

Global Corporate Sustainability Report 2025



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Please cite this publication as:

OECD (2025), *Global Corporate Sustainability Report 2025*, OECD Publishing, Paris, <https://doi.org/10.1787/bc25ce1e-en>.

ISBN 978-92-64-72759-5 (print)
ISBN 978-92-64-58803-5 (PDF)
ISBN 978-92-64-71224-9 (HTML)

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Foreword

The *OECD Global Corporate Sustainability Report* aims to support the adoption of corporate governance policies and practices that strengthen the sustainability and resilience of companies. It provides easily accessible information to help policymakers, regulators, and market participants understand how sustainability-related practices are evolving. The issues covered in this report relate to the recommendations on sustainability of the *G20/OECD Principles of Corporate Governance* (Chapter VI).

Chapter 1 presents policy insights based on the *G20/OECD Principles of Corporate Governance* and the *OECD Guidelines for Multinational Enterprises on Responsible Business Conduct*, to support policymakers, regulators and market participants who may consider reviewing some of their policies and practices in light of evolving market practices.

Chapter 2 compares the main features and trends in corporate sustainability globally using the OECD Corporate Sustainability dataset. It presents information, for instance, on whether companies disclose sustainability information, GHG emission reduction targets, executive remuneration linked to sustainability factors and human rights-related information. The dataset includes information on 12 900 companies disclosing sustainability-related information, representing 91% of global market capitalisation as of September 2025. Unless otherwise mentioned, all shares of companies and in market capitalisation are calculated over 44 152 listed companies worldwide with a market capitalisation of USD 125 trillion.

Chapter 3 outlines how the energy sector, as both the largest emitter of greenhouse gases and enabler of the clean energy transition, discloses material information regarding corporate sustainability, including GHG emissions and corporate governance. It dives into the disclosure practices of energy companies on GHG emissions, lobbying practices, research and development (R&D), capital expenditure, and executive remuneration. The chapter also presents findings from the analysis of 42 double materiality assessments conducted by energy companies under the first reporting cycle of the EU's Corporate Sustainability Reporting Directive (CSRD).

This report has been developed by the Capital Markets and Financial Institutions Division of the OECD Directorate for Financial and Enterprise Affairs. It was prepared by Adriana De La Cruz, Eliot Evain-Wilkes, Valentina Cociancich and Matthis Cadeau, under the supervision of Caio de Oliveira, Head of the Sustainable Finance and Corporate Governance Team, and Serdar Çelik, Head of Division. Barbara Bijelic, Benjamin Michel and Konstantin Mann from the OECD Centre for Responsible Business Conduct prepared the sections on human rights due diligence. The authors are also grateful for comments from OECD colleagues Sebastian Abudoj, Pauline Bertrand, Thomas Dannequin, Daniel Blume, Antonio Gomes, Liv Gudmundson, Arijete Idrizi, Raphael Jachnik, Allan Jorgensen, Flora Monsaingeon-Lavuri, John O'Shea, Nicolas Pinaud, Sara Sultan, Hitesh Tank, and Devran Zeyrek.

For a comprehensive review of regulatory frameworks on corporate sustainability – including disclosure requirements, governance arrangements and market service providers – readers are invited to consult the *OECD Corporate Governance Factbook 2025*.

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Abbreviations and acronyms

ASEAN	Association of South-East Asian Nations	IPCC	Intergovernmental Panel of Climate Change
CapEx	capital expenditures	ISAE	International Standard on Assurance Engagements
CCUS	carbon capture, use and storage	ISSA	International Standard on Sustainability Assurance
CEO	chief executive officer	ISSB	International Sustainability Standards Board
CSR	corporate social responsibility	KPI	key performance indicator
CSRD	Corporate Sustainability Reporting Directive	LSEG	London Stock Exchange Group
DEI	diversity, equity and inclusion	OECD	Organisation for Economic Co-Operation and Development
DMA	double materiality assessment	PBC	public benefit corporation
EFRAG	European Financial Reporting Advisory Group	R&D	research and development
ESG	environmental, social and governance	SASB	Sustainability Accounting Standards Board
ESRS	European Sustainability Reporting Standards	SBTi	Science Based Targets initiative
EU	European Union	SICS	Sustainable Industry Classification System
G20	Group of Twenty	SOE	state-owned enterprise
GHG	greenhouse gases	TCFD	Task Force on Climate-Related Financial Disclosures
GRI	Global Reporting Initiative	TNFD	Taskforce on Nature-related Financial Disclosures
HSE	health, safety and environment	UK	United Kingdom
IEA	International Energy Agency	US	United States
IFRS	International Financial Reporting Standards	USD	United States dollar
IMF	International Monetary Fund		

Executive summary

Sound sustainability-related practices enable companies to recognise and respond to evolving environmental and social trends. Evidence presented in this report shows that sustainability disclosure practices have improved globally, yet continued efforts remain essential to enhance companies' capacity to generate long-term growth.

Between 2022 and 2024, sustainability-related disclosure expanded from 86% to 91% of global market capitalisation.

In 2024, almost 12 900 companies representing 91% of listed companies by global market capitalisation disclosed sustainability-related information, up from 9 600 companies representing 86% of market capitalisation in 2022. Sector-wise, energy companies have the highest rate of disclosure, covering 94% of the industry's market capitalisation; the real estate sector has the lowest share at 78%. In 2024, companies representing 88% of market capitalisation disclosed scope 1 and 2 GHG emissions and 76% disclosed at least one category of scope 3 emissions.

In 2024, 42% of companies disclosing sustainability-related information obtained assurance of this information by an external service provider. Most companies rely on limited assurance (56%), with far fewer relying on reasonable assurance (17%). Globally, more than half of the sustainability-related assurances are performed by an auditor.

Companies use different accounting standards and frameworks to disclose sustainability information. The top three globally are the Global Reporting Initiative (GRI) Standards, used by more than 6 500 companies, the Task Force on Climate-Related Financial Disclosures (TCFD) recommendations by more than 4 800 companies, and SASB Standards by almost 3 500 companies. Globally, 582 companies use IFRS S1 and S2 from the International Sustainability Standards Board (ISSB). At least 1 800 companies listed in the European Union are subject to the use of the European Sustainability Reporting Standards (ESRS) in 2025.

Institutional investors hold large equity stakes (~35%) in both the 100 highest GHG emitters and the 100 leading green-patent filers, while the public sector has a sizeable share (~20%) only among the high emitters.

