

# **CFS Working Papers Series**

No. 735

Felix Rossmann, Jan Greitens, Lisa Knoll

SMEs within a data-driven sustainable finance framework: A European Survey

# The CFS Working Paper Series

presents ongoing research on selected topics in the fields of money, banking and finance. The papers are circulated to encourage discussion and comment. Any opinions expressed in CFS Working Papers are those of the author(s) and not of the CFS.

The Center for Financial Studies, located in Goethe University Frankfurt's House of Finance, conducts independent and internationally oriented research in important areas of Finance. It serves as a forum for dialogue between academia, policy-making institutions and the financial industry. It offers a platform for top-level fundamental research as well as applied research relevant for the financial sector in Europe. CFS is funded by the non-profit-organization Gesellschaft für Kapitalmarktforschung e.V. (GfK). Established in 1967 and closely affiliated with the University of Frankfurt, it provides a strong link between the financial community and academia. GfK members comprise major players in Germany's financial industry. The funding institutions do not give prior review to CFS publications, nor do they necessarily share the views expressed therein.

#### SMEs within a data-driven sustainable finance framework: A European Survey

#### Abstract:

Sustainable finance regulations and initiatives across Europe have predominantly targeted large corporations, while small and medium-sized enterprises (SMEs) are increasingly drawn into the framework, often facing challenges such as resource constraints and complex documentation requirements. To capture the dynamics of this field, a European survey conducted in 2025 with responses mainly from German and Austrian companies examined SME engagement with sustainable finance. The findings show a rising share of SMEs investing in sustainability in comparison to the preceding study in 2023, with internal funding as the dominant source. Where external financing is used, it is primarily activated on publicly supported bank loans, whereas capital markets remain largely irrelevant for SMEs. While a connection between sustainability data collection and sustainable investment exists, many SMEs invest without systematically collecting data. These results highlight the continued centrality of traditional banking relationships as the main external financing channel for SMEs, which could serve to enable and facilitate capital flows toward sustainability rather than prescribe or direct them.

**Keywords:** Sustainable Finance, Small and Medium-sized Enterprises, Sustainability Investment, Sustainability Reporting, Bank Financing

**Funding:** This publication was produced in the context of the joint research project "Climate Finance Society (ClimFiSoc) – The Institutional Logics of Climate Finance", funded by the Bundesministerium für Forschung, Technologie und Raumfahrt Space (BMFTR) and accompanied by Sustainable Finance and Climate Protection (SFCP), running from 2022-2025.

#### **Authors:**

#### **Felix Rossmann**

Universität Paderborn, Fakultät für Kulturwissenschaften, Warburger Str. 100, 33098 Paderborn, Email: felix.rossmann@uni-paderborn.de

#### Prof. Dr. Jan Greitens

Westfälische Hochschule, FB Wirtschaft und Informationstechnik, Münsterstr. 265, 46397 Bocholt, E-Mail: Jan.greitens@w-hs.de

#### PD Dr. Lisa Knoll

Universität Paderborn, Fakultät für Kulturwissenschaften, Warburger Str. 100, 33098 Paderborn, Email: lisa.knoll@upb.de

#### 1. Introduction

Sustainable finance has become a central element of Europe's economic transformation, positioned as a market-based system capable of mobilizing the resources needed for a green transition of the economy. Within this context, the European Union has developed a comprehensive policy framework to strengthen capital markets and foster cross-border investment. With the idea of a Capital Markets Union (CMU) aiming to deepen and integrate European financial markets in order to provide companies with more efficient access to capital the framework was increasingly aligned with sustainability goals, particularly through the Action Plan on Financing Sustainable Growth (2018) and the subsequently following regulations (Gortsos 2024). These regulatory initiatives such as the Sustainable Finance Disclosure Regulation (SFDR), EU Taxonomy Regulation and the Corporate Sustainability Reporting Directive (CSRD) are concentrated on large corporations, requiring them to disclose sustainability-related information.

While these corporations were the initial focus of the regulations small and medium-sized enterprises (SMEs) play an equally decisive role in Europe's transition, often described as the backbone of both the German and the European economy (Goeke 2008, 14). In the sustainable finance debate, SMEs are increasingly framed as underfinanced and disproportionately burdened by reporting requirements. The European Commission's SME Relief Package 2023 explicitly highlights this by stressing the importance of improving green financing opportunities for SMEs and promotes proportionality as well as tailored frameworks for very small enterprises (EU Commission 2023). The latest Omnibus regulatory process seeks to reduce administrative burdens by 25 percent for companies in general and by up to 35 percent for SMEs (Lanfermann 2025, 7). In its most recent work, the European Financial Reporting Advisory Group (EFRAG) is developing a voluntary reporting standard for small and medium-sized enterprises (VSME), designed to offer a simplified and proportionate framework that makes sustainability data accessible and comparable without overburdening them. These efforts aim at balancing the need for transparency in value chain relationships, bank-finance relationships and capital markets with the specific constraints of SMEs.

Sustainable finance has become a moving target, continuously evolving in scope, instruments, and regulatory frameworks. Initially aimed at directing capital towards environmentally and socially responsible projects, it has developed into a comprehensive architecture that increasingly shapes the financial structures of the European real economy. Different financing methods address this challenge in distinct ways. Market-based financing requires companies to bear the full cost of information disclosure at the time of the transaction, as investors demand extensive data to evaluate diverse risks. Bank-based financing, by contrast, distributes these costs over the lifetime of the client relationship. Through relationship banking, financial intermediaries acquire in-depth knowledge of a company's business model, often including regional expertise, enabling a long-term perspective. While market-based financing is most efficient for large, well-known companies with supraregional business models, the more specific and small-scale financing needs of SMEs are generally better served by banks (Flögel et al. 2024, Greitens 2023).

To complement the research on sustainable finance and SME as a dynamic field we conducted two consecutive surveys in 2023 and 2025. These surveys provide empirical insight into how companies experience and respond to the evolving financial and regulatory landscape. The period covered by the surveys captures a shift from the initial momentum generated by EU Green Deal policies toward a more critical environment during the Omnibus process, when concerns over bureaucracy and reporting burdens became increasingly prominent. By comparing responses across both waves, the surveys allow us to examine changes in European SMEs engagement with sustainable finance, the use of external financing, and the collection and management of sustainability data. In this way, the survey results offer a timely and practical perspective on how sustainable finance policies interact with the

realities of European companies, particularly SMEs, reinforcing the discussion on the role of financial systems in the economic transition.

#### 2. Literature Review

The following chapter reviews the academic and policy-oriented literature relevant to sustainable finance and SMEs. It is divided into two parts that reflect the two main angles of the discussion. Section 2.1 will shortly examine the literature on SME financing in Europe and in Germany particular and connect it with the emerging body of work on financing green investments by SMEs. Section 2.2, will turn to the literature on SME sustainability reporting. This includes studies on the trickle-down effect of reporting requirements from large corporations to smaller firms, as well as research that considers the costs associated with sustainability disclosure. Together, these two subsections provide the foundation for understanding how SMEs interact with sustainable finance: first by looking at if and how SMEs invest and finance sustainability-related projects and how they perceive availability of green finance. And second how sustainability data collection and reporting shapes access to that finance and influence SME behaviour.

#### 2.1 SME Financing

The financing of SMEs has followed a Europe-wide trend for many years, shifting away from external funding toward a more internal financing. The EIB Investment Survey 2023 indicates that German firms financed approximately 70% of their investment volumes from internal sources, 23% from external finance, and 7% from intra-group transactions - closely mirroring the EU-wide pattern. Only 39% of German firms used external financing sources, down from 46% in 2022 and slightly below the EU average of 43%. Among SMEs in particular, the share declined sharply, from 47% to 36% (EIB 2024, 19).

This trend is also visible in rising equity ratios. Rather than investing or distributing profits to shareholders, firms increasingly retain earnings to build equity. German SMEs have steadily strengthened their equity buffers since the early 2000s. According to the Kreditanstalt für Wiederaufbau (KfW) panel, the average equity ratio increased from around 18% in the early 2000s to 30.6% in 2023 (Schwartz / Gerstenberger 2025, 3).

