

Carrots & Sticks

Beyond Disclosure in ESG and Sustainability Policy

Annual Report September 2023



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Foreword



Foreword

Covid-19, climate change, and ongoing conflicts have continued to put corporate transparency and supply chain impacts at centre stage. There are growing demands for transparency on impacts of companies as well as for accountability for negative impacts on the economy, the environment and people.

Governments wanting to drive a positive agenda towards a more just and sustainable society have used legislative tools to change corporate behaviour and market conditions. The last few years have seen significant developments in the regulatory landscape, with the human rights impacts of climate change and environmental degradation gaining recognition at the international, regional and national level, as well as growing demands for transparent information on companies' tax payments and practices.

That is why we believe that the continuing expansion of Carrots & Sticks (C&S) makes a useful contribution to the efforts of governments, companies, investors, researchers, and other stakeholders. However, the increasing number and variety of policies can also pose challenges for organizations and other stakeholders. Alignment and harmonization must be a key goal for governments, market regulators, stock exchanges, industry associations, standard setters and all those responsible for developing reporting instruments and sustainability policies. The 2021 update to GRI's Universal Standards embed human rights due diligence reporting, and reflect the expectations for sustainability impacts set out in authoritative international instruments, such as the United Nations Guiding Principles on Business and Human Rights (UNGPs) and the OECD Guidelines for Multi National Enterprises.

In April 2023, the partners of C&S expanded to include the University of Edinburgh and King's College London as part of the development of the database, joining the Global Reporting Initiative (GRI), Stellenbosch University, and the UN Environment Programme (UNEP). These updates include an online repository with the original policies available in PDF and Word formats, with English translation also available. We would also like to thank the Government of Sweden for their financial support to this work.

This update has come at a critical time as we are only seven years away from reaching the 2030 Agenda for Sustainable Development and unfortunately progress is not keeping pace with the original ambitions. The broadened scope of the database brings a wider picture of the current policy landscape, highlighting both growth and gaps.

We truly hope that the expanded C&S will act as a source of inspiration for policy makers and private sector actors around the world. As GRI we will continue to support quality sustainability policy and disclosure standards to support those policies.

Peter Paul van de Wijs
Chief Policy Officer, Global Reporting Initiative (GRI)



Executive Summary



Executive Summary

The 2023 edition of the Carrots & Sticks (C&S) annual report presents a comprehensive assessment of environmental, social and governance (ESG) & sustainability policy worldwide.

This report highlights the expanding nature of ESG & sustainability policies since 2020, underscoring their increasing importance to a growing number and range of actors, including national governments, business and industry bodies, financial regulators, international organizations, NGOs, regional organizations, research institutes and stock exchanges. This report provides valuable insights into the landscape of ESG & sustainability policymaking through its analysis of over 2,463 policies from 132 countries, 76 international and regional organizations, in 38 languages, from 1897 to the present day.

Headline results

Using state-of-the-art advancements in natural language processing (NLP) and machine learning (ML), the C&S 2023 annual report employs data-driven approaches to effectively convert policy documents into precise, measurable, and data-enriched outputs. Through these techniques, we extracted valuable information from each policy in the database. Our analysis covers different policy attributes, including mandatory versus voluntary policies, policy restrictiveness, thematic analyses focusing on the Sustainable Development Goals (SDGs), the ESG focus of policies, targeted business activities, and the use of the GRI Standards. Several findings stand out.

- A central interest regarding ESG & sustainability policy is to what extent these policies have teeth (e.g., an ability to compel action). Consistent with previous versions of our report, C&S 2023 continues to code each policy in terms of it being **'mandatory'** or **'voluntary'**. We find that the majority of ESG & sustainability policies are voluntary, constituting 55.2% of all policies, while mandatory policies make up the remaining 44.8%. However, 2015, with the introduction of the SDGs, marks an inflection point for ESG & sustainability policy. Prior to 2015, most policies were mandatory (52%) and 48% were voluntary. However, after 2015, there was a reversal in this trend, with 36% mandatory policies and 63% voluntary.
- Assessing **policy restrictiveness** and **restrictions on business** is crucial for understanding the extent

to which ESG & sustainability policies shape the actions and behaviours of those actors targeted by these policies. Notably, a small fraction (less than 20%) of policies exhibits high or very high levels of restrictiveness or restrictions on business. Most policies (approximately 75%) fall into the low restrictiveness category, which suggests limited power of enforcement. However, when comparing disclosure requirements to other ESG & sustainability policies, disclosure policies consistently show a two to three times higher likelihood of being classified as high or very high in terms of restrictiveness or restrictions on business. This suggests that disclosure policies are most likely to compel action. Comparing these findings to those outlined above, we can conclude that even when policies are mandatory, they tend to provide few specific (or granular) details regarding which actions and behaviours are required, permitted or prohibited.

- We see an increasing number of policies invoking the **SDGs**. However, this is most prominent at the level of the goals, as specific mentions of one or more of the 17 SDGs remain scarce. When specific SDGs are mentioned, a few tend to dominate: *SDG 8: Decent work and economic growth* receives the most explicit mentions, followed by *SDG 12: Responsible consumption and production* and *SDG 3: Good health and well-being*. As expected in the 2020 report, the rise in prominence of SDG 3 may be linked to the Covid-19 pandemic. Conversely, *SDG 9: Industry innovation and infrastructure* has the fewest explicit references in the analysed policies.
- Which types of businesses operating in which **sectors** are targeted by ESG & sustainability policies? According to our analysis of policy content in terms of the North American Industry Classification System (NAICS), we find that the most targeted business sector is 'management of companies', with 2,165 policies addressing this area. 'Management of companies' encompasses a wide range of activities related to the governance and oversight of companies, including strategic planning, decision-making, and holding securities. NAICS considers management of companies—which we conceive of as a horizontal rather than vertical sector type—a sector in its own

right. Our reading is that the extent to which this horizontal category is most targeted may be capturing firm size and multinational activities. With respect to firm size, policies often target firms above a certain size. In the UK, for instance, the Companies Act 2006 targets large and medium-sized companies, and the UK Corporate Governance Code 2018 applies to premium listed companies. The next most targeted sector is 'finance and insurance,' with 1,979 policies focusing on banking, fund management, insurance, and the financial market infrastructure. The prevalence of 'finance and insurance' in policies can be attributed to the high number of stock exchanges, financial regulators, and ministries of finance among the top policy issuers in the C&S database.

- Our analysis of the relative focus of policies in terms of **environmental ('E'), social ('S'), and governance ('G')** themes reveals a clear dominance of E focus over time, followed by an S focus and then a G focus. At a more granular level, *E-focused* policies tend to refer to issues regarding climate change, energy, waste and water. *G-focused* policies refer to audit, internal control, and risk management, whereas *S-focused* policies centre largely on one term, 'compensation'.
- A new feature of C&S 2023 is our analysis of references to the GRI Standards. Our results show a strong upward trend over time, especially in the last decade, of ESG & sustainability policymaking references to GRI Standards. Despite some variability, this same trend can be observed across six major world regions. Our analysis also looks at specific GRI Standards. Here we find that the most dominant standard is *GRI 2: General Disclosures* (40.2%), which covers the organizational profile of businesses,

business strategy, ethics, integrity, governance, management approach, reporting practices and stakeholder engagement. This is followed by two environment-related standards, namely *GRI 305: Emissions* (13.5%), which includes references to key issues regarding greenhouse gases and ozone-depleting substances, and *GRI 303: Water and Effluents* (8.1%), which includes issues regarding water supplies, water costs, and water discharge impacts.

Collectively, this report reveals the dominance of government entities as policy issuers, the prevalence of voluntary (over mandatory) policies, punctuated by a steep rise in voluntary policies since the SDGs were launched in 2015, and the generally low restrictiveness and restrictions on business activities in most policies (suggesting a lack of granularity in policymaking). By delving into the focus on SDGs, business sectors, ESG focus, and the adoption of GRI Standards, this report offers valuable insights for stakeholders seeking to understand how the evolving ESG & sustainability policy environment affects their businesses and policymaking activities.

If additional analysis and features of C&S would be of interest to you and your organization, please do get in touch with the team. Our aim is for this database, and the annual reports, to be a valuable resource.

Dr Adam William Chalmers, University of Edinburgh

Dr Robyn Klingler-Vidra, King's College London



History and Future of Carrots and Sticks



History and Future of Carrots & Sticks

Over the last two decades, the notion of carrots and sticks has made for good debate. For example, the pros and cons of voluntary versus mandatory approaches, following a comprehensive or selective menu of disclosure items, the evolution of the ESG agenda and finding improved ways of getting from words to action.

But what really determines the growth in reporting requirements? What drives the broader increase in corporate sustainability initiatives as captured in our expanded database? In the past, commentators speculated about suggested waves of awareness that appeared to peak around, among other things, key UN earth summits of the last five decades. Looking at the impressive overview of our latest report, the following five factors can be identified:

Historical events.

Think of the impact of major disaster or crisis events. An example is the Exxon Valdez disaster of 1989, when an oil tanker ran aground off the coast of Alaska and spilled 11 million gallons of oil. One result of this was the creation of the Valdez Principles, led by a responsible investor group called Ceres. With the principles came the idea that participant companies produce annual environmental reports. In the following decade, Ceres became a founding member of GRI, which has a multi-stakeholder process to develop standards for sustainability impact reporting.

Consumer-citizen awareness.

Mention has often been made of waves of consumer awareness of a sustainability agenda. In the 1980s, images of a hole in the ozone layer made a significant contribution to consumer environmental awareness, especially in those countries most exposed to its effects. The arrival of the internet economy only expanded the ability of consumer-citizens to ask critical questions and raise their views on the social impacts of developments, such as regional or global financial crises. New generations have new expectations with regards to transparency, while struggling with information overload.

Evolution of issues.

Materiality analyses over the years have shown how issues emerge as new, often poorly understood, and complex. Think artificial intelligence or cryptocurrencies. Over time, such issues move across materiality matrices, from being of high interest to stakeholders

to being mainstreamed and of high interest to business management. As issues mature and more organizations experiment with ways of managing them, the regulator steps in and decides there is sufficient public consensus for the matter to be regulated. New regulation can also be crucial for establishing new markets, including the disclosure of reliable information.


Scientific evidence.

The first Intergovernmental Panel on Climate Change (IPCC) report of 1990 predicted that we would reach global warming of 1.1 degrees Celsius above pre-industrial levels before 2030. The latest assessment report from the IPCC in 2023 signalled that we have reached that level. The climate debate has illustrated the complexities of consensus around a systemic issue reaching action at the pace required. On a smaller scale, the Covid experience of 2020–2022 illustrated the same. A new consensus about what is relevant and timely is emerging. One consequence of Covid has been a new understanding of work and employee well-being, which again translates into new expectations today for reporting on human capital.

Technological developments.

Consider technological and related professional development. The disclosure debate has grown from issues-based reporting to comprehensive sustainability reporting and experimental forms of integration. Today, new capabilities of the data revolution have taken the scale of information processed and integrated in innovative ways to a scale never seen before. While some debate the merits of an expanded annual report with sustainability-related financial disclosures, others believe the idea of a 'report' loses relevance in the digital world. New possibilities of data analytics and quantifying qualitative information open new expectations about what, how and where to report.

C&S 2023 is an illustration of applying new technological capabilities, including NLP. The report provides an impressive overview of an evolving sustainability agenda, including its link with country-level SDGs. Our new technological assessment capabilities offer many



opportunities, including trends in materiality, reference to topics included in the GRI Standards, industries covered, and governmental or non-governmental institutions taking the lead. Whether it is carrots or sticks, we will be paying close attention.

Dr Cornis Van der Lugt
Senior Lecturer Extraordinaire
Stellenbosch University Business School



What's new in Carrots & Sticks 2023



What's new in Carrots & Sticks 2023

C&S has undergone a significant overhaul since the 2020 edition. This transformation has been fuelled by the addition of two new academic partners: Dr Adam William Chalmers (University of Edinburgh) and Dr Robyn Klingler-Vidra (King's College London).

The thrust of our efforts has been to expand the breadth of ESG & sustainability policies included in the database and to maintain high standards of methodological rigour underscoring the conceptualization and coding of ESG & sustainability policies. The C&S 2023 annual report introduces several new features that enhance the database's offerings.

First, we expanded the coverage of the C&S database by taking a broader approach to conceptualizing **ESG & sustainability policy**. ESG & sustainability policy refers to a set of rules and regulations created by governments, regulators, international bodies, multi-stakeholder initiatives, professional bodies, or industry associations to encourage or require companies to adopt sustainable and ethical business practices. Importantly, this includes **disclosure requirements**¹, and C&S will remain the pre-eminent global database for disclosure-focused policies. In addition, C&S now also includes the **broader suite of ESG & sustainability policy** initiatives, including guidelines and legislation.²

Second, C&S has new documentation and analysis features. The **collection of documents** for each policy now offers users the ability to access and download the actual (PDF and Word) documents pertaining to each policy included in the database. What is more, all policy documents are available in their original language as well as in an English translation. This provides a reliable resource for individuals seeking geographically and linguistically comprehensive information on ESG & sustainability policies. Notable in C&S 2023 is the remarkable diversity of languages covered. C&S now has ESG & sustainability policies in no fewer than **38 distinct languages**, ranging from Arabic to Kirghiz, and from Korean to Ukrainian.³ Figure 1, shows a typical policy page from the C&S website. This is a good example of how C&S now includes information in the original policy language as well as high-quality English translations.

Third, new tools and methodologies allow users to analyse the contents and characteristics of policies in the C&S database. Leveraging advancements in artificial intelligence and computer science, **NLP** and **ML** methods are used to convert the text within policy documents into data. This data-driven approach to text analysis enables us to extract novel insights from each policy document with a high level of accuracy and nuance. For example, we use *topic modelling*⁴ to accurately categorise policies according to their focus on specific SDGs. We use the same method to ascertain which industries are targeted in each policy. Another example of the new analysis tools is the scoring of the relative restrictiveness of each policy. This offers a new layer of understanding of the difference between mandatory and voluntary policies, or those that are required by law versus those that merely encourage businesses to adopt sustainability practices.

Explanation

A disclosure requirement is a legal or regulatory obligation for a company to provide information about its environmental and social performance. This information can include data on the company's environmental impact, its labour practices, its charitable giving, and its commitment to diversity and inclusion.

As before, the domain of coverage pertains to 'corporate responsibility', 'corporate social responsibility', 'ESG', 'materiality' (financial and double), 'shared value', 'social value', and 'sustainability'. C&S continues to exclude traditional, core notions of corporate governance. The thematic distinction between ESG & sustainability policy and wider corporate governance is consistent with the emphasis on ESG & sustainability underpinning the GRI Standards. The practices and principles of corporate governance often constitute arenas of overlap with ESG & sustainability, but not all control and operations issues are necessarily about ESG & sustainability. Similarly, ESG & sustainability may also have more externally oriented attributes than what can be internally-focused core corporate governance mechanisms. The distinction between disclosure policy and other forms of ESG & sustainability policy is maintained throughout this report and facilitates analysis and comparison. The C&S website enables filtering by the two policy types to the same end.

For topic modelling we use a variation of Latent Dirichlet Allocation (LDA), a statistical model used to discover topics within a collection of documents. It assumes that each document is a mixture of various topics, and each topic is a distribution of words. LDA helps identify themes in text data, making it easier to analyse and categorise documents.

³ Please see the Appendix for a complete list of languages.

Figure 1. Example policy page from Carrots & Sticks

Carrots & Sticks

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← Back to overview

Guía de reporte y divulgación de sostenibilidad para emisores en Chile

Sustainability reporting and disclosure guide for issuers in Chile

Summary

The Guía de Reporte y Divulgación de Sostenibilidad para Emisores en Chile provides guidance for companies in Chile on how to report and disclose their sustainability practices. The guide outlines the principles, frameworks, and standards that companies can use to report on their environmental, social, and governance (ESG) performance. It also provides specific guidance on how to disclose information related to topics such as climate change, human rights, and supply chain management. The goal of the guide is to promote transparency and accountability among companies and to help investors make informed decisions based on ESG considerations.

Issuer	Chile
Year	2021
Region	South America
Issuer (type)	Bolsa de Santiago (Stock Exchange)
Instrument type	Guide
Disclosure instrument	Yes
Geographical scope	National
Mandatory or voluntary	Voluntary
Collaborators	Global Reporting Initiative (GRI), Sweden Sverige

Text analysis

- + Restrictiveness
- + Restrictions on business
- + ESG
- + Sustainable Development Goals
- + GRI standards
- + Main industries targeted

Access instrument

Introduction

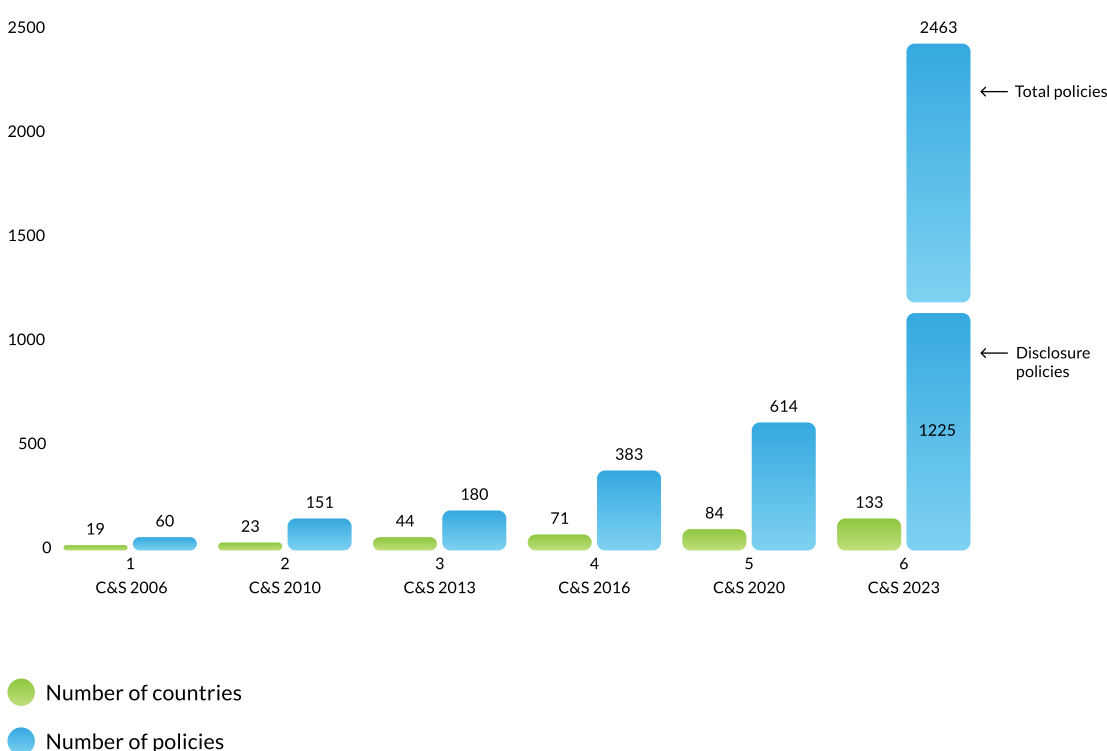


Introduction

The first C&S report, published in 2006, analysed trends based on a data set comprising 60 policies (the only reporting policies at the time) from 19 different countries. Each subsequent C&S report saw a marked increase in the size of the database. The analysis underpinning this C&S 2023 report is based on the data set's **2,463 policies from 133 countries**, 44 international and 17 regional organizations. Among the policy documents, 1,225 (or 49.7%) are disclosure policies.⁵ Figure 2 illustrates these trends and includes the latest figures.