Climate change is considered to be a financially material risk for listed companies that account for 65% of global market capitalisation. Companies considered to be facing risks related to climate change, data security and human capital have larger market capitalisation than those primarily facing other sustainability-related risks such as ecological impacts or human rights.

Among the 100 listed companies that disclose the highest GHG emissions, 35 are from the energy industry. Institutional investors hold the largest share of equity in these 100 companies (36%), followed by the public sector with 18%.

While the adoption of existing green technologies by high-emitting companies is essential for the transition to a low-carbon economy, the development of new technologies will also be necessary for a successful transition. Japanese companies account for just over half of the 100 listed companies with the highest number of green patents, followed by the United States, Developed Asia-Pacific excl. Japan and US, and Europe (~15% each). Institutional investors own 37% of the equity in these companies, and the public sector a much smaller portion (4%).

Listed companies increasingly adopted practices that more fully integrate sustainability considerations between 2022 and 2024.

In 2024, two-thirds of companies by market capitalisation had a board-level committee whose mandate included overseeing sustainability risks. The board itself may also consider sustainability-related issues. In 2024, the board in 70% of companies by market capitalisation oversaw climate-related issues, up from 53% in 2022. Boards can also consider sustainability matters when establishing senior executives' compensation. Among companies with variable executive compensation, 67% by market capitalisation linked it to sustainability factors in 2024, raising from 60% in 2022.

To promote stakeholder and shareholder engagement, companies can establish a range of policies. Companies representing 11% of global market capitalisation include employee representatives on the board of directors, and 60% disclose the employee turnover rate. This high rate may reflect the financial materiality of human capital in many industries. Concerning shareholder engagement, 86% disclose their policies including, for instance, how shareholders can question the board or management or table proposals at shareholder meetings.

A growing number of human rights-related due diligence legislations requiring companies to disclose human rights information has driven increased consideration of these risks by companies. Yet, disclosure of meaningful information remains limited in practice. Disclosure of human rights information remains focused largely on reporting on key human rights policies and commitments (81% of global market capitalisation report having human rights policy) and is also correlated with company's size and geography.

The energy sector is both a major emitter of greenhouse gases and a pivotal actor for deploying clean technologies.

The energy industry has the highest rate of sustainability-related disclosure globally, with 94% of companies (by market capitalisation) reporting information. At the global level, listed energy companies account for 31% of total emissions disclosed. The role of governments in curbing the sector's emissions is significant. Listed state-owned enterprises (SOEs) account for almost a third of listed energy companies' GHG emissions.

As part of their functions, boards should effectively oversee the lobbying activities that management conducts and finances. This ensures that management gives due regard to the boards' long-term sustainability strategy. Globally, 7% of listed energy companies publicly disclose their position on climate-related public policy and 6% assess whether their climate policies are consistent with those of the associations to which they belong.

Aligning corporate behaviour with sustainability goals will also require massive investment in alternative technologies to replace the combustion of fossil fuels. Between 2015 and 2024, net cash flow from listed energy companies' operating activities increased by 32%, enabling them to triple dividend payments and share repurchase. Concurrently, net cash used in investing activities grew by less than 5%.

The analysis of 42 double materiality assessments undertaken by energy companies under the first reporting cycle of the EU's Corporate Sustainability Reporting Directive (CSRD) shows that nearly all companies (98%) identified climate change as both a material negative impact and financial risk, making it the most consistently reported material issue. For most sustainability topics, companies assessed the materiality of impacts as higher than the materiality of financial risk, suggesting that companies may lack incentives to address the sustainability impacts they identify.

Sustainability-related corporate disclosure increased between 2022 and 2024, but additional progress is needed to further align with the G20/OECD Principles of Corporate Governance.

The state of play of sustainability-related disclosure in 2024 suggests several directions for standard-setters and policymakers. The adoption of the International Standard on Sustainability Assurance (ISSA) 5000 by more jurisdictions could strengthen confidence in sustainability-related assurance and ensure a common understanding of what “limited” and “reasonable” assurance mean across jurisdictions.

To enhance comparability and reliability of sustainability information, regulators could also encourage reasonable assurance for companies disclosing scope 1 and 2 emissions and ensure that appropriate monitoring is in place to prevent potential conflicts of interest where the same firm provides both financial and sustainability assurance services. These efforts to enhance comparability could be supported by efforts from standard-setters to strengthen interoperability among sustainability-related disclosure frameworks, which would also help reduce compliance costs for companies operating across jurisdictions.

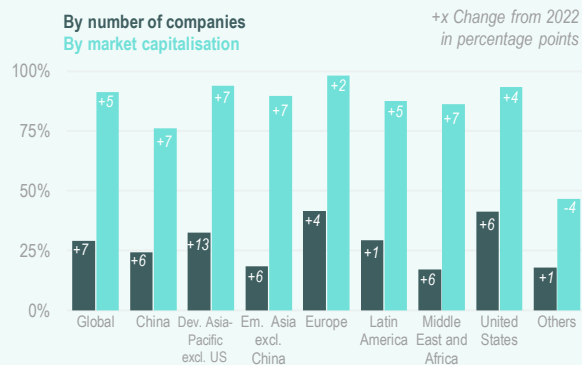
Both the public and private sectors have a strong role to play in aligning market practices with disclosed objectives. SOEs can lead by example on sustainability and shape outcomes for a low-carbon transition. Meanwhile, institutional investors may consider the long-term returns of investing in companies developing clean energy technologies. Boards’ growing recognition of climate change as a core financial and strategic issue can support these orientations, particularly when coupled with enhanced transparency on lobbying activities.

Given that companies representing more than two-thirds of global market capitalisation are considered to face financially material human-capital risks, greater attention to widely disclosed related metrics – such as employee turnover – may be warranted. Similarly, energy companies’ disclosure and target-setting for scope 3 emissions – largely linked to the use of sold products – may have limited global impact if adopted only by listed firms. Still, scope 3 emissions dwarf the operational footprint of energy companies and may therefore be too significant to be overlooked.