Despite these stronger equity positions, SMEs remain dependent on bank loans for investment. For more than 60% of European SMEs, bank credit continues to be the most important instrument for financing growth, especially in fixed capital investment (OECD 2024, 20). In Germany, however, the share of investing SMEs using bank loans has nearly halved over the past 20 years - from 40% in 2004 to 23% in 2023 (Schwartz / Gerstenberger 2025, 1).

The dependence on bank financing is somewhat lower in Germany than in the European average, although in countries such as the Netherlands and across Scandinavia, market-based finance plays a much larger role even for SMEs (OECD 2024, 22). In Germany, by contrast, public development banks have greater significance than in many other European countries (OECD 2024, 27). Public development-bank programs and grants remain an important component of SME financing in Germany. In 2023, grants accounted for roughly 13% of investment financing, while own funds reached a new record high (Schwartz / Gerstenberger 2024, 28).

Zooming into the figures specifically targeting green financing of SMEs, similarly to the general figures in climate-related investments internal financing from retained earnings makes up the bulk with accounting of 46% in the German Mittelstand in 2023 (Brüggemann/ Wehrstedt 2025, 2). Nevertheless, external financing through bank loans (including public funding) accounted for a larger share of climate-related investments by SMEs (51%) compared to general investments. According to KfW research this is due to the development that grants become even more important with a share of 22 % of climate-related investments in the German Mittelstand (ibid., 1). Summarized the growing

importance of bank loans and public funding programs with regard to climate-related projects can be attributed to the rise in average investment volumes in climate-related projects, which has tripled between 2021 and 2023 (ibid., 2) One possible explanation for this rise is that realised investment projects in the past where predominantly "low hanging fruits" and the recent investments have higher initial costs.

With regard to the access to green finance of SMEs the latest studies suggest that financial constraints and the cost of environmental play a dominant role in the challenges and considerations of European SMEs. In the Flash Eurobarometer 549 next to complex administrative or legal procedures (35 %), the cost of environmental actions (28 %) ranks in the second place of the barriers for SMEs going green and resource-efficient (European Union 2024, 57). A BCG-study on climate transition of european mid-sized companies identifies the amount of Capex and lack of financing as the most dominant barrier to decarbonize, followed by uncertain return on invest (BCG 2025, 8). In the German context these findings are backed up by economic viability of the projects and the lack of financial ressources being the top obstacles when implementing climate-related investments (Brüggemann/ Wehrstedt 2025, 5).

#### 2.2 SME Sustainability Data Collection and Reporting

Sustainable finance and sustainability reporting are increasingly interlinked in shaping the investment landscape for SMEs, as the importance of collecting, managing and reporting sustainability-related data is a dominant narrative in the field (e.g. OECD 2025). Financial institutions and investors increasingly rely on verifiable environmental, social, and governance (ESG) data to assess risk, determine eligibility, and set terms, making robust data collection and reporting a precondition for participation in green finance markets (EBA 2025). In this sense, sustainability data does not merely document performance, it can actively shape investment opportunities by e.g. signalling credibility to financiers, demonstrating compliance with regulatory or supply-chain expectations, and enabling SMEs to access tailored financial products. At the same time, collecting and reporting such data entails costs and administrative burdens, which can be particularly challenging for resource-constrained SMEs and may influence the net benefits of engaging with sustainable finance.

Regarding the question of how SMEs are currently confronted with data requirements, the literature highlights the so-called trickle-down effect, referring to the phenomenon where sustainability requirements and reporting standards imposed on larger corporations and financial institutions indirectly influence smaller firms in their supply chains (SME United / Eurochambres 2023, 15). Regarding the primary drivers of the effect, different studies highlight customers within the value chain as the main driver (SME United / Eurochambres 2023; Löher et al. 2022; Kruse et al. 2023). In contrast, evidence regarding information requests from external financing partners, such as banks, is less consistent. SME United / Eurochambres (2023) report 32% of SMEs facing such demands, whereas Löher et al. (2022) find only 7%, and Kruse et al. (2023) rank banks near the bottom among key stakeholders for sustainability reporting. Gerstenberger (2024) notes that in 2023, only 16% of surveyed SMEs were asked for sustainability information during credit negotiations, although an increase is expected in the future.

Zooming into the German market the dominant intrinsic motivations for SMEs to engage with sustainability and to collect and use sustainability-related data are the realization of cost reductions and identification of future savings potential. This is consistently reported across different studies (Block et al. 2023; Göhler et al. 2023; Kruse et al. 2023; Löher et al. 2022; Tran et al. 2024). By contrast, improving future access to financial resources, for example through better loan conditions, plays a comparatively minor role in the mentioned studies.

Regarding the costs and benefits collecting and reporting sustainability-related data some recent studies summarize the challenges and obstacles. In a cost-benefit analysis of the implementation of the VSME the EFRAG (2024) states that sustainability-reporting or a better ESG performance will not

translate per se into better financial outcomes and competitive position (31). This underlines the beforementioned results about access to financial resources being comparatively less significant for SMEs motivation to collect and report sustainability data. The EFRAG states that reporting ESG more likely leads to soft factor-related positive outcomes as e.g. leading to better management practices and awareness about ESG performance and increased transparency and accountability. In general, the costs are higher in the first year because of cost of familiarization, initial data collection and establishing processing and reporting infrastructures and can vary widely across SMEs of different size categories and with regard to the business model (36). For future expenditures and reoccurring costs, a gradual decrease is expected. Studies about the cost-benefit analysis of the EU Taxonomy for SMEs back up these considerations especially pointing out that data collection/ preparation are expected to generate higher burdens for SMEs then larger companies with the reason of SMEs lacking the necessary expertise to swiftly collect sustainability-related data (EFRAG 2024, 75).

#### 3. Data and Methods

We conducted two consecutive surveys in 2023 and 2025, covering a period in which sustainability and sustainable finance initially gained momentum through EU Green Deal policies, but later faced pushback during the Omnibus process. Increasing criticism of excessive bureaucracy also emerged during this time. This shift is reflected in our survey results, with a significant decline in responses in 2025 compared to 2023. In comparison to the 2023 survey, the 2025 edition received significantly fewer responses through the same distribution channels. Participation dropped from 2,142 companies in 2023 to 481 in 2025. The distribution by company size and industry remained broadly consistent, while the country distribution shifted. In both surveys, responses from Germany accounted for the largest share, but in the second wave Austria ranked second, replacing Romania (SME United / Eurochambres 2023).

Although the data analyzed correspond to 2025, the questionnaire was structured to maintain consistency with the 2023 survey for comparative purposes. The financing-related questions were mainly kept consistent, while changes and additions focused on areas such as sustainability data collection and related costs. The questionnaire was divided into four parts. Section 1 focused on sustainable investment activities, including the sustainability objectives pursued, the use of external financing, the specific types of financing employed, and the sustainability goals associated with them. It also explored how companies perceive their banks' role in relation to their sustainability efforts. Section 2 addressed the collection of sustainability data, the motivations behind such data collection, and the application of reporting standards. Companies were additionally asked to provide rough estimates of the annual working hours and costs incurred for collecting and processing sustainability data. This section further examined companies' ability to calculate their CO<sub>2</sub> emissions in line with the GHG Protocol's Scope 1–3 categories. Section 3 concluded the questionnaire by gathering general company information, including definitions of company size, sector classification, country of headquarters, and legal form. Finally, respondents had the option to provide their contact details for potential follow-up questions in Section 4. Both questionnaires are available in the appendix.

The 2025 dataset consists of 481 companies from the European Union that identify as SMEs, including 'larger SMEs' in line with the broader German concept of the *Mittelstand*. The survey was carried out between 26 May and 4 July 2025 using the EU Survey tool. All questions were translated into the official European languages through the platform's integrated translation function. In the 2025 dataset the legal form of the company strongly correlates with firm size and was therefore excluded from the explanatory narratives, as it did not provide additional explanatory value.

