figure 5: Overview of the areas covered in the climate-related analysis of the Austrian financial market–focus on Module 2.



Source: Environment Agency Austria

Objective

Credit institutions are key actors in the green transition through their provision of financing. To date, climate-related analyses of banks have primarily focused on assessing their climate risk resilience, for example through stress testing,[36] with the goal being to safeguard financial market stability.[37] However, meeting climate targets also requires measures to be taken that make an active contribution to decarbonisation, such as policies governing the

[35] The methods, samples and selected main statements of Module 2 are presented in excerpts below. Comprehensive explanations can be found in the corresponding analysis report (in German): Finanzmarktanalyse: Kreditinstitute

[36] ESAs (2024)

[37] EBA (2024)

financing of CO_2e-intensive activities (e.g. extracting and burning coal, oil or natural gas). Module 2 lays the foundation for just such an assessment.

This module evaluates the green transition efforts of Austrian banks classified by the European Central Bank (ECB) as being significant credit institutions in Austria (as of 1 January 2024). It provides insights into both the strategic climate ambitions and the operational implementation of climate action measures. The module also examines bank members of the Austrian Green Finance Alliance (GFA), a national initiative under which financial institutions have voluntarily committed to aligning their core business with climate neutrality by 2050. The data used in this analysis is based exclusively on publicly available information.

Methodology

The analysis of the credit institutions included in the sample is based on a review of public corporate publications ("desk research"), with data being collected in July and August 2024.[38] The data collected was evaluated using a structured assessment framework that had been developed in line with key guidelines issued by relevant supervisory authorities.[39] The framework covers the following areas:[40] strategy and business model, governance and organisational structure, risk, metrics and targets, and measures for implementation.

For each of these areas, publicly available information was collected based on various predefined criteria in order to assess the climate ambitions of the credit institutions analysed. Examples include public commitments to ambitious long-term climate goals, such as aligning lending and investment portfolios with climate neutrality and/or the 1.5°C target, or the presence of policies governing financing in the fossil fuel sector.

Both quantitative and qualitative methods were used in the evaluation of the responses derived from public information. Most questions were closed-ended, with open-ended questions being used in selected cases. Each question had to be clearly answerable based on publicly accessible information in order to be included in the analysis. One key challenge

[38] Later publications were therefore not taken into account.
[39] ECB (2022a, 2022b, 2022c); FMA (2022); EBA (2022); Commission Implementing Regulation (EU) 2022/2453
[40] TCFD (2017)

in the secondary analysis was dealing with the partly heterogeneous and varying levels of detail given in the disclosures made by the various banks.

Sample description

The following samples were analysed:

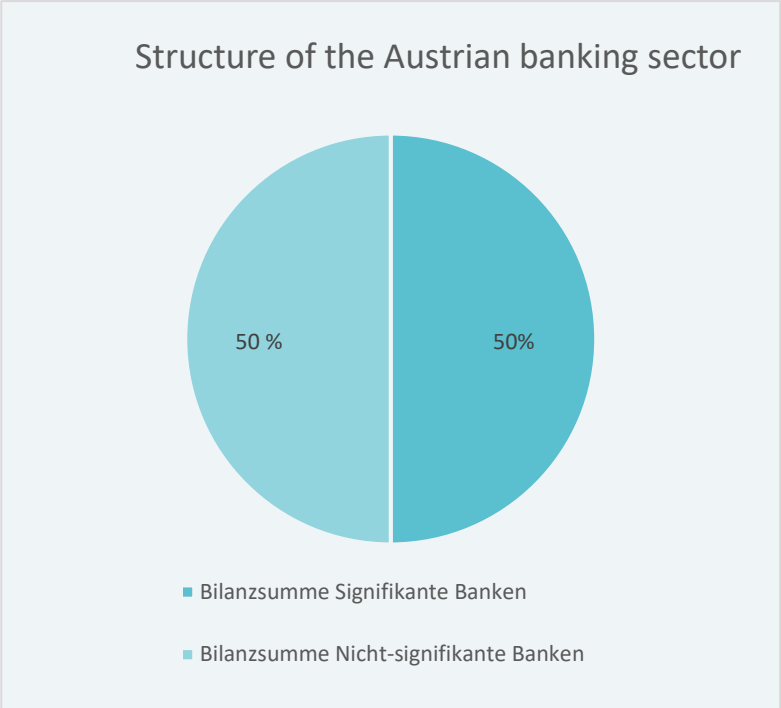
- **Significant credit institutions**:[41] all six banks based in Austria and classified as "significant credit institutions" by the ECB, putting them under direct supervision by the ECB: Addiko Bank AG, BAWAG P.S.K. Bank für Arbeit und Wirtschaft und Österreichische Postsparkasse Aktiengesellschaft, Erste Group Bank AG, Raiffeisen Bank International AG, Raiffeisenlandesbank Oberösterreich Aktiengesellschaft and Volksbank Wien AG.
- **Members of the GFA**:[42] five credit institutions that were members of the Austrian GFA prior to the reporting date of 31 December 2023. The analysis covers the following banks: BKS Bank AG, Oberösterreichische Landesbank Aktiengesellschaft (HYPO Oberösterreich), Raiffeisenbank Gunskirchen eGen, Raiffeisen Landesbank Vorarlberg mit Revisionsverband eGen and UniCredit Bank Austria AG.

