Climate-related disclosures of Národná banka Slovenska's non-monetary policy portfolios

Prepared for the Eurosystem TCFD disclosures as at the end of 2025

June 2026

NÁRODNÁ BANKA SLOVENSKA
EUROSYSTÉM

www.nbs.sk

Reproduction of short excerpts – no more than two paragraphs – is authorised without formal written permission provided that the source is acknowledged.

Published by Národná banka Slovenska
© Národná banka Slovenska 2026

Postal address
Národná banka Slovenska
Imricha Karvaša 1,
813 25 Bratislava

Electronic version
www.nbs.sk/en/publications/climate-related-disclosures-of-nbs-non-monetary-policy-portfolio/

ISSN 2729-8604 (online)

June 2026

Contents

Summary

This climate-related disclosure report is part of a joint Eurosystem project that provides a harmonised and transparent approach to climate-related risks. It describes the climate risks to which the non-monetary policy portfolios of Národná banka Slovenska (hereinafter 'NBS' or 'the Bank') are exposed and is published annually on the NBS website.

In early 2025 the Bank approved a sustainable investment strategy based on four key pillars: the application of a negative list; support for decarbonisation; thematic investing; and ESG rating monitoring. The measures presented constitute a basic framework enabling the Bank to more effectively identify and assess climate and ESG risks, while ensuring the efficient management of investment reserves. The strategy links the long-term ambition of effective investing with the goal of supporting the transition to a low-carbon economy. By systematically applying ESG criteria, strengthening decarbonisation targets and favouring financial instruments that support environmentally responsible projects, the investment structure will naturally shift towards a portfolio with a lower environmental impact and greater resilience to long-term climate and regulatory risks.

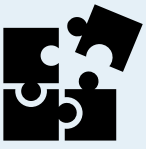
Most of the aggregate carbon metrics for NBS portfolios gradually improved over the period from 2021 to 2024. In 2025, however, the trend reversed, as most carbon metrics deteriorated owing to changes in portfolio composition. For the first time, all carbon metrics of non-sovereign issuers are reported not only for their own activities and energy consumption, but also for their entire value chain, i.e. suppliers and customers.

The Bank actively invests in green, social and sustainability bonds, which are innovative financial instruments used to finance investments in environmental, climate change-related and social projects.

The remainder of this report is organised into four sections – Governance, Strategy, Risk management, and Metrics and targets – in line with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

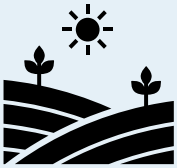
BOX 1

2025 at a glance

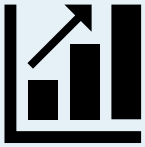


Adoption of a sustainable investment strategy

Holdings of green, social and sustainability bonds amounted to €870 million



Investment in a net-zero ETF (Invesco Global Equity Net Zero ETF)



Slight increase in most carbon metrics

1. Governance

The Bank manages foreign exchange reserves on the basis of the Act on Národná banka Slovenska (No 566/1992), as amended,[1] as well as the rules applicable to Eurosystem national central banks (NCBs).

All framework documents related to reserves management are approved by the **Bank Board of Národná banka Slovenska**. The Bank's Investment Policy Statement includes proposals to address environmental, social and governance (ESG) aspects and climate-related risks in reserves management. In its investment process, the Bank adheres to the international obligations of the Slovak Republic and its own policies in these areas.

Key decisions in reserves management are made by the **NBS Risk Management Committee** and the **NBS Investment Committee**. The Risk Management Committee primarily defines the risk framework and tolerance levels and sets investment rules and limits. The Investment Committee is mainly responsible for strategic asset allocation proposals and for decisions on active and passive asset management. The committees usually meet every month, and their discussions include, among other things, specific decisions related to climate risks and opportunities, as well as ESG aspects of investment reserves. Outcomes are either submitted to the NBS Bank Board as separate documents or incorporated into internal regulations.

Since 2024 the **NBS Climate Committee** has operated as an advisory, agenda-setting and coordinating body of the Bank Board in matters of climate change, climate risks, climate policies, sustainable finance and the transition to a low-carbon economy. The Climate Committee focuses on how climate risks, climate policies and sustainable finance can be taken into account in the Bank's activities. It defines the framework and direction of the Bank's climate-related sustainability agenda and discusses selected issues related to climate change impacts, national and international mitigation measures, and their effects on NBS activities, reserves management, financial market supervision, financial markets, monetary policy, financial stability and the Slovak economy. The committee consists of a chair and 19 other members, mainly department directors.

The Climate Committee's coordination role is carried out by the **Climate Sustainability Section**. This section also develops the analytical capacity needed to address the challenges arising from climate change. Its work includes analysing climate change impacts on the economy, assessing climate risks, and improving the availability of data in this area. The Climate Committee and the Climate Sustainability Section support the goal of making the Bank a sustainable institution while strengthening its contribution to national and international efforts in the field of climate change.

[1] Section 28(1): 'Národná banka Slovenska shall hold in custody and manage foreign reserve assets in gold and in foreign exchange assets, shall use these reserves, and shall conduct foreign exchange operations; when conducting operations within the Eurosystem, it shall proceed in accordance with the rules applicable to Eurosystem operations'.

2. Strategy

In November 2019 the Bank became a member of the international group known as the Network for Greening the Financial System (NGFS),[2] which is dedicated to addressing and analysing the financial risks and opportunities associated with climate change and the transition to a low-carbon economy.

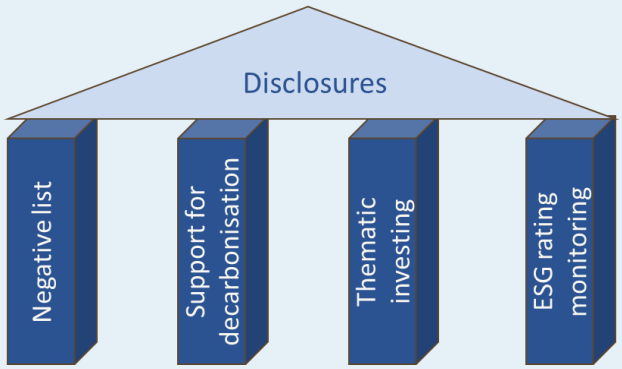
During the 2021 United Nations Climate Change Conference (COP26) in Glasgow, the Bank reiterated its commitment to contributing, within its mandate, to the global response to climate change. The Bank has pledged to support the collective commitment made through NGFS and European Central Bank (ECB) declarations and is committed to gradually integrating sustainability into its core functions and internal operations.[3]

In February 2021 the Eurosystem central banks, including the Bank, defined a common stance[4] for applying sustainable and responsible investment principles to the euro-denominated non-monetary policy portfolios managed by national central banks (NCBs). The common stance aims to support Eurosystem members in advancing the transition to a low-carbon economy and achieving EU climate objectives. Consequently, these climate-related disclosures have been published annually since 2023 as part of this initiative.

An important step in 2025 was the approval of a **sustainable investment strategy** within NBS reserves management. The strategy, approved by the NBS Risk Management Committee, comprises four key pillars (Box 2):

BOX 2

A four-pillar sustainable investment strategy



1. Application of a negative list

The Bank has compiled a negative list that excludes from its eligible investment universe any issuers active in controversial industries (e.g. cluster munitions production, tobacco manufacturing, thermal coal mining, coal-fired power plants) or non-compliant with generally applicable environmental and ethical standards.

