LIETUVOS BANKAS
EUROSISTEMA

Climate-related disclosures of Lietuvos bankas' non-monetary policy portfolios

2023

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Content

INTRODUCTION

Lietuvos bankas and the Eurosystem are committed to addressing climate change by managing climate-related risks, supporting an orderly transition to a carbon-neutral economy, and reducing environmental impact. Against this background, Lietuvos bankas aims to enhance transparency about the exposure of its investment portfolio to climate risks and the portfolio's impact on the climate.

In March 2023, Lietuvos bankas published the first climate-related financial disclosures for its non-monetary policy portfolios. This is our second annual report on the carbon footprint of the assets we hold for non-monetary policy purposes. This report is part of the Eurosystem's common climate-related financial disclosures that contribute to this transparency effort and provide the foundation for reducing the exposure of the Eurosystem to climate-related risks. More broadly, these disclosures enhance the awareness and understanding of climate risks across the financial sector, promote the harmonisation of disclosure practices, and support the EU's climate neutrality objectives and its transition to a low-carbon economy.

The disclosure framework has been developed as a collective Eurosystem effort, with a focus on non-monetary policy portfolios. This framework considers the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD), the Partnership for Carbon Accounting Financials (PCAF), and the central banks and supervisors' Network for Greening the Financial System (NGFS). It has been adapted to fit the characteristics of Eurosystem portfolios. The disclosures will be reviewed and improved over time, in line with the increasing availability of climate-related data and growing expertise in handling climate-related risks.

This report is structured around the recommendations of the Task Force on TCFD, which specifically comprise four pillars: governance, strategy, risk management, and metrics and targets.

GOVERNANCE

Climate sustainability is one of the strategic directions of Lietuvos bankas. The Climate Change Centre, established 2022, aims to enhance greenness and mitigate climate related risks in all areas of responsibility of Lietuvos bankas, including, among other things, financial stability, foreign reserves management.

Our investment policy guidelines include climate-related aspects as an additional element to be considered after the traditional principles of reserve management – safety, liquidity, and return. The Board of Lietuvos bankas is responsible for approving the allocation of strategic assets as well as climate-related investment strategies and targets. The Market Operations Department implements these principles in practice and reports to the Board.

STRATEGY

Lietuvos bankas seeks to align its financial asset portfolio with the EU's long-term decarbonization objective in support of the Paris Agreement. While implementing this alignment, methodological and data reliability issues, as well as interference with other principles and objectives, need to be considered.

In 2022, Lietuvos bankas began to apply a sustainability strategy to its equity investments. The main goal of this strategy is to improve the climate-related characteristics (e.g. by reducing exposure to oil and coal businesses) of investments without significantly changing their risk and return characteristics. This strategy will be reviewed regularly and adjusted according to climate-related targets.

As part of its Green Strategy for 2023-2025, Lietuvos bankas will pursue a thematic impact investment strategy that seeks to increase green investments in asset classes where such investments are available. A process of incorporating climate change considerations into the investment strategies of other asset classes is ongoing.

RISK MANAGEMENT

Lietuvos bankas, in line with the Eurosystem, adopted the recommendations and terminology proposed by the TCFD when identifying, assessing, and mitigating climate-related risks. Two risk categories can be distinguished: transition risks and physical risks. Transition risks concern the likelihood and impact of the economic consequences of the transition to a low-carbon economy. Physical risks, by contrast, concern the likelihood and impact of severe climatic events or natural disasters. As climate change impacts both macroeconomic and microeconomic factors, financial markets play an important role in translating these impacts to market participants through asset prices. Asset prices, in the case of corporate bonds and equities, are also exposed to reputational risks and climate-related litigation risks.

Lietuvos bankas takes a holistic view in managing the potential quantitative effect that climate-related risks have on its balance sheet via non-monetary policy portfolios. Climate-related risks are integrated into the risk management process, where they do not form a new risk category by themselves, but rather are an amplifying factor in existing categories such as credit and market risks. Thus, a bottom-up approach is applied, and climate-related risks are treated as reinforcers of financial risks. Therefore, measuring the link between our financial assets and climate risks using climate-related metrics is an essential part of our risk management approach.

METRICS AND TARGETS

This section presents the TCFD disclosures of climate-related metrics and targets for the financial asset portfolios of Lietuvos bankas. These disclosures are aligned with the data sources and methodologies applicable to the Eurosystem's common minimum disclosures.