Measured by financial assets held both domestically and abroad, banks represent the largest segment of the Austrian financial market with a share of 64 per cent (see Table 1). Since a significant portion of business transactions is concentrated in a small number of credit institutions, one key focus of Module 2 lay on the sample represented by the significant banks (see Figure 6). Due to their large market share, significant banks not only wield substantial influence but also serve as role models in implementing climate-related measures. The analysis also covered members of the GFA because they are considered pioneers in taking climate action.

[41] These "significant institutions" are subsequently also referred to as "significant banks" or "significant credit institutions".

[42] As members of the GFA, participating financial companies in the banking, insurance, investment company, pension fund and corporate provision funds sectors undertake to align their portfolios with the climate goals of the Paris Agreement and to expand green activities in their core business. See: Green Finance Alliance

Figure 6: Structure of the banking sector in terms of significant and non-significant banks.



Source: Environment Agency Austria based on ECB data (2024)

Selected key messages from Module 2

A credit institution's strategic climate alignment is underpinned by a public commitment to an ambitious long-term climate target, based on which short- to medium-term goals are then defined. The analysis shows that the majority of significant banks have not yet made a public commitment to make their lending and investment portfolios climate-neutral. Only clear self-commitments were considered in the analysis.[43] By contrast, all GFA members have made corresponding public commitments. Yet the European Climate Law defines the achievement of climate neutrality by 2050 as being legally binding in the EU, whereas the Paris Agreement obliges signatories to limit global warming to well below 2.0°C.

[43] The significant banks include one credit institution that is part of the global Net Zero Banking Alliance (NZBA). In addition, two significant banks have signed the Principles for Responsible Banking (PRB) and have subsidiaries in the asset management sector, which in turn are part of global sustainability initiatives. For the purposes of this analysis, it was not considered sufficient to state, for example, that a bank is aligned with the IEA's Net Zero by 2050 (NZE 2050) scenario without them also making a clear commitment to actually achieving climate neutrality and neither was merely being a member of a sustainability-related initiative.

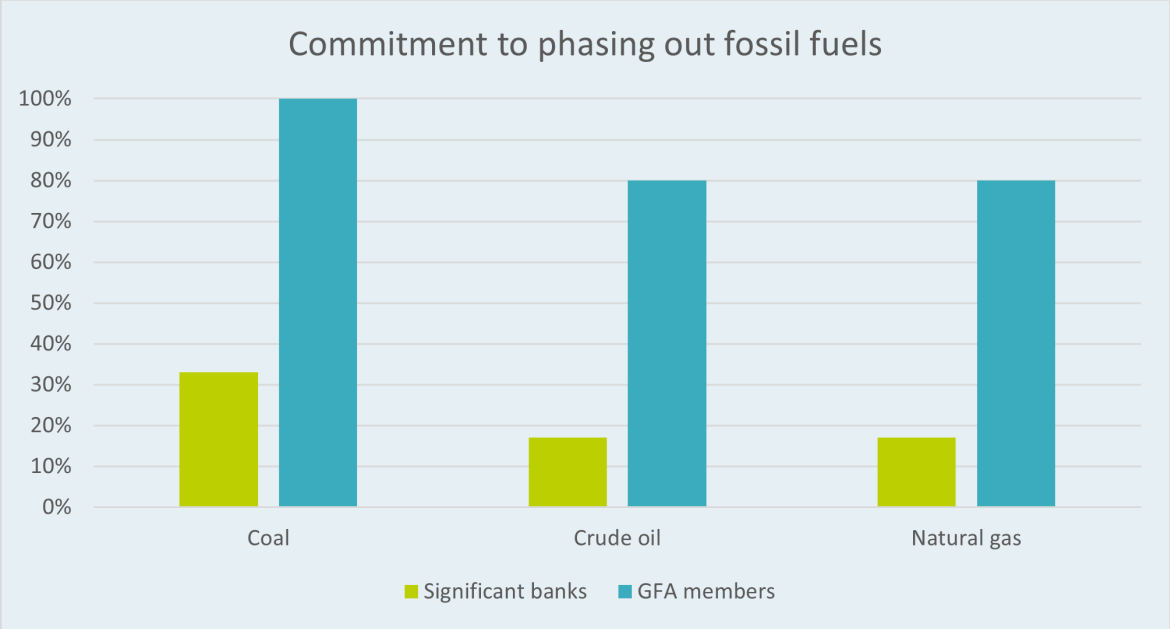
The analysis also shows that all Austrian credit institutions examined have published a climate strategy and have already integrated climate protection at an organisational level. In terms of their products, all the banks reviewed now offer green products in both lending and investment.

