Sustainability
Reporting Navigator

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TRANSPARENCY

CSRD Adoption in the EURO STOXX 50: ESG Reporting is Coming of Age

April 2025 by Sustainability Reporting Navigator

About us and this study

Introduction

Who we are

Founded and operated by Goethe University Frankfurt, the University of Cologne, and Ludwig-Maximilians-Universität (LMU) Munich, the Sustainability Reporting Navigator (SRN) is an Open Science Platform dedicated to supporting practice, policy-making, and academic research.

It is supported by the German Research Foundation (DFG grant 403041268), the BMW Foundation Herbert Quandt, TÜV Süd Foundation, and accounting firms BakerTilly, Curacon, Forvis Mazars, KPMG, and PwC.

Its AI-enhanced CSRD Report Search Engine has made the SRN a key resource for in-depth analysis and benchmarking of CSRD reporting for preparers, auditors, policy-makers, academics and other stakeholders.

Introduction

Context

The Corporate Sustainability Reporting Directive (CSRD) and its integral European Sustainability Reporting Standards (ESRS) are central components of the EU's Green Deal. They are now in force for the first wave of large, listed companies in most EU member states. However, the CSRD's uneven transposition, with some some EU countries (e.g., Germany) lagging behind, as well as the current 'Omnibus' debate have contributed to uncertainty around implementation.

Key questions now arising include:

- How is CSRD/ESRS adoption changing sustainability-related information supply?
- Does the changed information supply meet stakeholders' demand?
- What are the net costs/benefits of the new requirements?

The European Commission's 'stop-the-clock' measures offer a timely window for empirical evidence to inform policy decisions. Against this background, our study seeks to provide concrete input relevant for EFRAG's recent call.

Introduction

About this study

Our study provides an exploratory analysis of the first-time ESRS reporting in the 2024 sustainability statements of some of the largest "first-wave" firms in the EU. It focuses on criteria of common interest, such as report volume, the topics covered, as well as specific disclosure and adoption choices.

The analysis benchmarks the EuroStoxx50 companies' 2024 sustainability reports against their 2023 sustainability reports and their financial reports. The study combines manual collection of ESRS application features with algorithmic assessment of disclosure topics and textual characteristics.

The analyses presented in this report are a preview of the large-scale study "Targeting transparency: early evidence on mandatory adoption of ESRS" that is currently being conducted by the SRN team as a registered report.

Executive Summary

Executive Summary

Report volume

Sustainability report volume in 2024 varies substantially across the EuroStoxx 50 firms, from around 20,000 to over 180,000 words, with an average of close to 90,000 words.

Compared to 2023, average report length increased by 24% in terms of word count (from 72,000 to 89,000 words) and by 16% in terms of page count (from 133 to 154 pages). Especially firms with shorter reporting in 2023 expanded their reports, catching up to their peers—some more than doubling in size.

However, about a quarter actually reduced their reporting volume, with some reports declining dramatically in length—particularly for those firms that had previously issued already longer and separate separate sustainability reports.

Overall, 2024 reports exhibit is a trend toward convergence of volume towards an average that is significantly higher than 2023, with short reports becoming longer and very long reports becoming shorter.

Executive Summary

Elements and language attributes

Sustainability reports are shifting from PR-style documents toward more structured and formal reporting, increasingly resembling financial reports. This transition is reflected in greater use of numerical data, tables, and standardized formatting, along with fewer 'glossy' images.

Textual analysis shows a move toward more technical and sophisticated language, and an increase in negative or conservative sentiment—likely due to greater coverage of negative externalities and risk-related disclosures.

These changes point to a growing seriousness and maturity in sustainability reporting.

Executive Summary

ESG matters covered

In terms of ESG topics, nearly all companies report on Climate Change (E1), Own Workforce (S1), and Business Conduct (G1), reflecting strong alignment with core ESRS areas.

However, the extent of disclosure within these topics varies: while some firms comply with nearly all disclosure requirements, others report only selectively, even when the topic is deemed material—especially when phase-in options are available.

Entity-specific ESG topics also appear; they are reported by 42% of firms. Cybersecurity and data protection is mentioned most often—making them the most frequently cited customized topics.

Executive Summary

Adoption choices

Although all EuroStoxx 50 companies apply the ESRS, there is significant variation in their implementation. Most firms take advantage of first-year phase-ins, e.g., options to omit sensitive information or prior-year comparatives. On the other hand, value-chain information is commonly provided.

The extent of voluntary, transparency-enhancing disclosures differs considerably across firms, indicating varying levels of ambition in implementing ESRS. For example, most firms opt for limited assurance, with reasonable assurance used rarely, or only for selected data points. Also, only few firms use primary data to quantify scope 3 emissions.

However, many firms adhere to the recommended ESRS structure, lending their reports greater accessibility.

Executive Summary

User information demand

Data from 3,500 search queries on the Sustainability Reporting Navigator platform indicates strong user interest in greenhouse gas emissions and own workforce, i.e., content relating to the core topical standards commonly reported by all companies. About half of the users interested in these topics request quantitative information. This highlights the importance of standardized ESG metrics.

Moreover, there is strong interest in companies' materiality assessments, especially with respect to qualitative information.

The logged queries offer rare, direct insight into what stakeholders actually look for in sustainability reports.

Results: Benchmarking Sustainability Statements 2024

Report volume

Reports vary substantially in length

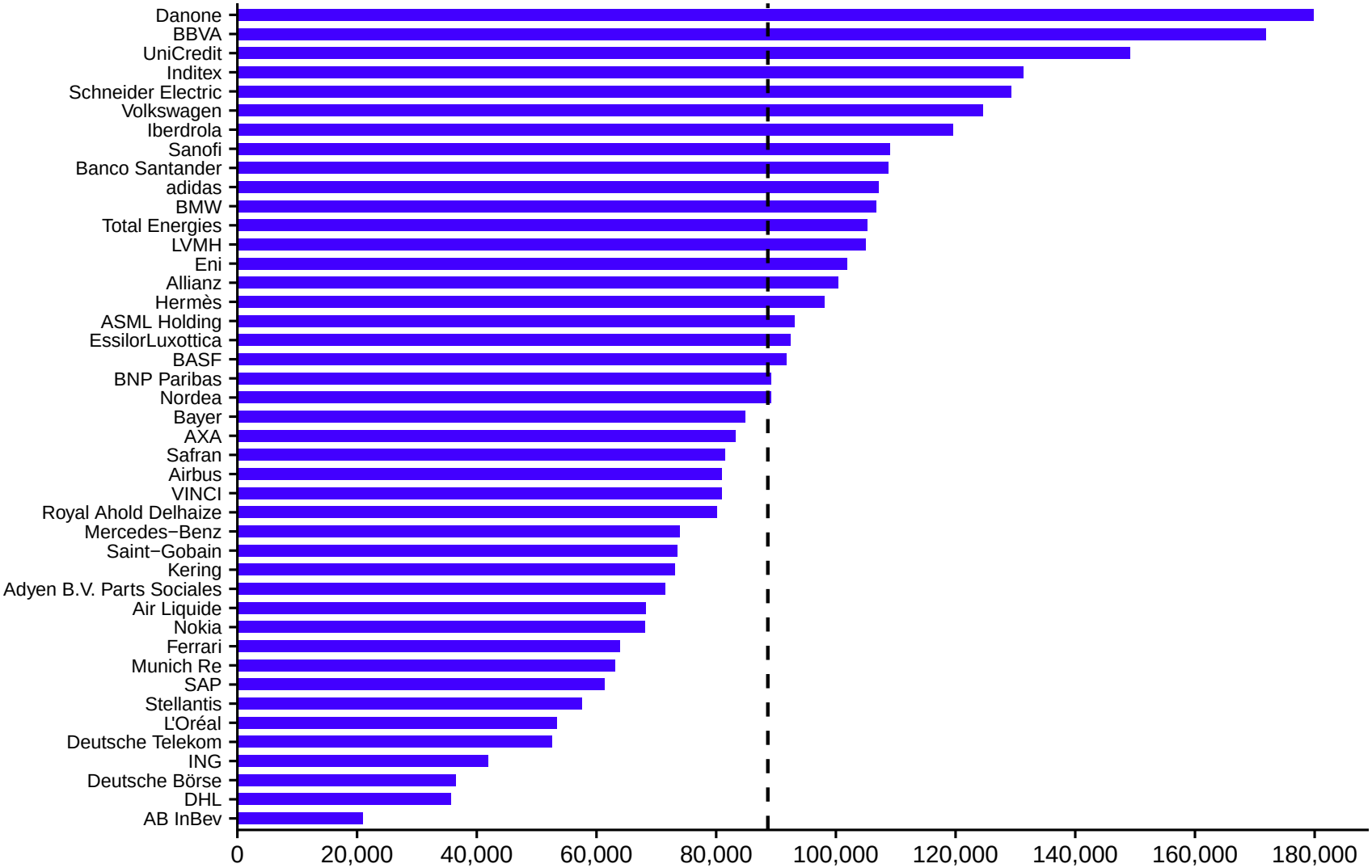

Fig. 1: Total words by firm (2024). This figure shows the absolute length of sustainability reporting for each firm in 2024, measured in number of words. The dashed line indicates the sample average.

Report volume

Reports are getting longer...