⁵ These disclosures policies come from a smaller number of unique issuers: 62 countries, eight international organizations and four regional organizations.

Figure 2. Growth of C&S coverage: 2006-2023



In terms of coverage, the C&S 2023 database marks a **four-fold increase** in the number of policies since the last C&S report in 2020 and a **41-fold increase** in the number of policies included in 2006. This growth is driven by the wider conceptualization of ESG & sustainability policies, beyond the primarily disclosure-focused policies. It also represents much expanded geographic coverage, to the tune of a **seven-fold increase** in the number of countries where policies are included in the database. While previous versions of C&S saw their own impressive increases in the size and scope of the database, the increase in coverage in 2023 is the most comprehensive yet.

Table 1. Growth of C&S coverage: 2006 to 2023

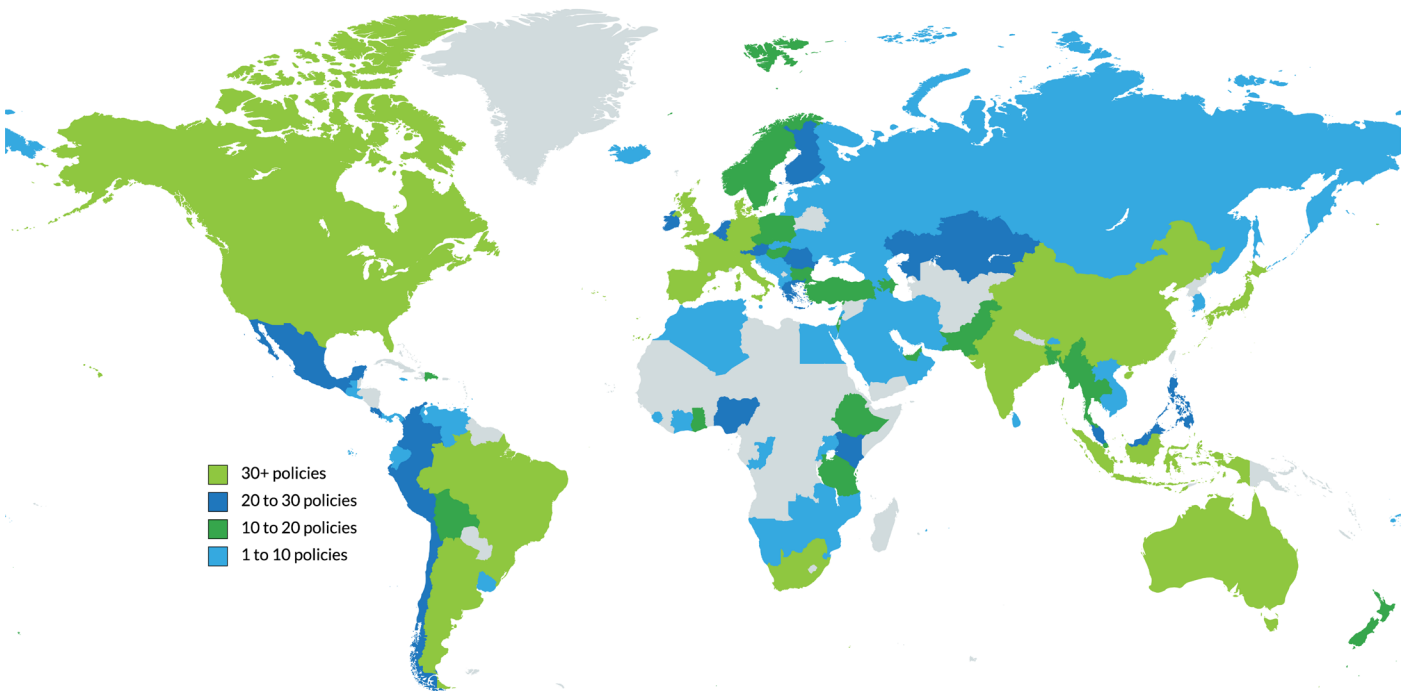
	2006 to 2010	2010 to 2013	2013 to 2016	2016 to 2020	2020 to 2023
% increase in countries	21.05%	91.30%	61.36%	15.48%	58.33%
% increase in policies	151.67%	19.21%	112.78%	60.31%	296.74%

Table 1 details the year-on-year increase in the number of countries and policies now in the C&S database. A full breakdown of the number of policies by countries, international and regional organizations can be found in the Appendix.

The increase in the number of policies in the C&S database in 2023 is the result of a few significant factors. First, rather than including primarily national government policy, coverage now makes a more systematic effort to include policies at multiple levels of governance. C&S now includes policies issued by international actors, such as the United Nations and GRI, and regional organisations, such as the European Union, alongside national governments. Second, the coverage increase was boosted as part of a concerted **data collection** effort to add more policies from a larger number of countries and over a longer time period.⁶ C&S now covers policies implemented by countries located in every major world region. The distribution of policies by country is illustrated in Figure 3 below.

⁶ This entailed input from numerous research assistants who helped by hand-coding and using web-scraping methods to gather information from other relevant platforms, including European Corporate Governance Institute (ECGI), Principles for Responsible Investment (PRI), and Sustainable Stock Exchange Initiative (SSE), the Reporting Exchange and the Green Policy Platform.

Figure 3. Number of policies per country



How has policy coverage increased over time?

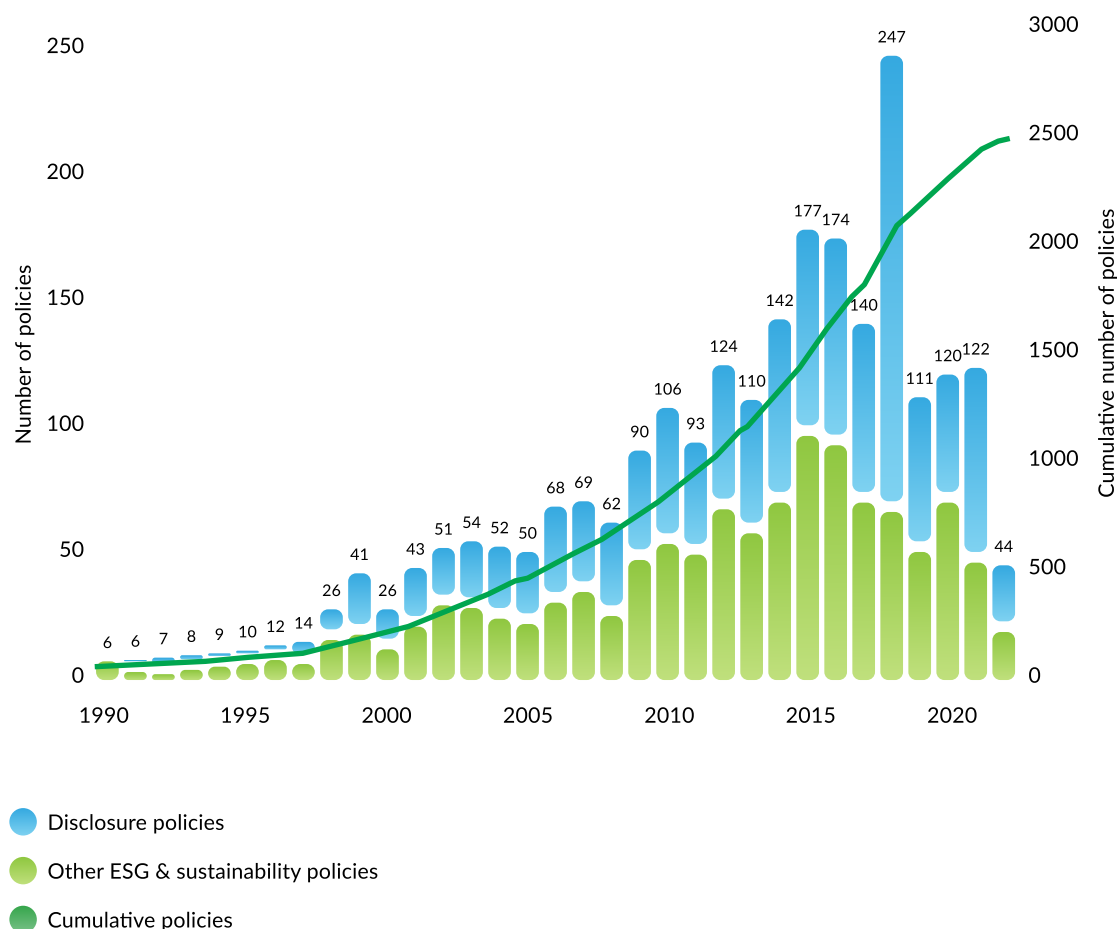
The expanded C&S database enables further analysis of policy trends over time. Figure 4 visually depicts the annual creation of new policies (based on year of publication), distinguishing between disclosure policies and other ESG & sustainability policies (represented by blue and green bars, respectively). The figure also represents the cumulative growth of policies published over time (see green trend line). While the C&S database goes back to 1897, we only graphed policies starting in 1990. We do so here, and elsewhere in this report, for two reasons. First, policies issued during the

first century of our data set (1897–1990) constitute a mere 5% of the total policies recorded. This small number of policies makes comparison over time difficult and may skew statistical results. Second, the early 1990s act as a natural starting point for analysis, as it roughly corresponds with several major world events, including the establishment of the United Nations Environmental Programme Finance Initiative (UNEP FI) (1992), the Rio Earth Summit (1992), the United Nations Framework Convention on Climate Change (UNFCCC) international environmental treaty, adopted at the Rio Earth Summit (1994), and the Inaugural Global Roundtable on the topic of greening financial markets (1994). There was a surge in disclosure and other ESG & sustainability policies issued starting around

⁷ Importantly, 41 policies have multiple issuers. These are also accounted for in our database and our analysis.

⁸ Business and industry bodies are multi-stakeholder groups that include public authorities.

Figure 4. Growth of ESG & Sustainability Policy over time

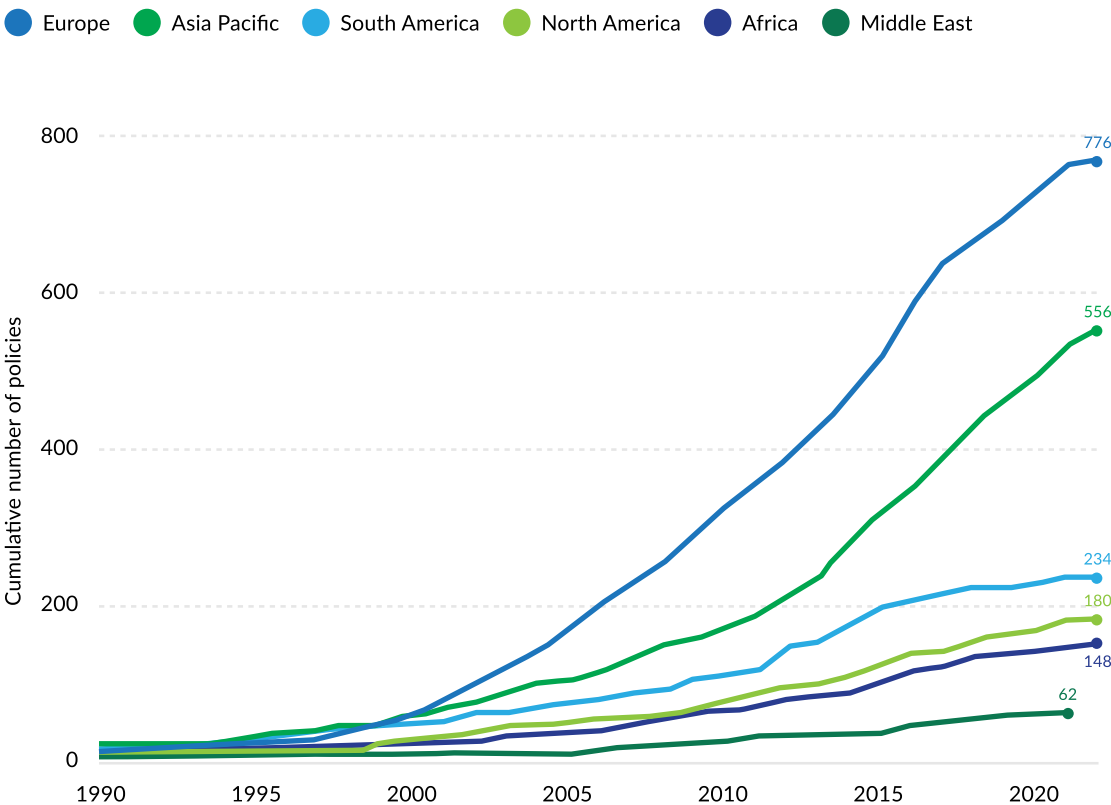


2000, reaching a peak in 2018 and then slowly declining thereafter.

How does this growth in ESG & sustainability policy vary globally? Do we see differences across major world regions? The results are illustrated in Figure 5 below. The most active policy issuers are located in Europe (776 policies, 31.5%), followed by Asia Pacific (556 policies, 22.5%). Countries in the Middle East

(62 policies, 2.5%) and Africa (148 policies, 6%) are relative laggards. North America (180 policies, 7.3%) and South America (234 policies, 9.5%) show relatively slower policy growth trends. What is consistent across all world regions is the observation that ESG & sustainability policy growth is a relatively recent phenomenon of the last two decades, starting in the 1990s for most regions, or the mid-2000s for the Middle East.

Figure 5. Growth of ESG & sustainability policy across world regions



Who issues ESG & sustainability policies?



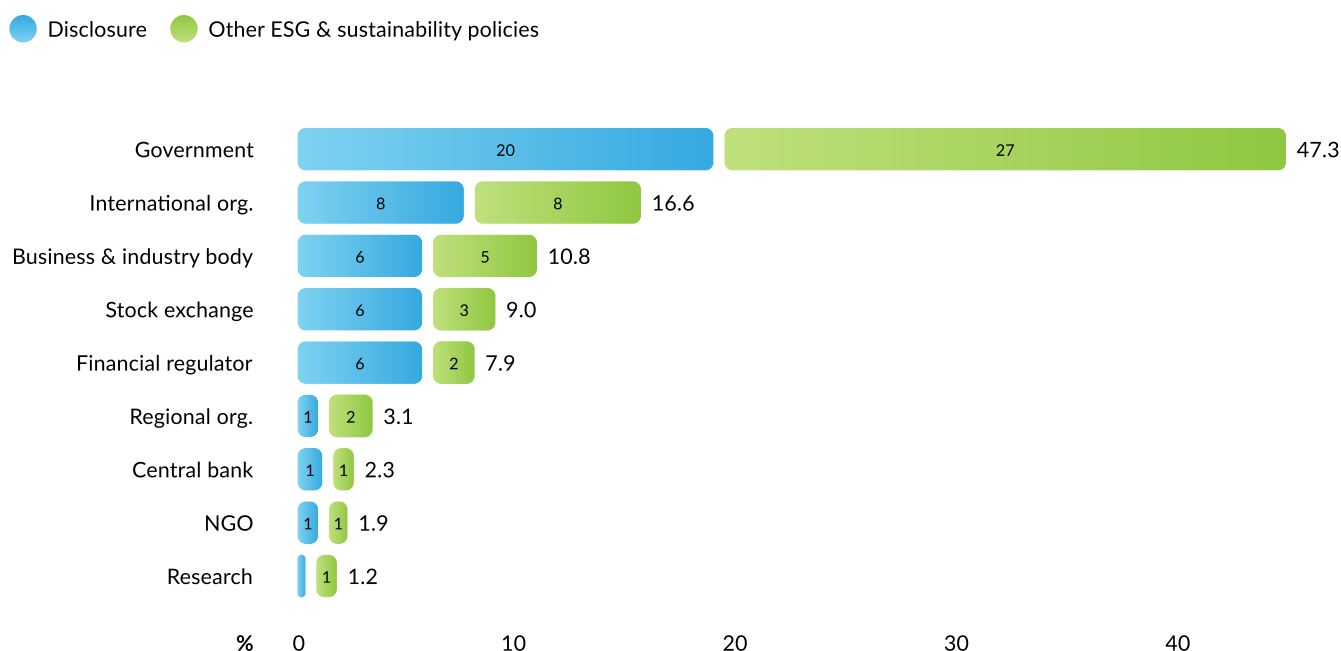
Who issues ESG & sustainability policies?

ESG & sustainability policies are issued by myriad types of governance actors. Building on previous versions of C&S, we hand coded each policy issuer according to one of the following nine categories: (1) central bank, (2) financial regulator, (3) government, (4) business and industry body, (5) international organization, (6) NGO, (7) regional organization, (8) research institute and (9) stock exchange. The results are presented in Figure 6.⁷ The most prevalent issuer type, by a sizeable margin, is government (47%), which includes, for example, government agencies, authorities, executives, legislative bodies, and ministries. This is followed by international organizations at 17%, business and industry bodies at 11%,⁸ stock exchanges at 9%, financial regulators at 7%, regional organizations at 3%, central banks at 2%, and NGOs and research institutions both with less than 2%.

⁷ Importantly, 41 policies have multiple issuers. These are also accounted for in our database and our analysis.

⁸ Business and industry bodies are multi-stakeholder groups that include public authorities.

Figure 6. Leading issuers of ESG & sustainability policy type



This finding that governments are the most active issuers of ESG & sustainability policy appears to be a universal one, as each of the world's major regions has government as the most active issuer. This is visualized in Figure 7 on the following page. The most significant presence of 'business and industry bodies' – the second most active issuer type – is in North America. Stock exchanges play a particularly active role in Asia Pacific and the Middle East.

Importantly, there is rich variation encompassed within these nine 'issuer' type categories. The governmental category alone includes cabinet offices, consultative committees, ministries of energy, environment, business, finance and regulatory agencies, and other authorities. This multitude of organisation types contributes to the diverse landscape of ESG & sustainability policy.