METRICS

Weighted Average Carbon Intensity (WACI), Total Carbon Emissions, and Carbon Footprint are the key metrics of the Eurosystem disclosure framework. All three are recommended by the TCFD for asset owners. Normalised metrics (such as WACI and Carbon Footprint) and absolute metrics (Total Carbon Emissions) complement each other, and in combination provide a high degree of transparency regarding the exposure of portfolios to climate-related risks and their impact on the climate. All three metrics benefit from standardised methodologies and are widely used in climate-related reporting across the financial sector.

WACI measures a portfolio's exposure to carbon-intensive issuers, expressed in tonnes of CO_2 equivalent[1] per EUR million revenue in case of non-sovereign issuers, and per GDP, government consumption expenditure, or per capita in case of sovereign issuers. The carbon intensity of each issuer is computed by normalising its greenhouse gas (GHG) emissions by a measure of economic activity. The WACI of the portfolio is then calculated by weighting the carbon intensity of each issuer by its respective share of holdings in the portfolio. The WACI is a central element of the Eurosystem's climate-related financial disclosures. High data availability, data normalisation, and the widespread application of the metric across the financial industry ensure comparability across portfolios and over time. WACI delivers an "outside-in" perspective (i.e. financial materiality), which serves as a proxy for a portfolio's exposure to climate change-related transition risks.

The total absolute GHG emissions metric quantifies the emissions associated with a portfolio, expressed in tonnes of CO_2 equivalent. GHG emissions are weighted by the investor's contribution to the issuer's total capital structure (enterprise value, including cash for non-sovereign issuers, and GDP for sovereign issuers) and are summed up to determine the portfolio's total absolute emissions. This metric serves as a foundation of related normalised metrics such as the carbon footprint. It provides an "inside-out" perspective (i.e.

[1] Carbon dioxide equivalent (or CO_2 equivalent) is a metric measure used to compare the emissions of various greenhouse gases based on their global warming potential (GWP), by converting amounts of other gases to the equivalent amount of carbon dioxide with the same global warming potential.

climate-related materiality) which serves as a proxy for a portfolio's carbon footprint. Due to its non-normalised nature, the metric's comparability across portfolios and over time is limited, with portfolio size being a main driver. To overcome this shortcoming and to provide a more holistic view of a portfolio's associated emissions, complementary disclosure of the carbon footprint is essential.

The carbon footprint normalises the total absolute GHG emissions associated with a portfolio by its market value, expressed in tonnes of CO_2 equivalent per EUR million invested, thereby allowing for comparability across differently sized portfolios and over time. More details on the calculations of metrics are provided in the Annex.

The Eurosystem disclosure framework is, for the time being, primarily based on scope 1 (direct) and scope 2 (indirect, related to energy consumption) emissions. Scope 3 (indirect, not related to energy consumption) emissions, while often accounting for the largest part of an issuer's emissions, remain subject to methodological issues (double counting of emissions, high share of estimated emissions, etc.). For the first time, metrics based on scope 3 emissions are reported for supranational and agency bonds, corporate bonds, covered bonds and equities in the Annex but are not discussed in the main text.

For multi-asset investors, the double counting of GHG emissions is almost unavoidable due to the interlinked nature of corporate, sub-sovereign, and sovereign emissions. The disclosure framework regarding emissions allocation mechanisms for sovereign issuers aims to address the challenge of double counting to the furthest possible extent. However, double counting of emissions is a natural element of climate-related financial reporting.

Methodologies to allocate emissions to sovereign issuers are subject to ongoing debate. The debate centres around the question of which emissions a country is responsible for: the emissions within its borders (production focus), the emissions related to domestic consumption (consumption focus), or the emissions related to government institutions and government expenditures (government focus). The Eurosystem has decided to disclose all three emissions allocation methods separately to provide the maximum degree of transparency and address carbon leakage and emissions double counting to the fullest possible extent.

The production method is the most widely used approach, and is employed, for example, by the Intergovernmental Panel on Climate Change (IPCC). It acts as the basis for countries' Nationally Determined Contributions (NDCs) and holds countries accountable for the emissions within their borders (territorial perspective), which they can affect via domestic laws and policies. However, the production method results in the double counting of emissions (because it includes corporate emissions) and does not address the issue of carbon leakage, in which energy-intensive business processes are outsourced to countries with laxer emissions constraints. In this report for sovereign issuers, production emissions are reported both including and excluding the impacts of land use, land-use change, and forestry (LULUCF).