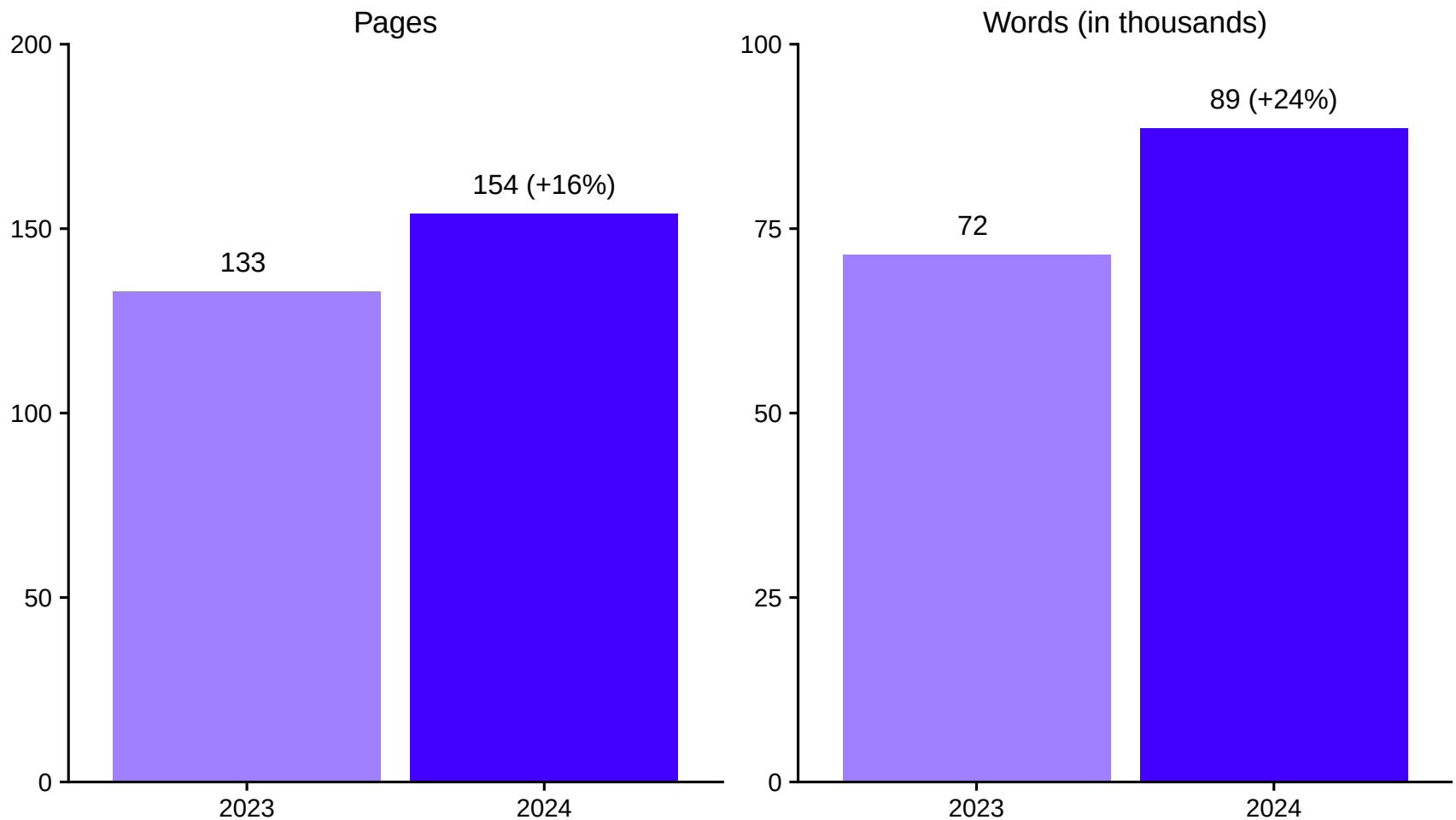

Fig 2. Growth in reporting volume. This figure shows the average number of pages (left panel) and words (right panel) in firms' 2023 and 2024 sustainability reporting.

Report volume

... but not for everyone

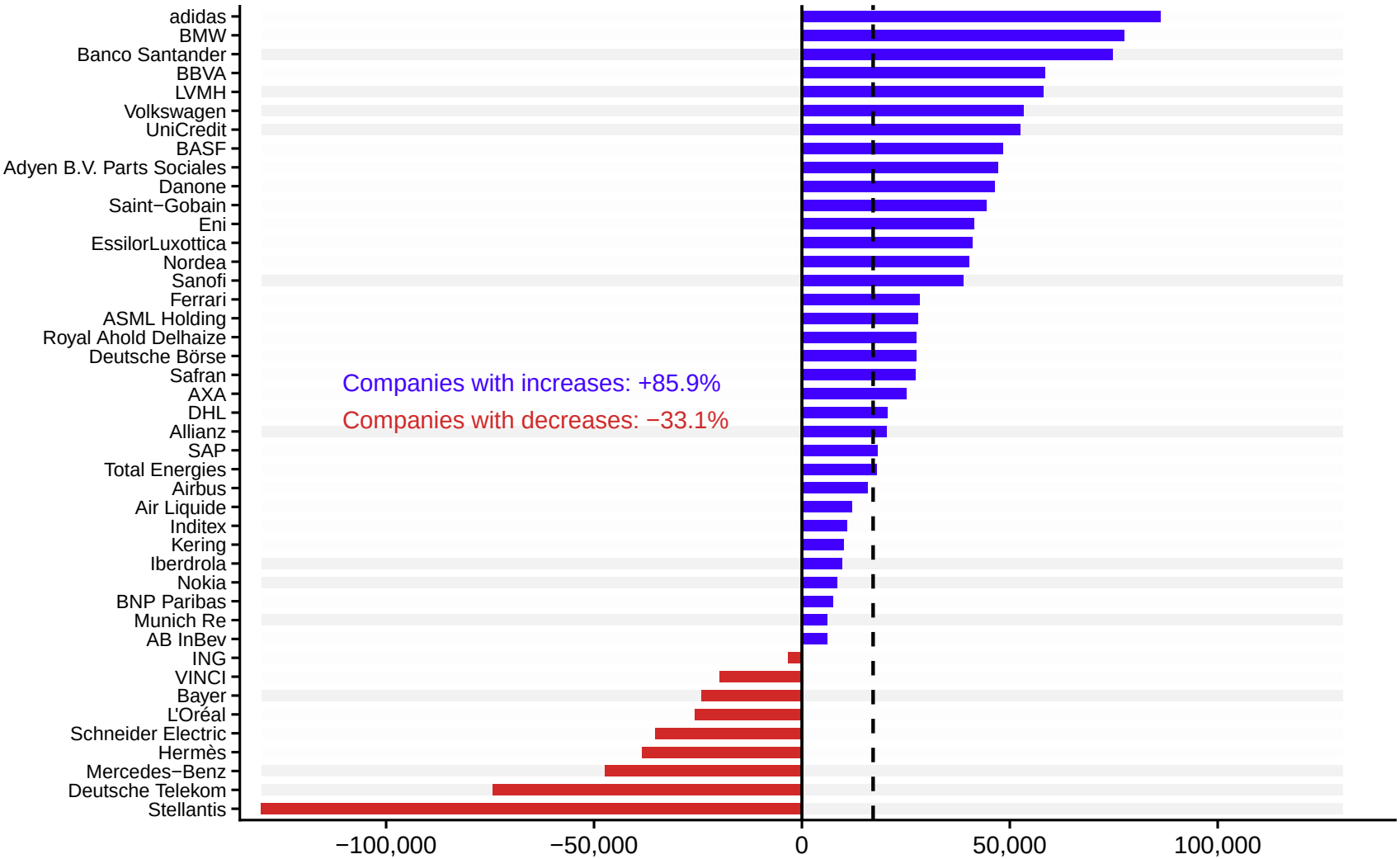

Fig. 3: Change in words by firm. This figure shows the change in total words per firm between 2023 and 2024. The dashed line indicates the sample average change. Red bars denote reductions, purple bars indicate increases. Firms with a separate sustainability report in 2023 are highlighted with a grey background.

Report volume

Reporting converges, with shorter reports catching up

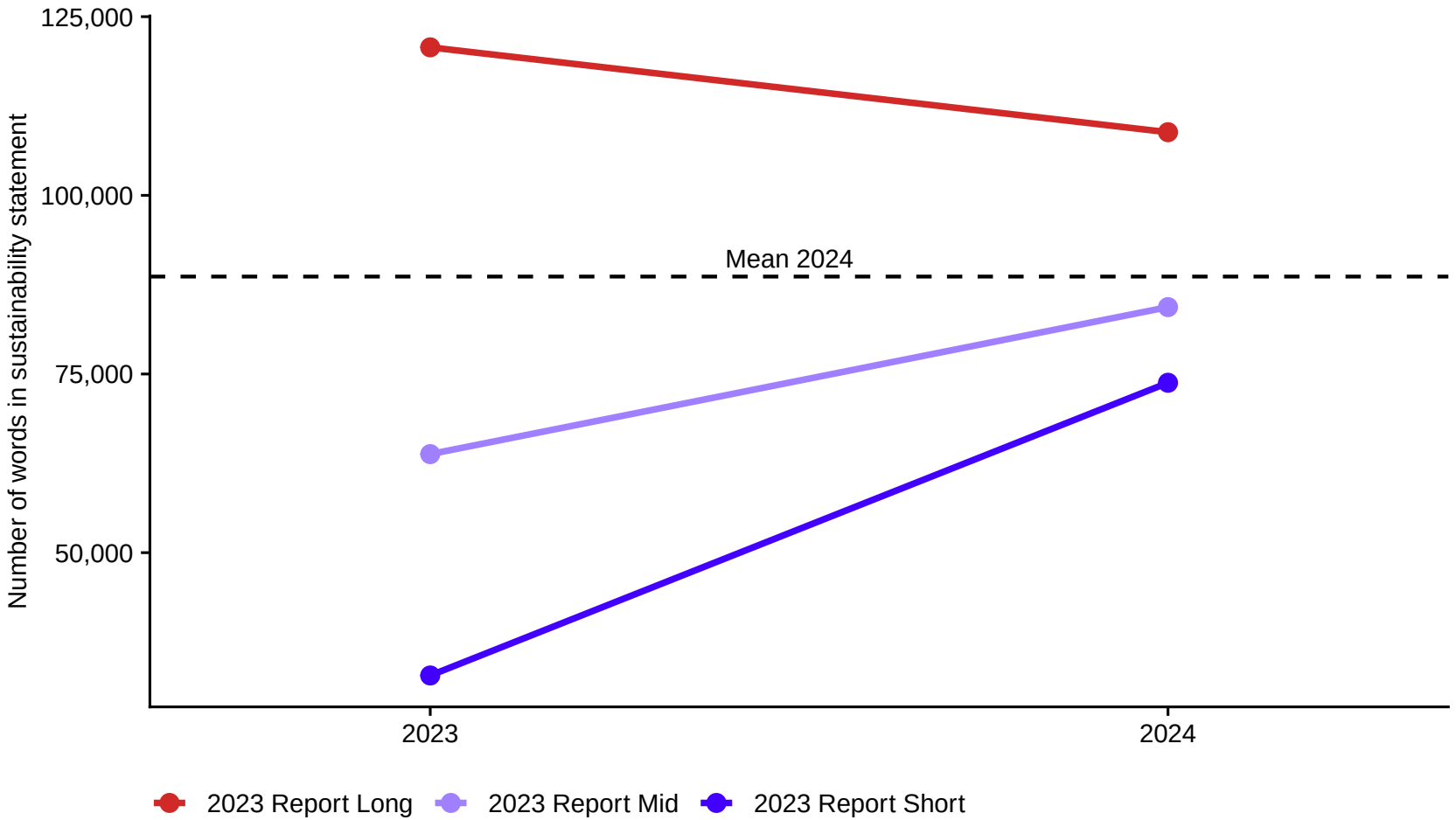

Fig. 4: Change in word count by 2023 report length terciles. The figure shows the average word count in 2023 and 2024, grouped by terciles based on 2023 report lengths.