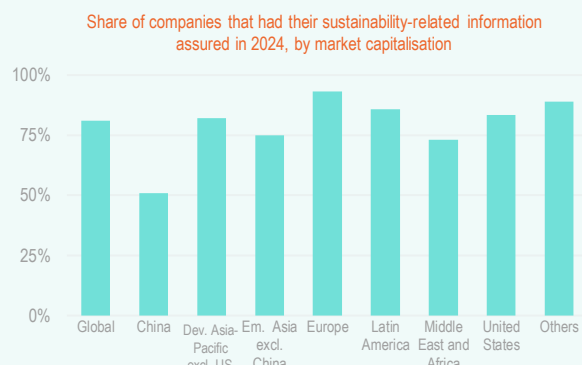
While disclosure of environmental R&D and capital expenditure remains fragmented, evidence suggests expectations of a gradual transition to a low-carbon economy. Yet, concerns remain regarding energy companies’ limited expansion of capital expenditure, as recent trends show rising dividends and share buybacks significantly outpacing investment growth.

Infographic 1. Key facts and figures

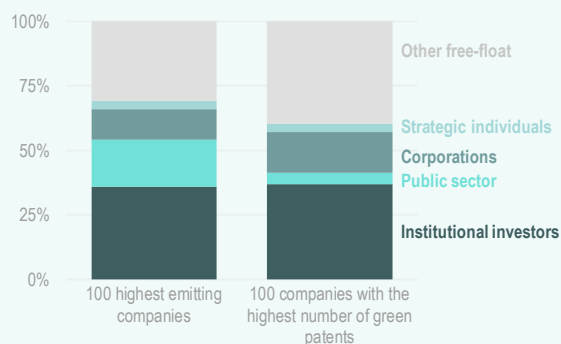
91% of companies by market capitalisation disclose sustainability-related information globally, 2024



Assurance of sustainability-related information is widespread, even in markets with no regulatory requirements



Institutional investors' portfolio allocations do not differentiate between high-emitting companies and those investing in new green technologies



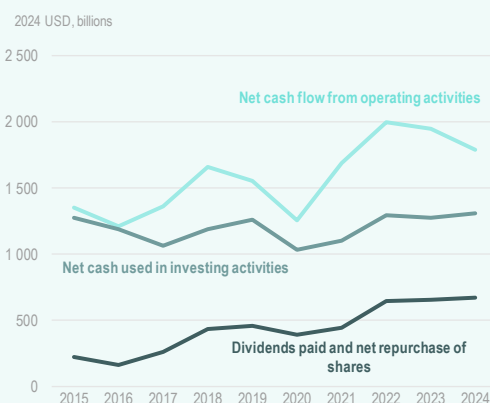
Boards increasingly recognise sustainability as a strategic issue



Energy companies' scope 1 and 2 disclosures are relatively high, but scope 3 disclosure remains limited



From 2015 to 2024, listed energy companies tripled dividend payments and share repurchase, while net cash used in investing activities grew by less than 5%



1 Key policy insights

This chapter presents policy insights to support policymakers and regulators in further aligning market practices with the G20/OECD Principles of Corporate Governance and the OECD Guidelines for Multinational Enterprises on Responsible Business Conduct. It provides insights on sustainability-related disclosure, the role of third-party assurance in strengthening credibility of disclosures, and opportunities for enhancing interoperability among sustainability-related frameworks to reduce compliance costs and enhance comparability. The chapter provides further insights on ownership in high-emitting companies and innovative ones, the role of boards to adequately consider material sustainability matters, and the adoption of policies on shareholder and stakeholder engagement mechanisms.

Managing companies and allocating capital have always required understanding how environmental, social, and technological trends shape business cash flows. Public policy developments, evolving social preferences, and technological innovation have influenced corporate behaviour and investment decisions since the earliest corporations were established. What is new is the breadth and depth of information now disclosed by companies and investors on the environmental and social aspects of their activities.

Both updated in 2023, the *G20/OECD Principles of Corporate Governance* (G20/OECD Principles) and the *OECD Guidelines for Multinational Enterprises for Responsible Business Conduct* (OECD MNE Guidelines) are aligned and complementary. The G20/OECD Principles include a Chapter VI on sustainability and resilience to support companies and their investors to make decisions and manage their risks in a way that contributes to the sustainability and resilience of the corporation. The G20/OECD Principles emphasise that sound governance frameworks, combined with transparent and decision useful sustainability related disclosures, are essential to ensuring fair markets, the efficient allocation of capital, and the long-term growth and resilience of companies. The OECD MNE Guidelines recommend that enterprises conduct due diligence to address responsible business conduct issues and include a chapter (Chapter III) related to corporate disclosure of information on responsible business conduct and due diligence.

This edition of the *OECD Global Corporate Sustainability Report* provides data driven insights to support policymakers and regulators in advancing these objectives and in implementing the recommendations of the G20/OECD Principles and OECD MNE Guidelines.

1. Sustainability-related disclosure

Over the past two years, sustainability-related disclosure has expanded further, rising from 86% of global market capitalisation in 2022 to 91% in 2024 (Figure 2.1). This reflects continued demand for such information from large companies and investors. However, the absolute number of companies disclosing sustainability information – 12 900 – remains only a moderate share of the 44 152 listed companies worldwide. While this may represent an efficient equilibrium given the potentially disproportionate costs of disclosure for smaller companies, the limited disclosure by state-owned enterprises (SOEs) is noteworthy, given typically heightened expectations regarding their environmental and social impacts. In 2024, 63% of SOEs (95% by market capitalisation) disclosed sustainability-related information.

Across industries, disclosure levels vary significantly. In 2024, coverage by market capitalisation ranged from 78% to 94% (Figure 2.2). The real estate sector has the lowest level of disclosure, with only 78% of market capitalisation reporting sustainability information. Disclosure in the sector is particularly weak for scope 1 and 2 GHG emissions (74%, Figure 2.4) and at least one category of scope 3 emissions (55%, Figure 2.6). Considering the real estate sector's exposure to climate-related physical risks and its high emissions intensity linked to the use of cement and steel, these low levels of disclosure are notable. Standard setters and policymakers may therefore consider whether additional sector-specific guidance, or capacity building measures, could strengthen sustainability reporting in the real estate sector – particularly in Emerging Asia and the Middle East and Africa, where disclosure rates are the lowest.

Commercial data providers have sought to fill investor demand for emissions data, particularly on smaller companies and scope 3 emissions. In 2024, 11 135 companies representing 88% of global market capitalisation disclosed scope 1 and 2 emissions, while estimates are available for 16 000 companies covering 95% of market capitalisation (Figure 2.3). The gap is even more striking for scope 3 emissions: 7 712 companies (76% of market capitalisation) disclosed at least one category, but estimates extend coverage to nearly 15 900 companies, or 94% of market capitalisation (Figure 2.5). These estimates, while useful, cannot fully substitute for high-quality disclosure. Even the most sophisticated estimation models often rely on industry and location averages, which may not capture company-specific innovations or operational efficiencies that investors seek when allocating capital in the expectation of a transition to a low-carbon economy.