Measures related to the financing of fossil fuels along the entire value chain were also analysed. GHG emissions from burning fossil fuels are the main cause of global warming. Current and planned fossil fuel infrastructure emissions already far exceed the remaining carbon budget available to meet the 1.5°C target.[44] Looking at the publicly visible measures taken by significant banks to limit the financing of fossil fuels, it became clear that, although the majority impose restrictions on new financing for fossil fuels, these restrictions rarely cover the entire vertical value chain in the case of coal. For oil and gas, the restrictions are focused primarily on unconventional extraction methods.[45] Only two significant banks have committed to phasing out coal, whereas none at all have made a public commitment to exiting conventional oil and gas activities. By contrast, most GFA members have introduced public policies restricting new financing for fossil fuels and made commitments to gradually jettison their existing positions in fossil fuels (see Figure 7), which are significantly more comprehensive both in terms of the vertical value chain and the activities covered.

[44] IPCC (2023)

[45] The unconventional types of fossil fuel extraction are methods used to extract fossil fuels from deposits that are difficult or impossible to exploit using conventional techniques. They require special technical processes, are often associated with higher environmental impacts and include fracking (shale gas) and oil sands extraction (German Environment Agency, 2024).

Figure 7: Share of significant banks and GFA members committed to phasing out existing positions in coal, oil and gas



Source: Environment Agency Austria

Broader context

Whilst Module 2 focused on Austrian banks, the inclusion of external analyses allows national trends to be placed within the context of the largest European and international banks (measured by their balance sheet total).

An analysis by "ShareAction" assessed the climate targets of the 20 largest European banks by balance sheet size regarding decarbonisation as well as targets related to the expansion of sustainable finance and investments based on publicly available information.[46] The analysis highlights the high degree of climate commitments among the banks studied: all have at least a sectoral decarbonization target,[47] and three banks have overarching (high-level) targets. Regarding the expansion of green business activities, eighteen banks have a

[46] ShareAction (2024)

[47] Decarbonisation targets are designed to address climate risks and limit negative externalities and include objectives for reducing their financed emissions and their exposure to carbon-intensive sectors.

general sustainable finance target,[48] while nine have adopted a more detailed sector-level approach.

Regarding policies on financing fossil fuels, an investigation by the international initiative "Banking on Climate Chaos" into the world's 60 largest banks by balance sheet total[49] found that new self-imposed restrictions on coal financing have made only slow progress. In the oil and gas sector, however, further policies have been published, albeit still with an insufficient level of ambition. A total of 43 out of the 60 largest banks apply exclusion criteria to coal-fired power plants. Of these, the policies of 25 banks include coal phase-out commitments, with 17 targeting 2030 or 2040 as their phase-out deadline. This roughly aligns with the Net Zero Emissions by 2050 scenario presented by the International Energy Agency (IEA), which calls for a 55 per cent reduction in coal-based power generation excluding CCUS[50] by 2030 compared to 2022 and a complete phase-out by 2040.[51] Regarding oil and gas, 38 banks have exclusion criteria, of which only 20 include conventional extraction activities.