In contrast, the consumption method holds countries accountable for emissions stemming from domestic demand by including emissions related to imports and excluding emissions related to exports, thereby addressing the issue of carbon leakage. However, it does not address the issue of double counting, and its underlying methodology is complex, as it requires detailed information about international trade flows. Because of this complexity, the consumption method is less widely used than the production method.

Finally, the government method focuses only on emissions related to government-owned buildings, vehicles, energy consumption, and indirect emissions related to government expenditures, subsidies, and investments. While this method reduces the problem of double counting, it is widely criticised for its narrow scope.

The climate-related data underlying our calculations stems from two specialised data providers (Institutional Shareholder Services and Carbon4Finance), which were chosen following a Eurosystem procurement, judging the quality and coverage of the disclosed data. Financial data is gathered from various internal and external public and non-public data sources. Since there is a natural delay until both GHG emissions and financial data becomes available, reporting climate-related metrics for the most recent periods—which is in line with best

market practices—requires merging data from different reference years. As the new data become available, the metrics will be updated retrospectively in the following reports.

The carbon intensity and the share of green bonds are presented as supporting metrics in this report. The green bond share corresponds to a portfolio's exposure to green bonds (defined according to ICMA standards) relative to its total size. Further details regarding the calculation of metrics are available in the Annex.

Table 1 shows the climate-related metrics of Lietuvos bankas' financial assets for the year 2023 (based on scope 1 and 2 emissions), with metrics split by asset class. Metrics for the years 2020, 2021 and 2022 are provided in Annex Tables 3–5.

Table 1. Climate-related metrics for the year 2023
(percentages in brackets indicate data availability)

	Sovereign				Non-sovereign				
	Sovereign and sub-sovereign bonds				Total	Supranational and agency bonds	Corporate bonds	Covered bonds	Equities
	Production		Consumption	Government					
	Excl. LULUCF	Incl. LULUCF							
Portfolio size (EUR billions)	2.9				2.0	0.4	1.1	0.0	0.5
WACI (tonnes of CO_2 equivalent per EUR million revenue, GDP, consumption exp., or per capita)	249 (100%)	228 (100%)	18 (100%)	261 (100%)	61 (94%)	0 (85%)	74 (95%)	2 (100%)	79 (99%)
Total carbon emissions (tonnes of CO_2 equivalent)	723,376 (100%)	661,622 (100%)	791,088 (100%)	101,643 (100%)	61,461 (94%)	3 (85%)	47,898 (95%)	12 (100%)	13,549 (99%)
Carbon footprint (tonnes of CO_2 equivalent per EUR million invested)	249 (100%)	228 (100%)	273 (100%)	35 (100%)	35 (94%)	0 (85%)	52 (95%)	0 (100%)	29 (99%)
Carbon intensity (tonnes of CO2 equivalent per EUR million revenue, GDP, consumption exp., or per capita)	249 (100%)	228 (100%)	18 (100%)	231 (100%)	109 (94%)	0 (85%)	112 (95%)	2 (94%)	111 (99%)
Green bond share	0.0% (100%)				6.5% (100%)	0.94% (100%)	8.4% (100%)		

Chart 1 shows the historical evolution of the size and asset allocation of Lietuvos bankas' financial asset portfolio. Charts 2–5 show the historical evolution of climate-related metrics for carbon-intensive asset classes in Lietuvos bankas' financial asset portfolio. Chart 6 shows the green bond share (defined according to ICMA standards) relative to its total size.