2. Third-party assurance

As recognised in Sub-principle VI.A.5 of the G20/OECD Principles, “[s]ustainability-related disclosures reviewed by an independent, competent and qualified attestation service provider may enhance investors’ confidence in the information disclosed and the possibility to compare sustainability-related information between companies.” Between 2022 and 2024, assurance practices expanded, with coverage increasing from 66% of global market capitalisation to 81% (Figure 2.7). Assurance is common even in jurisdictions where it is not required or recommended, such as the People’s Republic of China (hereafter “China”) (19% of companies, 51% of market capitalisation) and the United States (39% and 83%).

Limited assurance remains considerably more widespread (56%) than reasonable assurance (17%) (Figure 2.8). In this context, the adoption of the International Standard on Sustainability Assurance (ISSA) 5000, finalised in November 2024, is timely. Its adoption by many jurisdictions could strengthen confidence in sustainability reporting and ensure a common understanding of what “limited” and “reasonable” assurance mean across jurisdictions, including in Emerging Asia where “reasonable” assurance is more commonly cited.

Two other developments may require attention by policymakers and regulators. First, among companies that provide assurance of their scope 1 and 2 emissions, just under 15% provide reasonable assurance (Figure 2.9). Given that climate change is a financially material risk for most listed companies (Figure 2.17), and that scope 1 and 2 emissions are relatively straightforward to measure, policymakers may wish to consider encouraging reasonable assurance for companies that disclose scope 1 and 2 emissions. This would be in line with sub-Principle VI.A.5, which states that “[...] greater convergence of the level of assurance between financial statements and sustainability-related disclosures should be the long-term goal.” Second, contrary to other regions, many European companies hire the same firm both for auditing financial statements and sustainability assurance (Figure 2.11). Regulators in Europe may, therefore, wish to monitor whether boards, audit committees or shareholders adequately oversee this practice in order to prevent potential conflicts of interest and safeguard the credibility of sustainability disclosures.

3. Sustainability-related disclosure standards

In 2023, two new sets of standards were introduced: the IFRS S1 and S2, developed by the International Sustainability Standards Board (ISSB), and the European Sustainability Reporting Standards (ESRS). Globally, 582 companies use the International Sustainability Standards Board (ISSB) standards, either stating a partial alignment, or asserting compliance, still well below the number of companies using the TCFD recommendations (4 857) or SASB Standards (3 497), which provided the foundations for the ISSB’s standard-setting work (Figure 2.12). The use of ESRS remains limited, reflecting their recent adoption in July 2023. Under the recently revised Corporate Sustainability Reporting Directive (CSRD), large, listed companies are applying ESRS for the first time in 2025, with other companies to phase them in from 2028 onwards. At least 1 800 EU-listed companies are expected to fall under ESRS requirements starting in 2025.

Taken together, these developments mean that the global disclosure landscape is expected to converge around three standards in the short term: the GRI Standards, used by over 6 500 companies; ISSB standards, potentially to be implemented by around 5 000 companies if issuers focused on financial materiality-only choose these standards; and ESRS, applying to approximately 2 000 companies by end-2025. Strengthening interoperability among these three frameworks may be critical to reducing compliance costs for companies operating across jurisdictions and to enhancing the comparability, reliability, and decision usefulness of sustainability-related information.

4. The rights of shareholders and institutional investors

An analysis of the 100 listed companies with the highest disclosed GHG emissions yields two key insights (see Figure 2.19 for company characteristics).

First, institutional investors hold the largest equity share in these high-emitting firms, accounting for 36% overall, with double the share in the United States (Figure 2.20). This underscores the importance of corporate governance frameworks in enabling and supporting effective shareholder engagement, as highlighted in Principle III.A of the G20/OECD Principles. However, investor engagement may be less effective in markets where most high-emitting companies are characterised by a dominant controlling shareholder, such as in Emerging Asia, Latin America, and the Middle East and Africa. By contrast, in Japan, the ownership of the 5 largest shareholders in many high-emitting companies' is limited, but the 20 largest shareholders hold on average 42% of the shares (Figure 2.21).

Second, the public sector is a significant shareholder in high-emitting companies in many emerging markets (Figure 2.20). Public ownership among the top-100 emitting companies is particularly high in China (51%), other Emerging Asian markets (51%), Latin America (47%), and the Middle East and Africa (41%). Most top-100 emitting companies in these regions are state-owned, highlighting the role SOEs can play in leading by example on sustainability and shaping outcomes for a low-carbon transition in emerging economies.

While the adoption of existing green technologies by high-emitting companies is essential for the transition to a low-carbon economy, the development of new technologies may also be required to ensure a successful transition while safeguarding living standards and energy security. An analysis of the 100 listed companies with the largest number of green patents provides two additional insights (see Figure 2.23 for company characteristics).

First, "other free-float" investors hold the largest share of equity in these highly innovative firms (40%), compared to just 31% in the group of highest emitters (Figure 2.24). This suggests that individual investors may be inclined to allocate capital to innovative companies with strong green R&D performance. A policy implication may be that the democratisation of finance – where individuals invest directly in securities – could not only enhance individual investors' returns by reducing intermediation costs, but also channel greater capital towards companies developing green technologies.

Second, institutional investors hold a 37% stake in these highly innovative companies, almost the same as their 36% share in the highest emitters. This may indicate that, despite public commitments to support the low-carbon transition, institutional investors' portfolio allocations have not differentiated between high emitting companies and those investing in new green technologies. As such, investor led engagement initiatives targeting high emitters, such as Climate Action 100+, may need to be complemented by new initiatives that also consider investment allocation and stewardship efforts towards highly innovative companies.

5. The board of directors

Principle VI.C of the G20/OECD Principles recommends that "the corporate governance framework should ensure that boards adequately consider material sustainability risks and opportunities when fulfilling their key functions." Importantly, such considerations should be pursued in the best interest of the company and its shareholders, taking into account the interests of stakeholders, as set out in Principle V.A. Assessing whether boards are fulfilling these responsibilities necessarily requires a case-by-case evaluation. In 2024, companies representing 70% of global market capitalisation reported that their board of directors oversees climate-related issues (Figure 2.27, Panel A). This is an increase from 53% in 2022 and surpasses the share of companies – representing 65% of market capitalisation – for which climate change is considered a financially material risk (Figure 2.17). This is a notable development, underscoring the growing recognition by boards of directors of climate change as a core financial and strategic matter.