Figure 7. Issuer type by world region

Figure 7a. North America

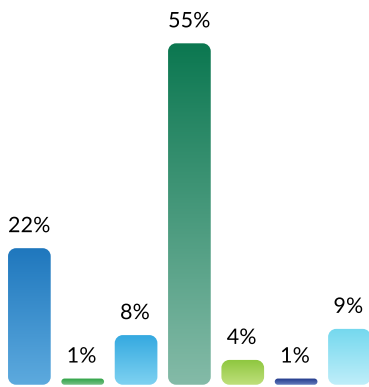


Figure 7b. Europe

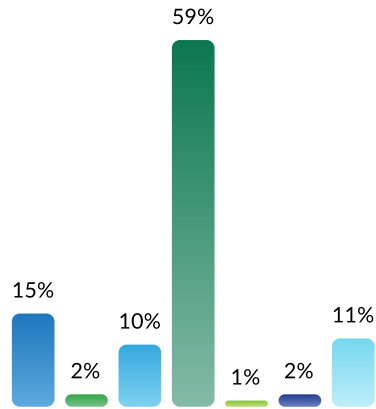


Figure 7c. Middle East

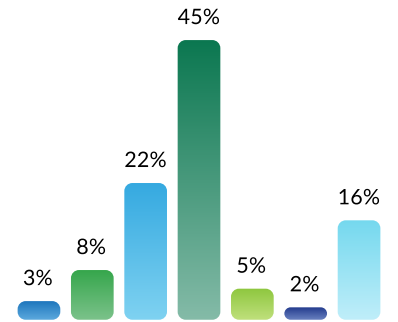


Figure 7d. South America

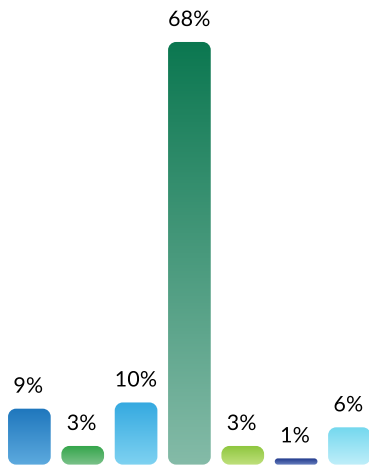


Figure 7e. Africa

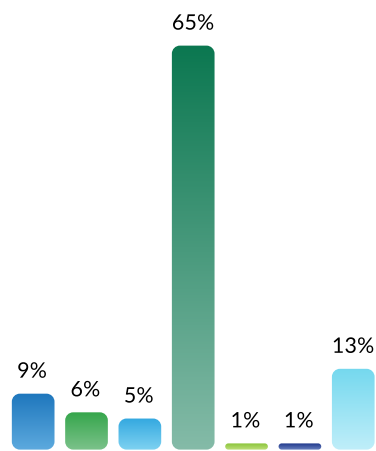
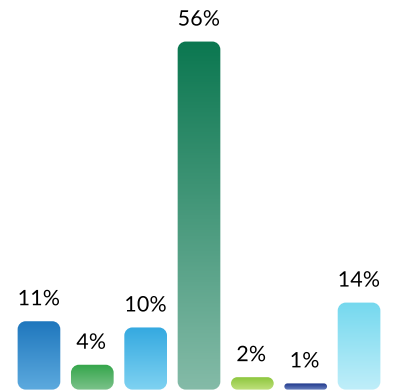


Figure 7f. Asia Pacific



Issuer type

- Business & industry body
- Central bank
- Financial regulator
- Government
- NGO
- Research
- Stock exchange

What's in the ESG & sustainability policies?

The background is a solid green color. It is decorated with various abstract shapes: several rounded rectangles in white, blue, and light green, and several circles in white, blue, and light green. The shapes are scattered across the lower half of the page, creating a modern, geometric pattern.

What's in the ESG & sustainability policies?

Analysis of the content and characteristics of ESG policies includes a consideration of (1) mandatory versus voluntary policies and (2) policy restrictiveness and restrictions on business activities.

We also present thematic analyses regarding (1) policies' focus on the SDGs, (2) their ESG focus, (3) which business activities and industries are targeted in ESG and sustainability policy and (4) references to the GRI Standards.

Mandatory versus voluntary policy

A central interest regarding ESG & sustainability policy is to what extent it has teeth. In other words, are businesses legally required to comply with the policy (as is the case with many laws and regulations) or is the

policy voluntary (as in the case of many blueprints, codes and guidelines)? Continuing the approach developed by earlier C&S reports, each policy has been hand coded in terms of it being either mandatory (i.e., businesses are required to abide by some set of prescribed activities, actions or behaviours) or voluntary (i.e., businesses are not required to abide by some set of activities, actions or behaviours). Figure 8 below compares mandatory and voluntary policies over time, distinguishing between disclosure policies and other ESG & sustainability policies. Across all policies and years covered in C&S (from 1897 to 2022), there are slightly more voluntary policies (55.2%) than mandatory policies (44.8%). This is different from

Figure 8. Comparing mandatory and voluntary policies

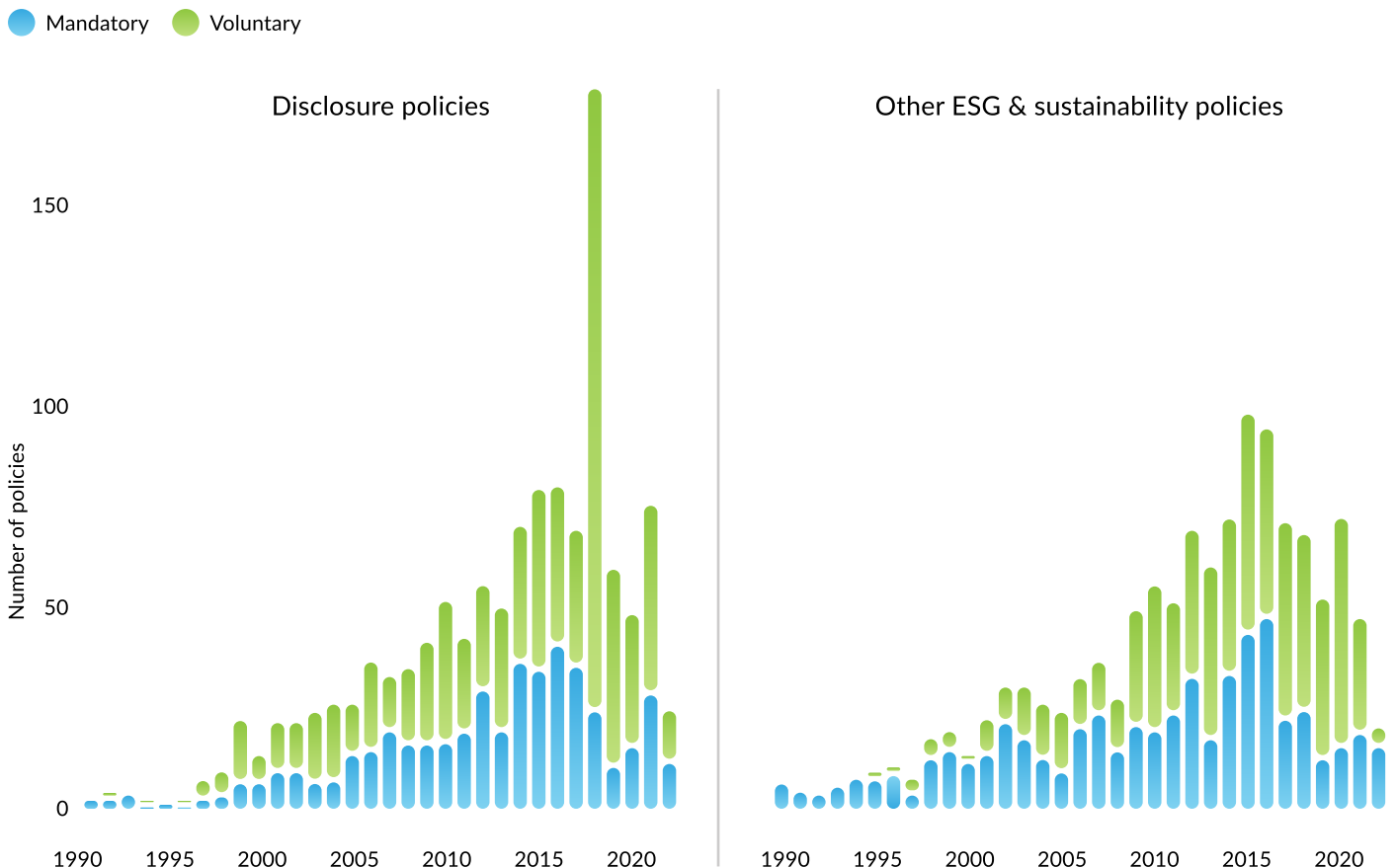


Table 2. Change in mandatory and voluntary policies over time

	Pre-2015	Post 2015	Change
Mandatory policies	52%	36%	-16%
Voluntary policies	48%	63%	+20%

the 2020 version of C&S report which indicated more mandatory policies compared to voluntary policies. This difference is mainly a function of our expanded data collection efforts and, albeit to a much smaller extent, the inclusion of both disclosure and other ESG and sustainability policies.

However, there appears to be an important inflection point around 2015 with the introduction of the UN SDGs. As shown in Table 2, in the pre-2015 period, 52% of all ESG & sustainability policies were mandatory, while 48% were voluntary. In the post-2015 period, this change was such that only 36% were mandatory and 63% were

(1) *restrictiveness* and (2) *restrictions on business*. These two measures are related but different. Both analyse the language of the text in each policy.

1. '*Restrictiveness*' looks at the language of 'enforcement' and 'deterrence' (i.e., mandatory policy) versus 'recommendation' and 'suggestion' (voluntary policy). This granular analysis of the language used offers a precise picture of the extent to which a policy is legally binding.
2. '*Restrictions on business*' looks at how this same language of restrictiveness applies directly to businesses and business actors.

Table 3. Sample dictionary terms

Restrictiveness	Restrictions on business*
Compel	Business must
Compelled	Business is barred
Confined	Business is legally required
Constrained	Business is mandated
Forbid	Business is prohibited
Forbidding	Business is obligated
Obligated	Business is required

*Note that we use a range of cognate terms for business, including company, corporation, enterprise, etc.

voluntary. This marks a 16% reduction in the number of ESG & sustainability policies that are mandatory and a concurrent 20% increase in the number of voluntary policies.

Policy restrictiveness and restrictions on business

In addition to hand coding policies according to the mandatory and voluntary categories, we use two new methods (NLP and ML) to examine the 'teeth' of policies:

In both methods, we employed a dictionary approach using a bespoke dictionary of restriction terms and then measured the relative prevalence of these terms in each policy document. These bespoke dictionaries contain hundreds of related words, with nuanced permutations and cognate terms. For example, for '*restrictions on business*', the term 'business must' is also measured using 'companies must', 'firms must', 'corporations must', 'enterprises must', 'employers must', 'directors must' and 'managers must', to give just a few examples. While the complete dictionary is available on the C&S website, Table 3 gives a small sample of these terms to help clarify the methodology.

Using these bespoke lists of terms, we calculated exact *restrictiveness* and *restrictions on business* scores for each policy in the C&S database. In basic terms, the higher the score, the greater the level of restrictiveness (e.g., the more teeth). To make our results more intuitive, we recoded these scores into several categories. We took the average (i.e., mean) score as a starting point and then used the standard deviation to measure equal increments from the mean. There are fewer increments for *restrictions on business* and hence there are only four categories compared to the five categories for *restrictiveness*. A detailed overview is provided in the Appendix.

Table 4 provides an overview of these scores and related categories.

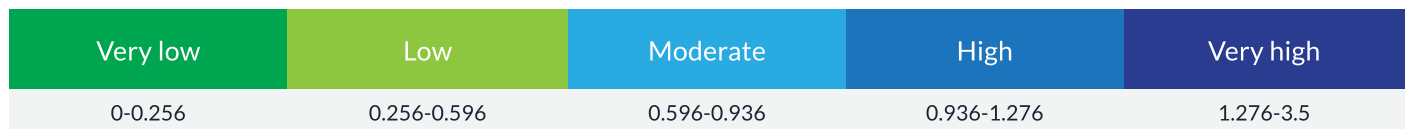
Trends in *restrictiveness* and *restrictions on business* over time are presented in Figures 9 and 10. The stacked bars show a count of the total number of policies issued each year that fall into the various restrictiveness categories. The grey line shows the average restrictiveness score per year for that policy year. The left side of the figures shows results for disclosure policies, and, on the right side, we see results for all other ESG & sustainability policies.

A few results stand out. First, a small share of policies can be coded high or very high in terms of *restrictiveness* or *restrictions on business*. These constitute less than 20% of the total data set. It is far more common for policies to be coded in the low category. They constitute about 75% of the entire data set. At the same time, there is a rather significant difference when comparing disclosure policies to all other ESG & sustainability policies.

Restrictiveness or *restrictions on business* disclosure policies are **two to three times more likely** to be coded as high or very high compared to all other policies.

Table 4. Measuring restrictiveness and restrictions on business

Restrictiveness



Restrictions on business



How can we make sense of these findings considering mandatory versus voluntary policy trends discussed in the previous section? While there are, especially after 2015, more voluntary policies issued than mandatory ones, there is still a sizeable portion of mandatory policies (36%) issued since 2015. Is there a relationship between mandatory policies and more restrictiveness or, equally, voluntary policies and less restrictiveness? Empirically, there is a moderate correlation between restrictiveness and mandatory policy ($r = .53$) and a weak correlation between restrictions on business and mandatory policy ($r = .25$). In bald terms, mandatory policies are not necessarily more restrictive. What this means is that even when policies are mandatory, they tend to provide few specific details (i.e., granularity) regarding which actions and behaviours are required, permitted, or prohibited. There is ‘tough talk’ in mandatory policies, but it is not specific to companies’ actions.

In 2018, there was a noticeable increase in the occurrence of ‘very high’ levels of *restrictions on business*. This spike can be attributed primarily to the publication of a series of Sustainability Accounting Standards Board (SASB) policies during that year. Many of these policies consistently received high scores in terms of their expression of restrictions on business activities and actors. These policy documents are structured around long lists about what entities ‘must’ and ‘shall’ disclose, calculate, include, perform, or otherwise undertake. However, it is important to note that the results are not solely driven by SASB standards. Several government-issued policies written in the same year also stand out for their stringent restrictions on business. Notable examples include the corporate governance codes of Bahrain and Bangladesh and China’s ‘Corporate Sustainability Compact for the Textile and Apparel Industry’. These codes are among the top 2% of the entire dataset in terms of *restrictions on business*.

Figure 9. Policy restrictiveness

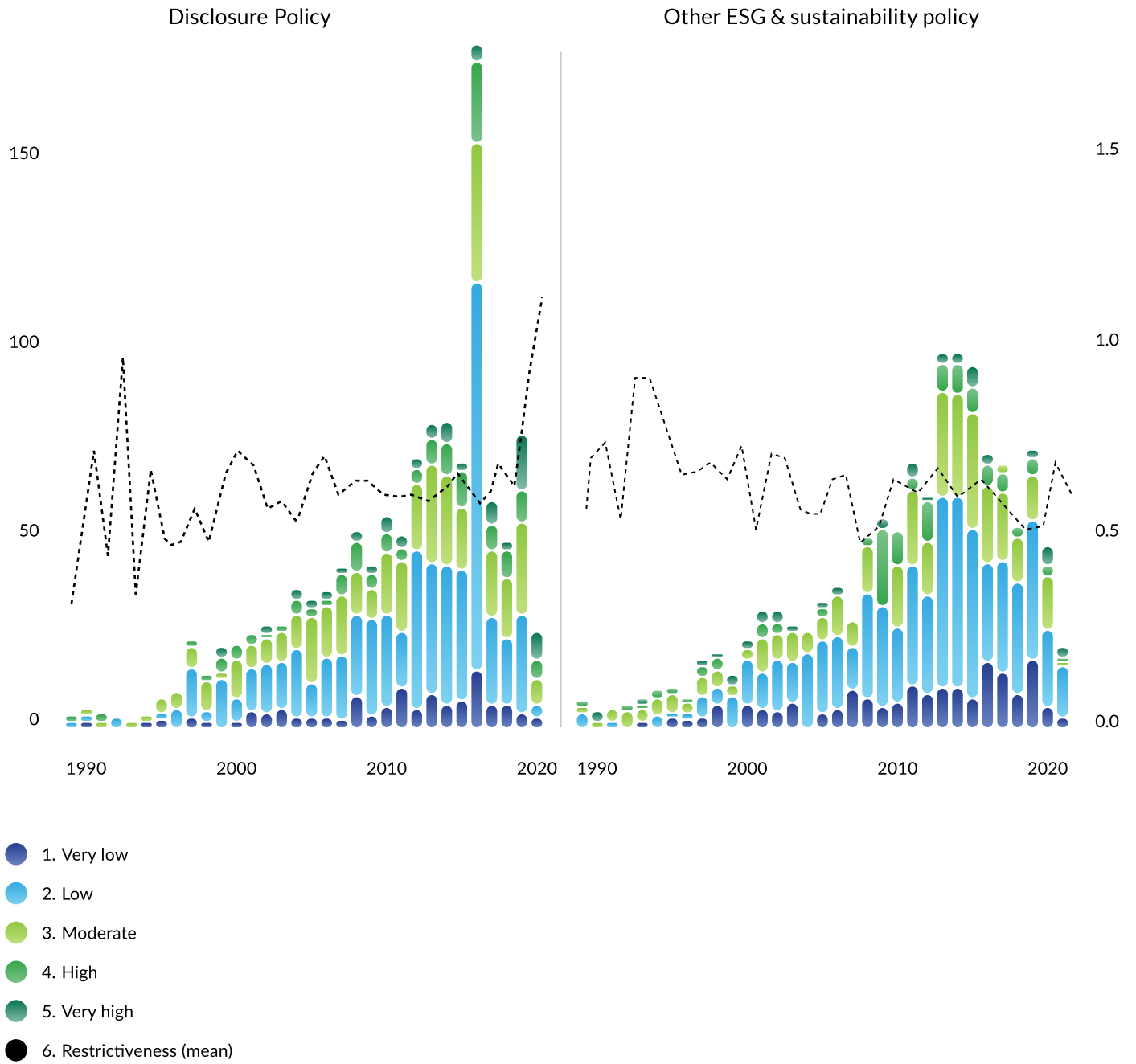
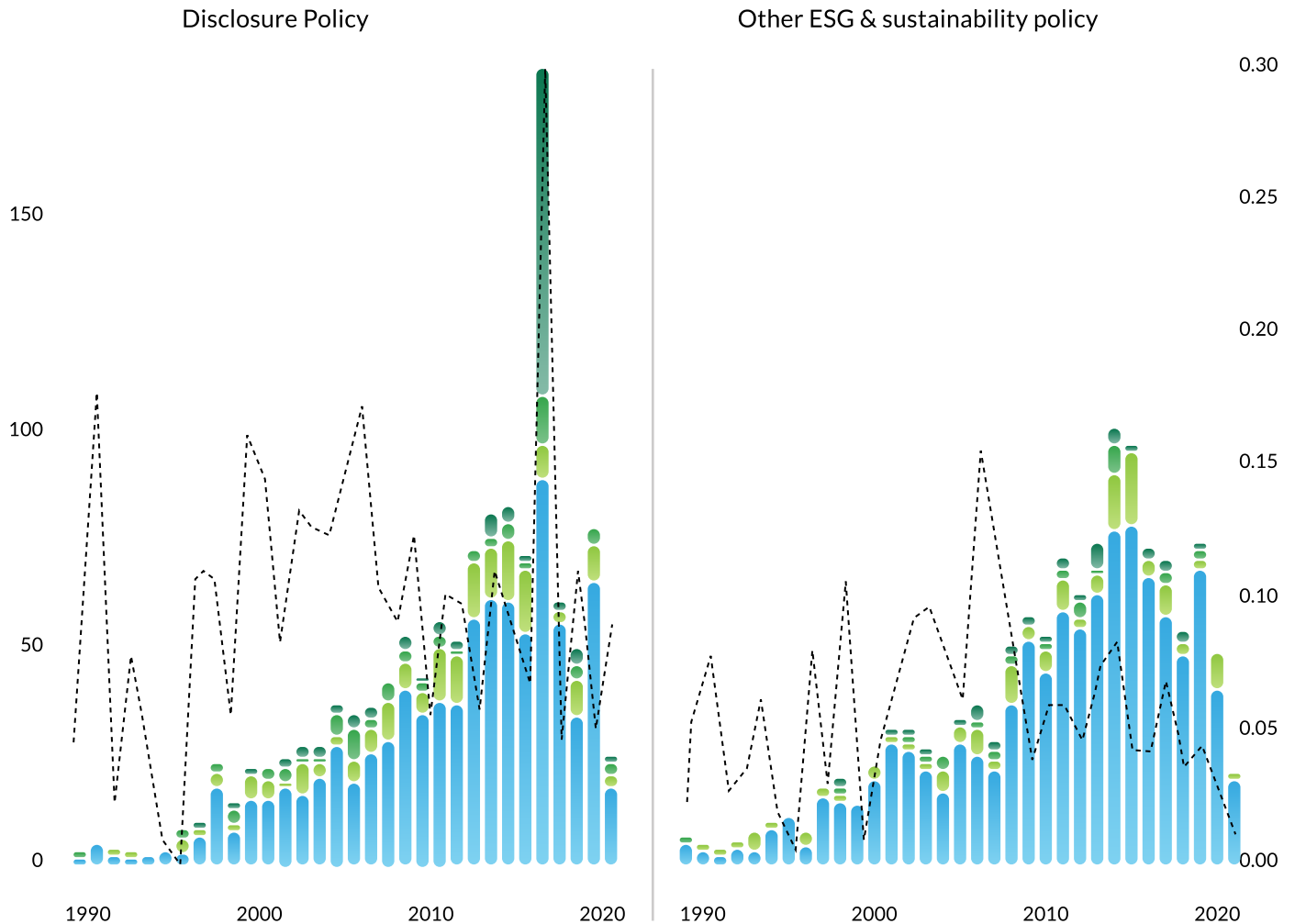