[2] The NGFS is a global network of central banks and banking supervisors that promotes a more sustainable financial system. Its aim is to analyse the consequences of climate change on the financial system and to redirect global financial flows to support economic growth with a low carbon footprint.
[3] NBS Climate Pledge, NBS press release, November 2021.
[4] Eurosystem agrees on common stance for climate change-related sustainable investments in non-monetary policy portfolios, ECB press release, February 2021.

The negative list supports efforts to ensure that NBS investment portfolios investing predominantly in corporate bonds adhere to principles of environmental and social sustainability, contribute to compliance with ethical principles and reduce reputational risk.

2. Support for decarbonisation

Decarbonisation measures are applied mainly in the equity portfolio through targeted investment in solutions supporting sustainability. Part of the NBS equity portfolio is invested in **a net-zero ETF** (Box 3). This ETF follows a strategy focused on firms that have adopted decarbonisation plans aimed at achieving net zero, thereby supporting the reduction of greenhouse gas (GHG) emissions within the portfolio.

The aim of this sub-initiative within the overall portfolio is to ensure that selected equity investments contribute to carbon neutrality, while also evaluating their long-term economic benefits.

BOX 3

Net-zero ETF investment

Invesco Global Equity Net Zero ETF (IQSZ US Equity) is tailored to the Bank's priorities, which focus on real-economy decarbonisation across all sectors and emphasise future reductions in greenhouse gas emissions. The objective is for the portfolio to include only companies that achieve the net-zero target by 2050.
The ETF places emphasis on:

- real decarbonisation, thereby supporting the reduction of GHG emissions within the portfolio;
- compliance with basic ethical standards (UN Global Compact, exclusion of controversial weapons and tobacco products);
- the active use of factors such as quality, momentum and value, allowing the optimisation of investment returns and risks.

3. Thematic investing

Thematic investing is integrated into the bond portfolios, with the Bank actively supporting investments in green, social and sustainability bonds, provided they have a positive return profile. These securities contribute to the financing of projects with positive environmental and social impacts.

Such an approach aligns the Bank's investment strategy with global trends in responsible investment and supports the transition to a low-carbon economy.

4. ESG rating monitoring

The ESG rating represents an evaluation of issuers based on the application of ESG principles in their activities. Monitoring of ESG ratings is an integral part of the Bank's investment process and is applied across all portfolios containing bonds and equities.

Regular ESG rating analysis enables the identification and management of environmental, social and governance (ESG) risks associated with individual issuers. This enhances transparency and robustness in the investment process and helps ensure that the Bank's portfolios remain aligned with ESG principles and long-term strategic objectives.

The Bank's sustainability investment strategy includes the **transparent disclosure of data** on the sustainability of investment reserves through this report (*Climate-related disclosures of NBS's non-monetary policy portfolios*).

Regular disclosure of information generally increases awareness and knowledge of climate risks, supports the harmonisation of disclosure practices through the application of standard market norms, and contributes to achieving the EU's climate neutrality objectives and the transition to a low-carbon economy.

3. Risk management

The management of NBS investment reserves is characterised by a long-term focus on the management of market, credit and liquidity risks. These risks are monitored, measured and managed in line with prudent investment principles. Climate risks affect all these areas, as they may lead to increased costs and financial losses as a result of climate change-related extreme weather events (physical risk) or the transition to a low-carbon economy (transition risk).

As part of the Eurosystem, the Bank assesses the sensitivity of its portfolios to climate risks using several metrics jointly identified by the Eurosystem. These metrics are published annually (see Section 4).

Since December 2020 the Bank has assessed the ESG score and rating of its non-monetary policy portfolios, which include bond portfolios in all eligible currencies and the equity portfolio. It also monitors exposure to controversial sectors such as alcohol, gambling, and weapons production, and measures carbon risk. These data are submitted annually to the NBS Bank Board for information.

4. Metrics and targets

Eurosystem NCBs' annual climate-related disclosures cover, at a minimum, the following climate metrics: weighted average carbon intensity (WACI); total carbon emissions (TCE); and carbon footprint (CF). These metrics are reported for all non-monetary policy portfolios denominated in euro and foreign currencies. In addition, the share of green, social, sustainability and sustainability-linked bonds in the portfolio is reported. Climate-related disclosures must also include at least one broadly defined long-term target aligned with the goals of the Paris Agreement and the EU's climate neutrality objectives. The setting of additional climate targets based on ECB recommendations is encouraged.

Sovereign issuers' GHG emissions can be reported using both a production approach and a consumption approach, thereby enhancing transparency in carbon metric reporting. These approaches are complementary and are based on the following types of emissions:

- **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 the UN Framework Convention on Climate Change (UNFCCC) for annual national inventories. Production emissions are reported including and excluding the effects of land use, land-use change and forestry (LULUCF). The LULUCF sector holds significant potential for mitigating climate change, not only through CO_2 reductions, but also through expanding CO_2 sinks.
- **Consumption emissions:** emissions linked to domestic demand, accounting for trade effects. This metric provides a broader view of a sovereign's emissions and tackles the issue of carbon leakage that arises due to production shifts from countries where goods are consumed later.

The main input for calculating carbon metrics for **non-sovereign issuers** is greenhouse gas emissions, measured as the sum of direct GHG emissions from sources that are controlled or owned by the reporting company (**scope 1**) and indirect GHG emissions from purchased energy (**scope 2**). This year's report is the first to include in all carbon metrics indirect GHG emissions throughout the organisation's value chain (**scope 3**) – both upstream (suppliers) and downstream (customers) of the company's operations (Box 4). In the previous year, scope 3 GHG emissions were used only for the total carbon emissions metric. While a company can manage both its direct (scope 1) and indirect (scope 2) GHG emissions, its ability to control scope 3 GHG emissions is significantly more limited.

BOX 4

Scope 3 GHG emissions

Scope 3 emissions include indirect GHG emissions that are not included in scope 2 and that occur in a company's upstream (supplier) or downstream (customer) activities. These emissions are divided into 15 categories:

1. purchased goods and services;
2. capital goods;
3. fuel- and energy-related activities;
4. upstream transportation and distribution;
5. waste generated in operations;
6. business travel;
7. employee commuting;
8. upstream leased assets;
9. downstream transportation and distribution;
10. processing of sold products;
11. use of sold products;
12. end-of-life treatment of sold products;
13. downstream leased assets;
14. franchises;
15. investments.

High levels of data availability and quality are essential for calculating reliable and relevant climate metrics. The Eurosystem, including the Bank, is aware of quality issues relating to scope 3 emissions data, which limit their reliability and comparability over time. These include intrinsic estimation uncertainty and methodological divergences across data providers. The Eurosystem expects a continued expansion in issuers' reporting of material scope 3 data and promotes higher transparency through the disclosure of scope 3 metrics in the main text of its reports. Carbon metrics based on scope 3 emissions are reported separately from those calculated using scope 1 and 2 emissions.