6. The interests of stakeholders and shareholder engagement

Globally, more than 9 600 companies – representing 86% of market capitalisation – disclosed policies on shareholder engagement in 2024 (Figure 2.30). These typically set out how shareholders can question the board or management, or table proposals at shareholder meetings. This is 1 000 more companies than

in 2022. While the disclosure of such policies does not by itself guarantee effective engagement, it signals a willingness by companies to facilitate dialogue with shareholders – particularly where disclosure is not mandated by regulation. This trend is therefore a positive indicator of progress towards the implementation of Principle VI.B of the G20/OECD Principles, which encourages “dialogue between a company, its shareholders and stakeholders to exchange views on sustainability matters as relevant for the company’s business strategy.”

Principle VI.D of the G20/OECD Principles further recommends that “the corporate governance framework should consider the rights, roles and interests of stakeholders.” To promote value-creating co-operation with employees in particular, companies may establish mechanisms for participation, such as workers’ councils or employee representation on boards. These mechanisms between companies and their employees may be particularly relevant for the two-thirds of employees of listed companies who are neither represented in trade unions nor covered by collective bargaining agreements (Figure 2.32). In 2024, companies representing 11% of global market capitalisation had employee representatives on their board of directors (Figure 2.31). Regional differences are significant: 59% of market capitalisation in China, 39% in Europe, and 9% in Latin America, compared with negligible levels in other regions. Relative to 2022, board-level employee representation has remained stable in Europe (10%) and Latin America (below 1%), but increased in China, rising from 26% to 28%.

Corporate disclosure on employee turnover may serve as a useful proxy for assessing employee satisfaction and the extent to which companies may be willing to invest in company-specific human capital. In 2024, more than 8 400 companies – representing 60% of global market capitalisation – reported employee turnover data (Figure 2.33). This was complemented by disclosures from more than 7 350 companies, representing 57% of market capitalisation, on the average number of hours of employee training per year (Figure 2.34). The prevalence of these disclosures likely reflects the fact that 68% of global market capitalisation is concentrated in companies for which human capital risks are considered financially material (Figure 2.17).

7. Disclosure of human rights information

Disclosure of human rights information lags significantly behind overall disclosure of sustainability information. For instance, companies representing 26% of global market capitalisation report on salient human rights impacts identified in their operations and supply chains, much lower than the 91% that disclosed sustainability-related information in 2024. The most widely disclosed human rights-related information is the existence of corporate policies and commitments on human rights (81% of market capitalisation) and key human rights issues such as child and forced labour (approximately 85% of market capitalisation). The disclosure of human rights information is strongly and positively correlated with companies’ market capitalisation, as reflected in disclosure rates being about ten times higher when measured by market capitalisation compared to the number of companies across all indicators. Disclosure is also significantly higher in certain regions, including in Europe and the United States.

The perception that human rights is not widely considered a financially material risk can in part explain such findings. As identified in Figure 2.18, human rights-related issues are considered material financial risks by companies representing 13% of market capitalisation and rank as a material topic in only 6 out of 77 industries (compared with 50% and 33 industries respectively for energy management). At the same time, the lack of quantitative indicators and frameworks to measure human rights performance can hinder companies’ ability to meaningfully report on their human rights practices.

The comparatively lower level of financial materiality for human rights risks implies that legislation is an important driver of companies’ human rights practices. Reporting the existence of policies on forced and child labour, for instance, is highly prevalent in geographies that have adopted forced labour legislation. In the United States and Europe where such laws exist, between 89-95% of listed companies (by market capitalisation) report having a forced or child labour policy or commitment.

8. The energy sector's climate-related disclosure

The energy sector – encompassing the oil, gas, coal and electric power industries – is both a pivotal driver of clean energy deployment and the single largest source of greenhouse gas emissions, accounting for almost a third of total emissions disclosed by listed companies (Figure 3.1, Panel A). For capital markets to function efficiently, investors need a clear understanding of individual energy companies' preparedness for alternative pathways towards a low-carbon economy. Significantly, the energy sector has the highest sustainability-related disclosure rate of any industry, with companies representing 94% of market capitalisation reporting sustainability information in 2024 (Figure 2.2).

Disclosure of scope 1 and 2 GHG emissions is relatively high in the energy sector, covering 90% of market capitalisation. However, scope 3 disclosure remains limited, particularly in Emerging Asia and the Middle East and Africa, where fewer than half of companies by market capitalisation report such data (Figure 3.2). Where scope 3 emissions are reported, disclosure is concentrated among large companies, which only rarely set reduction targets for this scope – and, when they do, interim targets are often limited (Figure 3.6).

This raises an important policy question for capital market regulators, environmental and energy authorities, and investors: should energy companies be further incentivised or required to disclose comprehensive scope 3 information and adopt targets covering these emissions? The issue is particularly relevant given that state-owned enterprises (SOEs) account for 32% of the sector's disclosed emissions, yet appear to underreport scope 3 emissions compared to other companies (Figure 3.4).

Energy companies have greater control over their scope 1 and 2 emissions, which arise from direct operations and purchased energy. By contrast, setting targets for scope 3 emissions – largely linked to the use of products sold – has proven challenging. Such targets may have limited direct impact on demand or global emissions if only adopted by listed companies. This helps explain why many companies in the sector have placed greater emphasis on the disclosure of scope 1 and 2 emissions. Still, scope 3 emissions dwarf the operational footprint of energy companies and may therefore be too significant to be overlooked.

9. The energy sector's impact

One area where energy companies' commitment to addressing GHG emissions can be tested is lobbying. Sub-principle VI.C.1 of the G20/OECD Principles of Corporate Governance recommends that “boards should ensure that companies' lobbying activities are coherent with their sustainability-related goals and targets”. Globally, 7% of listed energy companies disclose their climate policy positions and 15% report their business association memberships, with large companies disclosing average lobbying expenditures of USD 3.5 million (Figure 3.9). These figures reveal shareholders' limited accessibility to relevant information to hold boards accountable for overseeing lobbying activities. However, regional practices vary widely: Europe and the United States lead among advanced economies, and Latin America among emerging markets, while other regions have more room for improvement.