Chart 1. Portfolio size

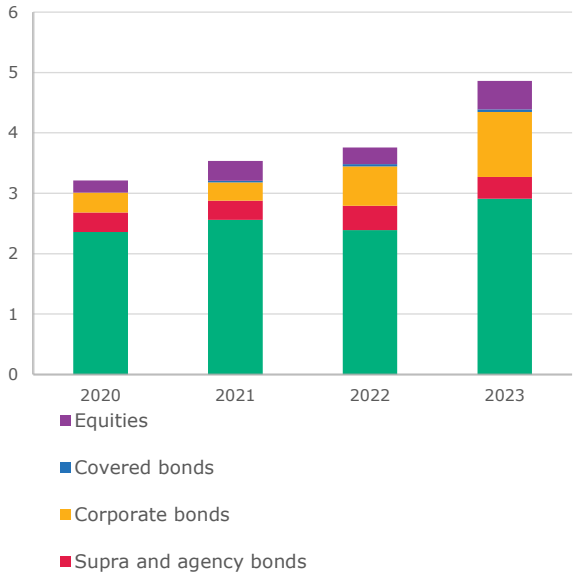

Chart 2. Total carbon emissions

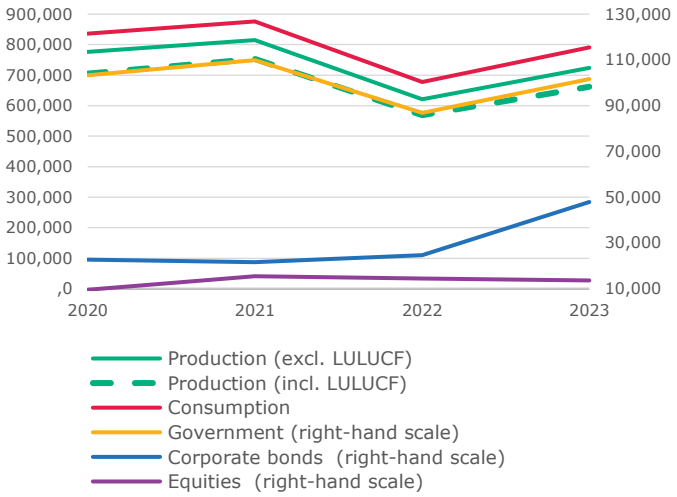

Chart 3. WACI

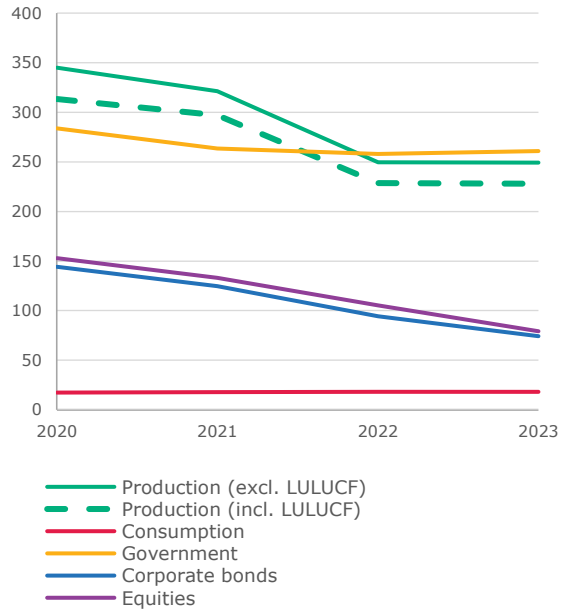

Chart 4. Carbon footprint

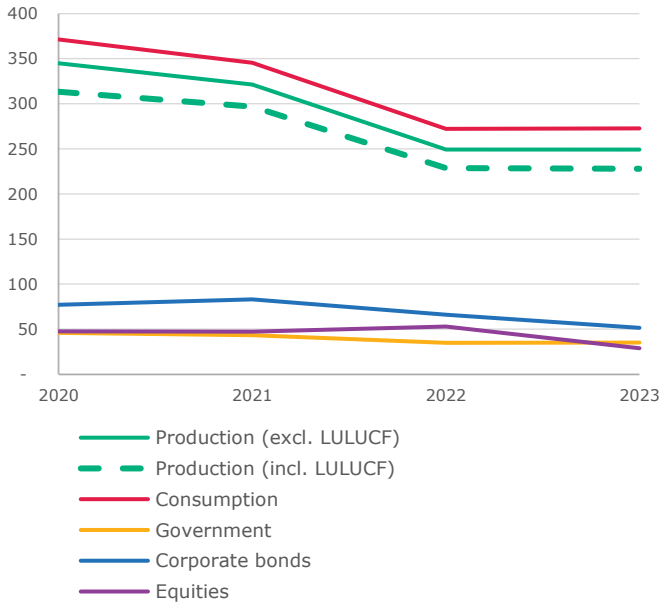

Chart 5. Carbon intensity

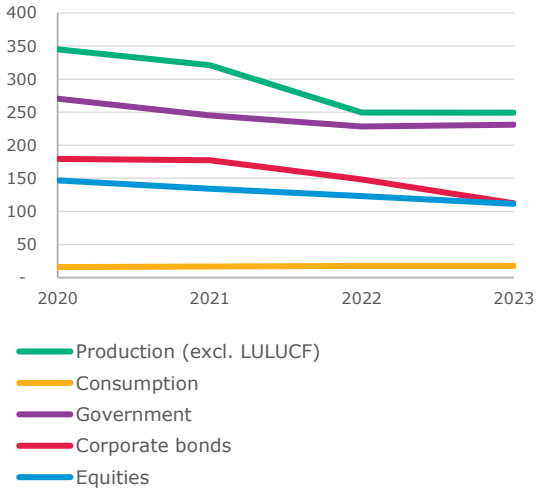

Chart 6. Green bond share

Throughout the reporting period, our investments in sovereign entities demonstrate a distinct trajectory toward decarbonization. This is evident from the decrease in normalised reported metrics – WACI and carbon footprint – across all three emissions allocation methods. The predominant driver behind this trend is the reduction in investments in carbon-intensive sovereign assets. Furthermore, countries such as the United States, Canada, and the United Kingdom are dedicated to the gradual decarbonisation of their economies, having pledged their commitment as signatories to the Paris Agreement. The increase in total carbon emissions in 2023 is primarily attributable to the expanded portfolio size. The proportion of green supranational and agency bonds (to all supranational and agency bonds in the portfolio) at the end of 2023 amounted 0.9% and for corporate bonds this share increased over the reporting period from 4.1% to 8.4%.

TARGETS

Targets are an important part of climate-related financial disclosures. Targets help to reduce portfolios' exposure to climate-related risks as well as manage climate-related opportunities and the impact of asset holdings on the climate. Lietuvos bankas is committed to seeking climate-neutral non-monetary policy portfolios by no later than 2050. This commitment is in line with the Paris Agreement and the EU's climate neutrality objectives.

Lietuvos bankas, considering its portfolio-specific objectives and constraints, the ongoing development of net-zero investment frameworks, and suitable instruments and the evolution of climate science, has set two interim targets for its equity investments. Lietuvos bankas will aim to reduce the WACI of its equity investments by 30% by 2025 compared to the base year 2020. Additionally, Lietuvos bankas will aim for the WACI of its equity