In accordance with standard EU criteria, the companies were divided into four size categories:

	202	23	2025	
Size Classification	absolute	in %	absolute	in %
Microenterprise (up to 9 employees, up to 0.7 million euros net sales, up to 0.35 million euros total assets)	803	37,5 %	183	38,0 %
Small Company (up to 49 employees, up to 8 million euros in net sales, up to 4 million euros in total assets)	626	29,2 %	142	29,5 %
Medium-sized Company (up to 250 employees, up to 40 million euros in net sales, up to 20 million euros in total assets)	437	20,4 %	86	17,9 %
Larger Company (more than 250 employees, more than 40 million euros in net sales, more than 20 million euros in total assets)	276	12,9 %	70	14,6 %
Total	2142	100 %	481	100,0 %

Table 1) Survey responses by company size in 2023 and 2025 (own composition)

Regardless of the diminishing participation the company size of the respondents remained nearly identical with a majority of micro, small and medium sized companies accounting for 85 % of the answers.

Country	2023		Country	2025	
	absolute	in %	Country	absolute	in %
Germany	1309	61,1 %	Germany	295	61,3 %
Romania	498	23,3 %	Austria	112	23,3 %
Czech Republic	135	6,3 %	Hungary	26	5,4 %
Austria	30	1,4 %	Luxemburg	21	4,4 %
Belgium	29	1,4 %	Spain	16	3,3 %
Other Countries	141	6,5 %	Other Countries	11	2,3 %
Total	2142	100,0 %	Total	481	100,0 %

Table 2) Survey responses by country in 2023 and 2025 (own composition)

The survey 2025 was mainly responded by companies from Germany and Austria. Combined the answers account for more than 80 % of the total responses. In comparison to the survey 2023 especially contributions from Romania and Czech Republic dropped tremendously.

Sector		2023	2025		
	absolute	in %	absolute	in %	
Service industry	1077	50,3 %	262	54,5 %	
Manufacturing	703	32,8 %	146	30,4 %	
Trading company (retail and wholesale)	362	16,9 %	73	15,1 %	
Total	2142	100,0%	481	100,0 %	

Table 3) Survey responses by industrial sector in 2023 and 2025 (own composition)

The survey responses by industrial sector remained consistent to a large extend. Companies from the Service Industry still account for more than half of the participants and increased slightly in the survey 2025. The percentage increase is due to lower participation by companies from manufacturing and trading (retail & wholesale) compared to 2023.

#### 4. Outcomes

The following chapter provides a detailed summary of the main findings of the 2025 survey and, where appropriate, places them in direct comparison with the results of the 2023 survey in order to identify developments over time. At first glance, the overall picture points to a surprisingly modest degree of change across the two-year period. Despite the continuous evolution of the regulatory landscape and the growing engagement of banks and financial institutions in the field of sustainable finance, there is little evidence to suggest that these shifts have had a measurable effect on the investment behaviour. Instead, patterns of financing and disclosure appear largely stable, with internal resources and public funding remaining central. To capture these dynamics in a systematic manner, the analysis is organised around three interrelated themes. Section 4.1 explores the extent of sustainable investment activities, focusing on both overall activity levels and the composition of financing sources. Section 4.2 examines the collection and reporting of sustainability-related data, highlighting prevailing practices as well as the costs and challenges associated with them. Finally, Section 4.3 investigates the barriers to sustainable investment most frequently reported by SMEs, thereby shedding light on the structural factors that continue to shape their participation in the sustainable finance regime.

# **4.1** Sustainable Investments: Activity, Financing mix and sustainability-focused bank engagement

Participation in the survey declined, likely due to a lower perceived relevance of the topic. At the same time, companies report higher levels of investment, but rely less on external financing. Bank financing remains essential for SMEs, as capital markets continue to play little to no role for this segment. The collection of ESG data is becoming more common, although no clear link to financing or investment activities can be identified. Overall, there is surprisingly little change compared to the previous survey.

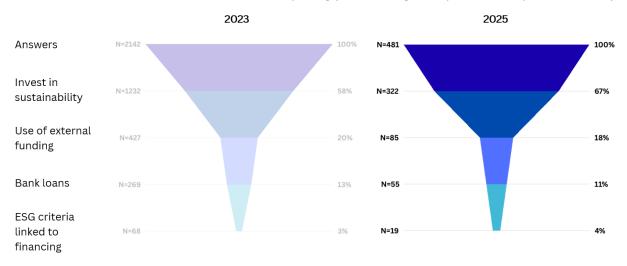


Figure 1) Sustainability Investments Funnel Comparison 2023 and 2025 (own composition)

#### Sustainable Investment Activity 2023 – 2025

In comparison to 2023 investments in sustainability have increased proportionally in 2025, particularly in medium- and larger-sized companies (from 65 % to 87 % for medium, and from 85 % to 94 % for

larger companies), while small companies also saw a 7 % increase, and micro-enterprises a 5 % rise. Although the sample sizes are not identical, the trend is visible.

	Year	Micro	Small	Medium	Larger	Total
Sustainability	2023	339 (42,2 %)	375 (59,9 %)	283 (64,8 %)	235 (85,1 %)	1232 (57,6 %)
investment ,yes'	2025	86 (47,0 %)	95 (66,9 %)	75 (87,2 %)	66 (94,3 %)	322 (66,9 %)
Sustainability	2023	464 (57,8 %)	251 (40,1 %)	154 (35,2 %)	41 (14,9 %)	910 (42,4 %)
investment ,noʻ	2025	97 (53,0 %)	47 (33,1 %)	11 (12,8 %)	4 (5,7 %)	159 (33,1 %)
Total	2023	803 (100,0 %)	626 (100,0 %)	437 (100,0 %)	276 (100,0%)	2142 (100,0 %)
	2025	183 (100,0 %)	142 (100,0 %)	86 (100,0 %)	70 (100,0 %)	481 (100,0 %)

Table 4) Sustainability investments by company size 2023 and 2025 (own composition)

#### Financing mix 2023 - 2025

Given the relatively small sample size in the 2023 survey (118 responses) compared to 584 in 2025, the strength of evidence is somewhat limited. Nevertheless, the overall results point to a decline in the use of external funding for sustainable investments: while 34.7% of respondents reported relying on external finance in 2023, this share dropped to 26.4% in 2025. This suggests that external funding has become less relevant for SMEs, at least in terms of the number of firms making use of it. Since the survey did not capture the actual volume of investments, however, conclusions remain constrained.

Funding type	Micro	Small	Medium	Larger	Total
	Abs. (In %)	Abs. (In %)	Abs. (In %)	Abs. (In %)	Abs. (In %)
Internal funding	248 (73,2 %)	227 (60,5 %)	178 (62,9 %)	152 (64,7 %)	805 (65,3 %)
External funding	91 (26,8 %)	148 (39,5 %)	105 (37,1 %)	83 (35,3 %)	427 (34,7 %)
•	Specification of th	e external funding	(427 companies,	584 answers)	
Bank loan	47 (38,8 %)	108 (54,6 %)	79 (56,8 %)	62 (49,2 %)	296 (50,7 %)
Without public funding (grants, subsidies, guarantees)	35 (74, 5%)	76 (70,4 %)	53 (67,1 %)	33 (53,2 %)	197 (66,6 %)
With public funding	12 (25,5 %)	32 (29,6 %)	26 (32,9 %)	29 (46,8 %)	99 (33,4 %)
Public funding (grants, subsidies, guarantees, or funding programs)	28 (23,1 %)	58 (29,3 %)	43 (30,9 %)	41 (32,5 %)	170 (29,1 %)
External equity financing (private equity, venture capital, capital increase)	41 (33,9 %)	28 (14,1 %)	15 (10,8 %)	18 (14,3 %)	102 (17,5 %)
Capital market funding	5 (4,1 %)	4 (2,0 %)	2 (1,4 %)	5 (4,0 %)	16 (2,7 %)
Total (answers)	121 (100 %)	198 (100 %)	139 (100 %)	126 (100 %)	584 (100 %)

Table 5) Financing mix of sustainable investments in 2023, Multiple answers possible, Percentage in the columns 2-5 refer to responses by company size and percentage in column 6 refers to total responses, Percentages in row 6 and 7 expressed as a proportion of bank loans (own composition)