Disclosure of environmental R&D and CapEx remains limited. Globally, only 2.5% of listed energy companies report environmental R&D, with regional figures ranging from 7.3% in Latin America to just 1.3% in the Developed Asia-Pacific excl. US (Figure 3.11). Similarly, only 7% of energy companies disclose environmental CapEx (Figure 3.13). Where large companies do report, their allocation of 43% of CapEx to low-carbon assets may suggest expectations of a gradual transition to a low-carbon economy. However, these disclosures are not aligned with a harmonised classification system, such as a taxonomy for sustainable activities, but rely instead on company-specific definitions, limiting comparability.

Another challenge lies in the capacity and willingness of energy companies to sustain CapEx and R&D – green or otherwise – given competing priorities. Between 2015 and 2024, the net cash flow of listed energy companies from operating activities increased by 32%, enabling them to triple dividend payments and share repurchases, while net cash used in investing activities grew by less than 5% (Figure 3.15).

Total R&D expenses quadrupled from 2015 to 2023, signalling efforts to innovate, but declined in 2024, falling by 14% compared to 2023.

Findings from the analysis of 42 double materiality assessments undertaken by energy companies under the first reporting cycle of the EU's Corporate Sustainability Reporting Directive (CSRD) highlight consistent gaps between the assessment of material negative impacts and material financial risks across most sustainability topics. For instance, 86% of companies identified material impacts related to biodiversity and ecosystems, while only 36% associated the topic with material financial risks to the company. Similar gaps were found for water, pollution and social issues associated with workers in the value chain. This may suggest that companies in the sector often lack financial incentives to mitigate some significant sustainability impacts, particularly for key environmental and social topics.

Policymakers may consider market-based or policy approaches that effectively price and assess the cost of adverse impacts and thereby strengthen incentives for corporate action. Additional research across other sectors would be critical to assess whether similar patterns persist across sectors and geographies, and to design effective policy responses that account for any such differences.

2 Market practices

This chapter outlines key trends and market practices of listed companies concerning corporate sustainability. It covers the regional and sectoral distribution of sustainability-related disclosures, common reporting standards and GHG emissions disclosure. Additionally, it explores third-party assurance of listed companies' sustainability related disclosure, their use of sustainability standards and their emission reduction targets. The chapter examines financially material sustainability risks, the investor landscape, ownership patterns of top emitting and environmentally innovative companies, and board responsibilities in managing sustainability issues. It also highlights the integration of stakeholder interests into corporate decision making, the disclosure of artificial intelligence ethics policy and of human rights-related information.

2.1. Sustainability-related disclosure

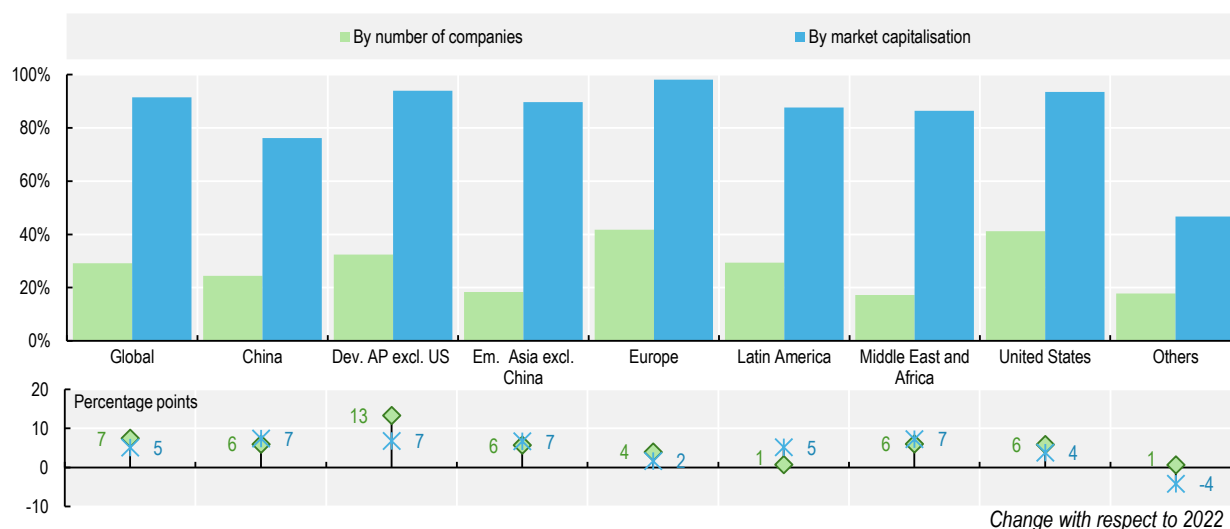
Information on a company's sustainability-related risks and opportunities and how it manages them can be material for investors' decisions to buy or sell securities, as well as to exercise their rights as shareholders and bondholders. Therefore, access to material sustainability information is crucial for market efficiency and for the protection of investors. Most regulators mandate or recommend the disclosure of sustainability matters (OECD, 2025^[1]). However, even in jurisdictions where sustainability disclosure is not mandatory, a significant number of companies have been reporting on sustainability risks and opportunities, driven by the interest of investors in the impact of environmental and social matters on companies' financial performance.

Out of the 44 152 listed companies globally with a total market capitalisation of USD 125 trillion, almost 12 900 disclosed sustainability-related information in 2024 or 2025 (Figure 2.1). For these figures, a company is considered as disclosing sustainability-related information when it discloses a sustainability report, an integrated annual report with sustainability data, a corporate social responsibility report with substantial data or a full or partial report of GHG emissions scope 1 and 2 or scope 3. The companies that disclosed sustainability-related information represent 91% of the global market capitalisation. In 2024, Europe (98%), Developed Asia-Pacific excl. the US (94%), and the United States (93%) had the highest overall levels of disclosure by market capitalisation. Among the 2 216 listed state-owned enterprises globally, 63% (1 395 companies) disclosed sustainability-related information in 2024 (these represented 95% of the market capitalisation of all state-owned enterprises).

Between 2022 and 2024, sustainability-related disclosure expanded, particularly among the largest listed companies. In China, Developed Asia-Pacific excl. the US, Emerging and Developing Asia excl. China, and the Middle East and Africa, disclosure by market capitalisation rose by 7 percentage points.

Figure 2.1. Disclosure of sustainability-related information by listed companies in 2024

91% of companies by market capitalisation disclose sustainability-related information globally.



Source: OECD Corporate Sustainability dataset, LSEG, Bloomberg, MSCI. See Annex A for details.