investments to be 30% lower than the benchmark (the WACI of developed markets equity index) by 2025. The second target provides additional support for the climate neutrality objective and is less affected by the risk that the metrics may reflect changes in market prices or financial data rather than any real changes in the portfolio's emissions characteristics. The sustainability strategy introduced in 2022 has already resulted in a 48% reduction of equities' WACI and an 21% improvement of equities' WACI relative to the equity benchmark. The changes in climate-related metrics from 2020 to 2023 are shown in Table 2. The possibility of setting intermediate targets for other asset classes is currently under assessment.

Table 2. Changes in climate-related metrics from 2020 to 2023
(percentages in brackets indicate changes in data availability)

	Sovereign				Non-sovereign				
	Sovereign and sub-sovereign bonds				Total	Supranational and agency bonds	Corporate bonds	Covered bonds	Equities
	Production		Consumption	Government					
	Excl. LULUCF	Incl. LULUCF							
Portfolio size (EUR billions)	24%				128%	27%	190%		135%
WACI (tonnes of CO_2 equivalent per EUR million revenue, GDP, consumption exp., or per capita)	-28% (0%)	-27% (0%)	4% (0%)	-8% (0%)	-39% (7%)	-65% (17%)	-49% (-1%)		-48% (-1%)
Total carbon emissions (tonnes of CO_2 equivalent)	-7% (0%)	-6% (0%)	-5% (0%)	-2% (0%)	90% (7%)	-58% (17%)	110% (-1%)		42% (-1%)
Carbon footprint (tonnes of CO_2 equivalent per EUR million invested)	-28% (0%)	-27% (0%)	-27% (0%)	-24% (0%)	-20% (7%)	-67% (17%)	-33% (-1%)		-39% (-1%)
Carbon intensity (tonnes of CO2 equivalent per EUR million revenue, GDP, consumption exp., or per capita)	-28% (0%)	-27% (0%)	11% (0%)	-14% (0%)	-33% (7%)	-70% (17%)	-37% (-1%)		-24% (-1%)

CONCLUSIONS

The Eurosystem will regularly review all elements of the Eurosystem disclosure framework with the goal of further improving the quality of the disclosures and ensuring that they are fit for purpose. Elements that will be subject to regular review include the scope of reported emissions, the portfolios included in the reporting, the reported metrics and targets, as well as data quality and availability issues.