Conclusions

In terms of setting climate targets, the comparison shows that GFA members, like the 20 largest European banks, have already defined and published long-term climate goals. The significant Austrian banks examined have set themselves considerably less ambitious targets. A limiting factor in this evaluation is the assessment of commitments based solely on public mentions of decarbonisation goals. Future analyses could benefit from investigating more detailed questions in this context, for example by involving the banks themselves in order to consider internal strategies as well. This could look at the scope of decarbonisation targets as well as targets for expanding green activities across the business areas covered.[52] Additionally, future studies could examine the methodologies underlying the climate targets and the degree of interlinking between decarbonisation and expansion goals.

Both the largest global and the significant Austrian banks still have work to do in terms of imposing restrictions on financing fossil fuels, whereas GFA members have more

[48] Sustainable finance targets aim to capitalise on climate opportunities and support positive impact. They involve scaling up financing for both green activities and businesses transitioning towards sustainability.
[49] Banking on Climate Chaos (2024)
[50] Carbon capture, utilisation and storage.
[51] See IEA: Coal - IEA
[52] This includes the expansion of green business activities in the credit and investment sectors.

comprehensive policies in place. With the IEA expecting overall demand for fossil fuels to peak before 2030,[53] entering into new financing agreements for the long-term expansion of fossil fuel infrastructure will also entail an increased risk of devaluation (the "stranded assets" problem).

Based on the present analysis, a repeat of this study in the future could offer important insights into the continued climate-related evolution of the domestic banking sector compared to the current analysis. At the same time, it should be noted that methodological advancements can also enhance the robustness of the analysis. Instead of the secondary analysis based on corporate disclosures—which, as already mentioned, has limitations in terms of comparability and scalability—a primary analysis of companies, for example through surveys, offers clear advantages.

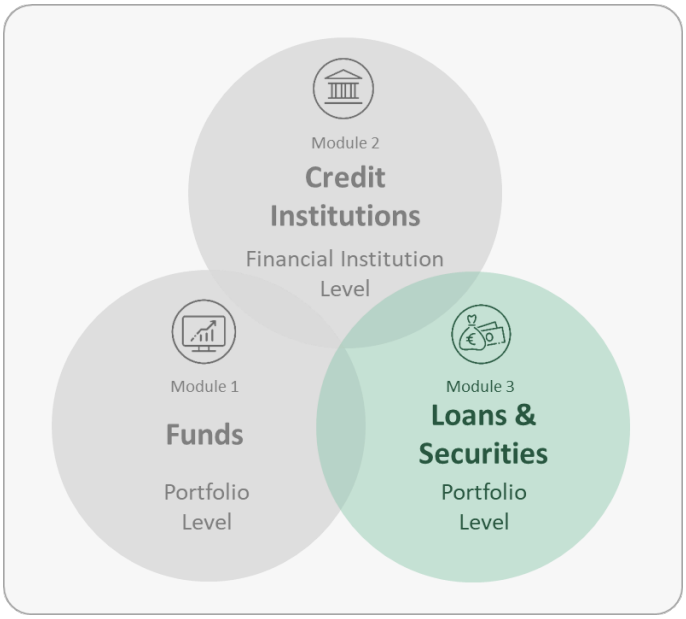
3.3 Module 3: Analysis of emissions financed by Austrian banks and funds

Module 3 is dedicated to determining and evaluating the aggregate financed emissions associated with lending and securities portfolios that are managed by financial institutions operating in Austria.[54]

[53] IEA (2024)

[54] The methods, samples and selected main statements of Module 3 are presented in excerpts below. Comprehensive explanations can be found in the corresponding analysis report (in German): Finanzmarktanalyse: Finanzierte Emissionen

Figure 8: Overview of the areas covered in the climate-related analysis of the Austrian financial market–focus on Module 3.



Source: Environment Agency Austria

Objective

A successful transition requires the gradual reduction of greenhouse gas emissions. Preparing a GHG inventory is a crucial step for companies aiming to align their business models with the goals of the Paris Agreement. Identifying key sources of emissions enables the development of targeted reduction strategies that serve as a basis for making decisions to invest in low-emission technologies. In this context, capturing their financed emissions[55] is essential for financial institutions, as it enables them to prioritise elements of their portfolio that can make a significant contribution to achieving climate targets. Against this backdrop, Module 3 focuses on the identification and assessment of financed emissions by financial institutions operating in Austria.