Across industries, the share of companies by market capitalisation disclosing sustainability information in 2024 ranged from 78% to 94% globally. The share is the largest for the energy, technology and financials

sectors, followed by consumer cyclicals (Figure 2.2). The share of sustainability-related disclosure by industry also varies between region. For instance, in China, companies representing 99% of the financial sector's market capitalisation disclose sustainability information, compared to 84% in the Middle East and Africa and 82% in Latin America.

Figure 2.2. Share of companies disclosing sustainability information by industry in 2024

The energy industry discloses sustainability information extensively, but other high environmental-impact sectors such as real estate lag.

By market capitalisation <i>In per cent</i>	Global	China	Dev. AP excl. US	Em. Asia excl. China	Europe	Latin America	Middle East and Africa	United States	Others
Basic Materials	88	65	93	90	99	87	79	98	66
Consumer Cyclicals	92	62	92	81	99	88	48	95	65
Consumer Non-Cyclicals	84	83	95	90	99	90	81	76	47
Energy	94	93	93	91	99	91	98	95	32
Financials	94	99	97	92	98	82	84	92	49
Healthcare	91	68	85	89	99	92	74	92	41
Industrials	89	65	93	88	97	89	57	95	45
Real Estate	78	69	90	82	79	75	50	86	0
Technology	94	65	96	94	98	94	83	96	53
Water & Related Utilities	81	49	89	74	99	94	71	94	0

Note: The energy sector is defined to include both energy and energy-related utilities industries and is based on the Reference data Business Classification (TRBC) from LSEG. Sectors with less than USD 100 billion of market capitalisation were excluded from the figure.

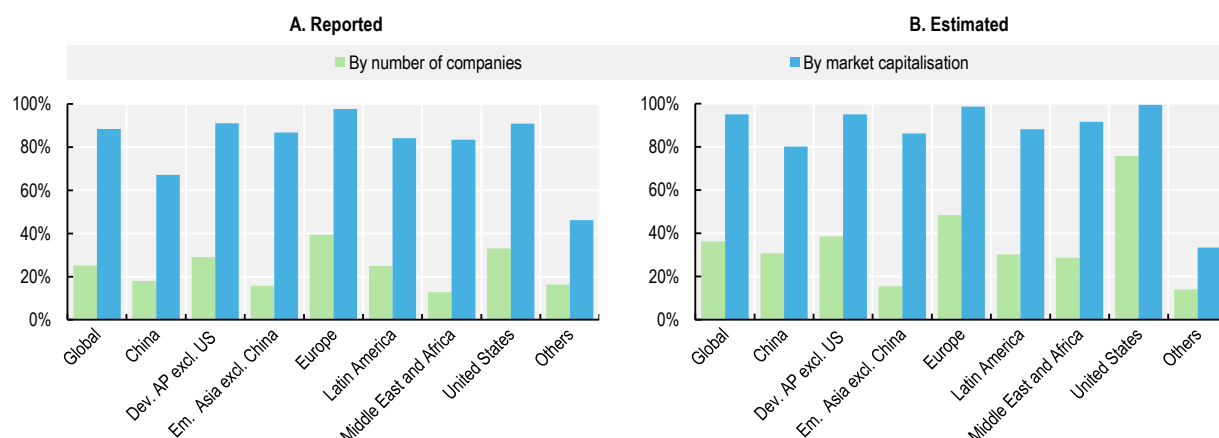
Source: OECD Corporate Sustainability dataset, LSEG, Bloomberg, MSCI. See Annex A for details.

Public awareness and regulatory actions around climate change have accelerated in several regions in recent years. This has contributed to increasing investors' interest in companies' GHG emissions. A reporting system coupled with efforts to assess emissions is an important first step in any effort to reduce GHG emissions. It requires an accurate measuring, reporting and tracking system of the emissions resulting directly from the activities carried out by the company (scope 1), indirect emissions related to energy consumption (scope 2), and emissions generated in the supply chain or by companies financed by financial institutions (scope 3).

Globally, 11 135 companies representing 88% of market capitalisation disclosed scope 1 and 2 GHG emissions in 2024, ranging from 46% of companies by market capitalisation in the regional category "Others" to 98% in Europe (Figure 2.3, Panel A). Commercial data providers also offer estimates of a company's GHG emissions based on its financial and non-financial disclosures, industry and location of operations. Estimated scope 1 and 2 GHG emissions reported by data providers are available for 16 000 companies, covering 95% of market capitalisation (Figure 2.3, Panel B).

Figure 2.3. Disclosure of scope 1 and 2 GHG emissions by listed companies in 2024

Large companies widely disclose scope 1 and 2 emissions, while estimates help reduce disclosure gaps for smaller ones, especially in the United States.



Source: OECD Corporate Sustainability dataset, LSEG, Bloomberg, MSCI. See Annex A for details.

Globally, the technology, financials and energy industries have the highest share of companies disclosing scope 1 and 2 GHG emissions by market capitalisation, with higher shares in Europe and lower shares in Others. In the United States, the industry with the largest share of companies (97% by market capitalisation) disclosing scopes 1 and 2 by market capitalisation is basic materials, while in the consumer non-cyclicals industry, less than 80% of the industry's capitalisation reports this information (Figure 2.4).

Figure 2.4. Share of companies disclosing scope 1 and 2 GHG emissions by industry in 2024

Technology, financials and energy companies lead in emissions disclosure by market capitalisation, while real estate lags with 74% disclosure.

By market capitalisation In per cent	Global	China	Dev. AP excl. US	Em. Asia excl. China	Europe	Latin America	Middle East and Africa	United States	Others
Basic Materials	84	52	92	88	98	83	73	97	64
Consumer Cyclical	89	52	90	79	99	83	39	93	63
Consumer Non-Cyclicals	82	76	93	89	99	84	77	75	46
Energy	90	81	79	91	99	87	98	92	32
Financials	90	97	95	86	97	81	78	87	49
Healthcare	87	57	84	88	98	92	72	88	38
Industrials	85	55	92	85	97	86	52	90	44
Real Estate	74	53	89	78	79	70	47	80	0
Technology	92	54	92	93	98	93	81	94	53
Water & Related Utilities	75	39	89	74	99	94	23	93	0