The Bank of Lithuania will regularly review the governance approach and strategies related to climate sustainability. We will also seek to further integrate climate-related risks into our risk management process and enrich our disclosures with relevant information reflecting our progress in this area.

ANNEX

Table 3. Climate-related metrics for the year 2022
(percentages in brackets indicate data availability)

	Sovereign				Non-sovereign				
	Sovereign and sub-sovereign bonds				Total	Supranational and agency bonds	Corporate bonds	Covered bonds	Equities
	Production		Consumption	Government					
	Excl. LULUCF	Incl. LULUCF							
Portfolio size (EUR billions)	2.4				1.4	0.4	0.7	0.0	0.3
WACI (tonnes of CO_2 equivalent per EUR million revenue, GDP, consumption exp., or per capita)	249 (100%)	229 (100%)	18 (100%)	258 (100%)	62 (93%)	1 (84%)	94 (96%)	2 (100%)	105 (100%)
Total carbon emissions (tonnes of CO_2 equivalent)	620,848 (100%)	568,821 (100%)	677,503 (100%)	86,852 (100%)	39,099 (93%)	5 (82%)	24,664 (96%)	11 (100%)	14,418 (100%)
Carbon footprint (tonnes of CO_2 equivalent per EUR million invested)	249 (100%)	229 (100%)	272 (100%)	35 (100%)	38 (93%)	0 (82%)	66 (96%)	0 (100%)	53 (100%)
Carbon intensity (tonnes of CO2 equivalent per EUR million revenue, GDP, consumption exp., or per capita)	249 (100%)	229 (100%)	17 (100%)	228 (100%)	132 (93%)	1 (82%)	148 (96%)	2 (100%)	123 (100%)
Green bond share	0.0% (100%)				4.1% (100%)	1.76% (100%)	5.6% (100%)		

Table 4. Climate-related metrics for the year 2021
(percentages in brackets indicate data availability)

	Sovereign				Non-sovereign				
	Sovereign and sub-sovereign bonds				Total	Supranational and agency bonds	Corporate bonds	Covered bonds	Equities
	Production		Consumption	Government					
	Excl. LULUCF	Incl. LULUCF							
Portfolio size (EUR billions)	2.6				1.0	0.3	0.3	0.0	0.3
WACI (tonnes of CO_2 equivalent per EUR million revenue, GDP, consumption exp., or per capita)	321 (100%)	297 (100%)	18 (100%)	263 (100%)	97 (82%)	1 (55%)	125 (89%)	3 (100%)	133 (100%)
Total carbon emissions (tonnes of CO_2 equivalent)	814,873 (100%)	753,156 (100%)	876,023 (100%)	109,897 (100%)	37,069 (82%)	4 (55%)	21,600 (89%)	10 (100%)	15,456 (100%)
Carbon footprint (tonnes of CO_2 equivalent per EUR million invested)	321 (100%)	297 (100%)	345 (100%)	43 (100%)	47 (82%)	0 (55%)	83 (89%)	0 (100%)	47 (100%)
Carbon intensity (tonnes of CO2 equivalent per EUR million revenue, GDP, consumption exp., or per capita)	321 (100%)	297 (100%)	17 (100%)	245 (100%)	152 (82%)	1 (55%)	177 (89%)	3 (100%)	134 (100%)
Green bond share	0.6% (100%)				5.9% (100%)	6.2% (100%)	5.7% (100%)		

Table 5. Climate-related metrics for the year 2020
(percentages in brackets indicate data availability)