Figure 10. Restrictions on business



- 1. Low
- 2. Moderate
- 3. High
- 4. Very high
- 4. Restrictions on business (mean)

Focus on Sustainable Development Goals

Since their inception in 2015 the Sustainable Development Goals (SDGs) have shaped the ESG & sustainability policy space. As illustrated in Figure 11, we see a steady increase in policy engagement with the SDGs over time. More specifically, Figure 11 shows the proportion of policies mentioning the SDGs (i.e., policies

mentioning the terms 'SDG' or 'Sustainable Development Goals', but not specific SDGs, like SDG 1: No poverty or SDG 1) from 2015 to 2022. Nearly 13% of policies issued in 2015 mentioned the SDGs. By 2021, this proportion increased by a factor of four, where nearly 52% (over half) of all policies issued in that year mentioned the SDGs.

Figure 11 shows that the SDGs are an important reference point in ESG & sustainability policy. Which specific SDGs are the main point of focus and how has

this changed over time? Importantly, only 13.3% (or 151 policies) of all the policies in our database issued since 2015 explicitly mention a specific SDG by name. Of these, 11% are counted as mandatory policies, whereas 89% are voluntary. Figure 12 compares the SDGs for all policies in our database, disaggregating disclosure requirements and all other policies. The most frequently mentioned SDG is *SDG 8: Decent work and economic growth*. This is followed by *SDG 12: Responsible consumption and production* and then *SDG 3: Good health and well-being*. In contrast, *SDG 9: Industry innovation and infrastructure* has the fewest explicit mentions.

We next examine the SDG focus across the six major world regions. There is a striking degree of variability in these findings (see Figure 13). SDGs 8, 12 and 3 are still prominent. *SDG 8: Decent work and economic growth* is the most prominent SDG in three of the six world regions: Asia Pacific, Europe and South America. In the Middle East, *SDG 5: Gender equality* is the most prioritised SDG. In North America, the most prioritised SDG is *SDG 2: Zero hunger*.

Finally, we examine the changing trends in how ESG & sustainability policies focus on specific SDGs over time. Figure 14 plots these results. In this case, we include the top five SDGs for each year between 2015 and 2022. Each bar represents the total proportion (%) of policies each year mentioning that specific SDG. Goals at the top of the chart have a greater proportion than those at the bottom. A few trends stand out. First, *SDG 13: Climate action* has risen in prominence, moving from just 7% in 2015 to nearly 14% in 2022, taking on the mantle as the most prominent SDG in the database. Next, we can see that two SDGs, namely *SDG 8: Decent work and economic growth* and *SDG 12: Responsible consumption and production* have remained consistently prominent over this eight-year period. Finally, *SDG 17: Partnerships* for the goals only appears in the top five once, in 2017, with 6%. Despite increasing calls for international cooperation from the likes of COP and other multi-stakeholder initiatives and gatherings, it seems that the partnership-focused goal has gained little purchase in ESG & sustainability policies.

Figure 11. Proportion of ESG & sustainability policies mentioning the SDGs: 2015-2022

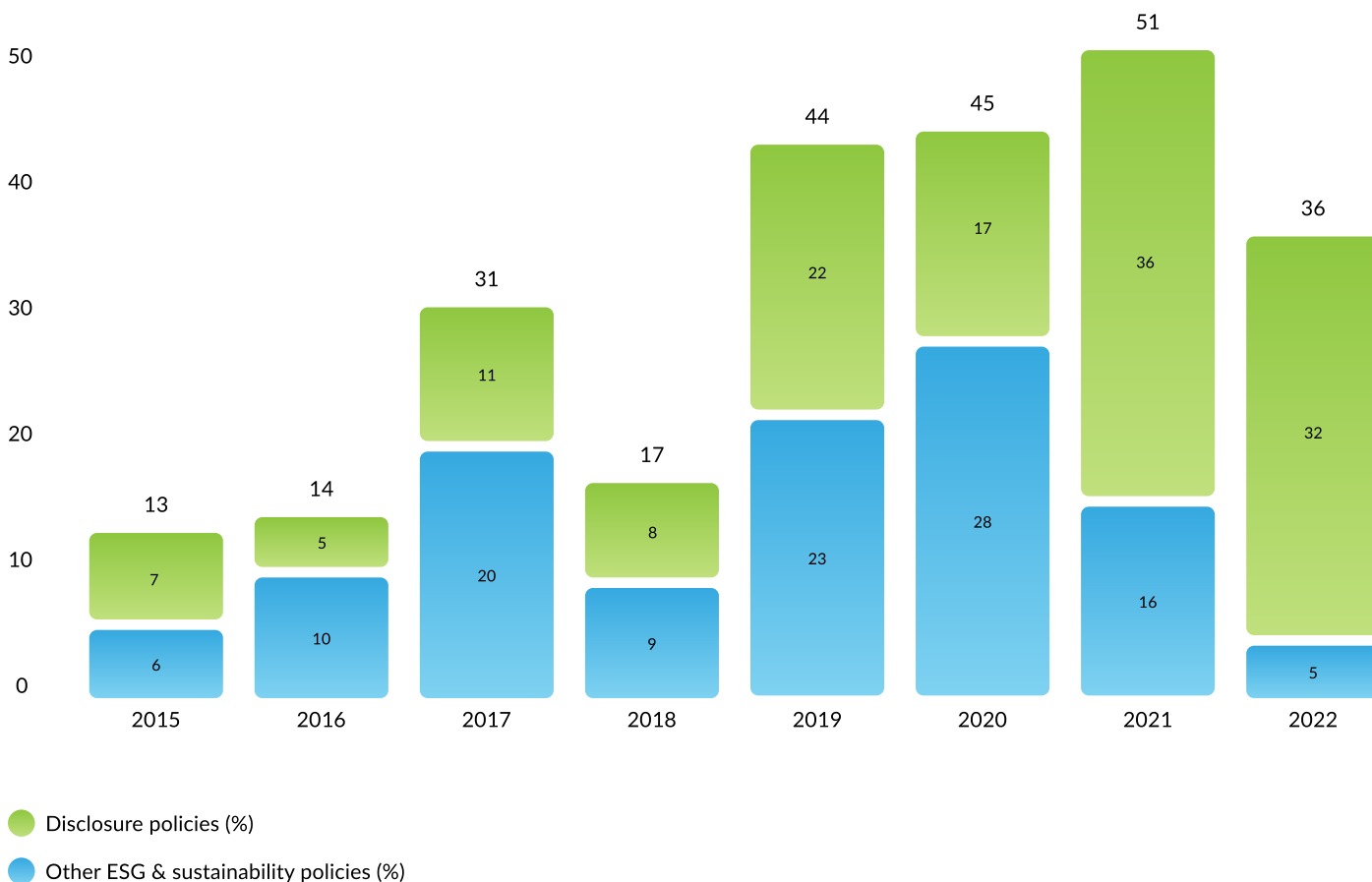


Figure 12. Focus on Sustainable Development Goals

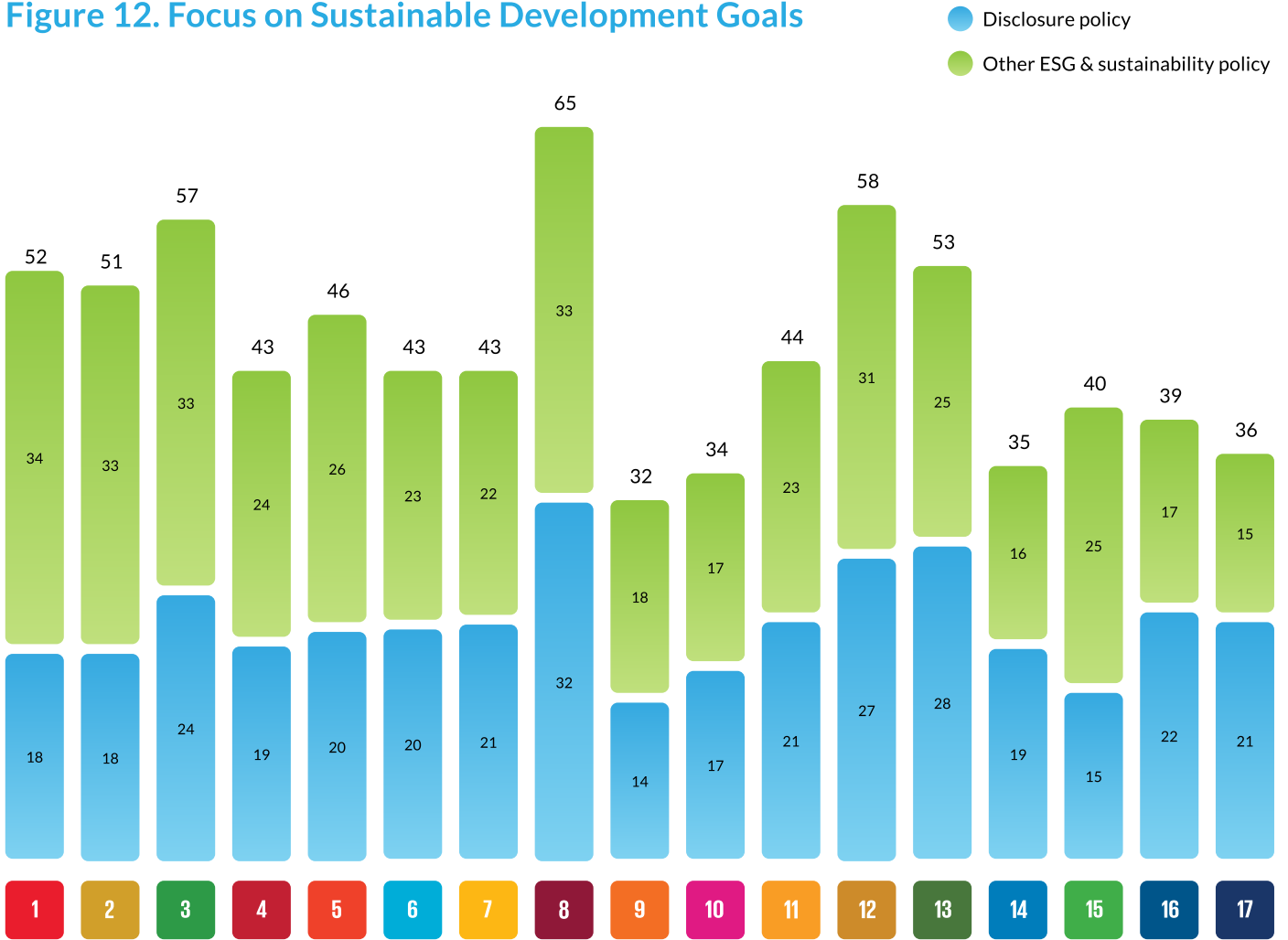


Figure 13. Top 3 SDG priorities by world region

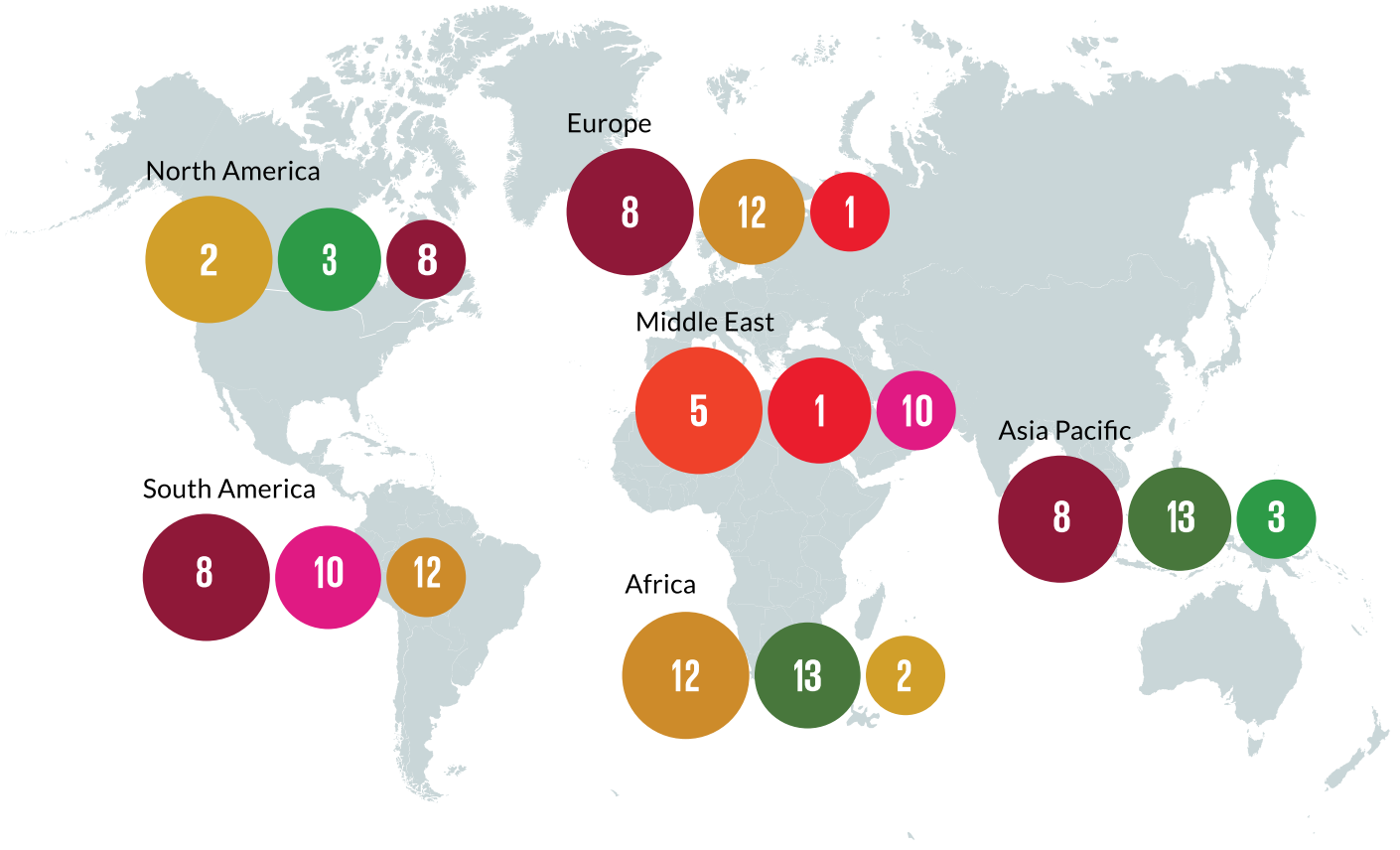
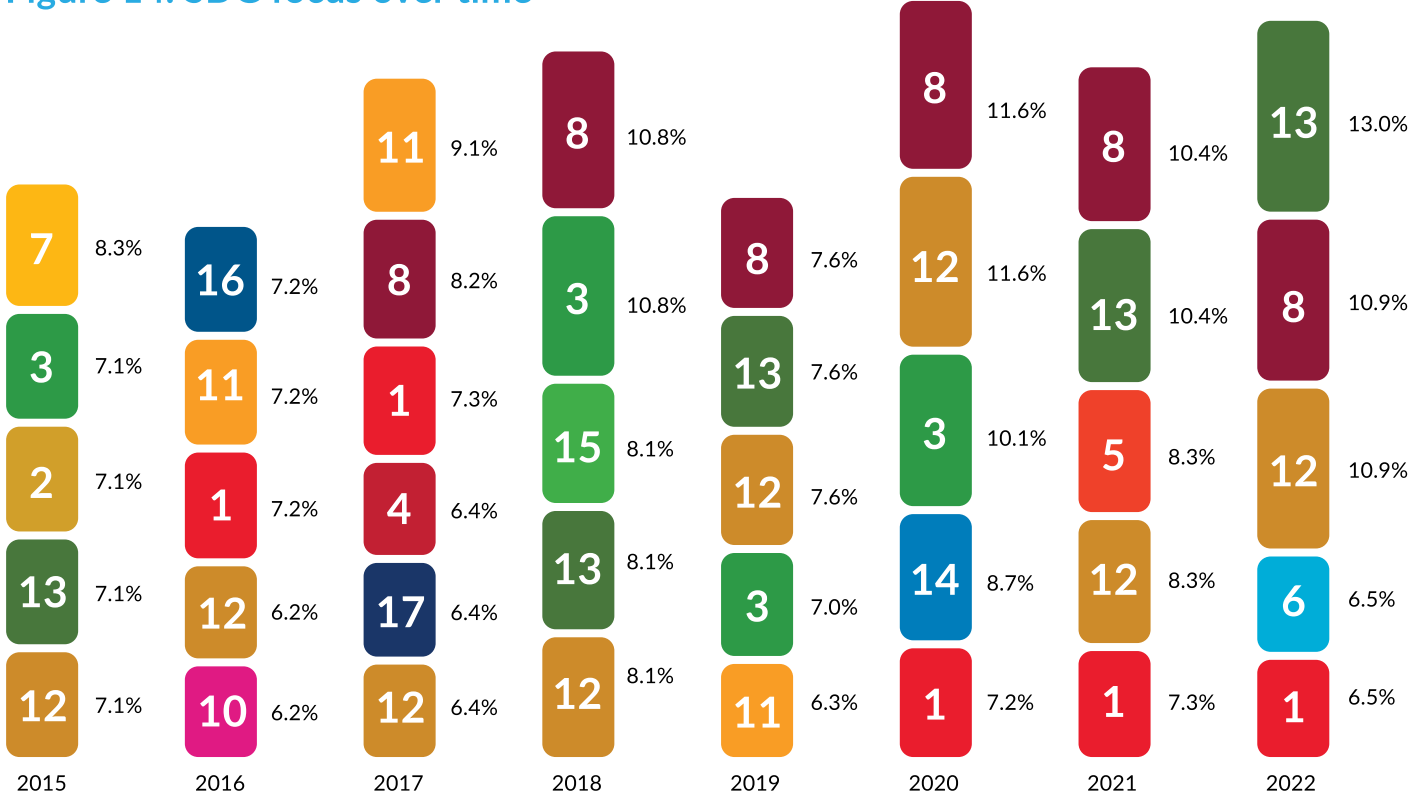