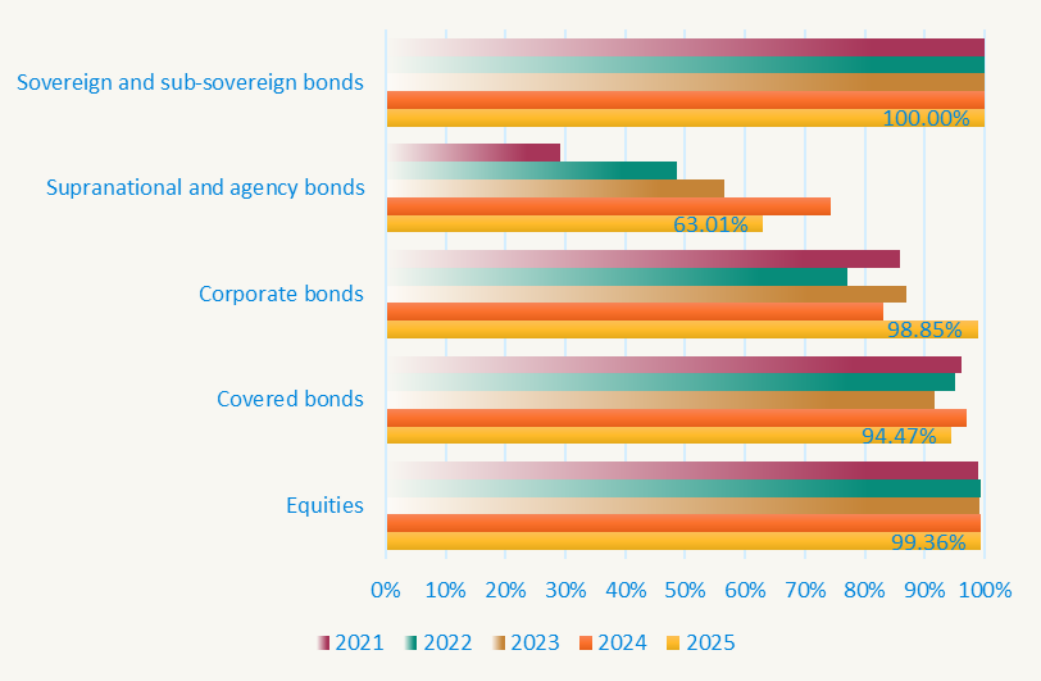
The methodology of this climate-related disclosure report aims to minimise double counting of emissions to the extent possible. However, double counting remains an unavoidable aspect of climate-related reporting. Data on securities and GHG emissions, and financial data used in the calculation of these metrics, should have identical reference years. While data on securities holdings are available on a timely basis, there is a natural lag in the availability of GHG emissions data and financial data. Consequently, mismatches in reference dates occur in the most recent year, or over the past two years in the case of sovereign bonds. This discrepancy will gradually be resolved in subsequent climate-related disclosure reports as the necessary data become available.

To ensure that carbon metric calculations produce high-quality and informative results, it is essential that input data on GHG emissions cover as large a share of securities holdings as possible. Obtaining accurate GHG emissions data is therefore a key element of climate-related disclosures. These data are available either directly from issuers' reports or from third-party providers. The Bank

uses the services of **Institutional Shareholder Services** (ISS), which both collects reported GHG emissions data and models missing data.

Chart 1 shows high data coverage from 2021 to 2025 for all asset classes other than supranational and agency bonds.

Chart 1
Data coverage in 2021–2025



Sources: ISS, and NBS calculations.

4.1. Metric definitions

The Eurosystem's joint disclosures include at least the following metrics, as detailed in Tables 1, 2 and 3 in the Annex:

a) **Weighted average carbon intensity (WACI):** This metric assesses a portfolio's exposure to carbon-intensive issuers. The carbon intensity of each issuer is computed by standardising its GHG emissions relative to its economic output. The portfolio's WACI is determined by weighting each issuer's carbon intensity by its share of holdings in the portfolio. Data normalisation, extensive data coverage, and broad application across the financial industry ensure comparability across portfolios and over time. WACI provides an 'outside-in' perspective (i.e. financial materiality), serving as a proxy for portfolio exposure to transition risks.

b) **Total carbon emissions (TCE):** This metric quantifies the carbon emissions attributed to a portfolio and is expressed in tonnes of CO_2e. The emissions of each issuer are weighted by its contribution to the corporate enterprise value including cash (EVIC), or, in the case of sovereign issuers, by gross domestic product adjusted for purchasing power parity (PPP-adjusted GDP). It offers an 'inside-out' perspective (i.e. environmental materiality), acting as a proxy for a portfolio's environmental footprint. As a non-normalised metric, its comparability across portfolios and over time is limited. Given its sensitivity to portfolio size, it should be complemented by the carbon footprint metric.

c) **Carbon footprint (CF):** This metric normalises the TCE value by portfolio size and is expressed in tonnes of CO_2e per EUR million invested. Unlike TCE, the carbon footprint metric enables comparability across portfolios and over time.

All three TCFD-recommended metrics are supported by a standardised methodology and are widely used in climate-related financial reporting. Normalised metrics (such as WACI and CF) and absolute metrics (such as TCE) complement each other, providing a comprehensive view of portfolios' climate risk exposure and overall climate impact.

The term 'carbon' in the names of the metrics refers to the definition of greenhouse gases under the Kyoto Protocol. The Kyoto Protocol specifies seven categories of GHG emissions: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF_6) and nitrogen trifluoride (NF_3). For simplicity, GHG emissions are expressed in tonnes of carbon dioxide equivalent (tCO_2e).

In addition to carbon metrics, the relative **share** of the following thematic bonds in the total volume of bonds held in the portfolio is also disclosed:

- **green bonds:**
  financial instruments with a positive environmental benefit, used to finance environmental or climate change mitigation projects;
- **social, sustainability and sustainability-linked bonds:**
  - social bonds are used to raise funds for social projects aimed primarily at helping socially disadvantaged groups;
  - sustainability bonds finance a combination of environmental and social projects;
  - unlike the above bond types – where proceeds must be allocated to specific environmental or social projects – sustainability-linked bonds may be used for general purposes, but their financial characteristics are linked to the issuer's performance against predefined sustainability goals.

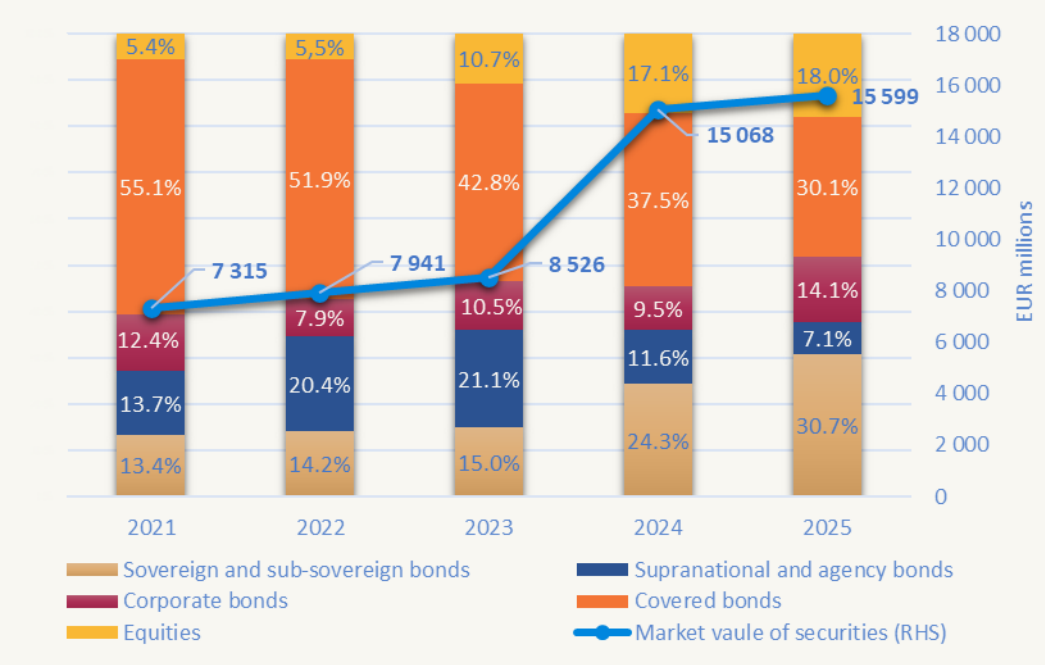
These thematic bonds do not affect the results of the carbon metrics, since GHG emissions are reported at the issuer level and are not differentiated by the type of security issued.