	Sovereign				Non-sovereign				
	Sovereign and sub-sovereign bonds				Total	Supranational and agency bonds	Corporate bonds	Covered bonds	Equities
	Production		Consumption	Government					
	Excl. LULUCF	Incl. LULUCF							
Portfolio size (EUR billion)	2.4				0.9	0.3	0.3	0.0	0.2
WACI (tonnes of CO_2 equivalent per EUR million revenue, GDP, consumption exp., or per capita)	345 (100%)	313 (100%)	17 (100%)	284 (100%)	100 (88%)	1 (73%)	144 (96%)		153 (100%)
Total carbon emissions (tonnes of CO_2 equivalent)	776,163 (100%)	705,057 (100%)	835,578 (100%)	103,345 (100%)	32,331 (88%)	6 (73%)	22,771 (96%)		9,554 (100%)
Carbon footprint (tonnes of CO_2 equivalent per EUR million invested)	345 (100%)	313 (100%)	371 (100%)	46 (100%)	44 (88%)	0 (73%)	77 (96%)		48 (100%)
Carbon intensity (tonnes of CO2 equivalent per EUR million revenue, GDP, consumption exp., or per capita)	345 (100%)	313 (100%)	16 (100%)	270 (100%)	164 (88%)	1 (73%)	179 (96%)		147 (94%)
Green bond share	0.0% (100%)				2.3% (100%)	0.6% (100%)	4.08% (100%)		

Table 6. Climate-related metrics based on scope 3 emissions for 2020 to 2023 (percentages below each metric indicate data availability)

	Year	Total	Supranational and agency bonds	Corporate bonds	Covered bonds	Equities
WACI (scope 3 in tonnes of CO_2 equivalent per EUR million revenue)	2023	1,016 *94%*	533 *85%*	1,262 *95%*	1,046 *100%*	844 *99%*
	2022	1,095 *93%*	888 *84%*	1,218 *96%*	1,040 *100%*	1,204 *100%*
	2021	820 *82%*	259 *55%*	945 *89%*	533 *100%*	1,039 *100%*
	2020	803 *88%*	241 *73%*	1,075 *96%*		1,067 *100%*
Total carbon emissions (scope 3 in tonnes of CO_2 equivalent)	2023	729,433 *94%*	3,275 *85%*	562,537 *95%*	7,236 *100%*	156,386 *99%*
	2022	1,317,603 *93%*	5,606 *82%*	200,713 *96%*	7,038 *100%*	1,104,245 *100%*
	2021	304,149 *82%*	900 *55%*	160,185 *89%*	1,720 *100%*	141,344 *100%*
	2020	272,132 *88%*	1,299 *73%*	186,602 *96%*		84,231 *100%*
Carbon footprint (scope 3 in tonnes of CO_2 equivalent per EUR million invested)	2023	417 *94%*	11 *85%*	605 *95%*	170 *100%*	333 *99%*
	2022	1,272 *93%*	16 *82%*	538 *96%*	163 *100%*	4,057 *100%*
	2021	387 *82%*	5 *55%*	616 *89%*	66 *100%*	431 *100%*
	2020	371 *88%*	5 *73%*	631 *96%*		419 *100%*
Carbon intensity (scope 3 in tonnes of CO_2 equivalent per EUR million revenue)	2023	109 *94%*	0 *85%*	112 *95%*	2 *100%*	111 *99%*
	2022	132 *93%*	1 *82%*	148 *96%*	2 *100%*	123 *100%*
	2021	152 *82%*	1 *55%*	177 *89%*	3 *100%*	134 *100%*
	2020	164 *88%*	1 *73%*	179 *96%*		147 *100%*

Disclaimer: Scope 3 emissions are reported on a best-effort basis to contribute to transparency in this regard. Scope 3 emissions data remain subject to considerable quality issues which limit the reliability of metrics. Substantial revisions to the disclosures are therefore possible in the future.

CALCULATION METHODS FOR CLIMATE-RELATED METRICS:

1. Weighted average carbon intensity

$$\boldsymbol{WACI} = \sum_{n}^{i}\left(\frac{\boldsymbol{current\ value\ of\ investment_i}}{\boldsymbol{current\ portfolio\ value}}\right)\boldsymbol{x}\left(\frac{\boldsymbol{issuer's\ GHG\ emissions_i}}{\boldsymbol{issuer's\ €M\ revenue\ or\ GDP, population,\ total\ consumption\ expenditure}_{\boldsymbol{i}}}\right)$$