Figure 14. SDG focus over time



Focus on business sectors

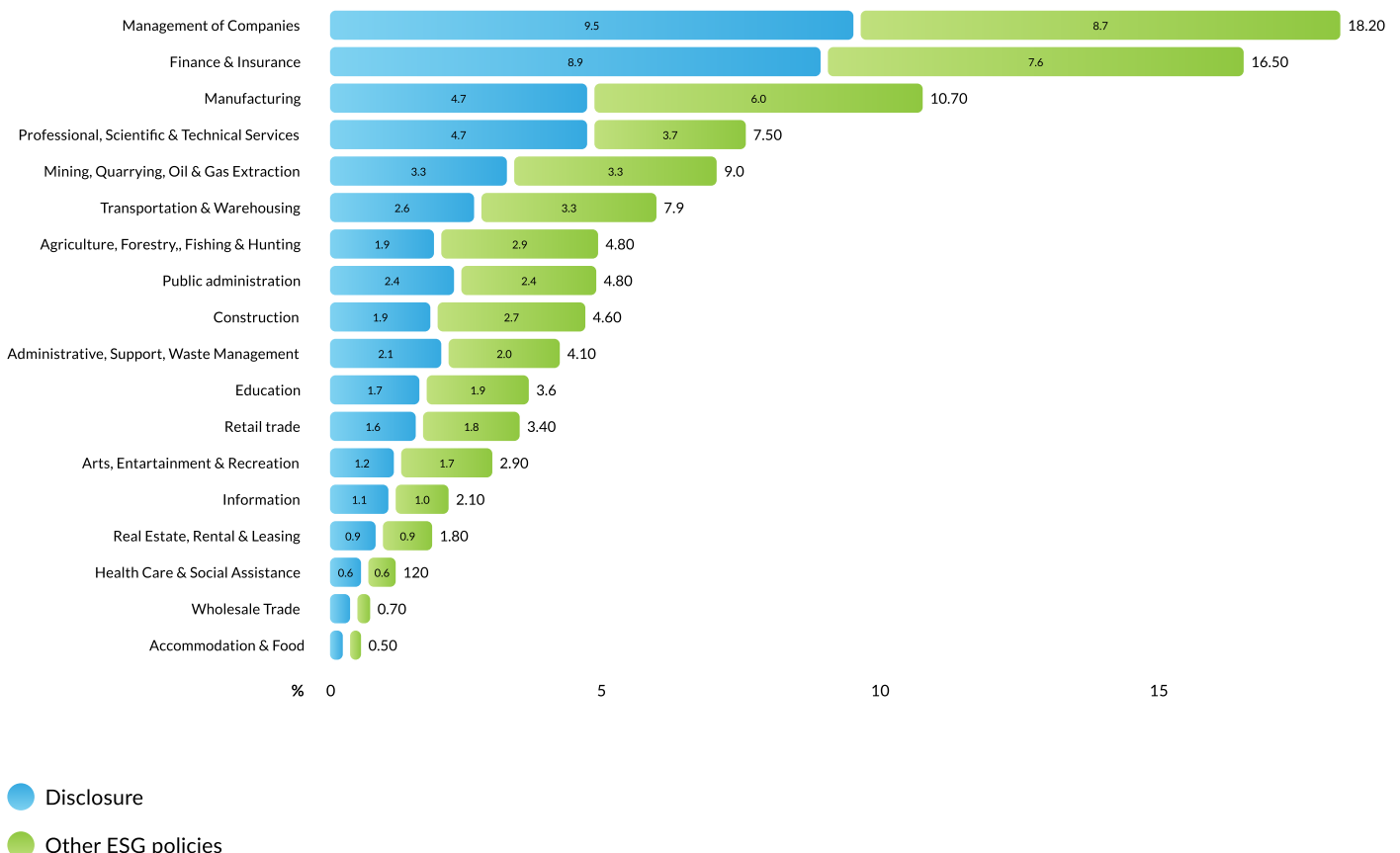
A chief purpose of many ESG & sustainability policies is to shape or in some way inform the activities of business and business actors. Which specific business sectors are targeted by these policies and how has this changed over time? While there are various ways to classify business sectors, we use the North American Industry Classification System (NAICS). This is a widely used classification system and corresponds with other existing systems, such as the United Nation's ISIC typology, the European Union's Nomenclature of Economic Activities (NACE) typology, and the Global Industry Classification Standards (GICS) (see the Appendix for the 18 general NAICS business sector categories and their descriptions).

Employing topic modelling techniques, we use descriptions of NAICS business sectors to generate a bespoke dictionary of keywords for each business sector. This provided prompts that we use in the automated classification of each policy in our database. Figure 15 below shows the results for which NAICS sectors (i.e., specific business activities) are targeted the most,

and least, in policies. The results compare disclosure requirements with other ESG & sustainability policies. Critically, single policies can target more than one business sector. One of the main advantages of our topic modelling approach is that we can assess the degree to which individual policies target multiple business sectors.

Turning to our results, we can see that 'management of companies', which is targeted in 18% policies (9.5% for disclosure requirements and 8.7% for other ESG & sustainability policies) is the most targeted business sector. 'Management of companies' has a cross-sector rather than an industry vertical flavour, as it includes holding companies and subsidiaries. Our reading is that this may be capturing firm size and multinational activities like supply chain management and other cross-national operations – such as policies that target firms above a certain size. The second most prominent sector is finance and insurance, which is targeted in 16.5% of policies. The NAICS 'finance and insurance' category includes the activities of banks, fund management activities, insurance and reinsurance, as well as the broader range of firms operating as part of the financial market infrastructure.

Figure 15. Growth of C&S coverage: 2006-2023



In this case, the relative prevalence of finance reflects the sheer number of stock exchanges and financial regulators, not to mention ministries of finance, which count among the top issuers in the C&S database (see Figure 6).

Next, we assess how ESG & sustainability policy targets different business sectors over time. In this case, we report the top five most prevalent business sectors (calculated as the overall proportion of each sector) for the years 1990 to 2022, looking at five-year time increments. The results, presented in Figure 16, underscore our earlier results, showing the prevalence over time of 'management of companies' and 'finance and insurance'. Given that there are 18 unique sectors, there is a good deal of stability in those sectors targeted by ESG & sustainability policy over time. In addition to 'management of companies' and 'finance and insurance', 'manufacturing' and 'mining, quarrying, oil and gas extraction' remain in the top five sectors over all five time periods. 'Manufacturing' was the

most targeted business sector for the period 1990–1995 but dropped to third and even fourth place in later time periods. 'Mining, quarrying, oil and gas extraction' ranked as the third most targeted business sector overall in the 2001–2005 period. The other sectors breaking into the top five at some point between 1990 and 2022 include 'professional, scientific & technical services', coming to prominence in the 2006–2010 period, 'transportation & warehousing', taking fourth place in 1990–1995 and 1996–2000 but then falling out of the top five, and 'public administration', which was in fifth place in the 2001–2005 time period.

Figure 16. Top five targeted business sectors (%) over time 1990-2022

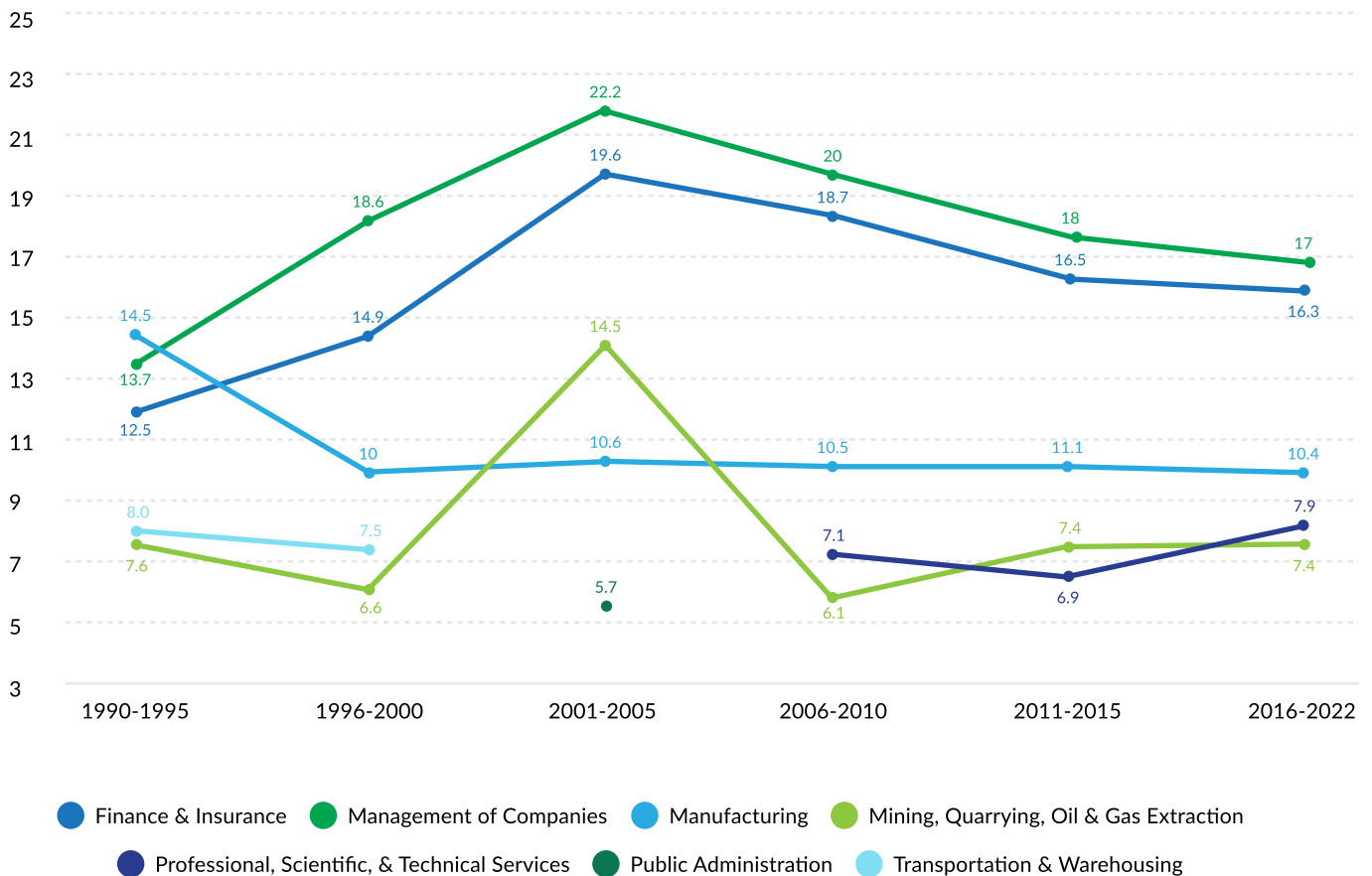
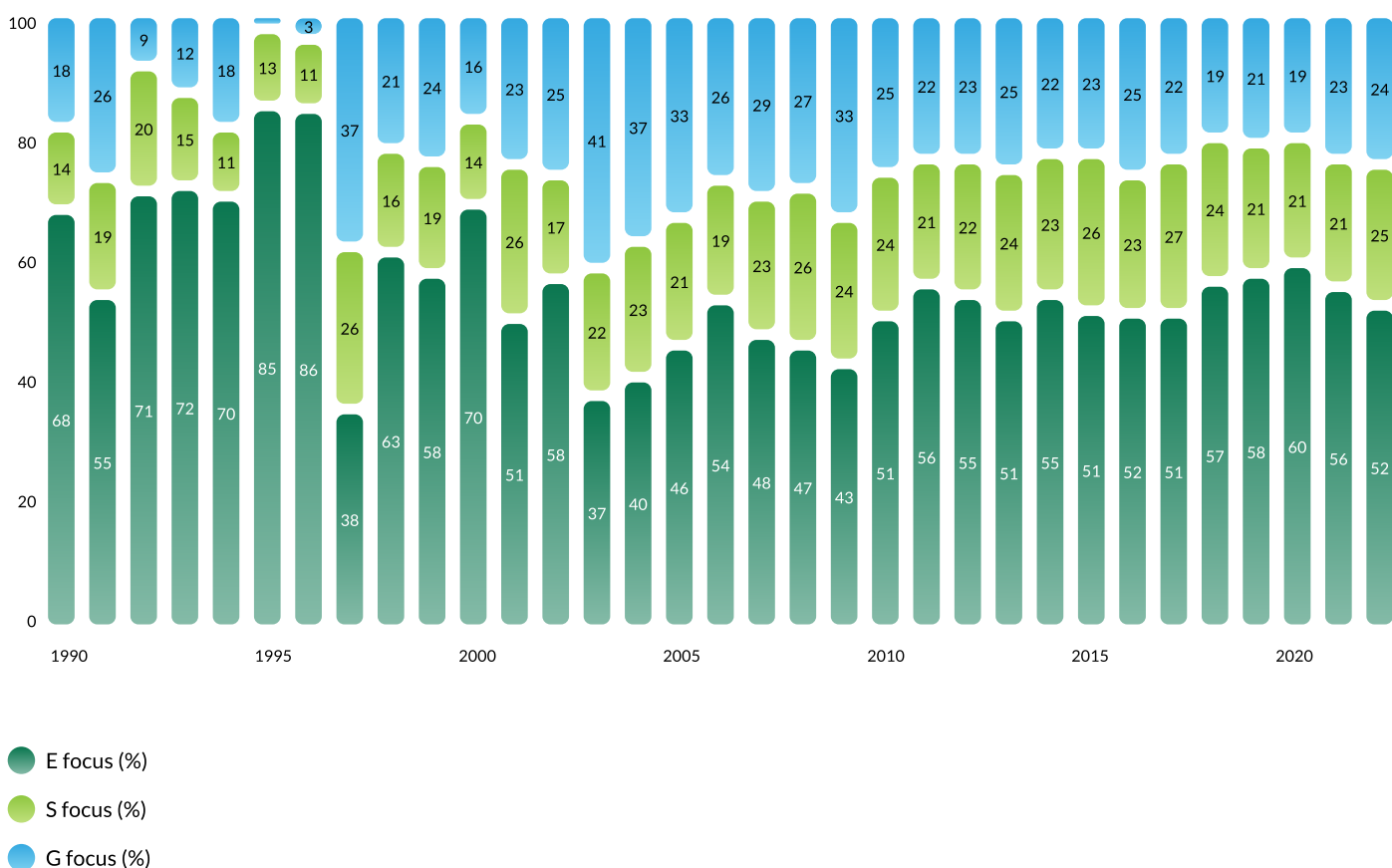