4.2. Metric results

The Bank discloses carbon metrics and thematic bond shares for its portfolios containing bonds and equities. The total market value of these portfolios fluctuates over time depending on financial market conditions, investment opportunities and the strategic asset allocation, as illustrated in Chart 2. For the categorisation of the monitored asset classes, a new metric was used this year and applied retrospectively to the previous years under review. This change resulted in a reclassification of certain issuers, with a negligible impact on the overall structure of asset classes.

The current strategic asset allocation was implemented at the end of 2023. Compared with 2021, the new strategy is reflected not only in a doubling of the total market value but also in a significant increase in the share of equities and sovereign and sub-sovereign bonds, primarily at the expense of covered bond holdings. Compared with the previous year, the total market value of bond and equity holdings remained stable, increasing by a modest 4% to €15.6 billion at the end of 2025. The dominant positions of sovereign and sub-sovereign bonds (30.7%) and covered bonds (30.1%) were maintained.

Chart 2
Evolution of the total market value of securities (EUR millions) and asset composition (percentages) from 2021 to 2025



Source: NBS calculations.

4.2.1. Carbon metric results

All carbon metrics for the non-monetary policy portfolios are calculated and reported:

- **at the asset class level**, including sovereign and sub-sovereign bonds, supranational and agency bonds, corporate bonds, covered bonds, and equities. For simplicity, all metrics are presented at the level of sovereign issuers (including sub-sovereign entities) and non-sovereign issuers;
- **for the previous year (2025) and the preceding period from 2021 to 2024** (see Tables 4 and 5 in the Annex).

Chart 3 shows the historical evolution of climate metrics (WACI, TCE, CF) for holdings of securities issued by **sovereign and sub-sovereign issuers**.

For **sovereign issuers**, data coverage in 2025 was nearly complete under both the production and consumption approaches, thereby enhancing the informative value of the metrics.

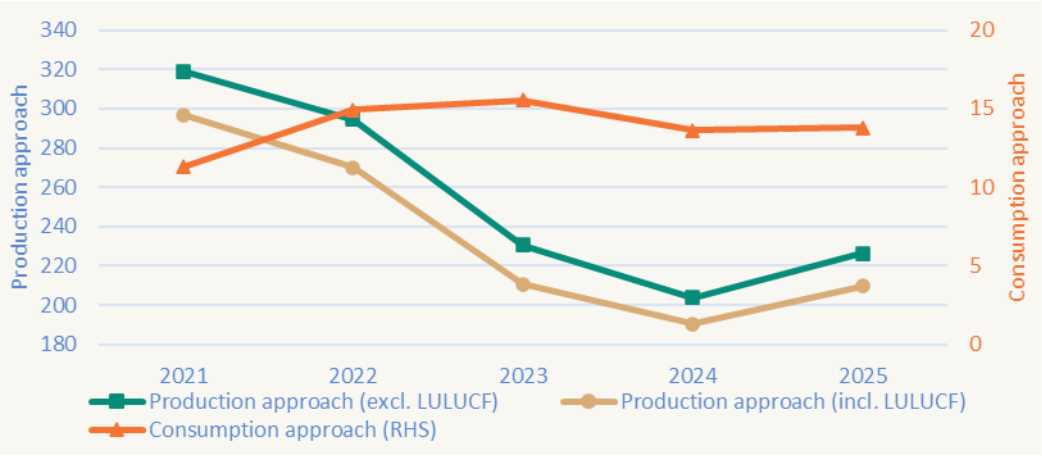
- All metrics calculated using the production approach are lower across the entire reporting period when the LULUCF sector is included than when excluded. This trend reflects the net carbon absorption effect of the LULUCF sector for sovereigns whose bonds are held in the portfolios.
- Across all years, the calculated values of the TCE metric are lower under the production approach than under the consumption approach. This indicates that economies concerned are net importers of goods associated with higher GHG emissions.
- The volume of sovereign and sub-sovereign bond holdings in the portfolios increased over the period under review, corresponding to an increase in the absolute TCE metric. In 2025 the normalised metrics (WACI and CF) also increased, owing to greater exposure to countries with higher GHG emissions (e.g. the United States, China).

Chart 3

Evolution of carbon metrics of sovereign issuers from 2021 to 2025

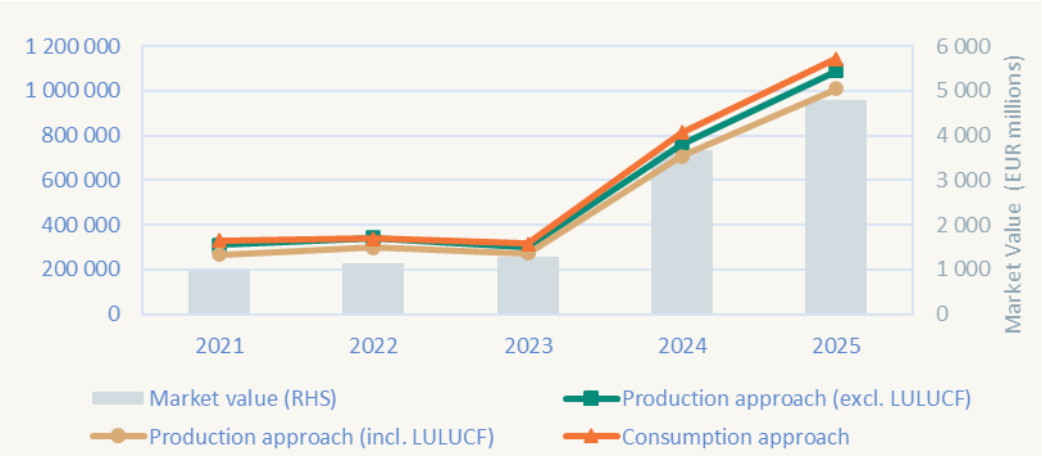
Panel 3.1

Weighted average carbon intensity (tCO_2e per EUR million PPP-adjusted GDP or per capita)