Elements and language attributes

From marketing to more serious and structured reporting...

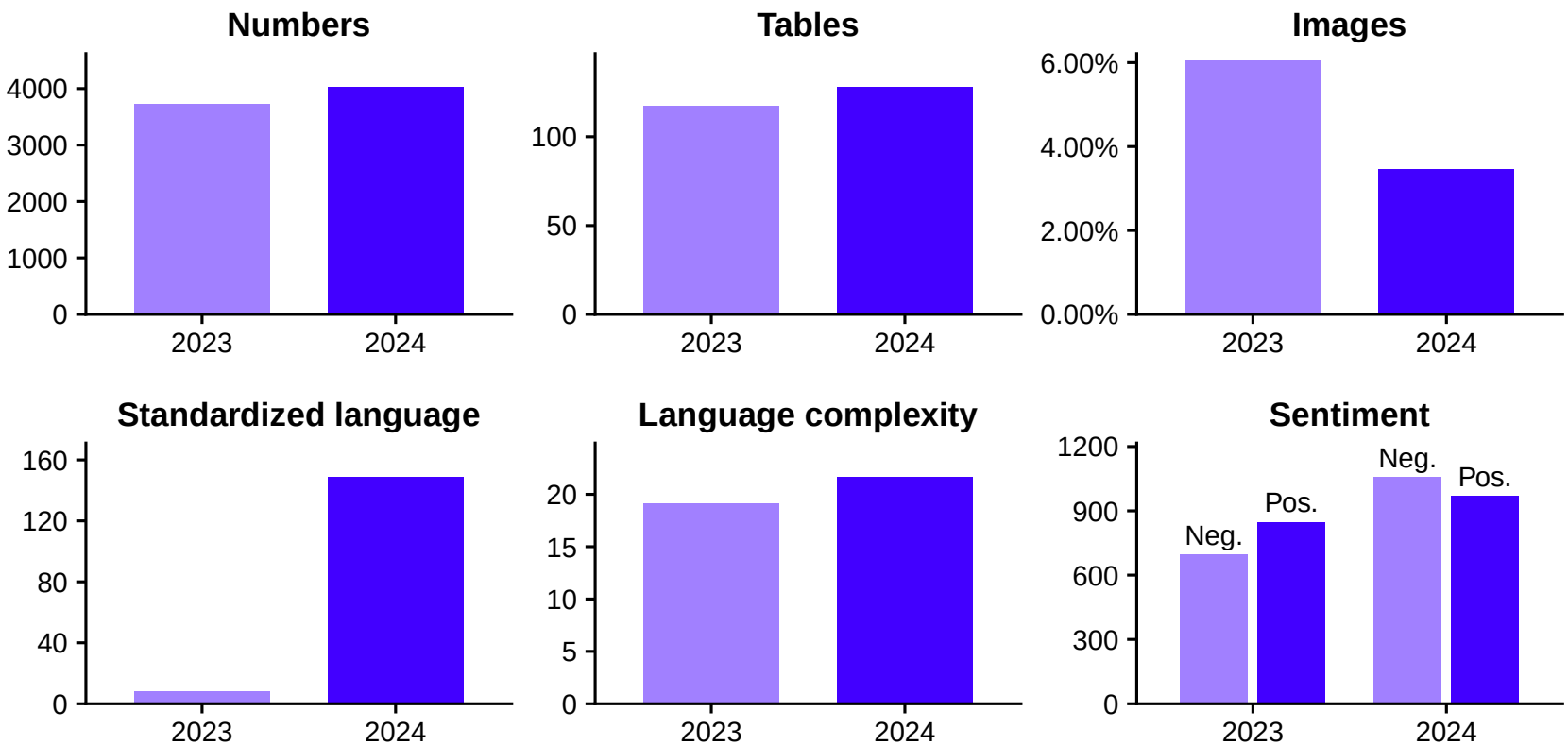

Fig. 5: Change of textual attributes in sustainability reporting. *Numbers* and *Tables* reflect the average count of numbers and tables in the sustainability statement, *Images* indicates the average image area in the sustainability statement, *Standardized language* is the average count of frequently used tetragrams, *Language complexity* is the Fog−Index, an aggregate measure of readability where higher values suggest more complex and technical language − which may be appropriate in professional sustainability disclosures, and the *Sentiment* plot shows the average number of positive and negative words in the sustainability statement, based on the Loughran & McDonald (2011) dictionary.

Elements and language attributes

... getting more similar to financial reporting

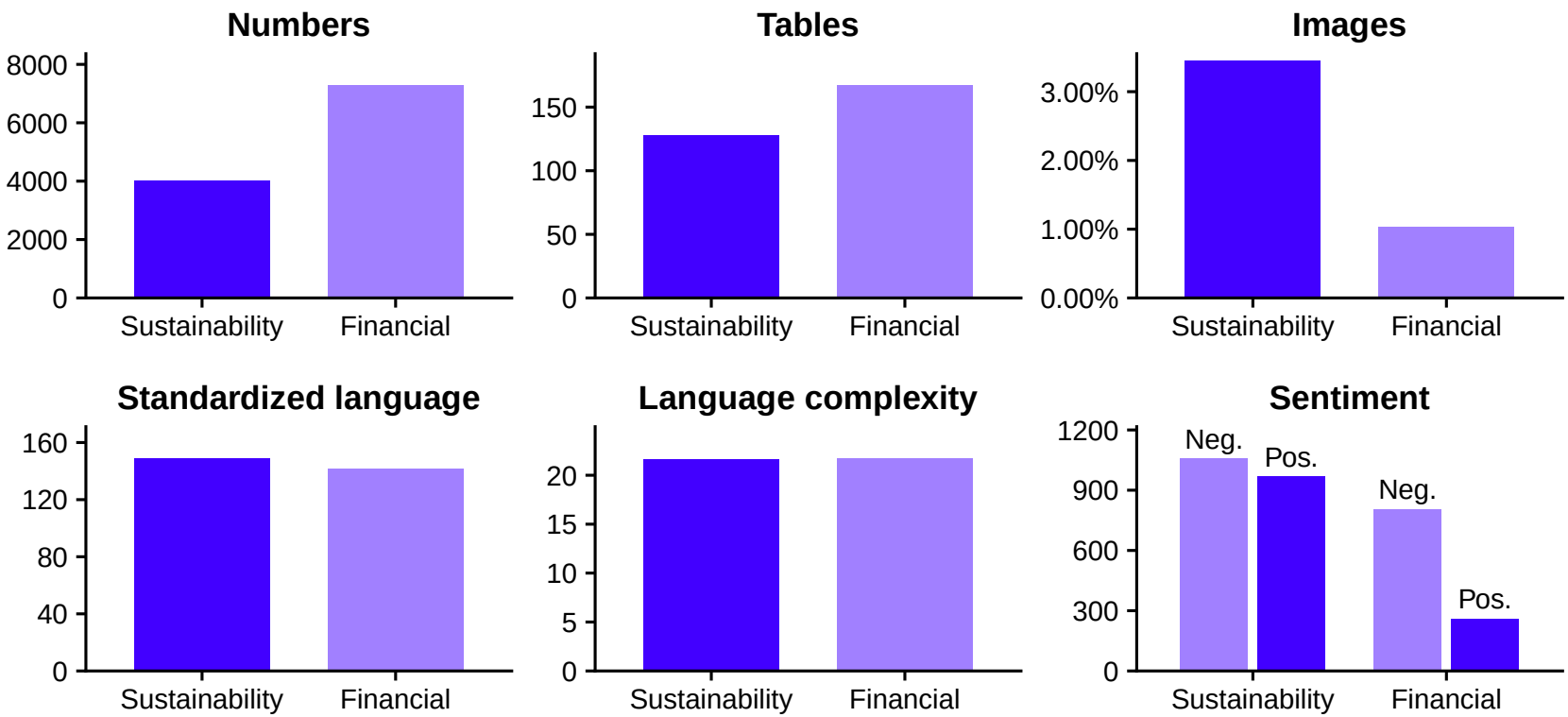

Fig. 6: Comparison of textual attributes between sustainability and financial statements (2024). *Numbers* and *Tables* reflect the average count of numbers and tables in the sustainability (financial) statement, *Images* indicates the average image area in the sustainability (financial) statement, *Standardized language* is the average count of frequently used tetragrams, *Reading difficulty* is the Fog−Index, an aggregate measure of readability where higher values suggest more complex and technical language − which may be appropriate in professional sustainability (financial) disclosures, and the *Sentiment* plot shows the average number of positive and negative words in the sustainability (financial) statement, based on the Loughran & McDonald (2011) dictionary.

ESG matters covered

Climate, workforce, and business conduct material for all...