Funding type	Micro	Small	Medium	Larger	Total
	Abs. (In %)	Abs. (In %)	Abs. (In %)	Abs. (In %)	Abs. (In %)
Internal funding	69 (80,2 %)	66 (69,5 %)	52 (69,3 %)	50 (75,8 %)	237 (73,6 %)
External funding	17 (19,8 %)	29 (30,5 %)	23 (30,7 %)	16 (24,2 %)	85 (26,4 %)
	Specification of th	e external funding	(85 companies, 1	l18 answers)	
Bank loan	7 (30,4 %)	21 (51,2 %)	15 (53,6 %)	12 (46,2 %)	55 (46,6 %)
Without public funding (grants, subsidies, guarantees)	4 (57,1 %)	11 (52,4 %)	10 (66,7 %)	5 (41,7 %)	30 (54,5 %)
With public funding	3 (42,9 %)	10 (47,6 %)	5 (33,3 %)	7 (58,3 %)	25 (45,5 %)
Public funding (grants, subsidies, guarantees, or funding programs)	9 (39,1 %)	15 (36,6 %)	10 (35,7 %)	11 (42,3 %)	45 (38,1 %)
Leasing*	5 (21,7 %)	4 (9,8 %)	2 (7,1 %)	1 (3,8 %)	12 (10,2 %)
External equity financing (private equity, venture capital, capital increase)	2 (8,7 %)	1 (2,4 %)	1 (3,6 %)	2 (7,7 %)	6 (5,1 %)
Capital market funding	0 (0,0 %)	0 (0,0 %)	0 (0,0 %)	0 (0,0 %)	0 (0,0 %)
Total (answers)	23 (100,0 %)	41 (100,0 %)	28 (100,0 %)	26 (100,0 %)	118 (100,0 %)

Table 6) Financing mix of sustainable investments in 2025, Multiple answers possible, Percentage in the columns 2-5 refer to responses by company size and percentage in column 6 refers to total responses, Percentages in row 6 and 7 expressed as a proportion of bank loans (own composition)

A closer look at the decline in external funding reveals that the share of bank loans fell across all company sizes between 2023 and 2025, with the sharpest drop of about 9% among micro enterprises. At the same time, public funding (including bank loans supported by public funds) gained importance, rising from around 29% of all responses in 2023 to 38% in 2025. This development reinforces the trend that sustainable finance for SMEs is strongly shaped by public funding especially in Germany. Capital market financing, which accounted for only 3% in the 2023 survey, disappeared entirely from the 2025 responses, highlighting its lack of relevance for SMEs' sustainable investments. By contrast, leasing emerged as a new source of external finance in 2025, representing about 10% of responses. The majority of these cases were reported by micro and small enterprises, suggesting that leasing is primarily linked to electric or hybrid vehicles.

The share of pure bank loans without associated funding programmes declined in 2025. While they represented 66% of all bank loans in 2023, this share fell to 54.5% in 2025. At the same time, overall reliance on external financing for sustainability-related investments decreased from 34.7% in 2023 to 26.4% in 2025. Together, these findings indicate that traditional bank loans are losing significance, and when loans are used for sustainable investments, they are increasingly linked to public funding programmes.

#### 4.2 Sustainability Data: Reporting, Plurality and related costs

The collection, management, and reporting of sustainability data present both challenges and opportunities for SMEs. On the one hand, gaining a clearer understanding of their own energy and resource consumption can reveal potential efficiency gains and cost savings. On the other hand, the

process can be complex and costly, sometimes without generating tangible benefits for the company. The following section therefore brings together the survey results on data collection and sustainability reporting practices. It shows which companies in the sample collect such data and explores possible links with investment behaviour. Insights are provided into the reasons SMEs engage in sustainability-related data collection and their ability to calculate their  $CO_2$  emissions. Finally, the section examines the costs associated with data collection and compares them with recent research findings.

#### **Data Collection and Trickle-Down Effect**

The systematic collection of sustainability data rises noticeably with company size. Only 16% of microenterprises gather such data, while the vast majority (84%) do not. In contrast, 90% of larger SMEs actively collect sustainability data, highlighting a clear difference between smaller and larger firms. Across the sample, 38% of companies collect sustainability-related data, but over half of them do so without a reporting standard, showing limited systematic collection and adoption among SMEs. The choice of reporting standards varies by company size, with larger SMEs more likely to use EU standards such as ESRS/CSRD (42%) and the EU Taxonomy (18%) due to regulatory requirements. Medium-sized and larger companies dominate standard usage, while micro-enterprises show the most diverse practices and avoid EU standards in favour of industry-specific ones. EMAS and LCA are rarely applied and mostly only by medium-sized and larger firms.

Collection of sustainability	Micro	Small	Medium	Larger	Total		
data	Absolute (Percentage)						
Yes	30 (16,4 %)	44 (31,0 %)	46 (53,5 %)	63 (90,0 %)	183 (38,0 %)		
No	153 (83,6 %)	98 (69,0 %)	40 (46,5 %)	7 (10,0 %)	298 (62,0 %)		
Total	183 (100,0 %)	142 (100,0 %)	86 (100,0 %)	70 (100,0 %)	481 (100,0 %)		

Table 7) Collection of sustainability data by company size 2025 (own composition)

By combining the results about SMEs collecting sustainability-related data and their investment behaviour caution is warranted in interpreting these results. As the survey did not capture information on the timing of investments and data collection, it is possible that companies decide on a specific investment as a result of their general ESG data collection. Conversely, it is also possible that companies begin collecting sustainability data in connection with an investment, for example to meet funding requirements or the sustainability data requirements of their bank. Among companies that collect data on sustainability, 91.8% also invest in sustainability. Among companies that do not collect data, only 51.7% do so. Given the mentioned constraints the results don't show a clear picture but indicate that firms that actively collect sustainability data are more likely to invest in sustainability.

	Sustainability investments ,yes'	Sustainability investments ,no'	Total
Sustainability	168 (91,8 %)	15 (8,2 %)	183 (38,0 %)
data collection			
,yes'			
Sustainability	154 (51,7 %)	144 (48,3%)	298 (62,0 %)
data collection			
,noʻ			
Total	322 (66,9 %)	159 (33,1 %)	481 (100,0 %)

Table 8) Sustainable investment and data management 2025 (own composition)

Examining the potential reasons for this result we went into the details and asked: Do the financing patterns of investing firms differ, for instance, are companies that rely on external, bank, or public funding more likely to collect sustainability data? Alternatively, is there a relationship with the type of investment objective for example, are data collection practices more strongly associated with climate-related investments? The detailed analysis indicates that among the 322 firms that invested in sustainability, the use of funding programs or external financing is broadly similar regardless of whether they collect sustainability data. Specifically, 23 of 168 firms that collect data and 22 of 154 firms that do not collect data used a funding program, while 14 and 11, respectively, combined it with a bank loan. Similarly, external financing in general was used by 37 firms in the data-collecting group and 48 firms in the non-collecting group. However, clear differences emerge in the scope of sustainability engagement. Firms that collect sustainability data pursue more sustainability objectives with their investments on average, both environmental (2.22 vs. 1.45) and non-environmental (1.05 vs. 0.73), compared to firms that do not collect data. This suggests that collecting sustainability data is associated with broader and more intensive sustainability engagement, strengthening overall commitment while keeping environmental objectives at the core.

SMEs may collect sustainability data for a variety of reasons, which generally depend on regulatory obligations, the company's preparedness, and the perceived benefits of data collection. In addition, data collection is often influenced by interactions with business partners, including other companies and financial institutions, which may be regulatory-driven but can also encourage SMEs to proactively advance their own sustainability initiatives.

Reasons for collecting	Micro	Small	Medium	Larger	Total		
sustainability data	Absolute (Percentage)						
Regulatory Obligation	5 (12,5 %)	5 (6,7 %)	18 (18,4 %)	36 (23,5 %)	64 (17,5 %)		
Trickle Down Effect	12 (30,0 %)	26 (34,7 %)	37 (37,8 %)	62 (40,5 %)	137 (37,4 %)		
Internal Factors	23 (57,5 %)	44 (58,7 %)	43 (43,9 %)	55 (36,0 %)	165 (45,1 %)		
Answers	40 (100,0 %)	75 (100,0 %)	98 (100,0 %)	153 (100,0 %)	366 (100,0 %)		

Table 9) Reasons for collecting sustainability data by company size 2025, Multiple answers possible, Percentage in the columns 2-5 refer to responses by company size and percentage in column 6 refers to total responses (own composition)

Internal company reasons (e.g. sustainability management, employee requirements and value orientation) are the most common motivation for smaller companies (i.e. micro and small enterprises). 58% and 59% of these companies cite these reasons, whereas the proportion drops to 44% and 36% for larger companies. The trickle-down effect (e.g. requirements from the supply chain and banks) increases with company size, rising from 30% in micro-enterprises to 41% in larger SMEs. Regulatory obligations are significantly more relevant for larger companies (24%) than smaller ones (13% for micro-enterprises and 7% for small companies). This reflects the greater regulatory obligations of larger companies. Smaller companies tend to collect sustainability data on their own initiative, although such cases are relatively rare. For larger companies, external factors such as regulatory and customer requirements are the decisive factor. Of the 137 companies surveyed, 28% collect

sustainability data primarily due to the trickle-down effect. This represents an increase compared to 2023 (19%).