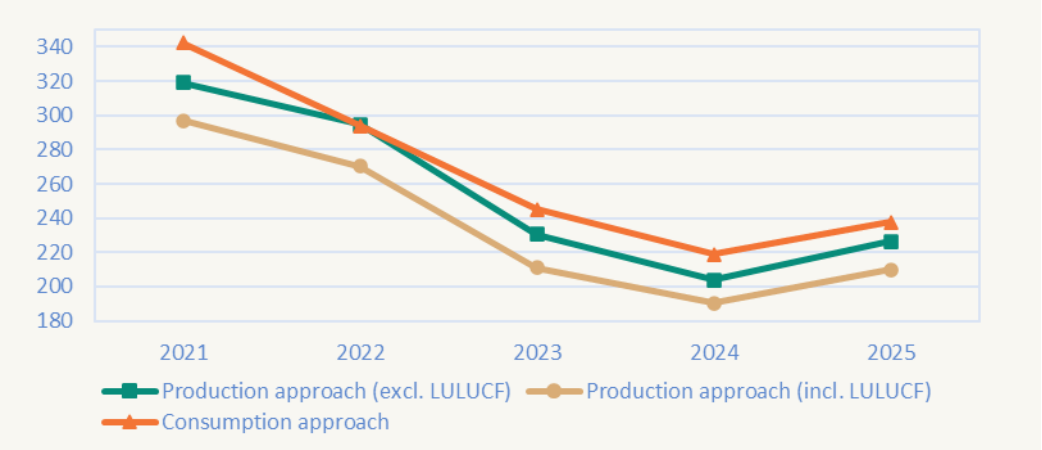
Panel 3.2

Total carbon emissions (tCO_2e)



Panel 3.3

Carbon footprint (tCO_2e per EUR million invested)



Sources: ISS, World Bank, Bloomberg, UNFCCC, and NBS calculations.

Chart 4 shows the historical evolution of climate metrics (WACI, TCE, CF) for holdings of securities issued by **non-sovereign issuers**.

For **non-sovereign issuers**, all metrics (WACI, TCE, CF) are reported for the first time, for the entire period under review, based not only on scope 1 and 2 GHG emissions (direct and indirect emissions) but also on scope 3 emissions (those of suppliers and customers).

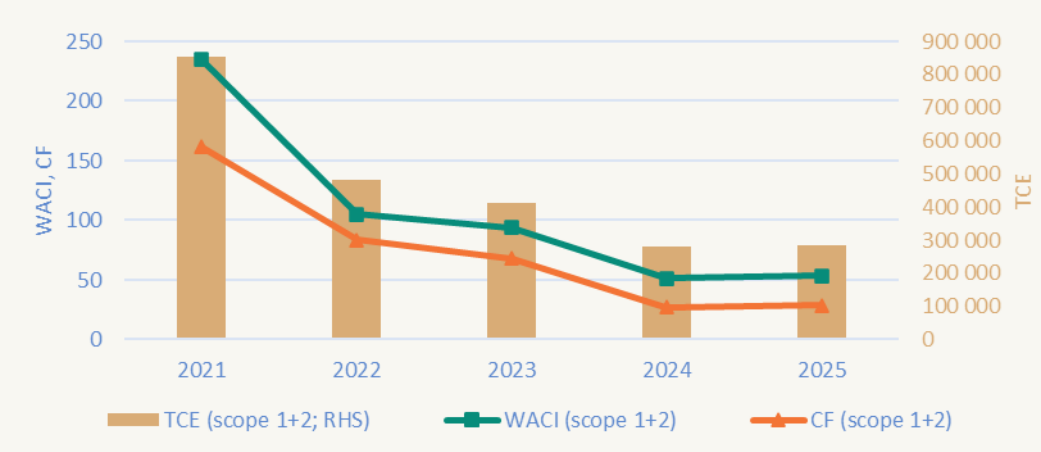
- Compared with 2024, almost all reported metrics increased slightly, with the exception of WACI (scope 3).
- The increase in the carbon metrics is in line with changes in the portfolio structure. Equities and increased investment in the energy sector had a particularly significant impact on this outcome.
- The main driver of the decrease in WACI (scope 3) was the category of supranational and agency bonds, where an exposure to a German government agency was sold.

Chart 4

Evolution of carbon metrics of non-sovereign issuers from 2021 to 2025

Panel 4.1

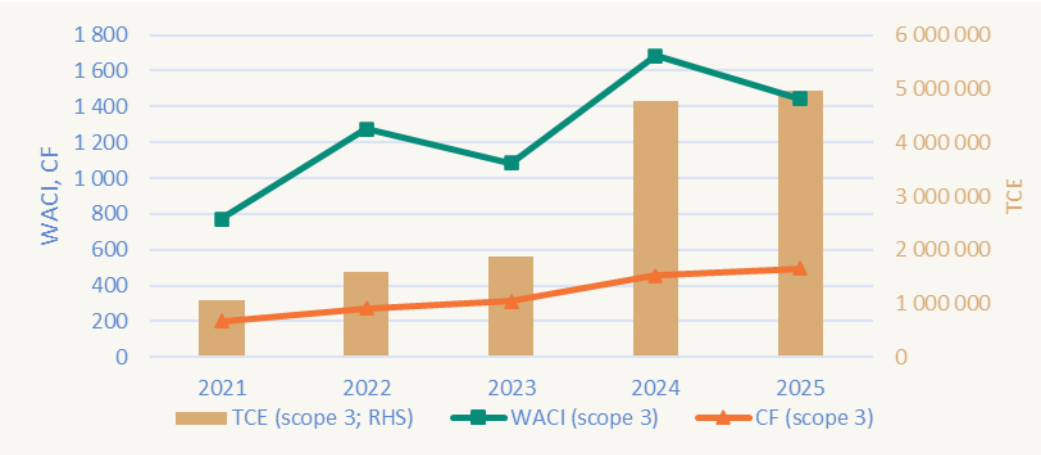
Carbon metrics WACI, TCE and CF (scope 1 and 2)



Sources: ISS, Bloomberg, UNFCCC, and NBS calculations.

Panel 4.2

Carbon metrics WACI, TCE and CF (scope 3)



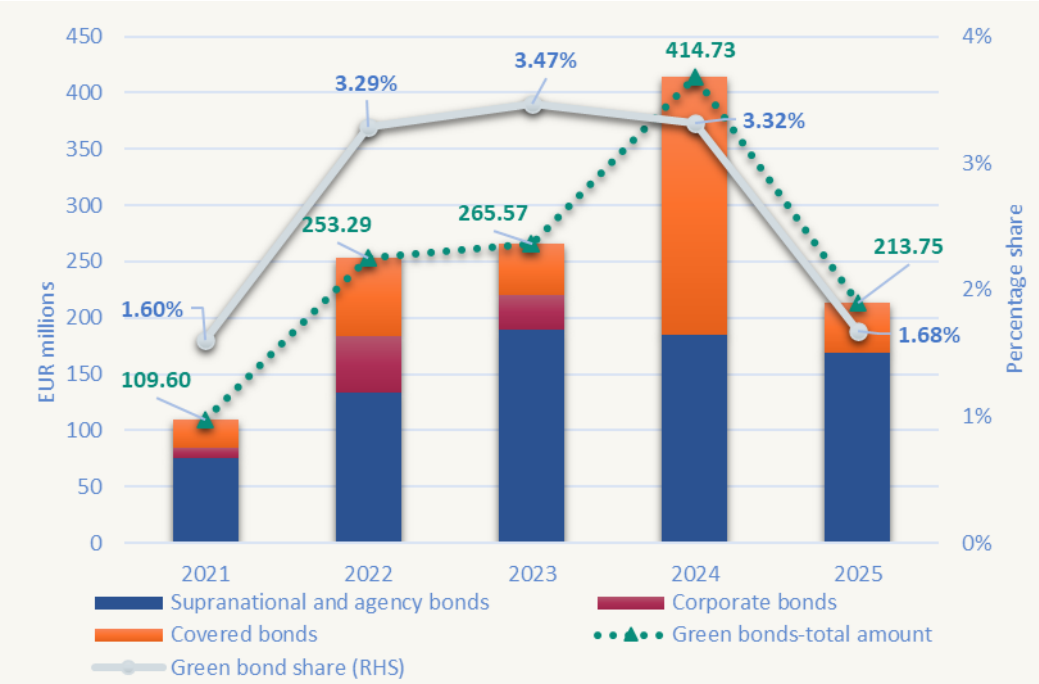
Sources: ISS, Bloomberg, UNFCCC, and NBS calculations.