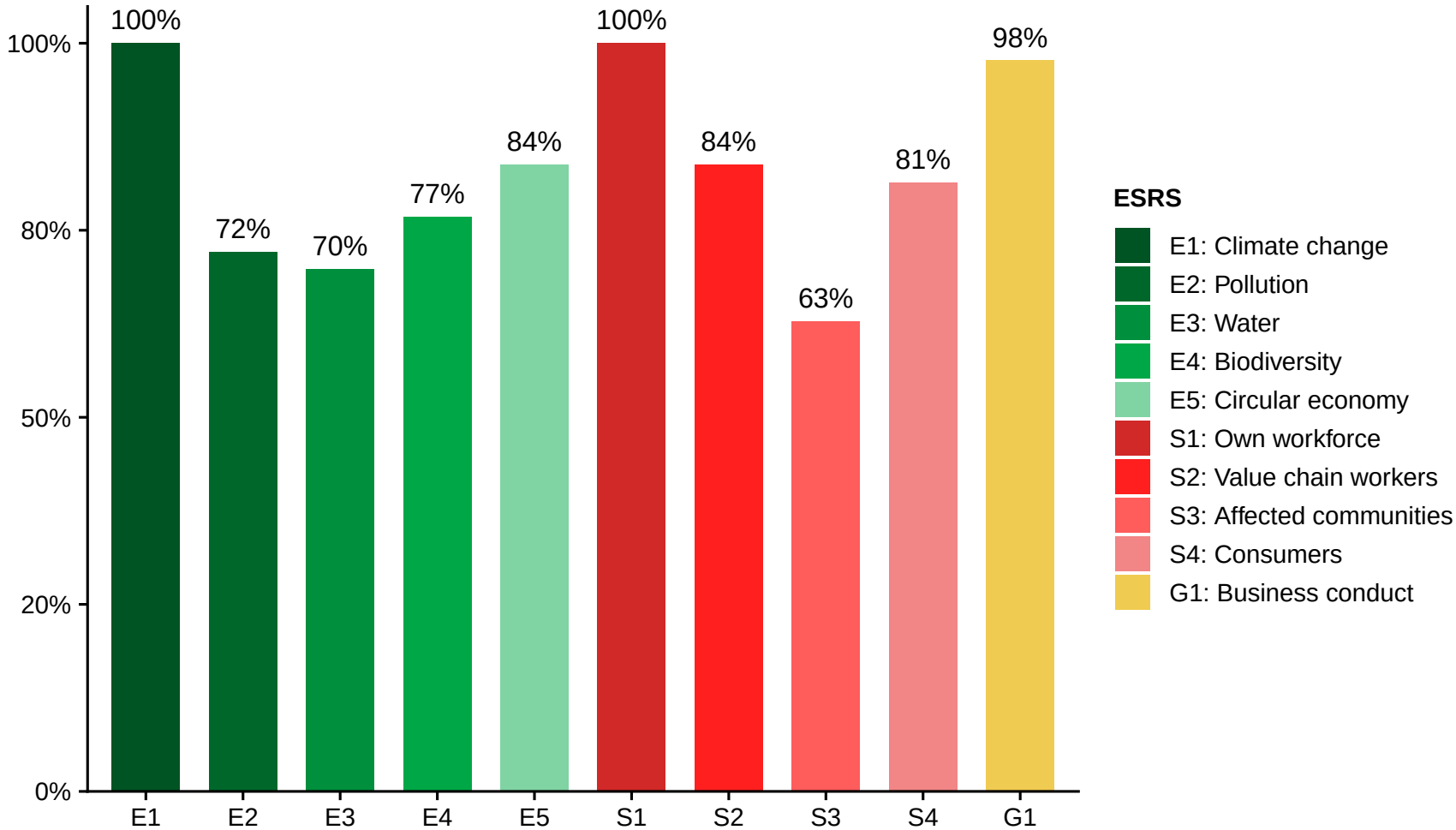

Fig 7. ESRS Materiality across sample firms. This figure shows the share of firms that report at least one material topic within each topical ESRS standard.

ESG matters covered

... but variation in how much firms report on a given topic

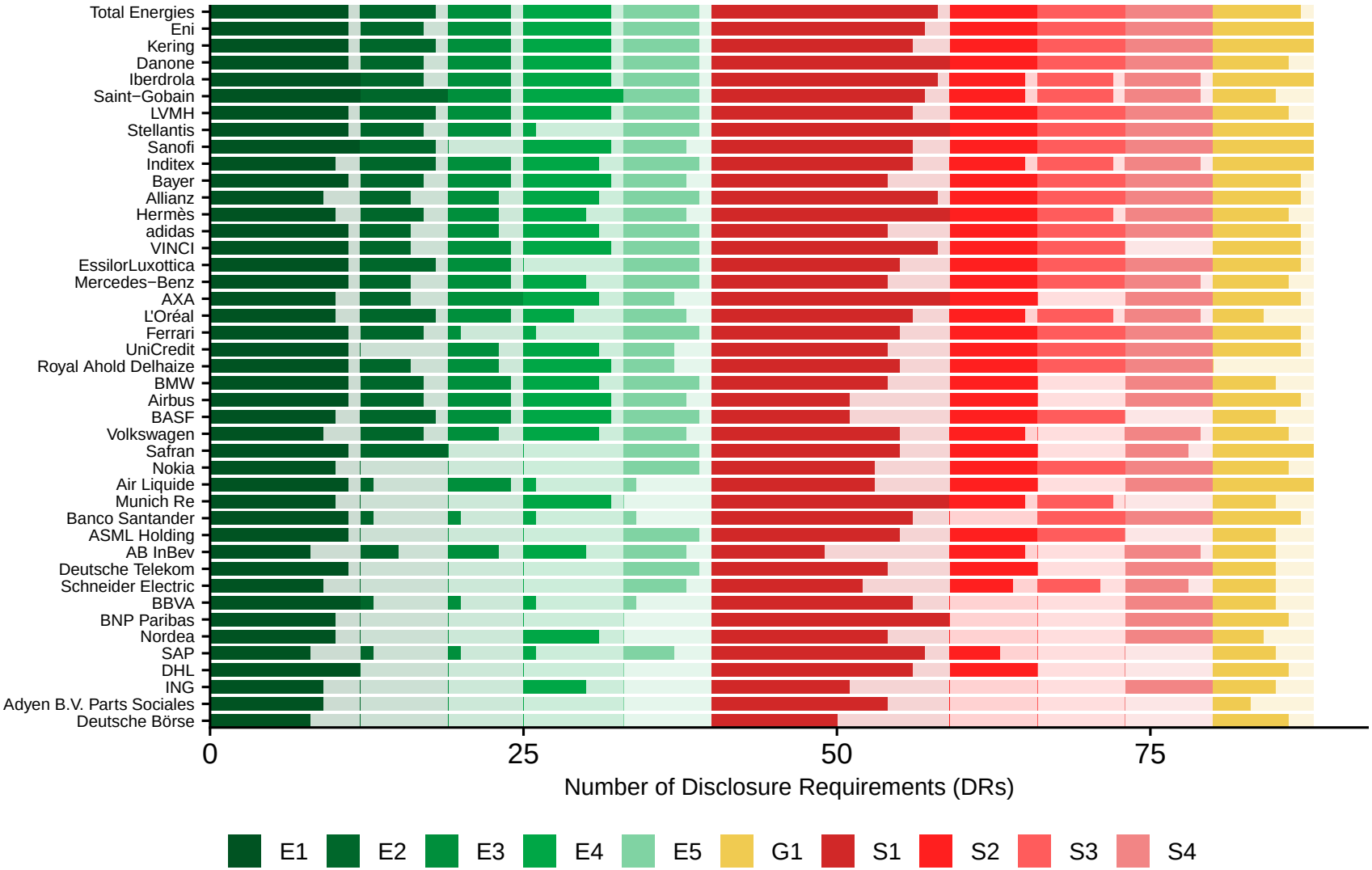

Fig 8. Material DRs by firm and ESRS standard. This figure shows the number of material DRs per topical standard for each firm. Light−colored backgrounds indicate the maximum possible DRs, dark bars indicate firm−level materiality.

ESG matters covered

42% report entity-specific topics (esp., cybersecurity)