#### CO<sub>2</sub> Emission Awareness and Disclosure among SMEs

An interesting finding is that 27 of the 183 companies that reported collecting sustainability data (see Table 7) indicated that they do not know their  $CO_2$  emissions. Among the 156 companies that claim to be aware of their emissions, 87.8% can distinguish Scope I, 72.4% Scope II, and 42.6% Scope III emissions.

	Micro	Small	Medium	Larger	Total
Do not know	155 (85,2 %)	103 (74,1 %)	50 (58,8 %)	11 (15,9 %)	319 (67,2 %)
their CO <sub>2</sub>					
emissions					
Know their CO <sub>2</sub>	27 (14,8 %)	36 (25,9 %)	35 (41,2%)	58 (84,1 %)	156 (32,8 %)
emissions					
	•	of those that kn	ow their emission	s	
Scope I	23 (85,2%)	28 (77,8%)	33 (94,3%)	53 (91,4%)	137 (87,8%)
Scope II	15 (55,6%)	20 (55,6%)	30 (85,7%)	48 (82,8%)	113 (72,4%)
Scope III	11 (40,7%)	12 (33,3%)	17 (48,6%)	28 (48,3%)	68 (43,6%)

Table 10) SME Awareness of CO<sub>2</sub> emissions and coverage of emission scopes (I–III) by company size 2025 (own composition)

A closer look at size-specific data (Figure 2) reveals a marked decline in the ability to calculate Scope III emissions, with fewer than half of medium and large companies able to do so. Among micro and small enterprises, this share is even lower, and the findings further show that even Scope II emissions pose substantial challenges, as only about half of these companies are able to measure them.

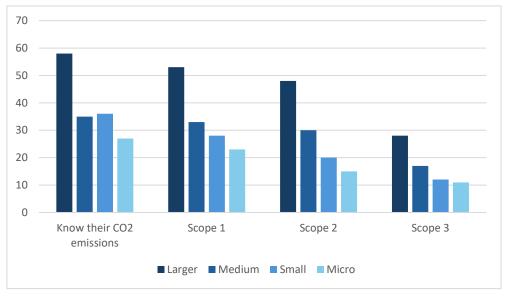


Figure 2: Absolute share of companies knowing their CO2 emissions by GHG Protocol Scopes.

#### Estimated costs for collecting sustainability data

Additionally, companies were asked to provide rough estimates of the internal and external working hours as well as the additional internal costs required to collect and process sustainability data per year. The results were summarized, and average and median hours and costs were calculated by company size. Based on these values, a cost range was modeled for each company, with the median representing the lower bound and the average representing the upper bound. The lower bound

scenario reflects the most conservative cost estimate, while the upper bound scenario represents the highest estimated cost within the range. Reported internal and external costs were provided in euros, and these values were integrated directly. To assign a monetary value to internal and external working hours, the Eurostat average hourly labour cost (Eurostat 2025) was used. This figure encompasses all expenses incurred by an employer per hour worked, including salaries, social security contributions, taxes, and other employment-related costs, providing a more complete and realistic assessment of labour costs. The EU average of 33.5 euros per hour was applied. Given the predominance of German and Austrian companies in the sample, where costs typically range between 42 and 44 euros per hour, this value represents a conservative estimate. Although external labour costs are likely higher, the same rate was applied for simplification.

	Bottom Line Scenario (BLS)						
Values	Micro	Small	Medium	Larger			
Internal working	40	40	80	500			
hours (Median)							
External working	6	2,5	22	60			
hours (Median)							
Additional internal	2500	3000	5000	38000			
resources in €							
(Median)							
Additional external	300	1500	1000	50304			
resources in €							
(Median)							
		Top Line Scenario (TLS)	1	T			
Values	Micro	Small	Medium	Larger			
Internal working	60,6	86,5	222,1	2290,2			
hours (Mean)							
External working	13,1	13,1	48,3	141,4			
hours (Mean)							
Additional internal	6269	9201	11290	50304			
resources in €							
(Mean)							
Additional external	1992	2867	20285	36950			
resources in €							
(Mean)							
	Cost range pe	er year (Bottom – Top Line	Scenario)	T			
Company Size		Calculation		Costs in €			
Micro (BLS)		x 33,5 €/h + 2500 € + 330 €		4371 - 10304			
Micro (TLS)	60,6 h x 33,5 €/h + 13	3,1 €/h + 6269 € + 1992 € =	10304 €				
Small (BLS)	40 h x 33,5 € + 2,5 h	x 33,5 € + 3000 € + 1500 €	= 5924 €	5924 - 15405			
Small (TLS)	86,5 x 33,5 €/h + 13,	1 h x 33,5 €/h + 9201 € + 2	867 € = 15405 €				
Medium (BLS)	80 x 33,5 €/h + 22 h x	x 33,5 €/h + 5000 € + 1000	€ = 9417 €	9417 - 40633			
Medium (TLS)	222,1 h x 33,5 €/h + 4	222,1 h x 33,5 €/h + 48,3 h x 33,5 €/h + 11290 € + 20285 € = 40632 €					
Larger (BLS)	500 h x 33,5 €/h + 60	x 33,5 €/h + 38000 € + 300	000 € = 86760 €	86760 -			
Larger (TLS)	2290,2 h x 33,5 €/h +	141,4 h x 33,5 €/h + 50304	€ + 36950 € = 168760	168760			
. ,	€ ′	•					
-			<u>.</u>				

Table 11) Estimated costs for collecting sustainability data by company size 2025 (own composition)

A comparison of the calculated cost ranges with findings from previous studies shows that, in particular, the estimates for micro and small enterprises are consistent with earlier investigations. For example, a cost—benefit analysis of SME disclosure on taxonomy alignment reports average

expenditures of EUR 5600 for micro and small companies in preparing sustainability reports, and a range of EUR 3100 to EUR 8700 for responding adequately to ESG requests (EU Commission 2024, 27). With respect to data collection and preparation in the context of taxonomy reporting, including life cycle assessment and emissions calculation, the same study identifies an indicative benchmark of EUR 12400 for small enterprises (ibid., 76). Similarly, a recent cost—benefit analysis of the VSME framework estimates initial costs of EUR 3500 to EUR 4500 for the basic module and EUR 8500 to EUR 9500 for the basic plus comprehensive module for micro and small enterprises with fewer than 20 employees (EFRAG 2024, 40).

For medium-sized enterprises, the first study reports average costs of approximately EUR 19000 for data collection and preparation in the context of taxonomy reporting, including life cycle assessment and emissions calculation (EU Commission 2024, 27). The VSME study, by contrast, estimates preparation costs between EUR 7500 and EUR 12800 for the basic module and between EUR 17500 and EUR 22800 for the basic plus comprehensive module. The authors characterize these estimates as conservative and point to expert assessments that place the costs for medium-sized enterprises in the range of EUR 20000 to EUR 40000, depending strongly on the complexity of the company's product portfolio and business model (ibid., 76).

#### 4.3 Perceived investment barriers of SMEs

In the 2025 survey, a total of 481 firms participated. Among them, approximately two-thirds (67%) reported having invested in environmental or social sustainability, as well as in good corporate governance, within the past two years. The remaining 159 firms indicated that they had made no such investments. These companies were subsequently asked to elaborate on the reasons for their non-investment. Notably, 58 firms refrained from providing any response. The explanations that were given were systematically categorized into eight distinct groups (see Table 15). Among these, the most frequently cited reason was summarized under the label "no necessity." This particular response could plausibly also be attributed to categories such as "sustainability already achieved," "ideological reasons," or "lack of profitability,". To reflect this ambiguity and its prevalence, "no necessity" was retained as an in-vivo code and established as a separate category of its own.