4.2.2. Green, social, sustainability and sustainability-linked bonds

In the period under review from 2021 to 2025, the Bank actively invested in thematic bonds such as green, social and sustainability bonds, which were issued exclusively by non-sovereign issuers (see Table 6 in the Annex). The Bank is not permitted to invest in sustainability-linked bonds; accordingly, its exposure to these securities was zero over the period.

The **share of green bonds** in the portfolios declined significantly in 2025, from 3.32% to 1.68% (Chart 5), reflecting the gradual sale of positions and limited investment opportunities in the market. In nominal terms, green bond holdings stood at €213.75 million at the end of 2025, representing a 48% decrease compared with 2024. By issuer type, supranational and agency bonds accounted for the largest share of these holdings (79%).

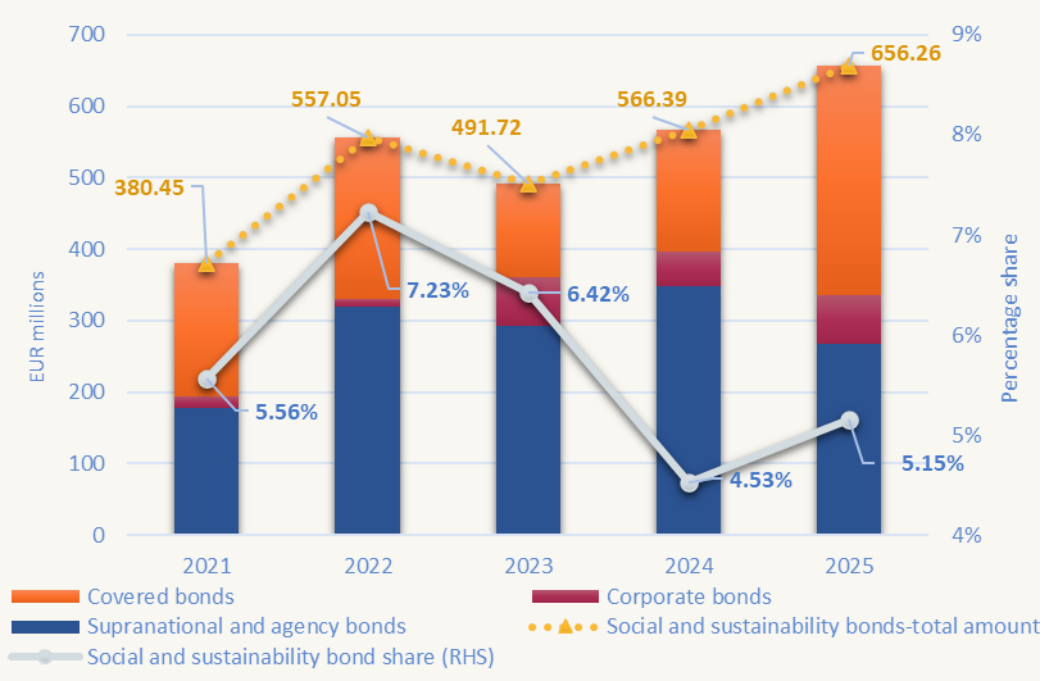
Chart 5
Share of green bonds in NBS portfolios from 2021 to 2025



Sources: Bloomberg, and NBS calculations.

The share of **social and sustainability bonds** in the portfolios, shown in Chart 6, increased to 5.15% in 2025. Unlike green bonds, the nominal amount of these bonds increased year-on-year in 2025, rising by 16% to €656.26 million. In terms of asset class, covered bonds accounted for the largest share of these holdings (48.7%).

Chart 6
Share of social and sustainability bonds in NBS bond portfolios from 2021 to 2025



Sources: Bloomberg, and NBS calculations.

The issuers of the green, social and sustainability bonds held in the portfolios contributed to 16 of the 17 **Sustainable Development Goals** (SDGs) defined by the United Nations. The most represented goals were sustainable cities and communities (SDG 11), affordable and clean energy (SDG 7), and industry, innovation and infrastructure (SDG 9). The projects financed in support of these goals primarily concerned affordable housing, employment generation, and access to basic services.

4.3. Targets

The Bank's long-term target for its non-monetary policy portfolios is aligned with the EU's decarbonisation and climate neutrality objectives as set out in the Paris Agreement. This includes holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the increase to 1.5°C above pre-industrial levels, as well as contributing to achieving carbon neutrality by 2050 at the latest.

Conclusion

Compared with last year's climate-related disclosure report, the set of reported metrics for non-sovereign issuers has been expanded to include carbon metrics based on scope 3 GHG emissions. This extends the scope of disclosed data to include information on the carbon intensity of the supply and customer chains of the issuers of the securities held in the NBS portfolios.

Annexes

Table 1
Elements of the Eurosystem's common minimum disclosures

Element	Details
Weighted average carbon intensity (tCO_2e/revenue in EUR millions, or EUR million PPP-adjusted GDP, or per capita)	$$WACI = \sum_n^i \left(\frac{current\ value\ of\ investment_i}{current\ portfolio\ value} \right) x \left(\frac{issuer's\ carbon\ emissions_i}{issuer's\ revenue, PPP-adjusted\ GDP, or\ population} \right)$$ Notes: For non-sovereign issuers, the calculation uses revenue; for sovereign issuers, PPP-adjusted GDP (production approach) or population (consumption approach). The current value of investment is calculated using the nominal value of bond holdings and market value of equities.
Total carbon emissions (tCO_2e)	$$TCE = \sum_n^i \left(\frac{current\ value\ of\ investment_i}{EVIC\ or\ PPP-adjusted\ GDP_i} x\ issuer's\ carbon\ emissions_i \right)$$ Notes: For non-sovereign issuers, the calculation uses EVIC; for sovereign issuers, PPP-adjusted GDP. The current value of investment is calculated using the nominal value of bond holdings and market value of equities.
Carbon footprint (tCO_2e per EUR million invested)	$$CF = \frac{\sum_n^i \left(\frac{current\ value\ of\ investment_i}{EVIC\ or\ PPP-adjusted\ GDP_i} \right) x\ issuer's\ carbon\ emissions_i}{current\ portfolio\ value\ (EUR\ millions)}$$ Notes: For non-sovereign issuers, the calculation uses EVIC; for sovereign issuers, PPP-adjusted GDP. The current value of investment is calculated using the nominal value of bond holdings and market value of equities.
Green bond share	The share of green bonds is expressed as the share of the nominal value of green bond holdings in the total nominal value of the bonds held in the portfolios (excluding the volume of equities); based on ICMA's Green Bond Principles (GBPs) and using the Bloomberg classification.
Aggregate share of social, sustainability and sustainability-linked bonds	The share of social, sustainability and sustainability-linked bonds is expressed as the share of the nominal value of green bond holdings in the total nominal value of the bonds held in the portfolios (excluding the volume of equity); based on ICMA's Sustainability Bond Guidelines (SBGs), Sustainability-Linked Bond Principles (SLBPs) and Social Bond Principles (SBPs), and using the Bloomberg classification.
Portfolio size	Portfolio size is expressed as the market value of the securities holdings in EUR millions as at 31 December of the respective year. Positions in other financial instruments (e.g. derivatives, repo trades, cash) are not included. Portfolio size may vary from year to year due to the Bank's investment strategy.
Asset classes	Sovereign and sub-sovereign bonds, supranational and agency bonds, corporate bonds, covered bonds, and equities.
Emissions scope	Scope 1 and 2 emission metrics, and scope 3 (reported separately).
Data availability	Data availability is indicated as a percentage for each metric and asset class.
Historical data	Metric disclosures for the most recent year and at least the two previous years.
Target	All Eurosystem members strive to ensure that the non-monetary policy portfolios under their management are on a path that supports the goals of the Paris Agreement and the EU's climate neutrality objectives as set out in the European Climate Law. Concretely, this consists in setting at least one broadly defined long-term target covering all NMPPs under the management control of the central bank, which is aligned with the goals of the Paris Agreement and the EU's climate neutrality objectives. Targets can be set at the portfolio level, the central bank level, or a combination of both. Targets should ideally be quantitative, and long-term targets should ideally be enriched by interim targets.