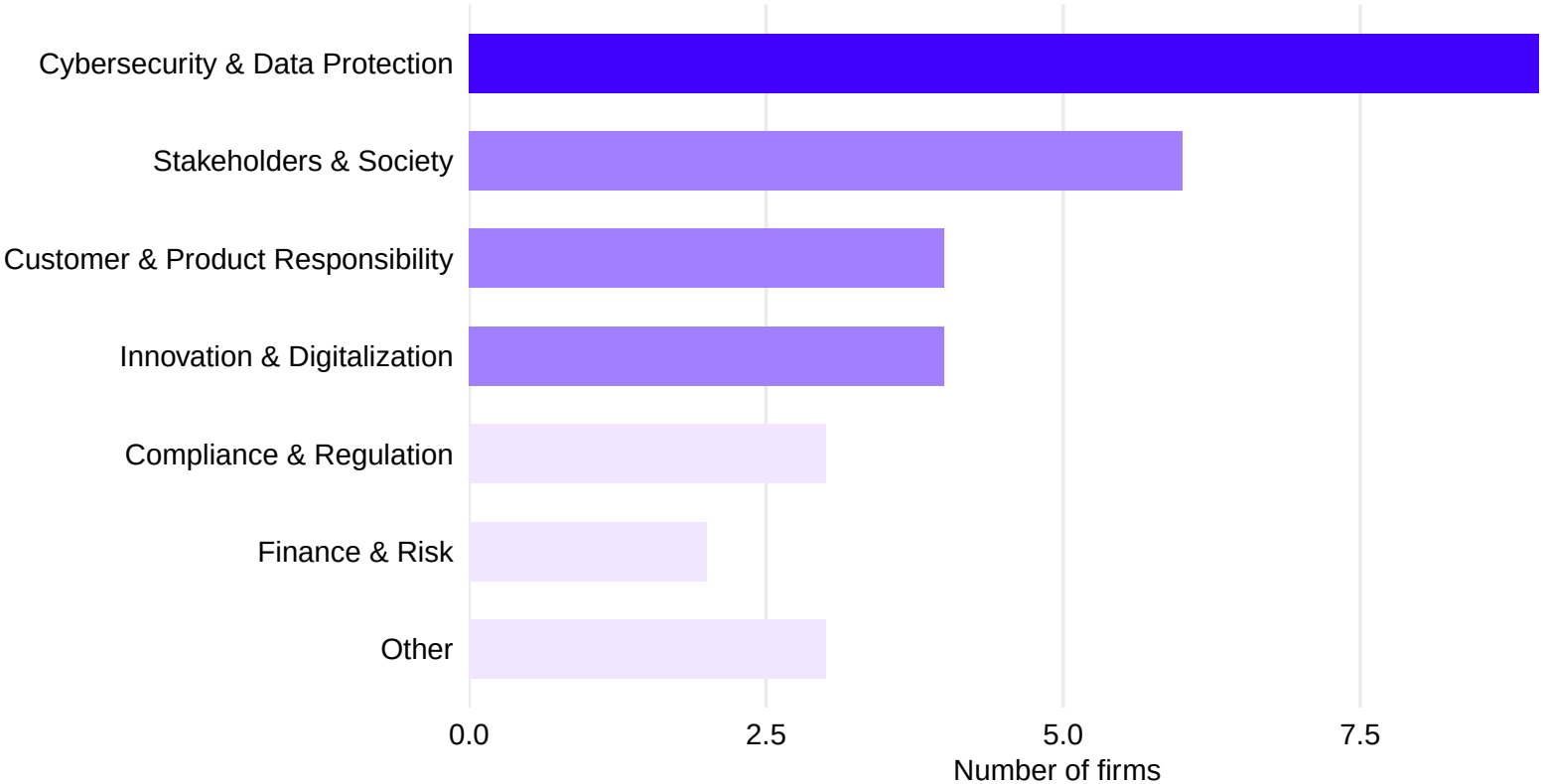

Fig. 9: Most reported entity−specific topic categories. This figure shows the number of companies that mention an entity−specific topic in each cluster. The shown clusters have been identified by feeding Chat GPT with the manually collected entity−specific topics.

Adoption choices

Same standards, but different implementation...

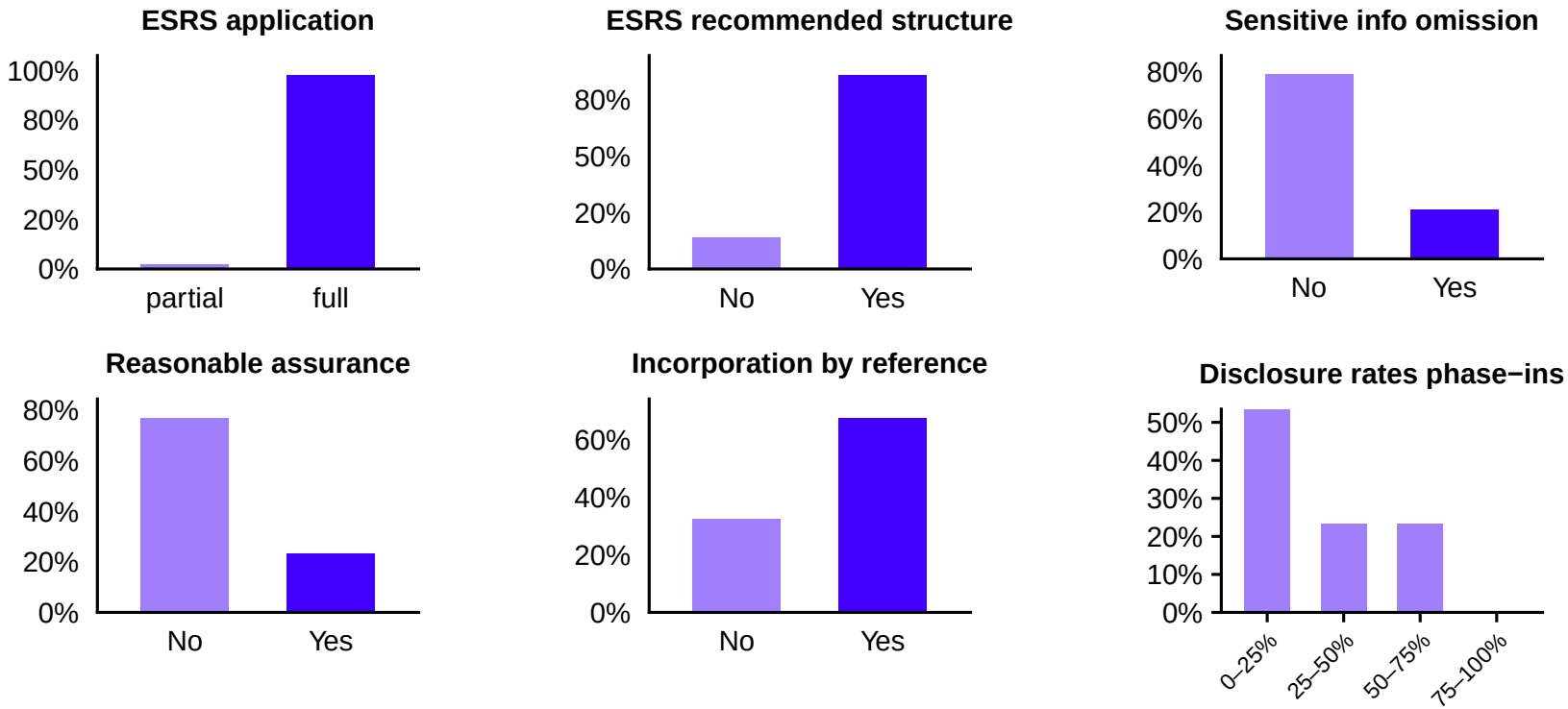

Fig. 10: Overview of ESRS application features (1). *ESRS application* indicates the share of firms that apply the ESRS standards fully or partially, *Reasonable assurance* relates to whether firms provide ESRS−related information covered (partly) by a reasonable assurance engagement, *ESRS recommended structure* shows whether firms follow the structure recommended in the ESRS, *Incorporation by reference* indicates whether firms incorporate information by reference, *Sensitive info omission* shows whether firms omit sensitive or classified material information and *Disclosure rates phase−ins* presents the share of companies that disclose a specific share of phase−in DRs.

Adoption choices

... with different degrees of voluntary disclosure

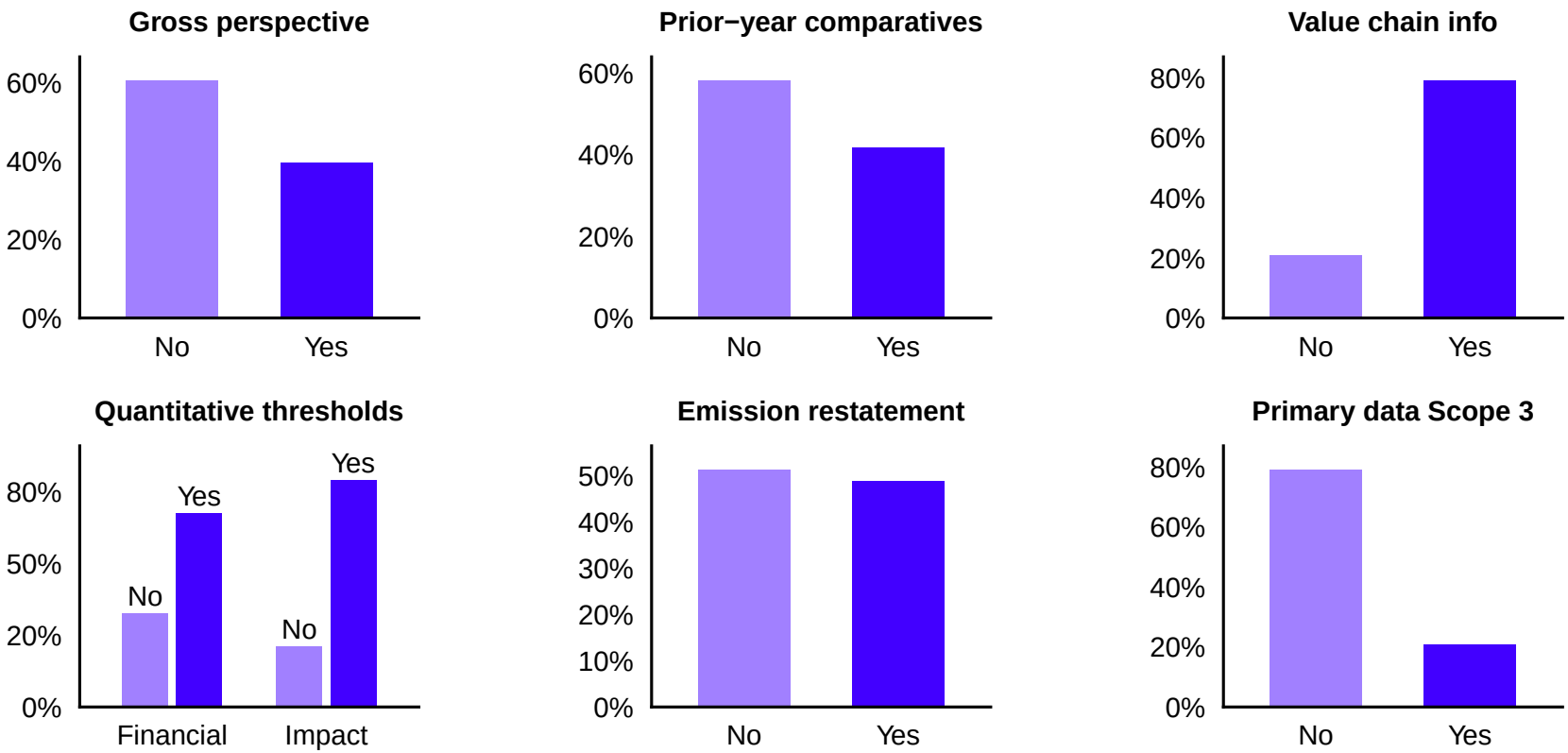

Fig. 11: Overview of ESRS application features (2). *Gross perspective* shows whether firms conduct the impact assessment on a gross basis, *Quantitative thresholds* indicate whether firms use quantitative thresholds to assess & prioritize impacts and risks & opportunities, *Prior−year comparatives* relate to whether firms provide comparative (quantitative) data for prior periods, *Emission restatement* shows whether firms restated previously reported emission values, *Value chain info* indicated whether firms disclose value chain related information and *Primary data Scope 3* shows whether firms calculate at least 50% of reported Scope 3 emissions with primary data.