The analysis is geared towards calculating and evaluating financed emissions at the macro level using environmental and economic data. This means that the analysis is not conducted at the level of individual institutions but is instead based on an aggregated view of credit and investment portfolios. Furthermore, a subsequent analysis might explore green

[55] In this analysis, the term “emissions” is used as a synonym for GHG emissions.

investments that have already been planned in order to obtain a comprehensive overview of the current state of transformation within the portfolios.

Methodology

The calculation of financed emissions is based on the methodology developed by the Partnership for Carbon Accounting Financials (PCAF), a recognised standard in the financial sector for measuring GHG emissions associated with lending and securities portfolios. The first version of the PCAF methodology was also reviewed against the GHG Protocol and found to be consistent with its requirements.[56] According to this approach, the total GHG emissions of a company receiving finance[57] are determined and then allocated to the respective lenders using an attribution methodology. PCAF defines attribution factors that put the amount of capital being financed or invested in relation to the total value of the company.[58]

As only aggregated, not company-specific, data was available for this analysis, a statistical method based on input-output models was applied to estimate financed corporate emissions. However, this method entails certain limitations that had to be taken into account in the analysis and should also be borne in mind when interpreting the results–in particular, the limited accuracy of the estimates, the fact that only upstream Scope 3 emissions are considered, and data gaps for specific asset classes (e.g. missing data on real estate financing).

Sample description

The underlying datasets were specifically selected to enable calculations for lending and securities portfolios for the year 2023. The following data sources were used:

- Lending and securities portfolios: data from the Austrian National Bank (OeNB)
- Calculation of revenue-based CO_2e emission intensities: EXIOBASE database[59]

[56] Financed emissions correspond to Scope 3 Category 15, “Investments”, of the Greenhouse Gas Protocol (GHG Protocol), an internationally recognised standard for measuring and reporting GHG emissions for companies.
[57] Or an asset, such as a property.
[58] In relation to the value of the asset.
[59] A global database that provides comprehensive information on environmental and economic interdependencies.

- Capital turnover rates: BACH database[60] and data provided by The Value Group GmbH

Selected key messages from module 3

The analysed lending volumes of banks finance total emissions (Scope 1, Scope 2 and upstream Scope 3[61]) amounting to 58.5 million tonnes of CO_2e, while the analysed securities portfolio[62] of Austrian investment funds finances a total of 18 million tonnes of CO_2e.

In both portfolios, the energy supply sector (NACE[63] Division D35) is the largest individual contributor in terms of financed total emissions, accounting for approximately 27 per cent of loan-financed and 17 per cent of security-financed total emissions.

In the lending portfolio, the utilities sector (NACE Sections D and E)–and particularly energy supply (D35), waste management (E38) and sewerage management (E37)–represents the most significant sector overall, accounting for around one-third of total financed emissions. The wholesale and retail trade sector (excluding motor vehicles, NACE G46 and G47) ranks second, contributing 12.8 per cent[64] of financed emissions. Building construction and civil engineering (NACE F41 and F42) is the third-largest sector, generating approximately 3 million tonnes of CO_2e, primarily due to the continued use of emission-intensive building materials.

[60] BACH is the abbreviation for "Bank for the Accounts of Companies Harmonized" of the Banque de France and contains harmonised company balance sheets from European countries that are all part of the eurozone.