Figure 17. E, S and G focus over time: 1990-2022

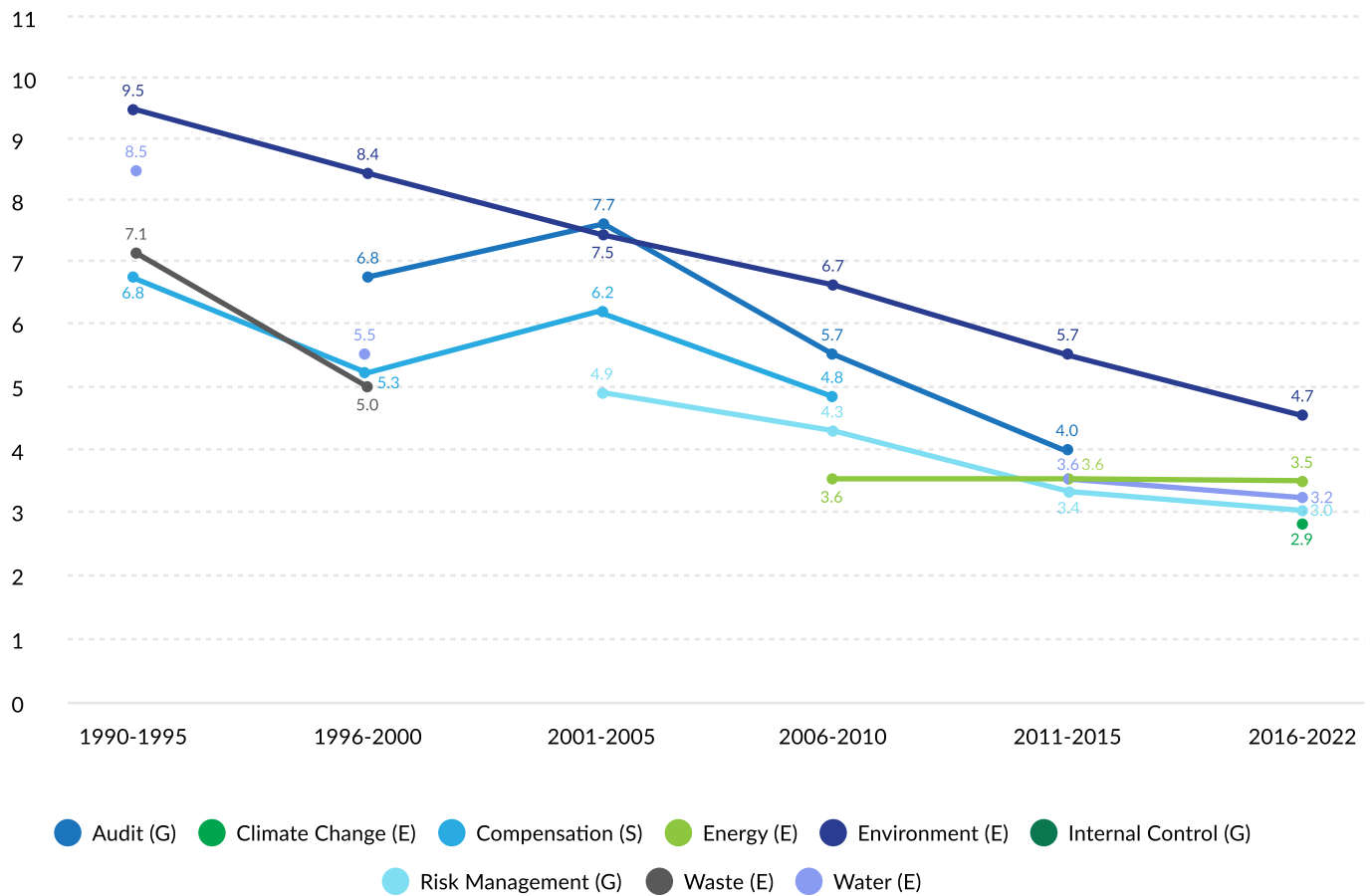


Focus on Environmental, Social, or Governance

We next turn to an analysis that disaggregates ESG into its constituent parts. Using topic modelling, we can categorize policies by their relative environmental ('E'), social ('S'), and governance ('G') focus. Importantly, a single policy can focus on E, S and G priorities simultaneously, and, in practice, most policies do (only 421 or 17% of the policies in our database do not have an E, S or G focus). Our analysis measures the proportion of E, S or G focus per policy and, Figure 17, presents these trends over time. A complete list of the ESG terms used in this analysis can be found on the C&S website.

Our analysis shows the relative dominance of E-focused policies from 1990 to 2022. At its high point, E-focused policies comprised more than 80% in the mid-1990s. Its low point, by contrast, occurred between 2003 and 2009 when the E focus declined to as low as 37%. Comparing S focus and G focus, we can see that there is a greater relative G focus from 1990 to 2022, reaching a high of 41% in 2003. G focused policies include many broadly applicable activities and themes, like business strategy and stakeholder engagement, as well as ethics and integrity. The sizeable increase in G focus may be understood as a policy response to both the Enron scandal of 2001 and the WorldCom scandal in the following year. While C&S captures policies that can be seen as direct legislation responses to these scandals (most significantly the Sarbanes-Oxley Act of 2002), it is also likely that it captures a large number of new policies focused on re-evaluating corporate governance practices and improved whistle-blower protections in the mid-2000s.

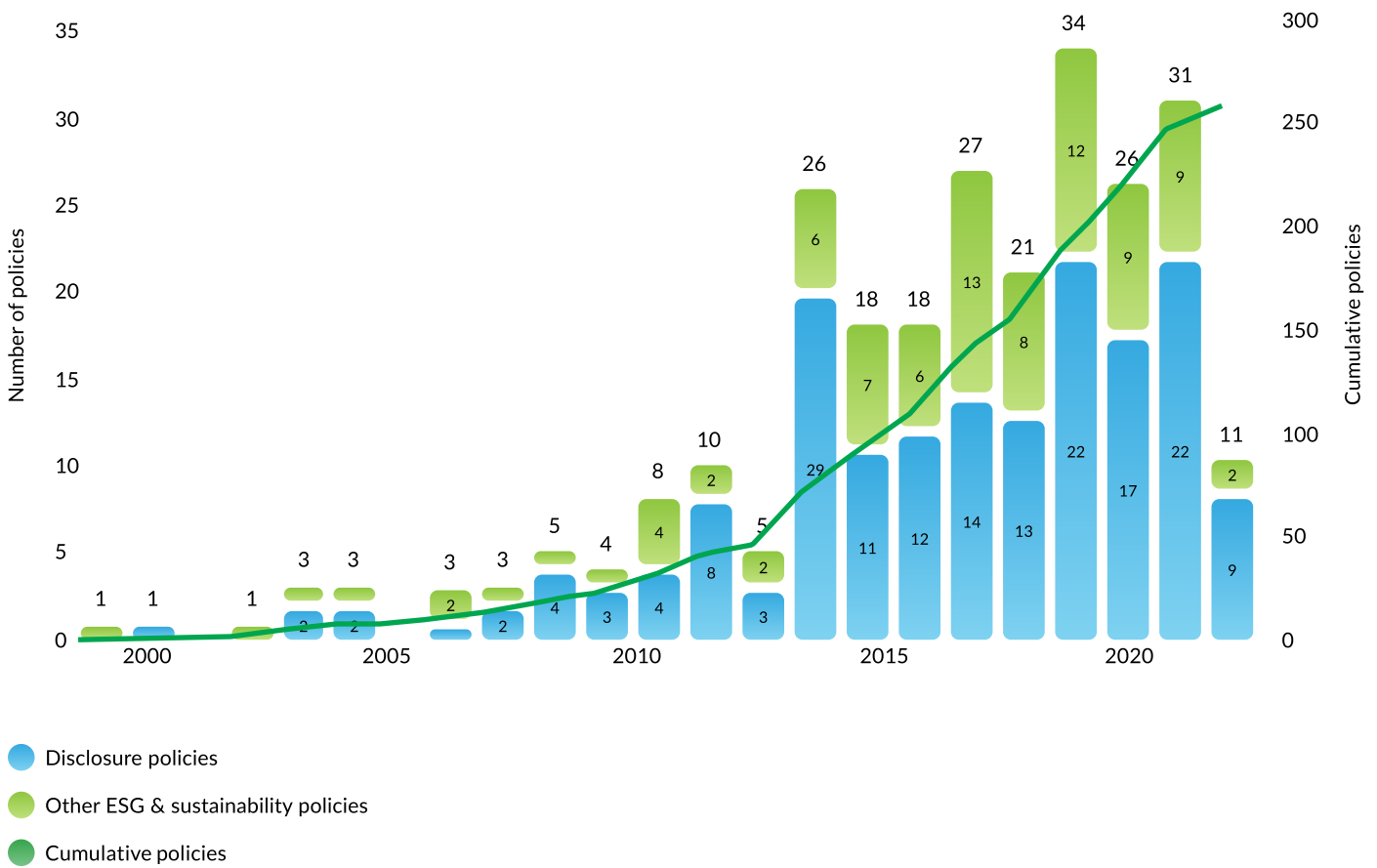
Figure 18. Top five focus over time 1990-2022



E, S and G are broad categories comprising a large number of more specific topics. To drill down into ESG categories, we examine the most prominent ESG topics for the years 1990 to 2022, looking at five-year time increments. Figure 18 presents the results. For each period, we calculate the overall proportion of each ESG term.

Overall, there are four E terms in the top five (climate change, energy, environment, waste and water), three G terms (audit, internal control and risk management), and only one S term (compensation). Only 'environment' is ranked in the top five across all time periods. Other consistently highly ranked terms include 'audit', 'water', 'risk management', and 'compensation', these four terms appear in four of six time periods. It is noteworthy that 'climate change' appears in just one time period, 2016-2022.

Figure 19. GRI mentions in ESG & sustainability policy over Time



Focus on the GRI Standards

The GRI Standards enable any organization – large or small, private or public – to understand and report on their impacts on the economy, environment and people in a comparable and credible way, thereby increasing transparency on their contribution to sustainable development. The standards are developed through an inclusive international multi-stakeholder process, delivering an inclusive picture of an organization’s material topics, their related impacts, and how they are managed. By employing the GRI Standards, companies can facilitate performance comparisons with peers and enable investors and other stakeholders to make well-informed decisions. This harmonized approach promotes transparency, accountability and benchmarking across diverse industries and regions.

We start by examining the number of policies mentioning the GRI Standards over time (from 1996 to 2022). The results are presented in Figure 19. In terms of general

references to GRI Standards, we see a strong upward trend over time, especially in the last decade. Disclosure policies tend to mention GRI Standards more frequently than other ESG & sustainability policies. This trend is consistent across the period.

We next examine general GRI mentions across six major world regions. The results are presented in Figure 20. Europe (1,230 mentions across 89 policies) and Asia Pacific (1,207 mentions across 85 policies) stand out as having the most mentions. It is also in these world regions that we see the earliest mentions of GRI. The other world regions have fewer policies and fewer mentions of GRI. Africa has 575 mentions across 24 policies; South America has 506 mentions across 32 policies; the Middle East has 307 mentions across 14 policies; and North America has 306 mentions across 15 policies. Concurrently, we see a major increase in policies and mentions in Africa and the Americas in the past 5 years.

Figure 20. GRI mentions in ESG & sustainability policy over time by region



GRI's modular system of Standards

The GRI Standards are designed as a modular system of interconnected standards. They are designed to be used together to provide a comprehensive overview of an organization's **impacts** on the economy, environment, and people. Essentially, the GRI Standards focus on the impact perspective of double materiality.

GRI Standards consist of **three series** of Standards: Universal Standards, Sector Standards, and Topic Standards

1. The three **Universal Standards** need to be used by all organizations and they contain requirements and disclosures that any organization must comply with, when reporting in accordance with the GRI Standards.
2. The **Sector Standards**⁹ are a new addition to the system and have been introduced to help increase the quality, completeness, and consistency of reporting by organizations in a sector. The Sector Standards list the likely material topics for organizations in a sector, and they also list the disclosures that are relevant for reporting on each of those likely material topics. An organization is required to use the Sector Standard or Standards that apply to them.
3. The 31 **Topic Standards** detailed in Table 5 cover a wide range of topics, from Emissions to Occupational Health and Safety or Tax and contain disclosures to report on each of those topics. Organizations only use those Topic Standards that are relevant based on the material topics they have identified.


In recognition of the interrelated nature of the various topics covered under the Topic Standards, during the 2021 revision of the GRI Standards, GRI has dropped the classification of the topic standards into Environmental, Social, and Economic categories. However, with the global debate around transparency and reporting using the ESG (Environmental, Social and Governance) classification for standards, we

Table 5. GRI Standards

Standard #	Subject
Universal Standards	
GRI 1	Foundation
GRI 2	General disclosures
GRI 3	Material topics
Topic Standards	
GRI 201	Economic performance
GRI 202	Market presence
GRI 203	Indirect economic impacts
GRI 204	Procurement practices
GRI 205	Anti-corruption
GRI 206	Anti-competitive behaviour
GRI 207	Tax
GRI 301	Materials
GRI 302	Energy
GRI 303	Water and effluents
GRI 304	Biodiversity
GRI 305	Emissions
GRI 306	Waste
GRI 308	Supplier environmental assessment
GRI 401	Employment
GRI 402	Labour/management relations
GRI 403	Occupational health & safety
GRI 404	Training and education
GRI 405	Diversity and equal opportunity
GRI 406	Non-discrimination
GRI 407	Freedom of association and collective bargaining
GRI 408	Child labour
GRI 409	Forced or compulsory labour
GRI 410	Security practices
GRI 411	Rights of indigenous peoples
GRI 412	Human rights assessment
GRI 413	Local communities
GRI 414	Supplier social assessment
GRI 415	Public policy
GRI 416	Customer health and safety
GRI 417	Marketing and labelling
GRI 418	Customer privacy

Table 6. GRI - ESRS Topic Mapping

Environment	Social	Governance	Universal
GRI 201: Economic Performance 2016	GRI 202: Market Presence 2016	GRI 204: Procurement Practices 2016	GRI 1: Foundation 2021
GRI 301: Materials 2016	GRI 203: Indirect Economic Impacts 2016	GRI 205: Anti-Corruption 2016	GRI 2: General Disclosures 2021
GRI 302: Energy 2016	GRI 303: Water and Effluents 2018	GRI 206: Anti-Competitive Behaviour 2016	GRI 3: Material Topics 2021
GRI 303: Water and Effluents 2018	GRI 304: Biodiversity 2016	GRI 207: Tax 2019	
GRI 304: Biodiversity 2016	GRI 401: Employment 2016	GRI 308: Supplier Environmental Assessment 2016	
GRI 305: Emissions 2016	GRI 402: Labour/Management Relations 2016	GRI 414: Supplier Social Assessment 2016	
GRI 306: Waste 2020	GRI 403: Occupational Health and Safety 2018	GRI 415: Public Policy 2016	
GRI 411: Rights of Indigenous Peoples 2016	GRI 404: Training and Education 2016	GRI 410: Security Practices 2016	
GRI 413: Local Communities 2016	GRI 405: Diversity and Equal Opportunity 2016		
	GRI 406: Non-Discrimination 2016		
	GRI 407: Freedom of Association and Collective Bargaining 2016		
	GRI 408: Child Labour 2016		
	GRI 409: Forced or Compulsory Labour 2016		
	GRI 410: Security Practices 2018		
	GRI 411: Rights of Indigenous Peoples 2016		
	GRI 413: Local Communities 2016		
	GRI 416: Customer Health and Safety 2016		
	GRI 417: Marketing and Labelling 2016		
	GRI 418: Customer Privacy 2016		



have (see Table 6) mapped the GRI Standards against this classification to help the ease of understanding. For reference we used the categorization used by the European Union in the delegated act which provides the European Sustainability Reporting Standards (ESRS) standards.¹⁰

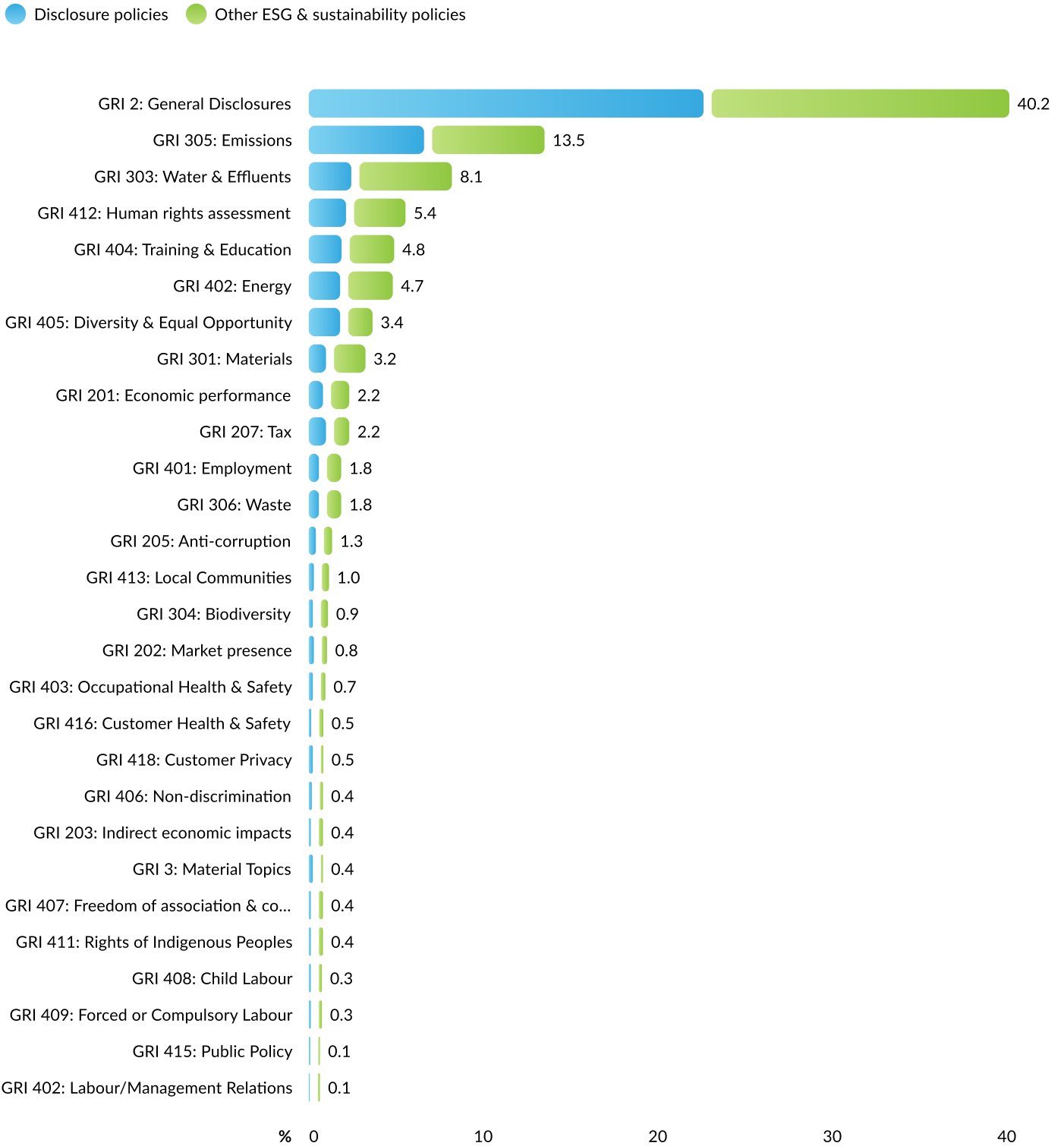
We proceed by examining the relative focus of policies on the GRI Standards. To do this, we use a topic modelling approach and a dictionary of terms related to GRI's Universal and Topic Standards. As such, we are not assessing specific mentions of the GRI Standards (e.g., *GRI 1: Foundation*), but rather the broader themes upon which these Standards are built. An overview of our GRI dictionary is available on the C&S website. The results are presented in Figure 21. The most dominant Standard by a considerable margin is *GRI 2: General Disclosures* (40.2%); this covers the organizational profile of businesses, business strategy, ethics, integrity, governance, management approach, reporting

practices and stakeholder engagement. This finding underscores the significant emphasis that regulators put on transparency in how companies manage their business. This is not surprising given that transparency is deemed as essential to enabling accountability and is in and of itself essential to good governance. This is followed by two environment-related Standards, namely *GRI 305: Emissions* (13.5%), which includes references to key issues regarding greenhouse gases and ozone-depleting substances, and *GRI 303: Water and Effluents* (8.1%), which includes issues regarding water supplies, water costs, and water discharge impacts. *GRI 412: Human Rights Assessment* constitutes 5.4% of the C&S database and includes things like human rights reviews, clauses, training, and screening. The remaining GRI Standards all constitute less than 5% of the C&S database. There is a surprising concentration among just a few core GRI Standards, with the remaining Standards being less prioritized in ESG & sustainability policies.