Table 2
Information on inputs for the metric calculations

Asset class	GHG emissions (tCO_2e)	Normalisation factor	Attribution factor
Sovereign and sub-sovereign bonds	Production emissions incl./excl. LULUCF	PPP-adjusted GDP (EUR millions)	PPP-adjusted GDP (EUR)
	Consumption emissions	Population	PPP-adjusted GDP (EUR)
Supranational and agency bonds	Scope 1 + 2 and scope 3 emissions	Revenue (EUR millions)	EVIC (EUR)
Corporate bonds			
Covered bonds			
Equities			

Table 3
Data sources used in the metric calculations

Data	Source
GHG emissions	ISS, UNFCCC
PPP-adjusted GDP, population	World Bank
Enterprise value including cash (EVIC)	ISS
Revenue	ISS, Bloomberg
Green, social, sustainability and sustainability-linked bond metrics	Bloomberg

Table 4
Metrics of the non-monetary policy portfolios for 2025

2025		Sovereign issuers			Non-sovereign issuers				
		Sovereign and sub-sovereign bonds			TOTAL	Supranational and agency bonds	Corporate bonds	Covered bonds	Equities
		Production approach		Consumption approach					
		excl. LULUCF	incl. LULUCF						
Portfolio size (EUR millions)		4 785.58			10 813.03	1 107.61	2 206.79	4 696.84	2 801.79
WACI (tCO2e/ revenue in EUR millions, or EUR million PPP-adjusted GDP, or per capita)	**Scope 1+2**	226.46	209.74	13.77	53.50	15.61	83.48	0.71	123,01
	Coverage	*100.00%*	*100.00%*	*100.00%*	*93.38%*	*63.01%*	*98.85%*	*94.47%*	*99,36%*
	Scope 3				1 444.58	1 744.74	1 469.70	1 502.47	1 258,61
	Coverage				*93.38%*	*63.01%*	*98.85%*	*94.47%*	*99,36%*
Total carbon emissions (tCO_2e)	**Scope 1+2**	1 090 200.05	1 009 681.94	1 144 780.43	285 477.39	2 654.61	136 701.30	1 017.96	145 103,51
	Coverage	*100.00%*	*100.00%*	*100.00%*	*93.38%*	*63.01%*	*98.85%*	*94.47%*	*99,36%*
	Scope 3				4 953 472.13	145 523.38	1 625 113.70	1 523 901.93	1 658 933,11
	Coverage				*93.38%*	*63.01%*	*98.85%*	*94.47%*	*99,36%*
Carbon footprint (tCO_2e per EUR million invested)	**Scope 1+2**	226.46	209.74	237.80	28.50	3.80	63.59	0.23	52,12
	Coverage	*100.00%*	*100.00%*	*100.00%*	*93.38%*	*63.01%*	*98.85%*	*94.47%*	*99,36%*
	Scope 3				494.49	208.12	756.00	347.55	595,93
	Coverage				*93.38%*	*63.01%*	*98.85%*	*94.47%*	*99,36%*
Green bond share		0.00%			*2.70%*	*15.21%*	*0.00%*	*0.97%*	-
Social and sustainability bond share		0.00%			*8.28%*	*24.18%*	*3.13%*	*6.89%*	-

Sources: ISS, World Bank, Bloomberg, UNFCCC, and NBS calculations.