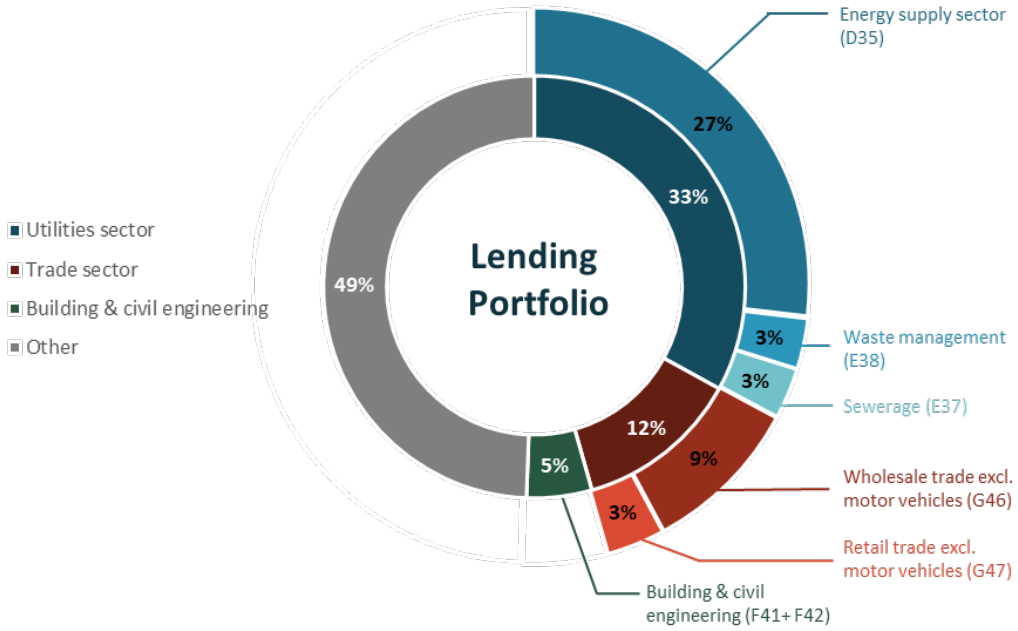
[61] The GHG Protocol divides greenhouse gas emissions into three categories or "scopes": Scope 1 for direct emissions, Scope 2 for indirect emissions from purchased energy and Scope 3 for other indirect emissions from upstream and downstream value chains.

[62] The securities volume analysed exclusively comprises equity positions, which corresponds to around a quarter of the total securities volume.

[63] NACE, which stands for "Nomenclature statistique des activités économiques dans la Communauté européenne", is a European system for classifying economic sectors.

[64] Applying commercial rounding, the shares for the trade sector in Figure 9 total 13 per cent, while the shares for wholesale trade excluding motor vehicles (G46) and retail trade excluding motor vehicles (G47) amount to 9 per cent and 3 per cent respectively.

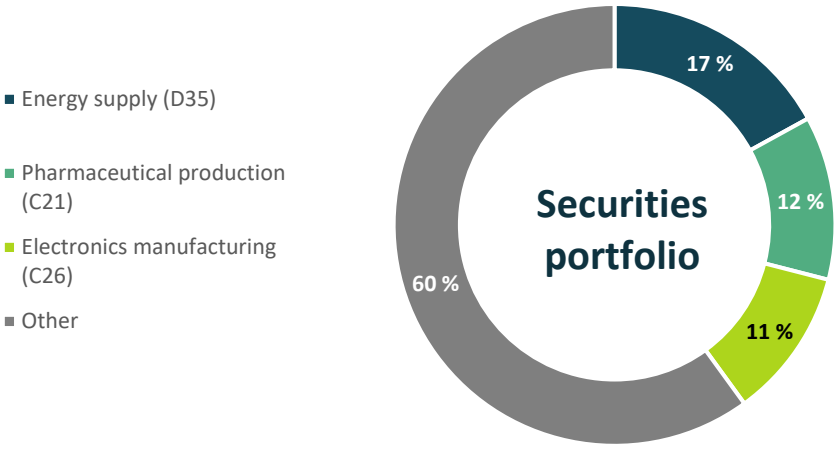
Figure 9: Share of the most relevant CO_2e emissions per economic activity financed through the lending portfolio.



Source: Illustration by Environment Agency Austria based on OeNB, EXIOBASE, Banque de France and The Value Group

In the securities portfolio, in addition to the energy supply sector (D35), the manufacturing sector (NACE Section C) dominates the total emissions financed, with the pharmaceutical industry (C21) and the electronics industry (C26) representing the largest individual subsectors.

Figure 10: Share of the most relevant CO_2e emissions per economic activity financed through the securities portfolio analysed.



Source: Illustration by Environment Agency Austria based on OeNB, EXIOBASE, Banque de France and The Value Group

The regional distribution of emissions reveals significant differences between the lending portfolio and the investment portfolio: while 38 per cent of total emissions in the lending portfolio are attributed to international lending volumes, this share amounts to 95 per cent in the securities portfolio, with 82 per cent of investments located outside the eurozone. This difference is not surprising, as securities portfolios are generally globally diversified, whereas lending activities are regionally anchored.

International volumes tend to be more emission-intensive. Accordingly, the CO_2e emission intensity of the highly international securities portfolio is significantly higher at 393 tonnes CO_2e per million euros invested compared to 239 tonnes CO_2e per million euros invested in the lending portfolio.