Users' information demand

Search terms on SRN platform: Great interest in emissions, materiality

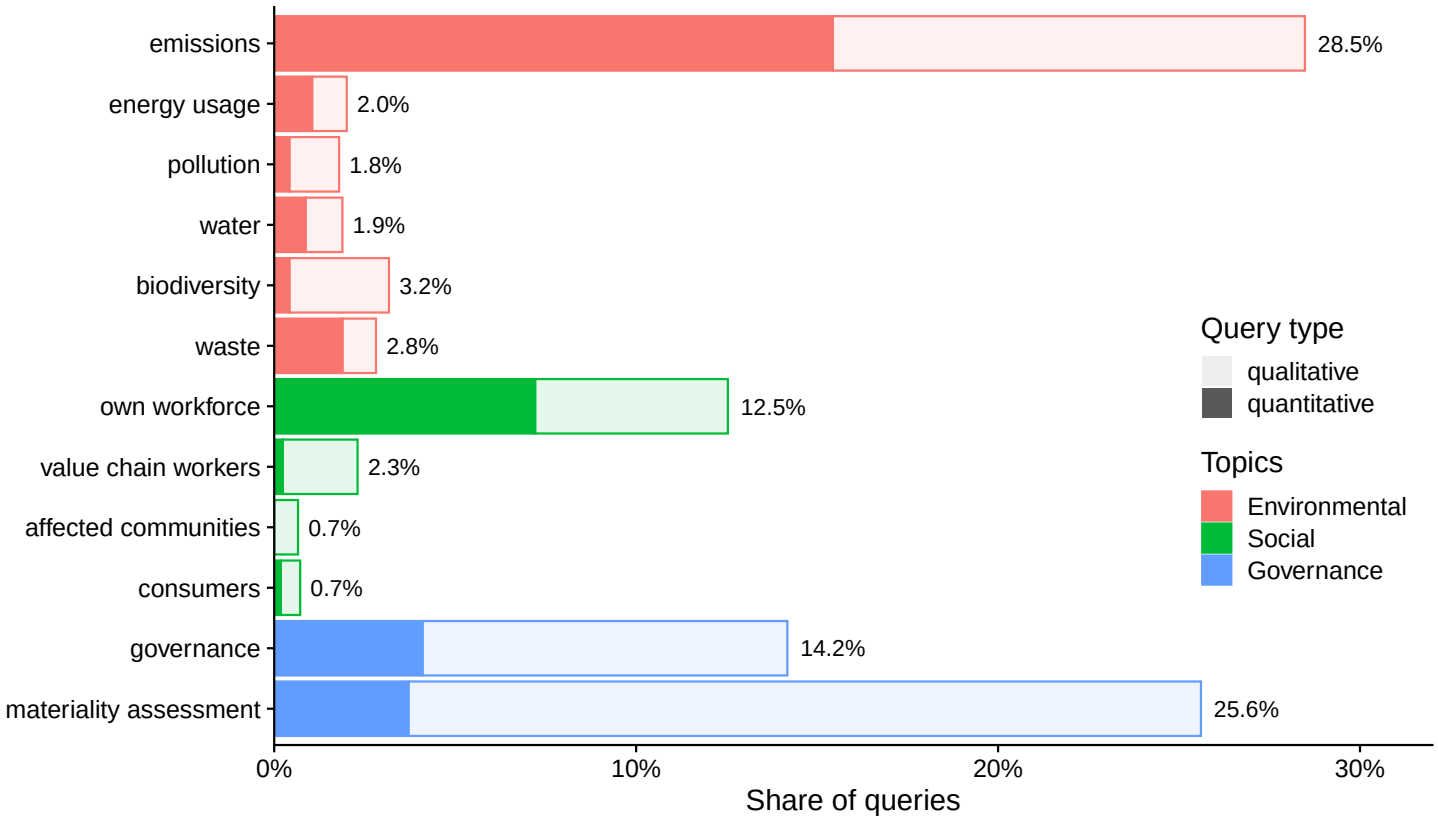

Fig. 12: Users' information demand. This figure shows the number of user requests for specific topics on the SRN's search engine, across all reports included in the CSRD report archive as of April 2025.

Conclusion

Conclusion

ESRS adoption shifts content and style of sustainability reporting supply

1. Sustainability report volume is growing, with wide variation across firms and signs of convergence toward a common length.
2. Sustainability reports are increasingly aligning with financial reports in both elements (e.g., data tables) and style (e.g., sentiment and language sophistication).
3. While some ESG topics are universally reported, reporting of others is more selective, and the depth of disclosure varies significantly–especially where phase-ins are available.
4. Early ESRS compliance reflects both ambition and caution among reporting firms, as evidenced by the use of transitional provisions and voluntary transparency enhancements.
5. Materiality assessments are a central focus of stakeholder interest, but its implementation differs across companies.

Conclusion

Our research agenda

Our research focuses on (the regulation of) corporate transparency within the broader framework of the DFG-funded research initiative TRR 266 Accounting for Transparency.

This report previews findings from our study on the effects of mandatory ESRS adoption, which also analyzes how stakeholders use sustainability information.

In addition, we are pursuing several related projects:

- One project analyzes climate disclosures in financial statements, contributing empirical insights to the IASB's initiative on climate-related and other uncertainties.
- Another project uses a survey-based modeling approach to estimate the implementation costs of ESRS adoption.

Overall, our work seeks to contribute to evidence-based sustainability reporting practice.

Call for support

How your contribution to the SRN can help improve corporate reporting

Partner with us in our research initiatives—support surveys and structured interviews.

Support our infrastructure by contributing financially to

- the further development of our open data collection, validation, and enrichment;
- building and scaling AI tools for automated extraction and classification of ESG disclosures, including training large language models on real-world report content;
- enable training and outreach, workshops, teaching materials, and student involvement to build capacity for the next generation of ESG-literate professionals; and
- expand access and usability by supporting the development of visual dashboards, and accessibility features that ensure wider impact and inclusivity.

With your support, the SRN can grow as a neutral, open-science platform that delivers evidence-based tools and insights for companies, policymakers, and users alike.

Contributors

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Imprint

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Appendix

CSRD reshuffles firms' reporting

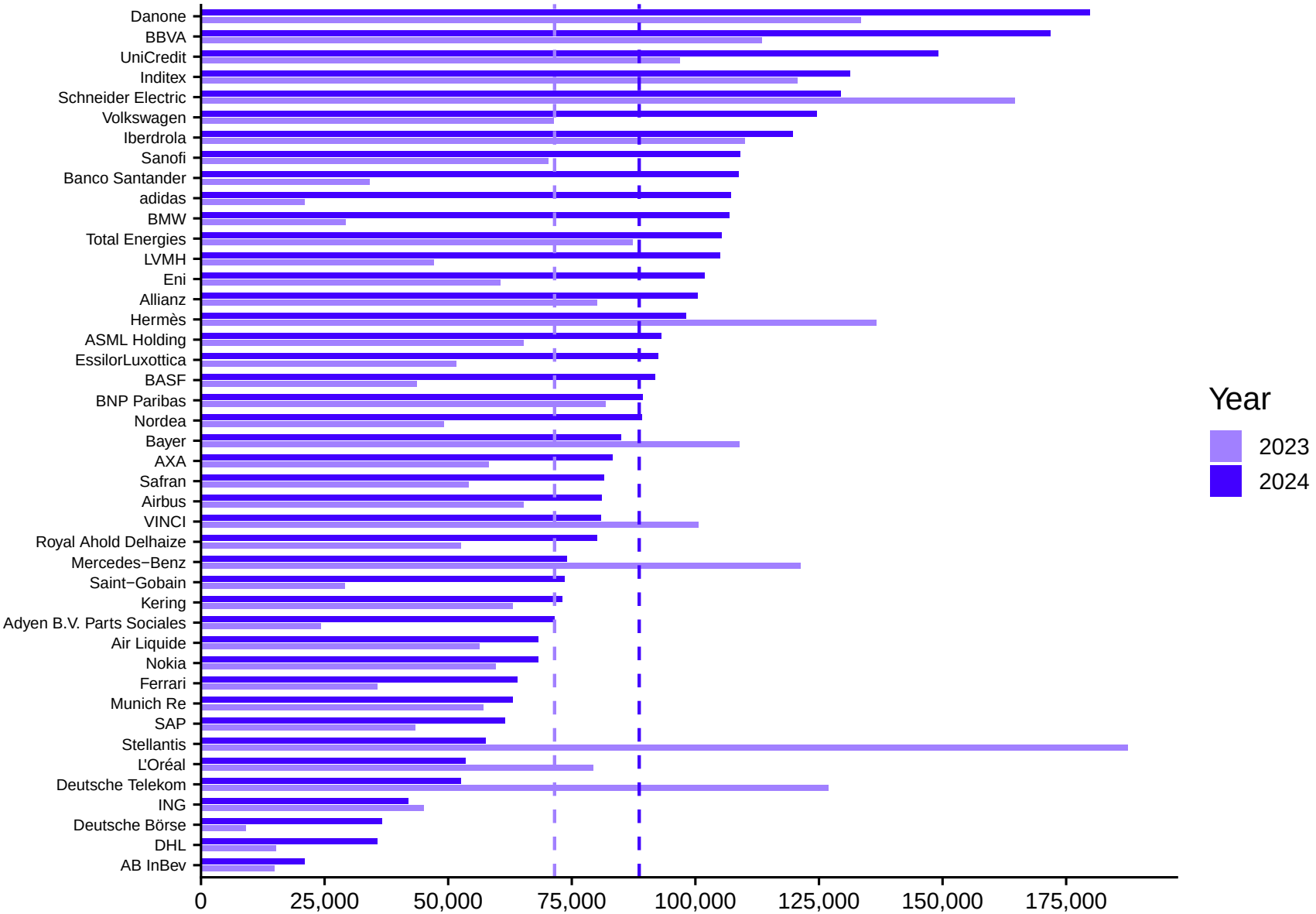

Fig. 13: Words by firm. This figure shows the number of words in the sustainability report for each firm in 2023 and 2024. The dashed lines indicate sample averages.