⁹ Since the first sector standard was only published in 2021, these have not been included in this report.

¹⁰ There is currently no equivalent ESRS to GRI 205: Anti-Competitive Behaviour 2016, therefore that topic Standard is not included in the table above.

Figure 21. Relative focus on GRI Standards



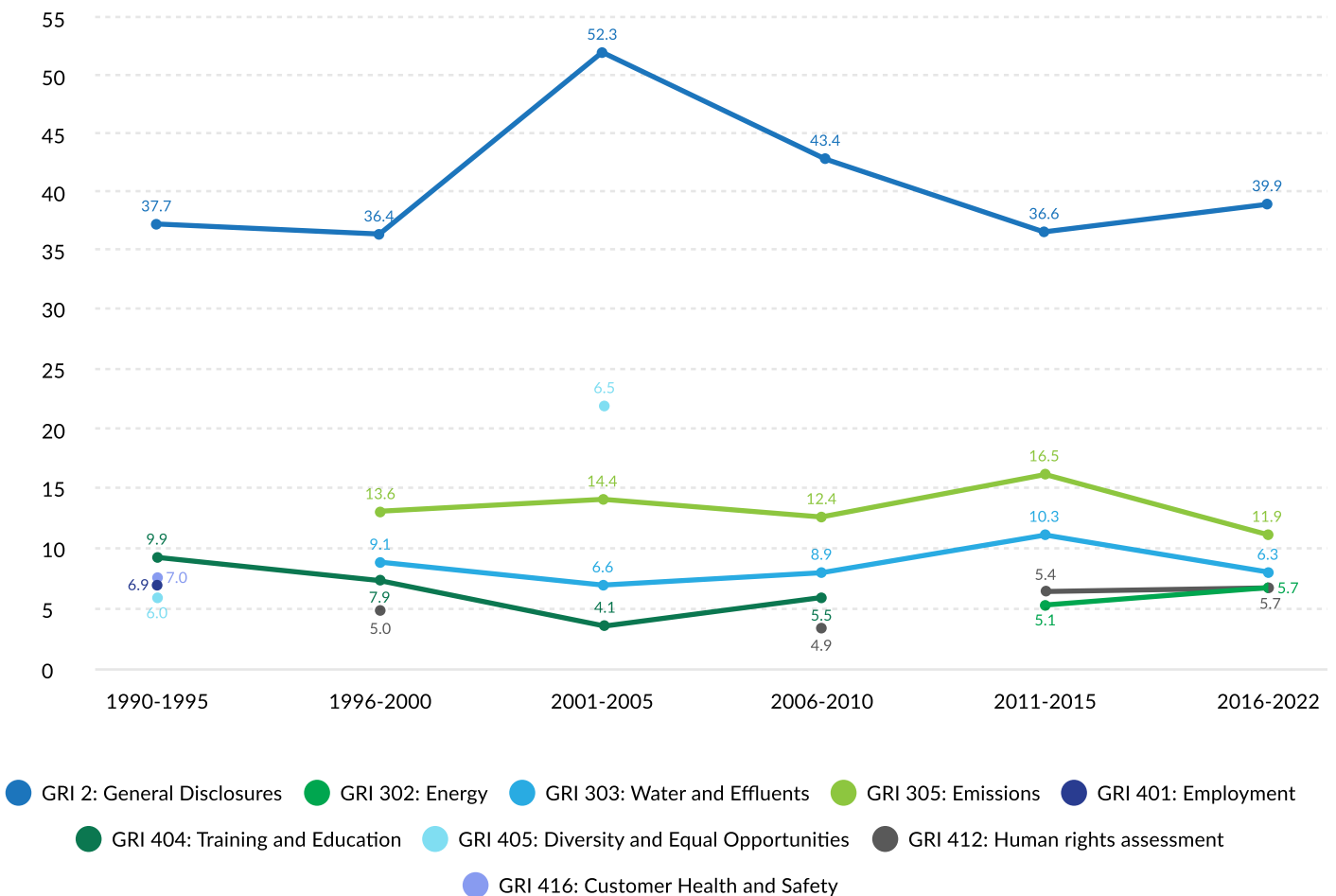
**Note: GRI 417: Marketing and Labelling, GRI 206: Anti-competitive Behavior, GRI 204: Procurement Practices, GRI 308: Supplier Environmental Assessment, GRI 410: Security Practices, and GRI 414: Supplier Social Assessment all scored less than 0.1% and are not shown in Figure 21.

How has the focus on specific GRI Standards changed over time? Figure 22 maps out the top five GRI standards across six time periods. *GRI 2: General Disclosures* stands out not only because it is the top-ranked standard across all time periods, but also because it constitutes a relatively sizeable share of the policy focus, ranging from about 36% to over 52%. This is followed by *GRI 305: Emissions*, taking the number two spot from 1996 to 2022, and then *GRI 303: Water and Effluents*, taking the number three spot for the same period. There is a good amount of consistency across these six time periods, and we do not see major fluctuations in the relative share of policies: *GRI 404: Training and Education*, is among the top five between 1990 and 2010; *GRI 412: Human Rights Assessment* is in the top five from 1996 to 2000 and then again from 2006 to 2022; and *GRI 302: Energy* is at the number five spot from 2011 to 2022.

Finally, we examine GRI Standards in terms of focus on specific business sectors, considering both horizontal (e.g., management) and vertical (e.g., finance) understanding of sectors. Here, we look exclusively at the top seven (i.e., those included in Figure 16) business sectors previously identified: 'finance and insurance', 'management of companies', 'mining, quarrying, oil and gas extraction', 'manufacturing', 'professional, scientific and technical services', 'public administration' and 'transportation & warehousing'. Specifically, we measure the degree to which policies that target these sectors also focus on GRI Standards.

The results are presented in Figure 23. First, we see that policies that target 'finance and insurance' show a preponderance of focus on *GRI 2: General Disclosures*, *GRI 207: Tax* and *GRI 3: Material Topics*, all at 16%.

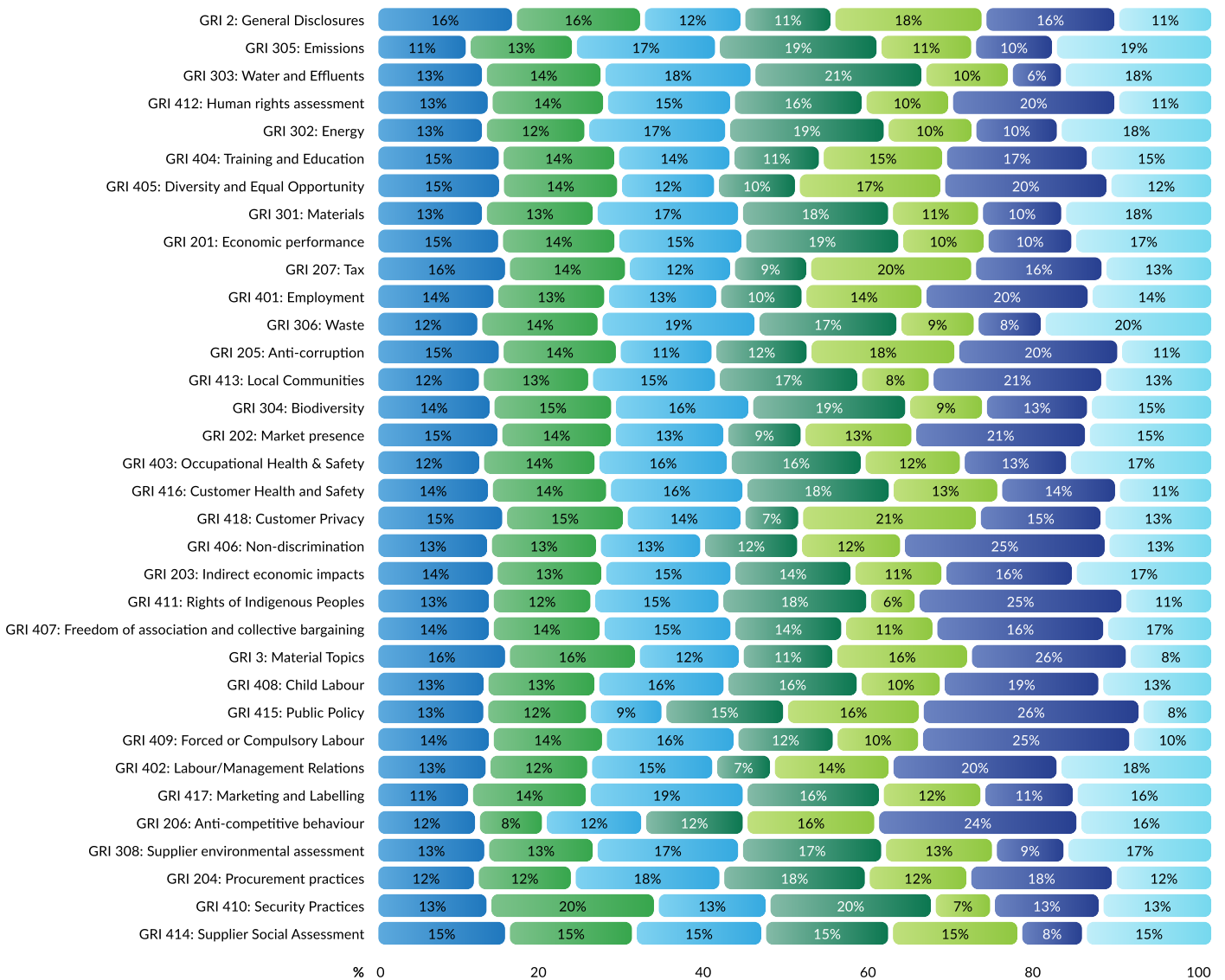
Figure 22. Top five GRI Standards over time



Those policies that target 'management of companies' include a significant focus on GRI 410: Security Practices (20%). Next, for 'manufacturing', we can see that these policies also tend to focus on GRI 306: Waste and GRI 417: Marketing and Labelling, both at 19%. Those policies targeting 'mining, quarrying, oil and gas extraction' also focus on GRI 303: Water and Effluents (21%) and GRI 201:

Economic Performance (19%). For 'professional, scientific and technical services', the focus is GRI 207: Tax (20%). Policies that target the 'public administration' sector also focus on GRI 415: Public Policy (26%), and GRI 409: Forced or Compulsory Labor (25%). Finally, for policies that target 'Transportation & warehousing', the main focus is GRI 306: Waste and GRI 305: Emissions, both at 20%.

Figure 23. GRI Standards by the top seven targeted business sectors



- Finance & Insurance
- Management of Companies
- Manufacturing
- Mining, Quarrying, Oil and Gas extraction
- Professional, Scientific, & Technical Services
- Public Administration
- Transportation & Warehousing

Conclusion



Conclusion

The 2023 C&S report presents an expanded and comprehensive assessment of ESG & sustainability policy worldwide. The report offers increased analysis in terms of temporal, spatial and linguistic dimensions.

This expanded conceptualization of policy includes a broader range of policy types moving beyond a focus on disclosure to encompass codes, guidance and questionnaires, guidelines, laws and regulations, self-regulation and standards, as well as implementation tools such as assurance standards. Furthermore, the report reveals the increasing prominence of voluntary policies since the implementation of the SDGs in 2015. This trend signifies a shift towards more proactive and voluntary approaches to addressing ESG & sustainability issues, complementing the mandatory policy landscape. Our reading of this is that, over time, these voluntary policies have helped expand and update agendas.

We note that ESG & sustainability policies have proliferated in the last 30 years, especially since the 1992 Rio Earth Summit. In line with our observation that Europe is an especially active policymaking region, we note that while preparing this 2023 annual report, the European Union's Corporate Sustainability Reporting Directive (CSRD) came into force. The CSRD was developed based on public consultation and technical advice from the European Financial Reporting Advisory Group. From the 2025 financial year, reports need to be published in compliance with CSRD rules for large companies, as well as listed SMEs, across Europe. This applies to approximately 50,000 companies, whereas its preceding directive – the Non-Financial Reporting Directive (NFRD) – only applied to approximately 11,700 large companies and groups. The European Sustainability Reporting Standards mandate specific disclosures for companies reporting in compliance with the CSRD.

At the international level, in June 2023, the International Sustainability Standards Board issued its first two disclosure standards aimed specifically at the financial information needs of investors: International Financial Reporting Standards (IFRS) S1: 'General Requirements for Disclosure of Sustainability-related Financial Information' and IFRS S2: 'Climate-related Disclosures'. The IFRS S2 requires companies to report on climate-related risks and opportunities from the 2024 financial year. IFRS S2 distinguishes physical risks (e.g., event-driven shocks) and transition risks (e.g., those associated with shifting towards a lower-carbon economy).

The advance of regional and international sustainability reporting requirements bodes well for future progress. The aim of ESG & sustainability policy is to improve corporate accountability and transparency. This is a means to an end. The range of environmental and societal aims of the SDGs is clear. However, the time frame for achieving the goals is closing and there are increasing concerns that they are unachievable. We argue that it is now more imperative than ever to understand how policies can drive the necessary results – around net zero targets, poverty, equality and inclusion, and more.

Looking ahead, in 2024 we will expand C&S's analysis features. This means including new metrics and website filters, a functionality that allows users to directly compare policies, and an AI interface through which users can employ natural language prompts to obtain real-time information (e.g., Is a policy currently in force? and What are the penalties for non-compliance?).

Our hope is that tools like C&S serve as a resource for academics, policymakers and stakeholders interested in understanding the trajectory of ESG & sustainability policy. The expanded coverage, diverse policy types, and temporal analysis, we hope, enhance our collective understanding of the policy landscape's complexity. We hope that C&S offers policy makers usable insights into which policies, and which attributes, deliver results. For industry leaders, our aim is for C&S to serve as a vital resource for informed decision-making for corporate strategy and reporting practice. Ultimately, we hope C&S can help inform better ESG & sustainability policymaking – policies that are widely used and capable of ushering in positive change.

About the project partners



About the project partners



Global Reporting Initiative

GRI is an independent international organization that has pioneered sustainability reporting since 1997. GRI helps businesses and governments worldwide understand and communicate their impacts on critical sustainability issues such as climate change, human rights, governance and social well-being. This enables real action to create social, environmental and economic benefits for everyone. The GRI Standards, the world's most widely used for sustainability reporting, are developed with multi-stakeholder contributions and are rooted in the public interest.



University of Edinburgh

Established in 1582, the University of Edinburgh in Scotland is a distinguished institution renowned for its academic excellence and rich history. As a member of the prestigious Russell Group, an association of 24 leading research-intensive universities in the United Kingdom, the university upholds a commitment to excellence that is evident in its consistent placement within the top 20 universities worldwide. Its strong performance in global rankings further highlights its dedication to providing world-class education and conducting impactful research.



King's College London

Established in 1829, King's College London is a renowned institution with a legacy of academic excellence and innovation. As a proud member of the prestigious Russell Group, a distinguished association of 24 leading research-intensive universities in the United Kingdom, King's College London upholds the highest standards of education and research. The university's commitment to excellence is evident in its consistent presence among the top-ranking institutions globally. King's Business School is triple crown accredited (AACSB, EQUIS, and AMBA) and a thought leader in sustainable and responsible business.



Stellenbosch Business School
STELLENBOSCH UNIVERSITY

Stellenbosch Business School

Established in 1964, Stellenbosch Business School at Stellenbosch University in South Africa was the first school from an African university to hold all three international accreditations: AACSB, EQUIS and AMBA. Stellenbosch Business School's mission is to develop responsible leaders who can help to create value for a better world. The school's areas of expertise include Responsible Leadership, Futures Studies and Foresight, Finance and Growth, Equality and Diversity, Conflict and Collaboration, Leadership Coaching, Corporate Governance, Entrepreneurship and Innovation.

Disclaimer





Disclaimer

This report does not claim to be an in-depth scientific study or analysis. It also does not aim to provide complete and consistent coverage of mandatory and voluntary reporting provisions. The report does not include an assessment of the impact of the reporting provisions identified. This document does not constitute legal advice – it is a general research report prepared for the purpose of informing discussion. The report is based largely on desk research and may contain inaccuracies. Although we endeavour to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No individual or any other entity, including governments or governmental representatives, should initiate actions based solely on the contents of this report. Readers are encouraged to inform the project partners about any inaccuracies or to provide additional information for future editions. The views expressed in this publication reflect those of the individual authors and not necessarily those of the University of Stellenbosch Business School, Stellenbosch University, King's College London, University of Edinburgh or GRI. While the GRI Board of Directors encourages the use of GRI publications by all organizations, the views expressed do not necessarily represent the decisions or the stated policy of GRI, nor does citing of trade names or commercial processes constitute an endorsement. Neither the GRI Board of Directors nor the project funders can assume responsibility for any consequences or damages resulting, directly or indirectly, from the use of GRI publications. This work has been funded by the Government of Sweden. Responsibility for the content lies entirely with the creator. The Government of Sweden does not necessarily share the expressed views and interpretations.