This analysis was being conducted for the first time and faced certain limitations, particularly regarding the availability of data, which affect the accuracy and completeness of the results. A significant underestimation of emissions is expected especially in sectors where sector classification does not adequately reflect the actual purpose of the financing. This is particularly true of the real estate sector (NACE L68), which accounts for 41 per cent of the lending volume, as well as for other sectors such as corporate management (M70)

and financial services (K64). In the real estate sector, a conservatively estimated adjustment could increase the reported emissions by approximately two-thirds.

Broader context

In the financial sector, a GHG inventory of financed emissions forms the basis for gaining a climate-related understanding of one's own portfolio. This kind of GHG inventory enables "emission hotspots" to be identified within the portfolio, i.e. areas where a significant portion of GHG emissions occur. This allows priorities to be set in a targeted way, e.g. to define engagement strategies for actively influencing companies as well as other measures. Tailored methods and data are required if banks are to set meaningful sectoral decarbonisation targets. However, there is currently only limited availability of both of these for the financial market.

This poses the question of to what extent the identified sectoral emission hotspots of loan financing are already reflected in the targets of the eleven banks analysed in Module 2.

Overall, six of the eleven banks have already set climate targets, which appear to cover, at least directly or indirectly, one sectoral emission hotspot in all six banks. These hotspots include the energy supply sector (D35), wholesale trade excluding motor vehicles (G46), waste management (E38), construction (F41 and F42), and real estate (L68).[65]

Three banks have set climate targets using cross-sectoral target-setting methods–such as the "Portfolio Coverage Approach" by the Science Based Targets initiative (SBTi)–and thus indirectly cover all sectoral emission hotspots. Two out of these three banks have additionally set sector-specific targets.

Three banks have formulated their targets using exclusively sectoral target-setting methods. All three have targets for the energy supply sector (D35), with two also including real estate (L68). However, the remaining sectoral emission hotspots are not covered by targets. One potential reason for this is that sectoral target-setting methods are currently

[65] For this comparison, the sector focuses were defined as the three largest emission sectors–based on Scope 1 and 2 as well as Scope 3–as well as the real estate sector, which was assigned a higher weighting in this study than the calculations suggest. As two sectors can be found in the three largest Scope 1 and 2 sectors as well as in the three largest Scope 3 sectors, this makes a total of five sectors.

only available for three sectors: energy, real estate and construction. The SBTi did not publish a methodological standard for the construction sector until August 2024.

Conclusions

Placing the results from Modules 2 and 3 into context indicates that the emission hotspots of the Austrian lending portfolio are not being strongly reflected in the banks' reduction measures. Neither have some banks set quantitative climate targets yet. Others, whilst they have formulated targets, these do not cover all sectors. Consequently, important sectors remain unaddressed in many cases, partly due to the lack of sector-specific target-setting methods. Since it is unclear when these missing sector methods will be developed, the use of cross-sectoral target-setting approaches–which some banks are already doing–is recommended.

The uncertainties that remain in interpreting the calculation results due to methodological limitations highlight the need for methodological improvements. For application in future studies, more detailed financial and emissions data as well as alternative data sources and methods should be considered and reviewed to minimise these uncertainties. For this purpose, Environment Agency Austria is analysing complementary methods and alternative input-output models to provide a better foundation.

4 Overall findings of the analysis

Although our analysis of the Austrian financial market in 2024 identifies some positive developments overall, further steps are needed to enhance the sector's climate alignment.

In the investment fund sector, our sample analysis reveals a significant increase in the disclosure rate of CO_2e emissions from 69 per cent in 2018 to 84 per cent in 2023 on average. Both indicators of adverse climate-related impacts, the CO_2e footprint (-17 per cent in 2023 compared to 2018) and the CO_2e emissions intensity[66] of investee companies (-10 per cent over the same period), suggest a trend toward improvement. The Austrian results were placed within the context of the European and international landscape using established comparable benchmarks that consistently demonstrate better outcomes for all three indicators than the Austrian samples do.

Across all samples and benchmarks, Scope 3 emissions account for the largest share of exposure at over 85 per cent, yet these indirect upstream and downstream emissions have exhibited the smallest reductions compared to Scope 1 and 2 emissions. Although there is still room for improvement in data availability and quality for Scope 3 emissions compared to Scopes 1 and 2, the conclusion to be drawn is clear: due to their significant share, Scope 3 emissions represent not only the greatest leverage for reduction but also the biggest challenges.