Companies differ in their numbers per word

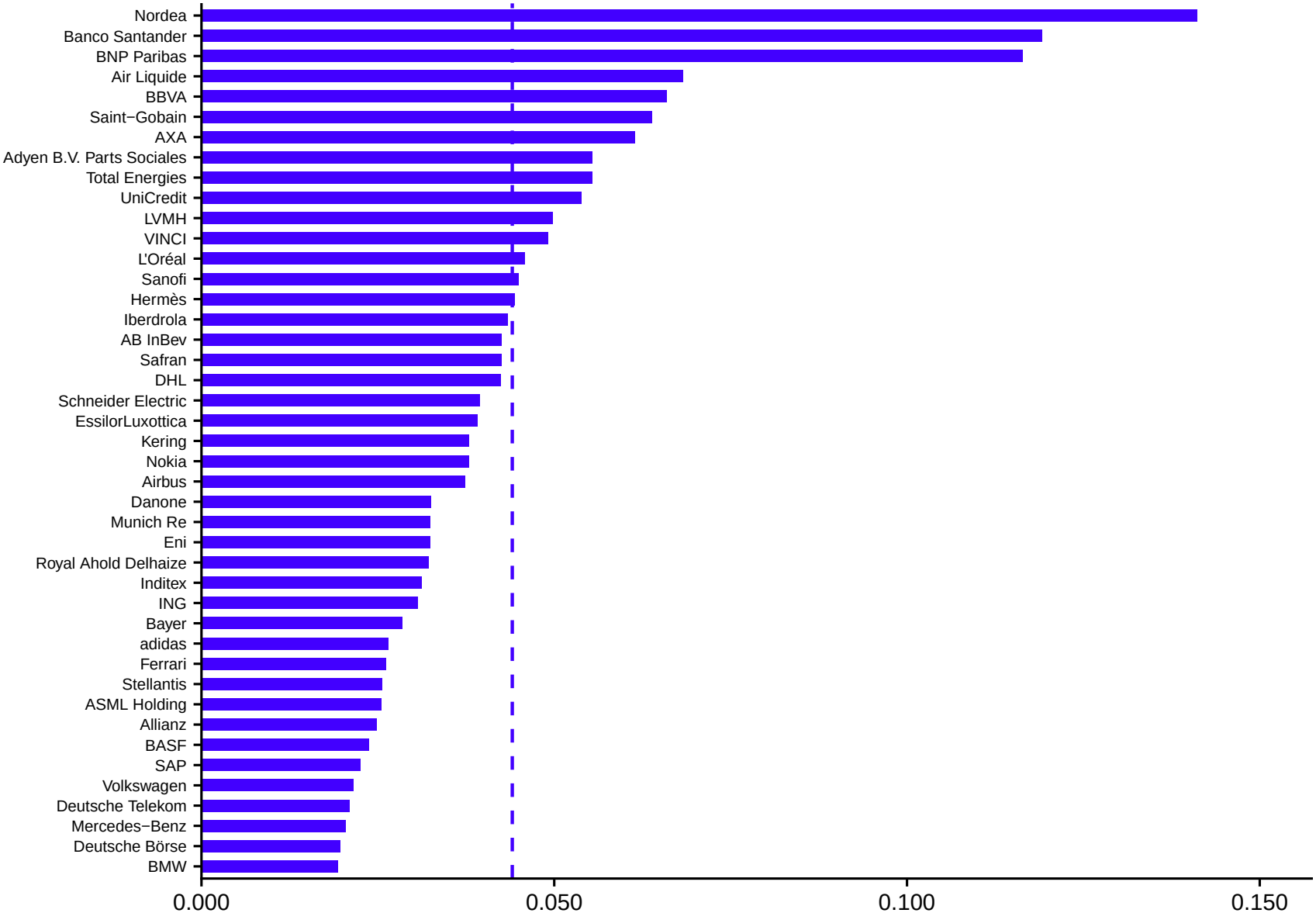

Fig. 14: Numbers−to−words ratio by firm (2024). This figure shows the relative frequency of numerical information in sustainability reporting in 2024. The dashed line indicates the sample average.

For most firms, sustainability statements are now longer than financial statements

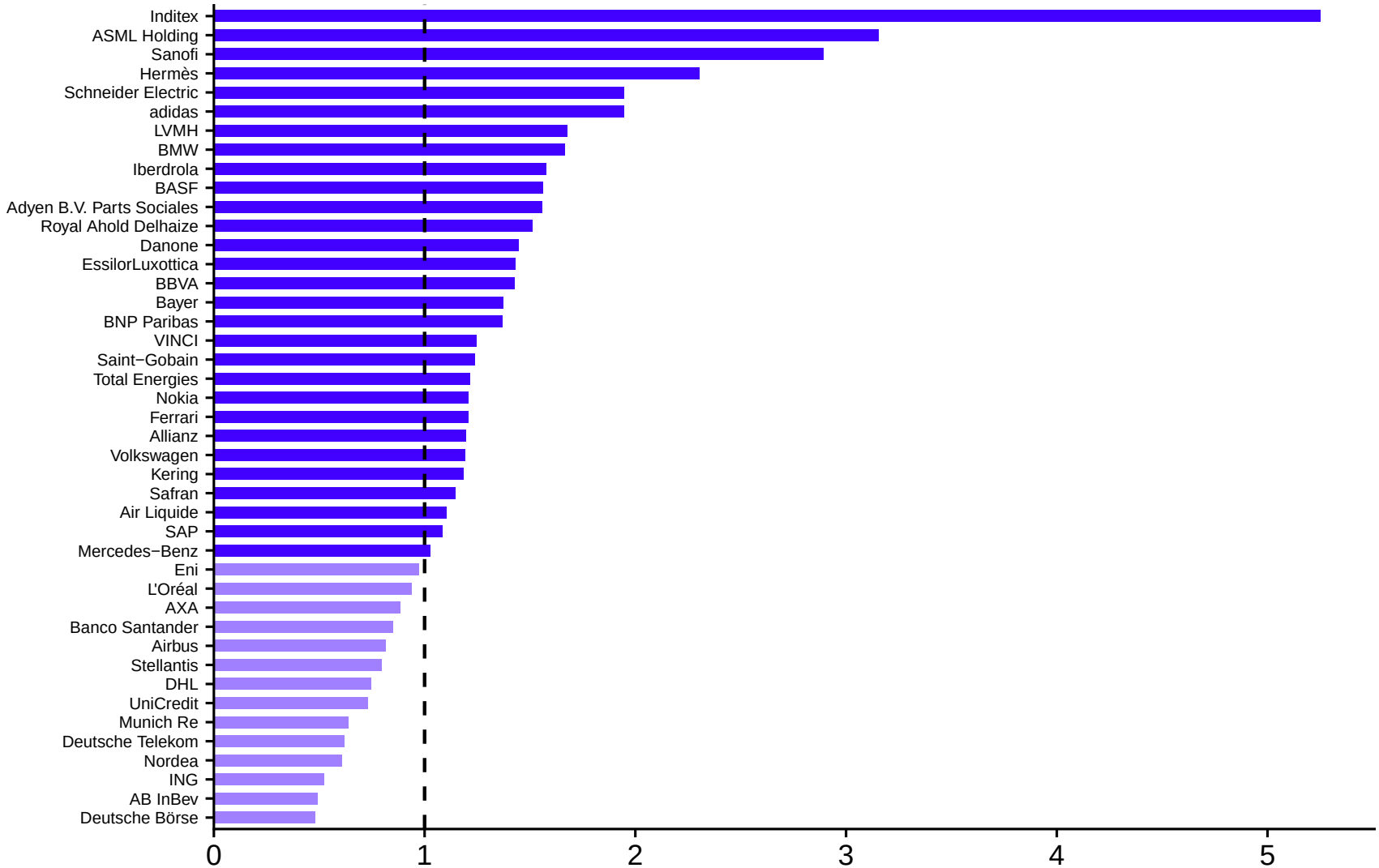

Fig. 15: Ratio of reporting length by firm (2024). This figure shows the ratio of sustainability statement length to financial statement length in 2024. The dashed line marks a ratio of 1.