	Micro	Small	Medium	Larger	Total		
	Absolute values (percentage)						
No answer	37 (38, 1 %)	18 (38,3 %)	2 (18,2 %)	1 (25,0 %)	58 (36,5 %)		
,No necessity'	18 (18,6 %)	3 (6,4 %)	0 (0,0 %)	0 (0,0 %)	21 (13,2 %)		
General	7 (7,2 %)	3 (6,4 %)	1 (9,1 %)	0 (0,0 %)	11 (6,9 %)		
economic							
situation							
Ideology	2 (2,1 %)	3 (6,4 %)	0 (0,0 %)	0 (0,0 %)	5 (3,1 %)		
Uncertainty	6 (6,2 %)	3 (6,4 %)	0 (0,0 %)	1 (25,0 %)	10 (6,3 %)		
Lacking access to	9 (9,3 %)	7 (14,9 %)	1 (9,1 %)	0 (0,0 %)	17 (10,7 %)		
finance							
Limited scope for	12 (12,4 %)	6 (12,8 %)	0 (0,0 %)	0 (0,0 %)	18 (11,3 %)		
action							
Sustainability	3 (3,1 %)	4 (8,5 %)	6 (54,5 %)	2 (50,0 %)	15 (9,4 %)		
achieved							
Lack of	3 (3,1 %)	0 (0,0 %)	1 (9,1 %)	0 (0,0 %)	4 (2,5 %)		
profitability							
Total	97 (100,0 %)	47 (100,0 %)	11 (100,0 %)	4 (100,0 %)	159 (100,0 %)		

Table 12) Reasons for not investing in sustainability by company size 2025 (classified open answers, no double classification), Percentage in the columns 2-5 refer to responses by company size and percentage in column 6 refers to total responses (own composition)

A detailed analysis of the results presents a mixed picture, with no single reason emerging as dominant for SMEs' lack of sustainability investment. Regarding access to finance, 17 companies (10.7 percent) cited a funding gap as the primary constraint, all of which were small or micro enterprises, with the exception of one medium-sized firm. This suggests that financing shortfalls, which the private financial sector could potentially address, are predominantly an issue for the smallest enterprises. Larger SMEs, by contrast, generally do not report funding constraints for sustainability-related investments.

Interestingly, 9.4 percent of firms indicated that they had already achieved sustainability, implying that no further investments were necessary based on their self-assessment. The category limited scope for action was reported exclusively by micro- and small enterprises (18 firms), whereas no medium or larger company cited this as a reason for non-investment.

Overall, the categories general economic situation and uncertainty highlight that economically turbulent times continue to affect SMEs, particularly micro- and small enterprises, underscoring the challenges these firms face in pursuing sustainability initiatives.

#### 5. Conclusion

The results of the study indicate that the share of SMEs investing in sustainability has increased compared to 2023. With regard to the financing mix capital markets remain irrelevant for financing these investments. While public funding programs and subsidized loans are gaining importance, traditional bank loans are progressively less relied upon. SMEs are gradually engaging with sustainability, though systematic measurement, reporting, and standardization are still limited. Notably, a substantial share of companies invests in sustainability without collecting ESG data, and for micro and smaller firms, the costs of data collection may in some cases outweigh the perceived benefits, limiting the incentive to gather such information. The findings suggest that there is no single dominant reason for not investing in sustainability; rather, a combination of financing limitations, misalignment with economic transformation needs, and broader economic challenges shapes investment decisions.

In light of this, policy and financial support should prioritize enabling SMEs to adopt sustainable practices effectively, focusing on practical investment objects and established labels or certifications familiar to SMEs. Such an approach can reduce administrative burdens and provide accessible pathways to sustainability, without overemphasizing complex reporting requirements or data collection that may not always be perceived as valuable. The findings further suggest that within the current sustainable finance regime for SMEs, capital markets play only a marginal role, placing traditional bank relationships at the center, where publicly funded loans dominate over conventional bank lending. While these loan channels remain intact, they could increasingly serve as facilitators of capital flows toward sustainable investments rather than directing them exclusively. Taken together, these insights can inform policy advice that fosters a more inclusive and balanced sustainable finance framework for SMEs.

#### Literature:

Block, J., Benz, L., Johann, M., Willeke, T., Lorenzen, S. (2023): Nachhaltige Transformation und Dekarbonisierung im produzierenden deutschen Mittelstand. <a href="https://www.uni-trier.de/fileadmin/fb4/prof/BWL/MIT/Berichte/Bericht\_Mittelstand\_Dekarbonisierung\_2023.pdf">https://www.uni-trier.de/fileadmin/fb4/prof/BWL/MIT/Berichte/Bericht\_Mittelstand\_Dekarbonisierung\_2023.pdf</a> Retrieved on September 3, 2025

Boston Consulting Group (2025): The Argos - BCG Mid-market Climate Transition Barometer. <a href="https://argos.fund/climate-barometer-2025-edition/">https://argos.fund/climate-barometer-2025-edition/</a> Retrieved on September 3, 2025

Brüggemann, A., Wehrstedt, C. (2025): Finanzierung von Klimaschutzinvestitionen im Mittelstand: Bedeutungszuwachs von Bankkrediten und Fördermitteln durch steigende Projektgrößen. Frankfurt: KfW Research.

EFRAG (2024): Cost-Benefit Analysis of the VSME.

https://www.efrag.org/system/files/sites/webpublishing/Project%20Documents/2309261112573240 /EFRAG%27s%20Cover%20Letter%20and%20Cost%20Benefit%20Analysis%20on%20VSME.pdf Retrieved on September 3, 2025

European Commission (2023): Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - SME Relief Package. <a href="https://single-market-economy.ec.europa.eu/document/download/8b64cc33-b9d9-4a73-b470-8fae8a59dba5">https://single-market-economy.ec.europa.eu/document/download/8b64cc33-b9d9-4a73-b470-8fae8a59dba5</a> en?filename=COM 2023 535 1 EN ACT part1 v12.pdf Retrieved on September 3, 2025

European Commission (2024): SME disclosure on taxonomy alignment, Cost/benefit analysis: final report. Volume 1. <a href="https://op.europa.eu/en/publication-detail/-/publication/8ad71b3e-0b65-11ef-a251-01aa75ed71a1/language-en">https://op.europa.eu/en/publication-detail/-/publication/8ad71b3e-0b65-11ef-a251-01aa75ed71a1/language-en</a> Retrieved on September 3, 2025

European Commission (2024): SMEs, resource efficiency and green markets. Flash Eurobarometer. <a href="https://europa.eu/eurobarometer/api/deliverable/download/file?deliverableId=94754">https://europa.eu/eurobarometer/api/deliverable/download/file?deliverableId=94754</a> Retrieved on September 3, 2025

Eurostat (2025, März): Hourly labour costs. In Statistics Explained. <a href="https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Hourly\_labour\_costs">https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Hourly\_labour\_costs</a> Retrieved on September 3, 2025

Eurochambers, SME United (2023): Access to sustainable finance for SMEs: a European survey. https://www.eurochambres.eu/wp-content/uploads/2023/09/Access-to-sustainable-finance-for-SMEs.pdf Retrieved on September 3, 2025

European Banking Authority (2025): Guidelines on the management of environmental, social and governance (ESG) risks. <a href="https://www.eba.europa.eu/sites/default/files/2025-01/fb22982a-d69d-42cc-9d62-">https://www.eba.europa.eu/sites/default/files/2025-01/fb22982a-d69d-42cc-9d62-</a>

<u>1023497ad58a/Final%20Guidelines%20on%20the%20management%20of%20ESG%20risks.pdf</u> Retrieved on September 3, 2025

European Investment Bank (EIB) (2024): EIB Investment Survey 2023 – Country overview: Germany. Luxembourg: EIB.

https://www.eib.org/files/documents/lucalli/20240238 econ eibis 2024 germany en.pdf Retrieved on September 3, 2025

Flögel, F., Schepelmann, P., Zademach, H.-M., Zörner, M. (2024): Injecting climate finance into SME lending in Germany: Opportunities for and limitations of regional savings and cooperative banks. ZFW — Advances in Economic Geography, vol. 68, no. 2, 111-123. <a href="https://doi.org/10.1515/zfw-2022-0011">https://doi.org/10.1515/zfw-2022-0011</a>

Gerstenberger, J. (2024): Bisher nur wenige KMU von Banken auf Nachhaltigkeitsinformationen abgesprochen – Bedarf dürfte aber zunehmen. Frankfurt: KfW Research.