Table 5

Carbon metrics of the non-monetary policy portfolios from 2021 to 2025

		Sovereign issuers			Non-sovereign issuers				
		Sovereign and sub-sovereign bonds			TOTAL	Supranational and agency bonds	Corporate bonds	Covered bonds	Equities
		Production approach		Consumption approach					
		excl. LULUCF	incl. LULUCF						
Portfolio size (EUR millions)									
	2025	4 785.58			10 813.03	1 107.61	2 206.79	4 696.84	2 801.79
	2024	3 667.15			11 400.61	1 746.60	1 428.78	5 655.56	2 569.67
	2023	1 275.26			7 250.38	1 800.16	891.66	3 644.86	913.69
	2022	1 128.07			6 812.66	1 623.88	626.51	4 124.23	438.04
	2021	982.21			6 333.17	999.35	903.58	4 033.15	397.09
WACI (tCO2e / revenue in EUR millions, or EUR million PPP-adjusted GDP, or per capita)									
Scope 1 + 2	**2025**	226.46	209.74	13.77	53.50	15.61	83.48	0.71	123.01
	Coverage	*100.00%*	*100.00%*	*100.00%*	*93.38%*	*63.01%*	*98.85%*	*94.47%*	*99.36%*
	2024	203.90	190.30	13.62	51.10	9.56	172.63	0.89	122.89
	Coverage	*100.00%*	*100.00%*	*100.00%*	*92.31%*	*74.25%*	*83.14%*	*97.07%*	*99.41%*
	2023	230.69	210.83	15.56	93.77	1.55	572.11	0.75	132.15
	Coverage	*100.00%*	*100.00%*	*100.00%*	*83.13%*	*56.52%*	*86.88%*	*91.63%*	*99.06%*
	2022	294.72	270.16	14.93	104.87	1.66	1075.18	1.32	141.35
	Coverage	*100.00%*	*95.14%*	*100.00%*	*82.45%*	*48.70%*	*77.14%*	*94.98%*	*99.31%*
	2021	318.98	296.91	11.32	234.53	3.13	1 518.70	2.07	160.11
	Coverage	*100.00%*	*92.97%*	*100.00%*	*84.22%*	*29.14%*	*85.86%*	*96.10%*	*98.93%*
Scope 3	**2025**				1 444.58	1 744.74	1 469.70	1 502.47	1 258.61
	Coverage				*93.38%*	*63.01%*	*98.85%*	*94.47%*	*99.36%*
	2024				1 682.65	2 726.50	1 116.23	1 773.26	1 218.57
	Coverage				*92.31%*	*74.25%*	*83.14%*	*97.07%*	*99.41%*
	2023				1 084.13	1 208.78	1 015.92	1 025.73	1 215.95
	Coverage				*83.13%*	*56.52%*	*86.88%*	*91.63%*	*99.06%*
	2022				1 275.81	1 356.14	1 472.58	1 237.84	1 248.72
	Coverage				*82.45%*	*48.70%*	*77.14%*	*94.98%*	*99.31%*
	2021				773.37	531.64	1 082.33	694.05	1 120.86
	Coverage				*84.22%*	*29.14%*	*85.86%*	*96.10%*	*98.93%*
Total carbon emissions (tCO_2e)									
Scope 1 + 2	**2025**	1 090 200.05	1 009 681.94	1 144 780.43	285 477.39	2 654.61	136 701.30	1 017.96	145 103.51
	Coverage	*100.00%*	*100.00%*	*100.00%*	*93.38%*	*63.01%*	*98.85%*	*94.47%*	*99.36%*
	2024	758 073.39	707 534.44	814 219.75	282 309.05	3 009.97	151 350.01	1 749.43	126 199.64
	Coverage	*100.00%*	*100.00%*	*100.00%*	*92.31%*	*74.25%*	*83.14%*	*97.07%*	*99.41%*
	2023	298 177.61	272 508.21	316 650.47	411 394.14	1 068.25	357 656.45	635.43	52 034.00
	Coverage	*100.00%*	*100.00%*	*100.00%*	*83.13%*	*56.52%*	*86.88%*	*91.63%*	*99.06%*
	2022	341 264.67	297 628.97	340 408.08	480 067.87	53.01	450 255.13	855.27	28 904.45
	Coverage	*100.00%*	*95.14%*	*100.00%*	*82.45%*	*48.70%*	*77.14%*	*94.98%*	*99.31%*
	2021	309 244.54	267 619.37	331 837.97	851 635.19	29.08	826 760.18	977.24	23 868.69
	Coverage	*100.00%*	*92.97%*	*100.00%*	*84.22%*	*29.14%*	*85.86%*	*96.10%*	*98.93%*
Scope 3	**2025**				4 953 472.13	145 523.38	1 625 113.70	1 523 901.93	1 658 933.11
	Coverage				*93.38%*	*63.01%*	*98.85%*	*94.47%*	*99.36%*
	2024				4 782 256.12	266 503.85	755 586.75	2 330 924.79	1 429 240.73
	Coverage				*92.31%*	*74.25%*	*83.14%*	*97.07%*	*99.41%*
	2023				1 883 250.29	120 302.49	426 302.64	818 465.76	518 179.39
	Coverage				*83.13%*	*56.52%*	*86.88%*	*91.63%*	*99.06%*
	2022				1 583 312.77	38 281.71	408 192.59	854 582.73	282 255.74
	Coverage				*82.45%*	*48.70%*	*77.14%*	*94.98%*	*99.31%*
	2021				1 054 953.78	5 568.14	567 357.78	296 190.34	185 837.53
	Coverage				*84.22%*	*29.14%*	*85.86%*	*96.10%*	*98.93%*

		Sovereign issuers				Non-sovereign issuers				
		Sovereign and sub-sovereign bonds								
		Production approach		Consumption approach		TOTAL	Supranational and agency bonds	Corporate bonds	Covered bonds	Equities
		excl. LULUCF	incl. LULUCF							
Carbon footprint (tCO_2e per EUR million invested)										
Scope 1 + 2	**2025**	226.46	209.74	237.80		28.50	3.80	63.59	0.23	52.12
	Coverage	*100.00%*	*100.00%*	*100.00%*		*93.38%*	*63.01%*	*98.85%*	*94.47%*	*99.36%*
	2024	203.90	190.30	219.00		26.94	2.31	127.91	0.32	49.42
	Coverage	*100.00%*	*100.00%*	*100.00%*		*92.31%*	*74.25%*	*83.14%*	*97.07%*	*99.41%*
	2023	230.69	210.83	244.99		67.99	1.03	460.51	0.19	57.79
	Coverage	*100.00%*	*100.00%*	*100.00%*		*83.13%*	*56.52%*	*86.88%*	*91.63%*	*99.06%*
	2022	294.72	270.16	293.98		83.35	0.06	903.04	0.21	66.64
	Coverage	*100.00%*	*95.14%*	*100.00%*		*82.45%*	*48.70%*	*77.14%*	*94.98%*	*99.31%*
	2021	318.98	296.91	342.29		161.37	0.10	1 076.76	0.26	60.86
	Coverage	*100.00%*	*92.97%*	*100.00%*		*84.22%*	*29.14%*	*85.86%*	*96.10%*	*98.93%*
Scope 3	**2025**					494.49	208.12	756.00	347.55	595.93
	Coverage					*93.38%*	*63.01%*	*98.85%*	*94.47%*	*99.36%*
	2024					456.44	204.11	638.57	428.91	559.66
	Coverage					*92.31%*	*74.25%*	*83.14%*	*97.07%*	*99.41%*
	2023					311.22	116.08	548.90	245.21	575.53
	Coverage					*83.13%*	*56.52%*	*86.88%*	*91.63%*	*99.06%*
	2022					274.88	46.72	818.68	213.21	650.74
	Coverage					*82.45%*	*48.70%*	*77.14%*	*94.98%*	*99.31%*
	2021					199.90	19.28	738.92	77.36	473.82
	Coverage					*84.22%*	*29.14%*	*85.86%*	*96.10%*	*98.93%*

Sources: ISS, World Bank, Bloomberg, UNFCCC, and NBS calculations.

Table 6
Thematic bond share in the non-monetary policy portfolios from 2021 to 2025

Thematic bonds	Share of total bond holdings	Sovereign and sub-sovereign bonds	Supranational and agency bonds	Corporate bonds	Covered bonds
Green bond share					
2025	1.68%	0.00%	15.21%	0.00%	0.97%
2024	3.32%	0.00%	10.62%	0.00%	4.11%
2023	3.47%	0.00%	10.58%	3.39%	1.24%
2022	3.29%	0.00%	7.71%	6.77%	1.66%
2021	1.60%	0.00%	7.80%	0.90%	0.63%
Social and sustainability bond share					
2025	5.15%	0.00%	24.18%	3.13%	6.89%
2024	4.53%	0.00%	20.01%	3.29%	3.04%
2023	6.42%	0.00%	16.36%	7.27%	3.61%
2022	7.23%	0.00%	18.43%	1.43%	5.38%
2021	5.56%	0.00%	18.39%	1.51%	4.70%

Sources: Bloomberg, and NBS calculations.

Abbreviations

CF	carbon footprint
CO_2e	carbon dioxide equivalent
COP	Conference of Parties
ECB	European Central Bank
ESG	environment. social and governance
EU	European Union
EVIC	enterprise value including cash
GHG	greenhouse gas
ICMA	International Capital Market Association
ISS	Institutional Shareholder Services
LULUCF	land use. land-use change and forestry
NBS	Národná banka Slovenska
NGFS	Network for Greening the Financial System
PPP-adjusted GDP	purchasing power parity–adjusted gross domestic product
SDG	Sustainable Development Goal
TCE	total carbon emissions
TCFD	Task Force on Climate-related Financial Disclosures
tCO_2e	tonnes of carbon dioxide equivalent
UNFCCC	United Nations Framework Convention on Climate Change
WACI	weighted average carbon intensity