Despite the different methodological approaches taken in Modules 1 and 3 for assessing sectoral emission contributions from securities investments, the results point in the same direction: exposures to climate risks are primarily driven by investments in companies in the industrial production (according to GICS[67], Module 1) or manufacturing (according to NACE[68], Module 3) sectors. This holds true at least when considering emissions from Scopes 1 to 3. Excluding Scope 3 emissions would present a significantly different picture, with the materials and utilities sectors accounting for by far the largest share of a portfolio's CO_2e

[66] In accordance with the Delegated Regulation (EU) 2022/1288.
[67] GICS–Global Industry Classification Standard: an internationally established classification system for companies by sector that was developed by MSCI and Standard & Poor's.
[68] NACE–"Nomenclature statistique des activités économiques dans la Communauté européenne", a statistical system for classifying economic sectors within the European Community.

exposure. This highlights that a clear understanding of the underlying subject of analysis is essential for interpreting the results.

An examination of loan-financed emissions reveals a somewhat different sectoral exposure: by far the largest is the utilities sector (energy, waste, sewerage), followed by the trade (excluding motor vehicles) and construction sectors (based on Scope 1, Scope 2 and upstream Scope 3 emissions).

These analyses form the basis for identifying the sectoral CO_2e exposure of Austrian lending and securities portfolios and thus for developing targeted reduction strategies going forward.

A complementary review of credit institutions' commitments to climate targets provides insights into the extent to which there is already a fundamental awareness of managing portfolio-related emissions. While the members of the Green Finance Alliance (GFA) that were examined have already taken an important initial step by committing to overarching climate targets, most significant Austrian banks have so far failed to follow suit. Comparing the sectoral GHG exposure identified in the domestic lending business of the credit institutions analysed with the decarbonisation targets set by them reveals a degree of divergence. This is partly because the lending portfolios of individual banks focus on different sectors and partly because there is a lack of sector-specific methods and more meaningful data, making it harder to formulate specific targets. Since it is unclear when this methodological gap will be closed, the use of cross-sectoral target-setting approaches–as some banks are already doing–is regarded as a practical interim solution.

Whilst decarbonisation targets represent an important pillar for assessing the climate alignment of credit institutions, a gradual reduction in financing for fossil fuels is another essential measure. This concerns both restrictions on new financing and commitments to divest from existing positions in coal, oil and natural gas. Whereas most members of the GFA have comprehensive policies in place, corresponding measures are much less wide-spread among significant Austrian credit institutions and cover only some of the necessary restrictions.

The present climate-related analysis represents another step towards analysing the Austrian financial market regarding its contribution to redirecting financial flows and limiting transition risks. The improved data, methodologies and tools now available offer expanded analytical possibilities compared to previous years. The dynamic evolution of regulation and voluntary initiatives by financial market participants make further innovations likely. Both the authors and the institution that commissioned this study are aware of the current limitations concerning analytical capabilities and the associated insights for the entire Austrian financial market. Despite these gaps, the currently available data and methodologies enable more comprehensive analyses than previous studies, helping to advance topics such as monitoring the progress made by the financial market in financing and investing in climate protection measures, managing transition risks appropriately and implementing transparency requirements.

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Abbreviations

BACH	Bank for the Accounts of Companies Harmonized
BMF	Federal Ministry of Finance
BMK	Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology
BMLUK	Federal Ministry of Agriculture, Forestry, Climate and Environmental Protection, Regions and Water Management
CCUS	Carbon capture, utilisation and storage
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalents
CSRD	Corporate Sustainability Reporting Directive
CTBs	Climate Transition Benchmarks
EC	European Commission
ECB	European Central Bank
ESAs	European Supervisory Authorities
EU	European Union
GDP	Gross domestic product
GFA	Green Finance Alliance
GHGs	Greenhouse gases
GICS	Global Industry Classification Standard
IEA	International Energy Agency
IPCC	Intergovernmental Panel on Climate Change
NACE	Nomenclature statistique des activités économiques dans la Communauté européenne
NZBA	Net Zero Banking Alliance
OeNB	Oesterreichische Nationalbank (Austrian National Bank)
PAB	Paris-Aligned Benchmark
PACTA	Paris Agreement Capital Transition Assessment
PCAF	Partnership for Carbon Accounting Financials

SBTi	Science Based Targets Initiative