Gerstenberger, J., Schwartz, M. (2024): KfW-Mittelstandspanel 2024: Mittelstand kann sich Konjunkturflaute nicht entziehen. Frankfurt: KfW Research.

Gerstenberger, J., Schwartz, M. (2025): Schleichender Rückzug? Immer mehr Unternehmen im Mittelstand verzichten auf Bankkredite zur Investitionsfinanzierung (Fokus Volkswirtschaft Nr. 488, 6 March 2025). Frankfurt: KfW Research.

Goeke, M. (2008): Der deutsche Mittelstand — Herzstück der deutschen Wirtschaft. In: Goeke, M. (ed.) Praxishandbuch Mittelstandsfinanzierung. Gabler. <a href="https://doi.org/10.1007/978-3-8349-9750-01">https://doi.org/10.1007/978-3-8349-9750-01</a>

Gortsos Christos, V. (2025): Sustainable Finance under EU Law: The Gradual Shift from Capital Markets to Banking Regulation. In: Alexander, K., Gargantini, M., Siri, M. (eds.) The Cambridge Handbook of EU Sustainable Finance: Regulation, Supervision and Governance. Cambridge Law Handbooks. Cambridge University Press, 552-572. <a href="https://doi.org/10.1017/9781009483971.026">https://doi.org/10.1017/9781009483971.026</a>

Göhler, G., Schnabel, F., Klinger, A., Nugel, S., Förther, L., Burger, E., Dörr, J. (2023): Auf dem Weg zur Klimaneutralität: Wie weit sind deutsche Familienunternehmen? <a href="https://www.econstor.eu/handle/10419/273575">https://www.econstor.eu/handle/10419/273575</a> Retrieved on September 3, 2025

Greitens, J. (2023): Sustainable Finance and Small and Medium Enterprises. In: Intereconomics. 58(4): 222-226. <a href="https://www.intereconomics.eu/contents/year/2023/number/4/article/sustainable-finance-and-small-and-medium-enterprises.html">https://www.intereconomics.eu/contents/year/2023/number/4/article/sustainable-finance-and-small-and-medium-enterprises.html</a> Retrieved on September 3, 2025

Kruse, C., Pietschmann, U., Kumpf, M., Wesseling, J. (2023): Nachhaltigkeitsreporting für kleine und mittlere Unternehmen: empirische Erhebung zum Stand der digitalen Nachhaltigkeitsberichterstattung in Unternehmen des westlichen Münsterlandes. Westfälische Schriften zum Nachhaltigkeitsmanagement, Ausgabe 1. Bocholt: Westfälische Hochschule.

Lanfermann, G. (2025): Omnibus-Regulierung will Nachhaltigkeitsberichterstattung vereinfachen. Die Europäische Kommission forciert Bürokratieabbau. Deutsches Rechnungslegungs Standards Committee e.V., Berlin.

Löher, J., Rieger-Fels, M., Nielen, S., Schröder, C. (2022): Die Förderung nachhaltiger Finanzierung durch die EU – Auswirkungen auf den Mittelstand. IfM-Materialien Nr. 294. Bonn: Institut für Mittelstandsforschung (IfM) Bonn.

OECD (2024): Financing SME growth in Germany. <a href="https://www.oecd.org/en/publications/financing-sme-growth-in-germany">https://www.oecd.org/en/publications/financing-sme-growth-in-germany</a> 8f9a90e9-en.html Retrieved on September 3, 2025

OECD (2025): Guidance Note on fostering convergence in SME sustainability reporting. <a href="https://www.oecd.org/content/dam/oecd/en/publications/reports/2025/06/oecd-guidance-note-on-fostering-convergence-in-sme-sustainability-reporting\_b1f6af62/d95a25de-en.pdf">https://www.oecd.org/content/dam/oecd/en/publications/reports/2025/06/oecd-guidance-note-on-fostering-convergence-in-sme-sustainability-reporting\_b1f6af62/d95a25de-en.pdf</a> Retrieved on September 3, 2025

Tran, Y., Bloch, L., Meyer, E., Kizilocak, E., Talmeier, M. (2024): Nachhaltigkeit im Mittelstand - Bestandsaufnahme und Donut-Ökonomie als Handlungskompass. <a href="https://digitalzentrum-berlin.de/wp-">https://digitalzentrum-berlin.de/wp-</a>

content/uploads/2024/MDZ%20Berlin Donut%C3%B6konomie Transferpublikation.pdf?x39886 Retrieved on September 3, 2025

## Appendix:

## Survey 2025

# Access to Sustainable Finance in the SME sector

Fields marked with * are mandatory.	
Disclaimer  The European Commission is not responsible for the content of questionnaires created using the EUSurvey service - it remains the sole responsible form creator and manager. The use of EUSurvey service does not imply a recommendation or endorsement, by the European Commission, of the expressed within them.	
The EU Sustainable Finance Framework aims to support investments in sustainability. This survey run by the European Chamber Organise Eurochambres and SME United investigates market practices and the need for reform from the perspective of small and medium-sized ento (SMEs). Your answers will be stored and processed anonymously.	
1 Investments	
* Have you made any investments in sustainability in the last two years? This refers to investments in green (e.g. energy-efficien resource-conserving investments) and social objectives as well as good corporate governance.	it and
What sustainability objective - apart from business considerations - did you pursue with these investments? (multiple choice por Climate protection Adaptation to climate change Sustainable use and protection of water and marine resources Transition to a circular economy Prevention and reduction of environmental pollution Protection and restoration of biodiversity and ecosystems Social goals Goals of good corporate governance	ssible)
Have you utilised external financing for this investment?	
What type of external financing have you used? (multiple choice possible)  Bank financing (e.g. loan from principal bank) Capital market (e.g. corporate bonds, promissory note loans) Leasing Funding programme Crowd funding Private equity and/or venture capital Other	

	very supportive e.g. by supporting a sustainable business model through sound advice and transformation support	supportive e.g. by supporting the development of a sustainability reporting system or improved financing conditions for sustainable investments	neutral e.g. neutral or disinterested in the topic of sustainability	punitive/ threatening e.g. through worsened financing conditions/ criticism of lack of sustainability reporting	very punitive very threatening e.g. by calling the business relationship int question
I perceive the bank as	0	0	0	0	0
Yes No sustainabi	lity goals were linked to the t	financing?		Ø	
No nt sustainabi				<b>2</b>	
No nt sustainabi				<b>2</b>	
eporting you collect Yes No	sustainability data in your c	ompany?			
eporting you collect Yes No t motivated The compa Improving in Requirement	sustainability data in your co you to collect sustainability ny has a regulatory obligation to d	ompany?  data? (multiple choice possible) to so (e.g. Corporate Sustainability R ng, or sustainability performance base	eporting Directive, Supp		

Do you use a reporting standard	d for your sustainability d	lata?	
Yes			
O No			
Which standard do you use? (m	ultiple choice possible)		
<ul> <li>European Sustainability Repo</li> </ul>	rting Standards (ESRS) as p	art of the Corporate Sustainat	pility Reporting Directive (CSRD)
☐ EU taxonomy for sustainable	T/ (0) (1) (1)	11.77	30 (3 (3)
☐ Eco Management and Audit S	cheme (EMAS)		
Life Cycle Assessment (LCA)			
─ Voluntary SME Standard (VSI)	ME)		
National standards and guide	lines		
✓ Other			
2021012 VISC 18 83 FEB.	2		
Which other standard do you us	se?		
			le le
Do you know your CO₂ emission  ■ Yes  No  Is it possible to determine the Covehicle fleet)?  ■ Yes		nissions for which the co	mpany is directly responsible, e.g. operation of ovens or
○ No			
Is it possible to determine the C district heating)?	O <sub>2</sub> Scope 2 emissions (in	direct greenhouse gas en	nissions from purchased energy, such as electricity or
Yes			
O Nein			
Is it possible to determine CO <sub>2</sub> S goods and services)?	Scope 3 emissions (indire	ct greenhouse gas emiss	ions from the value chain, e.g. business trips, purchased
Yes			
O No			
What is your rough estimate of	the effort required to colle	ect and process sustainat External resources	pility data per year?
	internal ressources	External resources	