2. Total carbon emissions

$$\boldsymbol{TAE} = \sum_{\boldsymbol{n}}^{\boldsymbol{i}}\left(\frac{\boldsymbol{current\ value\ of\ investment_i}}{\boldsymbol{EVIC\ or\ GDP_i}}\boldsymbol{x\ issuer's\ GHG\ emissions_i}\right)$$

3. Carbon footprint

$$\boldsymbol{CF} = \frac{\sum_{n}^{i}\left(\frac{\boldsymbol{current\ value\ of\ investment_i}}{\boldsymbol{EVIC\ or\ GDP_i}}\right)\boldsymbol{x\ issuer's\ GHG\ emissions_i}}{\boldsymbol{current\ portfolio\ value}\ (€\boldsymbol{M})}$$

4. Carbon intensity

$$\frac{\sum_{n}^{i}\left(\frac{\boldsymbol{current\ value\ of\ investment_i}}{\boldsymbol{EVIC\ or\ GDP_i}}\boldsymbol{x\ issuer's\ GHG\ emissions_i}\right)}{\sum_{n}^{i}\left(\frac{\boldsymbol{current\ value\ of\ investment_i}}{\boldsymbol{EVIC\ or\ GDP_i}}\boldsymbol{x}\begin{matrix}\boldsymbol{issuer's\ €M\ revenue\ or\ GDP, population,}\\ \boldsymbol{total\ consumption\ expenditure}_{\boldsymbol{i}}\end{matrix}\right)}$$

5. Green bond share of fixed-income portfolios based on ICMA Green Bond Principles

$$\frac{\sum_{\boldsymbol{green\ bonds}}\boldsymbol{current\ value\ of\ investment}}{\sum_{\boldsymbol{all\ bonds}}\boldsymbol{current\ value\ of\ investment}}$$

Summary of emissions allocation methods, normalisation factors, and attribution factors

Allocation			
Issuer type	Factor	Remarks	Unit
Corporate Supra & Agency	Scope 1, 2 and 3 emissions	Direct emissions and indirect emissions, related to energy consumption. Scope 3 emissions are all indirect emissions (not included in scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions.	tCO_2 equivalent
Sovereign	Production emissions	Emissions produced domestically within a country's physical borders, including domestic consumption and exports. This definition follows the territorial emissions approach adopted by United Nations Framework Convention on Climate Change (UNFCCC) for annual national inventories. Production emissions are reported excluding and including the effects of land use, land-use change and forestry (LULUCF).	
	Consumption emissions	Emissions related to domestic demand, accounting for trade effects. This metric provides a broader view of a sovereign issuer's emissions and tackles the issue of carbon leakage that arises due to production shifts from countries where goods are consumed later.	
	Government emissions	Direct emissions (e.g. from buildings, vehicles) and indirect emissions (e.g. emissions related to energy consumption, but also expenditures, subsidies, and investments) of the central government.	

Normalisation			
Issuer type	Factor	Remarks	Unit
Corporate Supra & Agency	Revenue	The total amount of income generated by the sale of goods and services related to the primary operations of the business. Commercial revenue may also be referred to as sales or as turnover.	EUR millions
Sovereign	Production: PPP adj. GDP	GDP is the sum of gross value added by all resident producers plus any product taxes and minus any subsidies not included in the value of the products. The Purchasing Power Parity (PPP) conversion factor is a spatial price deflator and currency converter that eliminates the effects of differences in countries' price levels.	EUR millions
	Consumption: Population	Total population of a country.	people
	Government: Final consumption expenditure	General government final consumption expenditure (formerly general government consumption) includes all government current expenditures for purchases of goods and services (including compensation of employees). It also includes most expenditures on national defence and security but excludes government military expenditures that are part of government capital formation.	EUR millions

Attribution			
Asset class	Factor	Remarks	Unit
Sovereign bonds	PPP adj. GDP	GDP is the sum of gross value added by all resident producers plus any product taxes and minus any subsidies not included in the value of the products. The Purchasing Power Parity (PPP) conversion factor is a spatial price deflator and currency converter that eliminates the effects of differences in countries' price levels.	EUR millions
Equities	EVIC	The sum of the market capitalization of ordinary shares at fiscal year end, the market capitalization of preferred shares at fiscal year-end, and the book values of total debt and minorities' interests.	
Supra & Agency bonds			
Corporate bonds			
Covered bonds			