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Appendix



Table A1. Country-level policies by world region

Africa	Asia Pacific	Europe	Middle East	North America	South America
Algeria (2)	Armenia (1)	Albania (1)	Bahrain (3)	Barbados (1)	Argentina (37)
Botswana (1)	Australia (68)	Austria (24)	Egypt (8)	Canada (60)	Bolivia (15)
Congo (1)	Azerbaijan (17)	Belgium (27)	Iran (1)	Dominican Republic (14)	Brazil (45)
Eswatini (1)	Bangladesh (12)	Bosnia & Herzegovina (4)	Iraq (1)	Jamaica (5)	Chile (22)
Ethiopia (13)	Bhutan (2)	Bulgaria (10)	Israel (11)	Mexico (20)	Columbia (28)
Ghana (15)	Cambodia (4)	Croatia (9)	Jordan (7)	Panama (9)	Costa Rica (27)
Ivory Coast (1)	China (64)	Cyprus (7)	Kuwait (3)	United States (71)	Ecuador (6)
Kenya (20)	Fiji (2)	Czechia (11)	Lebanon (2)		El Salvador (8)
Malawi (1)	Hong Kong (37)	Denmark (34)	Oman (1)		Guatemala (7)
Mauritius (3)	India (37)	Estonia (2)	Qatar (6)		Honduras (9)
Morocco (4)	Indonesia (30)	Finland (26)	Saudi Arabia (3)		Peru (22)
Mozambique (1)	Japan (42)	France (43)	UAE (17)		Trinidad & Tobago (2)
Namibia (1)	Kazakhstan (21)	Georgia (3)			Uruguay (4)
Nigeria (22)	Laos (1)	Germany (61)			Venezuela (2)
Rwanda (2)	Malaysia (28)	Greece (20)			
Sierra Leone (2)	Maldives (3)	Guernsey (1)			
South Africa (33)	Mongolia (2)	Hungary (17)			
Tanzania (14)	Myanmar (10)	Iceland (9)			
Tunisia (3)	Nepal (4)	Ireland (25)			
Uganda (2)	New Zealand (22)	Isle of Man (1)			

Table A1. Country-level policies by world region

Africa	Asia Pacific	Europe	Middle East	North America	South America
Zambia (2)	Pakistan (12)	Italy (42)			
Zimbabwe (3)	Philippines (29)	Latvia (3)			
	Russia (6)	Lithuania (4)			
	Singapore (15)	Luxembourg (14)			
	South Korea (8)	Macedonia (2)			
	Sri Lanka (8)	Malta (5)			
	Taiwan (28)	Moldova (3)			
	Thailand (18)	Montenegro (1)			
	Turkey (18)	Netherlands (26)			
	Vietnam (7)	Norway (24)			
		Poland (17)			
		Portugal (47)			
		Romania (20)			
		Serbia (3)			
		Slovakia (7)			
		Slovenia (9)			
		Spain (60)			
		Sweden (14)			
		Switzerland (33)			
		Ukraine (9)			
		United Kingdom (98)			

Table A2. Policies by international organizations

Intergovernmental organizations	Number of policies
Carbon Disclosure Project (CDP)	2
CFA Institute	3
Climate and Development Knowledge Network (CDKN)	1
Climate Disclosure Standards Board (CDSB)	1
Convention on Biological Diversity (CBD)	1
Council on Foundations (COF)	1
Fair Labor Association (FLA)	3
Food and Agriculture Organization (FAO)	5
Global Environment Facility (GEF)	1
Global Green Growth Institute (GGGI)	2
Global Reporting Initiative (GRI)	40
Green Growth Knowledge Platform (GGKP)	1
Greenhouse Gas Protocol (GHGI)	1
Group of Twenty (G20)	1
International Corporate Governance Network (ICGN)	8
International Energy Agency (IEA)	2
International Finance Corporation (IFC)	2
International Integrated Reporting Committee (IIRC)	3
International Labour Organization (ILO)	5
International Monetary Fund (IMF)	1
International Organization for Standardization (ISO)	1
International Working Group of Sovereign Wealth Funds (IWG)	1

Table A2. Policies by international organizations

Intergovernmental organizations	Number of policies
Natural Capital Finance Alliance (NCFA)	2
Natural Climate Solutions Alliance (NCSAlliance)	1
New Development Bank (NDB)	2
Organisation for Economic Co-operation and Development (OECD)	23
Principles for Responsible Investment (PRI)	3
Science Based Targets initiative (SBTi)	2
Social Accountability International (SAI)	1
Sustainability Accounting Standards Board (SASB)	78
Sustainable Stock Exchanges initiative (SSE)	6
Task Force on Climate-related Financial Disclosures (TCFD)	7
United Nations Conference on Trade and Development (UNCTAD)	1
United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)	2
United Nations Environment Programme (UNEP)	16
United Nations Framework Convention on Climate Change (UNFCCC)	1
United Nations General Assembly (UNGA)	6
United Nations Global Compact (UNGC)	145
United Nations Habitat (UNHabitat)	1
United Nations Human Rights Council (UNHR)	1
United Nations Industrial Development Organization (UNIDO)	3
World Bank (WB)	5
World Business Council for Sustainable Development (WBCSD)	3
World Resources Institute (WRI)	2

Table 3A. Policies by regional organizations

Regional organization	Number of policies
African Union (AU)	4
Asia-Pacific Economic Cooperation (APEC)	1
Association of Southeast Asian Nations (ASEAN)	7
Economic Community of West African States (ECOWAS)	6
European Bank for Reconstruction and Development (EBRD)	3
European Capacity Building Initiative (ECBI)	1
European Economic Area (EEA)	1
European Free Trade Association (EFTA)	1
European Fund and Asset Management Association (EFAMA)	2
European Union (EU)	28
Islamic Financial Services Board (IFSB)	1
League of Arab States (Arab League)	5
Organization of American States (OAS)	3
Pacific Island Forum (PIF)	1
Secretariat of the Pacific Regional Environment Programme (SPREP)	1
Shanghai Cooperation Organisation (SCO)	10
Southern Common Market (Mercosur)	1

Measuring policy 'restrictiveness'

Restrictiveness is measured as a proportion of the number of 'restrictiveness' ngrams located in each policy. These ngrams were taken from the Loughran-McDonald Master Dictionary w/ Sentiment Word List. Values are re-coded into one of five categories: very low, low, moderate, high, and very high. Categories are determined based on standard deviations (0.34) from the mean (0.569) of all restrictiveness scores in the corpus. This makes our categories comparable across the entire dataset.

Restrictions on business is measured as a proportion of the number of 'restrictions on business' ngrams located in each policy. These ngrams were taken from the Restrictions on business Ngram Dictionary. In this instance, values are re-coded into one of four categories: low, moderate, high, and very high. Categories are once again determined based on standard deviations (0.17) from the mean (0.08) of all scores in the corpus. This makes our categories comparable across the entire dataset.



Figure 1A. Distribution and coding of 'restrictiveness'

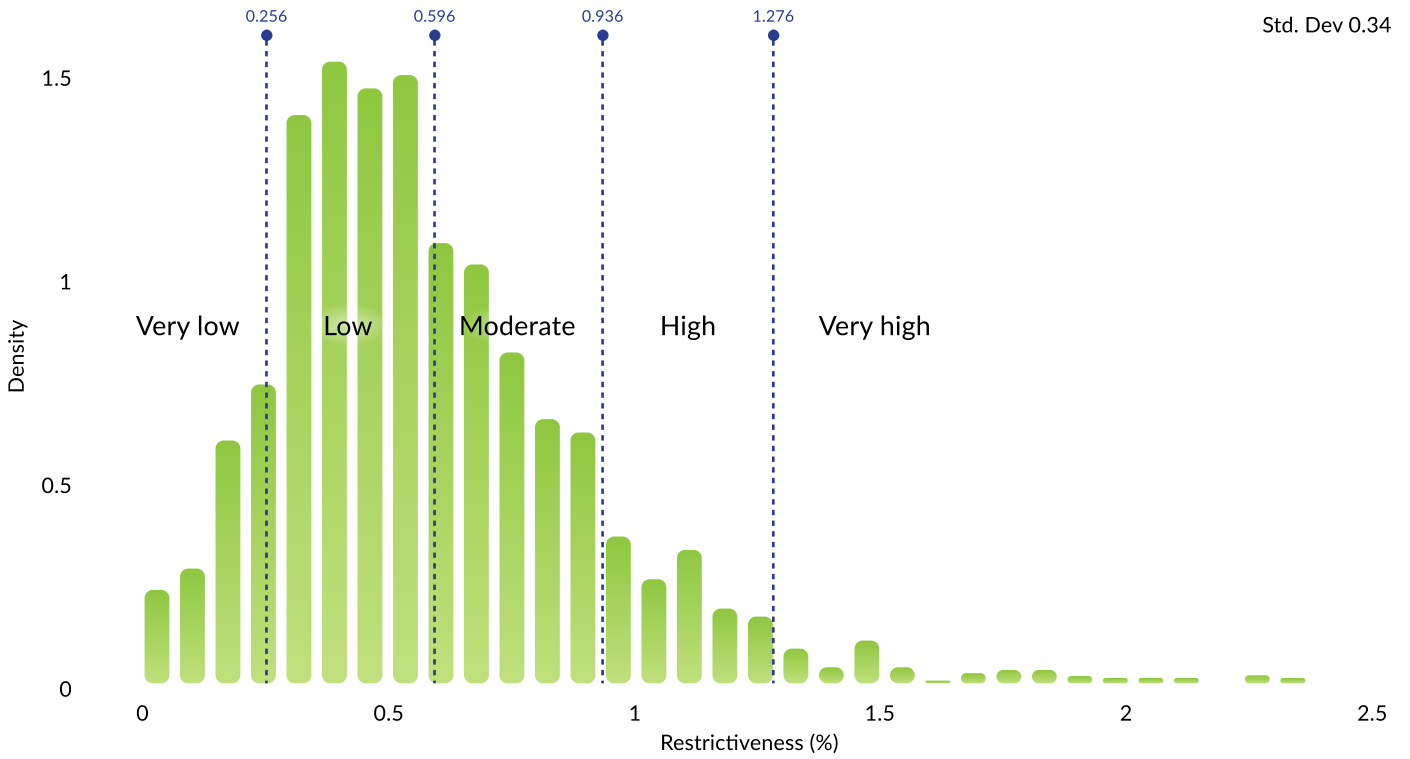


Figure 2A. Distribution and coding of 'restrictions on business'

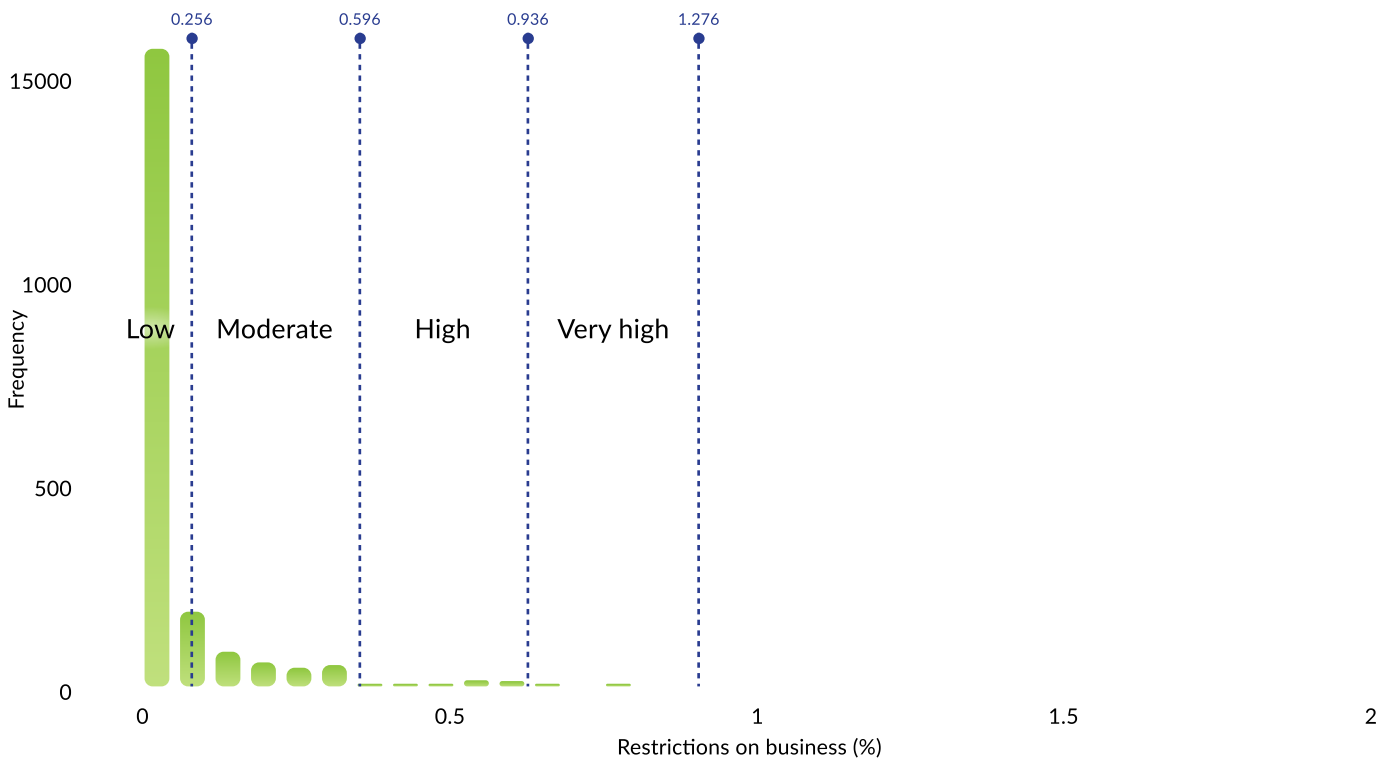


Table 4A. List of NAICS business sectors

Sector	Keywords
Accommodation & Food	<ul style="list-style-type: none"> • Comprises businesses providing customers with lodging and/or preparing meals, snacks, and beverages for immediate consumption. • includes both accommodation and food services establishments
Administrative, Support, Waste Management	<ul style="list-style-type: none"> • Comprises businesses performing routine support activities for the day-to-day operations of other organizations.
Agriculture, Forestry, Fishing & Hunting	<ul style="list-style-type: none"> • Comprises businesses primarily engaged in growing crops, raising animals, harvesting timber, and harvesting fish and other animals from a farm, ranch, or their natural habitats.
Arts, Entertainment, & Recreation	<ul style="list-style-type: none"> • Encompasses businesses that offer cultural, entertainment, and recreational services. • Includes those involved in live performances, preservation of historical/cultural objects, and operation of facilities for recreational activities and leisure pursuits.
Construction	<ul style="list-style-type: none"> • Comprises businesses primarily engaged in the construction of buildings or engineering projects (e.g., highways and utility systems), and in the preparation of sites for new construction and establishments primarily engaged in subdividing land for sale as building sites also are included in this sector.
Education	<ul style="list-style-type: none"> • Comprises businesses that provide instruction and training in a wide variety of subjects. • Typically provided by specialized establishments, such as schools, colleges, universities, and training centres.
Finance & Insurance	<ul style="list-style-type: none"> • Involves activities such as financial intermediation, where funds are raised and channelled from lenders to borrowers through loans and securities. • Includes pooling of risk through insurance and annuities, as well as providing specialized services that support these financial activities and employee benefit programs.
Health Care & Social Assistance	<ul style="list-style-type: none"> • Comprises businesses providing health care and social assistance for individuals. • Includes both health care and social assistance because it is sometimes difficult to distinguish between the boundaries of these two activities.
Information	<ul style="list-style-type: none"> • Comprises businesses engaged in the following processes: (a) producing and distributing information and cultural products, (b) providing the means to transmit or distribute these products as well as data or communications, and (c) processing data • Includes motion picture and sound recording industries; publishing industries, including software publishing; broadcasting and content providers; telecommunications industries; computing infrastructure providers, data processing, Web hosting, and related services; and Web search portals, libraries, archives, and other information services
Management of Companies	<ul style="list-style-type: none"> • Comprises (1) businesses that hold the securities of (or other equity interests in) companies and enterprises for the purpose of owning a controlling interest or influencing management decisions or (2) businesses (except government establishments) that administer, oversee, and manage establishments of the company or enterprise and that normally undertake the strategic or organizational planning and decision-making role of the company or enterprise.



Sector	Keywords
Manufacturing	<ul style="list-style-type: none">• involves the transformation of materials or components into new products through mechanical, physical, or chemical means.• includes plants, factories, and mills that utilize machinery and equipment. Handcrafted or home-based production and businesses selling products made on-site (e.g., bakeries, candy stores) can also fall under this sector.
Mining, Quarrying, Oil & Gas Extraction	<ul style="list-style-type: none">• comprises businesses that extract naturally occurring mineral solids, such as coal and ores; liquid minerals, such as crude petroleum; and gases, such as natural gas.• "mining" is used in the broad sense to include quarrying, well operations, beneficiating (e.g., crushing, screening, washing, and flotation), and other preparation customarily performed at the mine site, or as a part of mining activity.
Professional, Scientific, & Technical Services	<ul style="list-style-type: none">• comprises businesses that specialize in performing professional, scientific, and technical activities for others. These activities require a high degree of expertise and training.• Activities performed include: legal advice and representation; accounting, bookkeeping, and payroll services; architectural, engineering, and specialized design services; computer services; consulting services; research services; advertising services; photographic services; translation and interpretation services; veterinary services; and other professional, scientific, and technical services.
Public administration	<ul style="list-style-type: none">• consists of establishments of federal, state, and local government agencies that administer, oversee, and manage public programs and have executive, legislative, or judicial authority over other institutions within a given area.• these agencies also set policy, create laws, adjudicate civil and criminal legal cases, and provide for public safety and for national defence• establishments in this sector typically are engaged in the organization and financing of the production of public goods and services, most of which are provided for free or at prices that are not economically significant.
Real Estate, Rental & Leasing	<ul style="list-style-type: none">• comprises establishments primarily engaged in renting, leasing, or otherwise allowing the use of tangible or intangible assets, and establishments providing related services. The major portion of this sector comprises establishments that rent, lease, or otherwise allow the use of their own assets by others. The assets may be tangible, as is the case of real estate and equipment, or intangible, as is the case with patents and trademarks.
Retail trade	<ul style="list-style-type: none">• comprises establishments primarily engaged in retailing merchandise, generally without transformation, and rendering services incidental to the sale of merchandise.
Transportation & Warehousing	<ul style="list-style-type: none">• includes industries providing transportation of passengers and cargo, warehousing and storage for goods, scenic and sightseeing transportation, and support activities related to modes of transportation.
Wholesale trade	<ul style="list-style-type: none">• comprises establishments engaged in wholesaling merchandise, generally without transformation, and rendering services incidental to the sale of merchandise. The merchandise described in this sector includes the outputs of agriculture, mining, manufacturing, and certain information industries, such as publishing.

Carrots & Sticks

**Beyond Disclosure in ESG and
Sustainability Policy**

Annual Report September 2023