	Internal ressources	External resources
Estimated working hours	1.	1.
Estimated additional costs in €	1.	1.
Comment (optional)	6	//

### 3 Company details

	pest applies to your company? (2 of 3 criteria must be fulfilled)
<ul> <li>Micro-enterprise (up to 9</li> </ul>	9 employees, up to 0.9 million euros turnover, up to 0.45 million euros balance sheet total)
	9 employees, up to 15 million euros turnover, up to 7.5 million euros balance sheet total)
<ul> <li>Medium-sized company</li> </ul>	(up to 249 employees, up to 50 million euros turnover, up to 25 million euros balance sheet total)
Larger company	
* Where do you categorise	your company?
<ul> <li>Manufacturing company</li> </ul>	r
<ul> <li>Service company</li> </ul>	
<ul> <li>Trading company (retail)</li> </ul>	and wholesale)
Construction industry	
t laudiah asudaria tha ba	and office of your company to a to 42
in which country is the ne	ead office of your company located?
	~
* Legal form	
<ul> <li>Sole proprietorship</li> </ul>	
<ul> <li>Partnership</li> </ul>	
○ Corporation	
<ul> <li>Corporation with investor</li> </ul>	ors
<ul> <li>Listed corporation</li> </ul>	
O Other	
Other	
O Otner	
O Otner	
	The state of the s
4 Contact details (o	optional)
	optional)
4 Contact details (o	quiries or further surveys? This will remove the anonymity of the data collection.
4 Contact details (o	
4 Contact details (o	
4 Contact details (o  May we contact you for end  Yes  No	quiries or further surveys? This will remove the anonymity of the data collection.
4 Contact details (o	quiries or further surveys? This will remove the anonymity of the data collection.
4 Contact details (o  May we contact you for end  Yes  No	quiries or further surveys? This will remove the anonymity of the data collection.
4 Contact details (o  May we contact you for end  Yes  No  Please leave us the following	quiries or further surveys? This will remove the anonymity of the data collection.
4 Contact details (o  May we contact you for end  Yes  No  Please leave us the followin	quiries or further surveys? This will remove the anonymity of the data collection.
4 Contact details (o  May we contact you for end  Yes  No  Please leave us the following  Name  Company	quiries or further surveys? This will remove the anonymity of the data collection.

### Survey 2023

## SME Questionnaire on Sustainable Finance

Provide marked with " and mandalony.	
Disclaimer The European Optionsiste in not respectable for the positive of questionization are respectable, or the European Optionization in not respectable, or the positive area of EURs on an area of EURs of a respectable, or respectable, or evaluation or evaluation and the European Optionization of the respectable, forms  represent additions:	*
The EU developed a Bustalhable Finance hamework to support investments in sustainability, meaning in 5 m/komental, 5-octal and 5-overnance (65 projects. This survey wants to evaluate the market practices.	10:
Sue of your company	
* How large is your company? (2 of 3 uritaria must not be exceeded) of must 1 shoesoo	
Situremental services (up to 8 employees, up to 8.7 million euros net sales, up to 0.20 million euros total assets)  Small company (up to 68 employees, up to 8 million euros in ner axise, up to 4 million euros in notal assets)  Mischarr-asset company (up to 250 employees, up to 40 million euros in net sales, up to 20 million euros in total assets)  Larger company (more than 250 employees, more than 40 million euros in net sales, more than 20 million euros in total assets)	
Access to Bustainable Finance	
in the last two years, have you made any investments to improve the sustainability of your business (contribute to goals of European Green Deal, a mean of thosola)  The last two years, have you made any investments to improve the sustainability of your business (contribute to goals of European Green Deal, a mean of thosola)  The last two years, have you made any investments to improve the sustainability of your business (contribute to goals of European Green Deal, a mean of the last two years).	
Which sustainability goal - additionally to business reasons - did you pursue with these investments? (multiple choice possib	de)
Adaptation to climate change (e.g. insulation of buildings)  Sustainable use and protection of water and marine resources	
Transition to a circular economy Pollution prevention and control Protection and restoration of biodiversity and ecosystems	
Good corporate governance goals	
* Did your company need external funding for these investments?  of most 1 choice(s)	
Yes No	
Which one(s)?	
☐ Bank loen ☐ Capital market funding ☐ Grants, subsidies or guarantees	
Other sources of financing (capital increases by owners, private equity, etc.)	
Have any sustainability criteria been included in the contract (e.g. taxonomy criteria, ESG-ratings, sustainability KPIs)? at most 1 choice(s)	
☑ Yes □ No	
Which criteria were included in the contract?	

#### **Sutainability Reporting**

As a large enterprise you will need to prepare sustainability reports (based on CSRD / ESRS) from 2024 on.

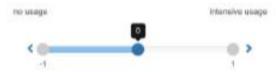
I am in communication with my tax advisor and/or auditor and have started preparations.

Alies the alder or accept the habit position.



I use IT tools and/or services of data providers to generate the data I need.

Move the allater or societ the Install position.



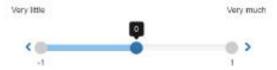
I can also use the data I prepare for the sustainability report for inquiries from the supply chain and from banks.

Move the alder or accept the initial position.

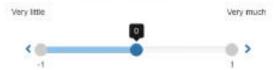


I can also use the data I prepare for the sustainability report as management tool in my company.

Move the aider or accept the initial position.



I have sufficient knowledge, overview and specialist staff to be able to fulfill the reporting requirements. Move the afder or accept the initial position



- Do business partners and I or banks ask you to provide sustainability information about your enterprise? at most 1 choice(s)
  - ☐ Yes
- \* Do you have an ESG-rating or are you planning to get one?

(ESG: E-nviromental, S-ocial and G-overnance; rating: extrenal ratings by an agency) at most 1 choice(s)

☐ Yes

□ No

<ul> <li>Do you have or plan to implement an environmental management system?</li> <li>at most 1 choice(s)</li> </ul>
☐ Yes ☐ No
Your company
How do you classify your company?  at most 1 choice(s)  Manufacturing company
Service company Wholesale and Retail Trade (NACE G)
<ul> <li>In which country is the head office of your company located?</li> <li>at most 1 choice(s)</li> </ul>
Austria Belgium Bulgaria Croatia
What is your function in your company?  at most 1 choice(s)  Managing Director Head of Finance / Controlling
Sustainability Management Other
* May we contact you for follow-up questions or further surveys?  at most 1 choice(s)  Yes  No
Contact details (name, company name, E-mail address, phone number):
Submit
GENT



# **CFS Working Papers Series**

# **Recent Issues**

All CFS Working Papers are available at www.gfk-cfs.de.

No.	Authors	Title
735	Felix Rossmann, Jan Greitens, and Lisa Knoll	SMEs within a data-driven sustainable finance framework: A European Survey
734	Volker Brühl	The regulatory complexity of the European Green Deal – too much too fast?
733	Alessandro Moro, Andrea Zaghini	Cui prodest? The heterogeneous impact of green bonds on companies' ESG score
732	Robert S. Chirinko	The 'Secret Sauce'?: Understanding The Success Of The State Bank Of North Dakota
731	Winnie Coleman, Dieter Nautz	Asymmetric Inflation Target Credibility
730	Volker Brühl	How will the digital euro work? A preliminary analysis of design, structures and challenges
729	Volker Brühl	The digital euro – implications for the European banking sector
728	Philip Schnorpfeil, Michael Weber, and Andreas Hackethal	Households' Response to the Wealth Effects of Inflation
727	Philip Schnorpfeil, Michael Weber, and Andreas Hackethal	Inflation and Trading
726	Matthias Fengler, Winfried Koeniger, and Stephan Minger	The Transmission of Monetary Policy to the Cost of Hedging
725	Andreas Hackethal, Tobin Hanspal, Samuel M. Hartzmark, Konstantin Bräuer	Educating Investors about Dividends