Reporting length importantly relates to Disclosure Requirements

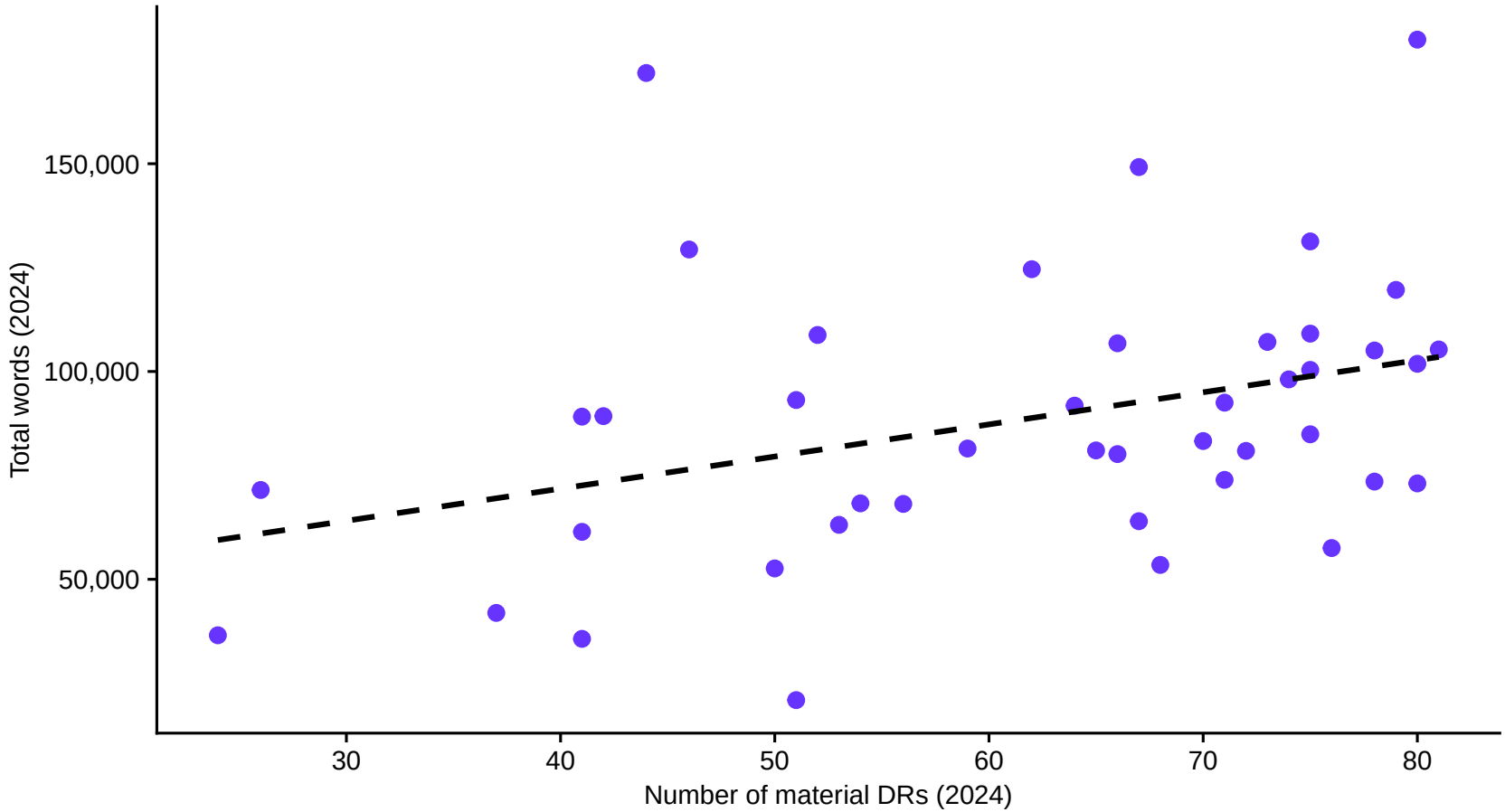

Fig. 16: Words vs. DR Count. This figure shows the relationship between total report length of 2024 sustainability reports and number of material Disclosure Requirements (DRs). The dashed line represents the linear regression fit. Pearson correlation: **r = 0.36**.

List of DRs by materiality (1/2)

DR	Discl	Description	DR	Discl	Description
E1-1	100%	Transition plan for climate change mi...	E3-IRO-1	63%	Description of the processes to ident...
E1-2	100%	Policies related to climate change mi...	E4-1	60%	Transition plan and consideration of ...
E1-3	100%	Actions and resources in relation to ...	E4-2	63%	Policies related to biodiversity and ...
E1-4	100%	Targets related to climate change mit...	E4-3	63%	Actions and resources related to biod...
E1-5	98%	Energy consumption and mix	E4-4	56%	Targets related to biodiversity and e...
E1-6	100%	Gross Scopes 1, 2, 3 and Total GHG em...	E4-5	40%	Impact metrics related to biodiversit...
E1-7	91%	GHG removals and GHG mitigation proje...	E4-6	2%	Anticipated financial effects from bi...
E1-8	70%	Internal carbon pricing	E4-IRO-1	69%	Description of processes to identify ...
E1-9	19%	Anticipated financial effects from ma...	E4-SBM-3	62%	Material impacts, risks and opportuni...
E1-GOV-3	86%	Disclosure requirement related to ESR...	E5-1	77%	Policies related to resource use and ...
E1-IRO-1	91%	Description of the processes to ident...	E5-2	77%	Actions and resources related to reso...
E1-SBM-3	93%	Material impacts, risks and opportuni...	E5-3	72%	Targets related to resource use and c...
E2-1	64%	Policies related to pollution	E5-4	60%	Resource inflows
E2-2	64%	Actions and resources related to poll...	E5-5	70%	Resource outflows
E2-3	62%	Targets related to pollution	E5-6	0%	Anticipated financial effects from re...
E2-4	43%	Pollution of air, water and soil	E5-IRO-1	74%	Description of the processes to ident...
E2-5	36%	Substances of concern and substances ...	G1-1	98%	Corporate culture and business conduc...
E2-6	5%	Anticipated financial effects from po...	G1-2	67%	Management of relationships with supp...
E2-IRO-1	65%	Description of the processes to ident...	G1-3	95%	Prevention and detection of corruptio...
E3-1	60%	Policies related to water and marine ...	G1-4	86%	Confirmed incidents of corruption or ...
E3-2	60%	Actions and resources related to wate...	G1-5	40%	Political influence and lobbying acti...
E3-3	60%	Targets related to water and marine r...	G1-6	53%	Payment practices
E3-4	51%	Water consumption	G1-GOV-1	86%	The role of the administrative, super...
E3-5	2%	Anticipated financial effects from wa...	G1-IRO-1	81%	Description of the processes to ident...

List of DRs by materiality (2/2)

DR	Discl	Description	DR	Discl	Description
S1-1	100%	Policies related to own workforce	S2-2	84%	Processes for engaging with value cha...
S1-10	81%	Adequate wages	S2-3	84%	Processes to remediate negative impac...
S1-11	33%	Social protection	S2-4	84%	Taking action on material impacts on ...
S1-12	47%	Persons with disabilities	S2-5	77%	Targets related to managing material ...
S1-13	70%	Training and skills development metrics	S2-SBM-2	67%	Interests and views of stakeholders
S1-14	86%	Health and safety metrics	S2-SBM-3	79%	Material impacts, risks and opportuni...
S1-15	40%	Work-life balance metrics	S3-1	63%	Policies related to affected communities
S1-16	88%	Compensation metrics (pay gap and tot...	S3-2	63%	Processes for engaging with affected ...
S1-17	91%	Incidents, complaints and severe huma...	S3-3	63%	Processes to remediate negative impac...
S1-2	100%	Processes for engaging with own worke...	S3-4	63%	Taking action on material impacts on ...
S1-3	98%	Processes to remediate negative impac...	S3-5	58%	Targets related to managing material ...
S1-4	100%	Taking action on material impacts on ...	S3-SBM-2	53%	Interests and views of stakeholders
S1-5	98%	Targets related to managing material ...	S3-SBM-3	58%	Material impacts, risks and opportuni...
S1-6	100%	Characteristics of the undertaking's ...	S4-1	81%	Policies related to consumers and end...
S1-7	44%	Characteristics of non-employee worke...	S4-2	79%	Processes for engaging with consumers...
S1-8	81%	Collective bargaining coverage and so...	S4-3	79%	Processes to remediate negative impac...
S1-9	98%	Diversity metrics	S4-4	81%	Taking action on material impacts on ...
S1-SBM-2	81%	Interests and views of stakeholders	S4-5	77%	Targets related to managing material ...
S1-SBM-3	93%	Material impacts, risks and opportuni...	S4-SBM-2	67%	Interests and views of stakeholders
S2-1	84%	Policies related to value chain workers	S4-SBM-3	79%	Material impacts, risks and opportuni...

Variable definitions

Variable	Definition
Words	Number of words in the sustainability (financial) statement
Pages	Number of pages in the sustainability (financial) statement
Numbers	Count of numbers in the sustainability (financial) statement
Tables	Count of tables in the sustainability (financial) statement
Images	Image area in the sustainability (financial) statement
Standardized wording	Count of frequently used tetragrams
Language complexity	Fog−Index, an aggregate measure of readability where higher values suggest more complex and technical language
Sentiment	Number of positive and negative words in the sustainability (financial) statement, based on the Loughran & McDonald (2011) dictionary
ESRS application	Share of firms that apply the ESRS standards fully or partially
ESRS recommended strucutre	1 if the SustSt roughly follows the structure recommended in the ESRS; 0 otherwise
Sensitive info omission	1 if the company omist sensitive or classified material information; 0 otherwise
Reasonable assurance	1 if ESRS-related information is (partly) covered by a reasonable assurance engagement; 0 otherwise
Incorporation by reference	1 if information is incorporated by reference to the SustSt; 0 otherwise
Disclosure rates phase ins	Share of DR phase ins that are disclosed by the firm
Gross perspective	1 if the impact assessment is conducted on a gross basis, i.e. intentionally excludes any mitigating actions ; 0 otherwise
Prior-year comperatives	1 if the the SustSt contains comparative (quantitative) data for prior periods; 0 otherwise
Value chain info	1 if the SustSt does not confirm the use of the transitional relief option to omit certain value chain related information; 0 otherwise
Quantitative thresholds	1 if the firm uses quantitative thresholds to to assess & prioritize impacts and risks & opportunities; 0 otherwise
Emission restatements	1 if the firm has had any Scope 1, 2, or 3 emissions restatement compared to the previous year; 0 otherwise
Primary data Scope 3	1 if at least 50% of the reported Scope 3 emissions are calculated with primary data ; 0 otherwise

Reports used

AB InBev	Deutsche Börse	Nokia*
adidas	Deutsche Telekom*	Nordea
Adyen B.V. Parts Sociales	DHL	Royal Ahold Delhaize
Air Liquide	Eni	Safran
Airbus	EssilorLuxottica	Saint-Gobain
Allianz*	Ferrari	Sanofi*
ASML Holding	Hermès	SAP
AXA	Iberdrola*	Schneider Electric
Banco Santander*	Inditex	Stellantis*
BASF	ING	Total Energies
Bayer*	Kering	UniCredit*
BBVA	L'Oréal	VINCI
BMW	LVMH*	Volkswagen*
BNP Paribas	Mercedes-Benz*	
Danone	Munich Re*	

List of reports used. * indicates that we used the separate sustainability report for 2023.