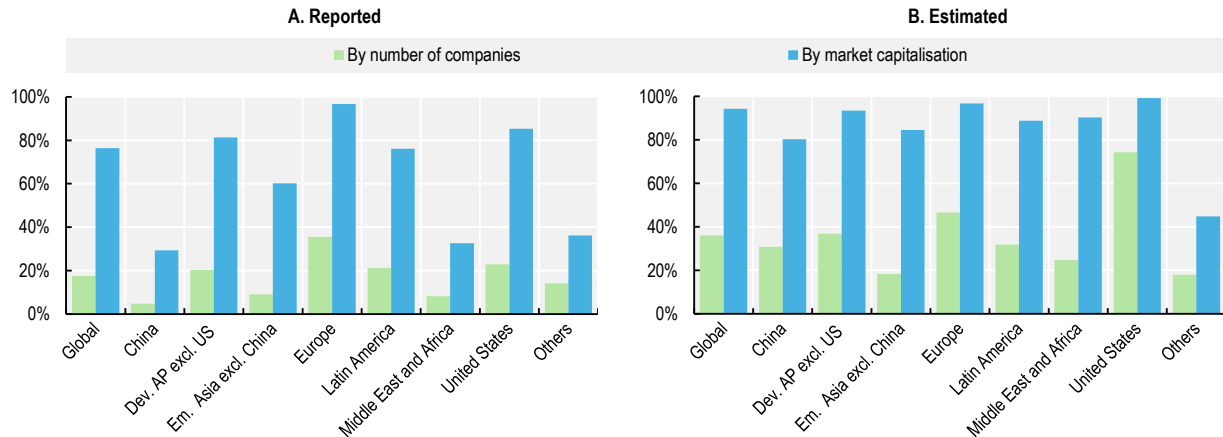
Source: OECD Corporate Sustainability dataset, LSEG, Bloomberg, MSCI. See Annex A for details.

The disclosure of at least one category of scope 3 emissions (76% by market capitalisation) is 12 percentage points lower than the disclosure of scope 1 and 2 emissions globally. In 2024, 7 712 companies (76% by market capitalisation) reported at least one category of scope 3 emissions, ranging from 2 279 companies (97% by market capitalisation) in Europe to 243 companies (29% of market capitalisation) in China (Figure 2.5, Panel A). In contrast, estimated scope 3 emissions amount to 94% of

market capitalisation across nearly 15 900 companies (Figure 2.5, Panel B) – an almost equal number of companies for which scope 1 and 2 emissions are estimated.

Figure 2.5. Disclosure of scope 3 GHG emissions by listed companies in 2024

Globally, 76% of companies by market capitalisation disclose at least one category of scope 3 GHG emissions, with estimates helping to fill significant gaps in China, and the Middle East and Africa.



Source: OECD Corporate Sustainability dataset, LSEG, Bloomberg, MSCI. See Annex A for details.

Globally, the technology and consumer cyclicals industries have the largest share of companies by market capitalisation that disclose at least one category of scope 3 emissions data. In Europe, disclosure is consistent across most industries, reaching more than 95% of disclosure by market capitalisation, except for real estate (75%). In China, the financial industry has the largest share of companies by market capitalisation disclosing scope 3 GHG emissions (57%) (Figure 2.6).

Figure 2.6. Share of companies disclosing scope 3 GHG emissions by industry in 2024

Scope 3 GHG disclosures vary across industries: technology and consumer cyclicals lead; energy and real estate lag.

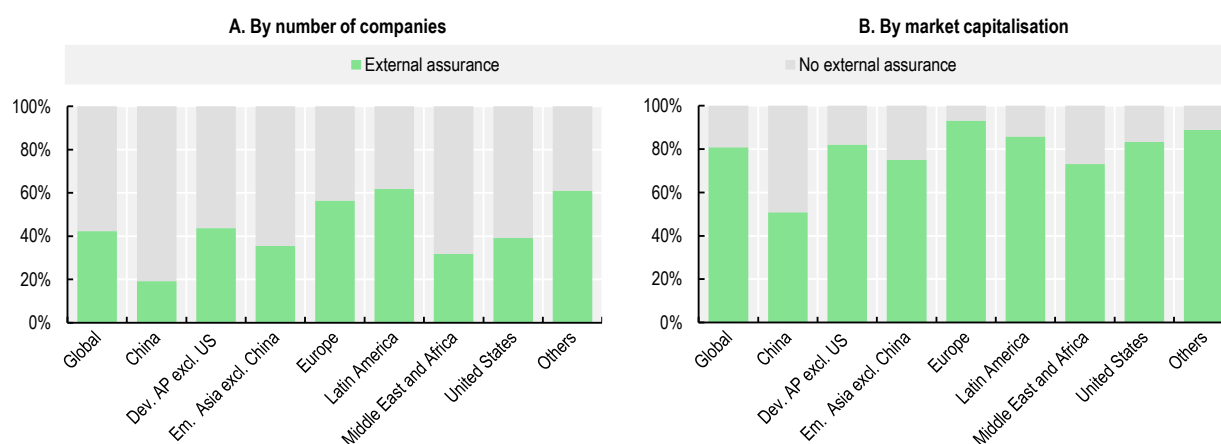
By market capitalisation In per cent	Global	China	Dev. AP excl. US	Em. Asia excl. China	Europe	Latin America	Middle East and Africa	United States	Others
Basic Materials	67	15	79	65	98	80	41	84	53
Consumer Cyclicals	80	26	76	48	98	72	24	88	60
Consumer Non-Cyclicals	70	18	75	63	98	57	65	72	46
Energy	55	21	65	47	98	82	12	77	6
Financials	78	57	91	66	97	80	54	80	49
Healthcare	75	19	65	55	96	90	66	79	27
Industrials	70	17	83	53	95	75	31	77	44
Real Estate	55	27	69	51	75	64	18	73	0
Technology	88	31	87	80	97	90	59	93	48
Water & Related Utilities	65	23	15	74	98	94	23	93	0

Source: OECD Corporate Sustainability dataset, LSEG, Bloomberg, MSCI. See Annex A for details.

Of the almost 12 900 companies that disclosed sustainability-related information in 2024, 42% obtained assurance of the information by an external service provider. Latin America (62% of companies, 86% of market capitalisation), Others (61%, 89%) and Europe (56%, 93%) show the highest levels of assurance of their sustainability-related information. Nevertheless, provision of assurance is meaningful even in jurisdictions where it is neither required nor recommended. As shown in Figure 2.7, there is a significant difference between the assurance of sustainability-related information by number of companies and by market capitalisation. For instance, in the Middle East and Africa, 32% of companies obtain assurance, making up 73% of the region's market capitalisation.

Figure 2.7. Share of companies with assurance of the sustainability-related information in 2024

Global consistency: companies seek assurance, regardless of the inexistence of regulatory requirements.



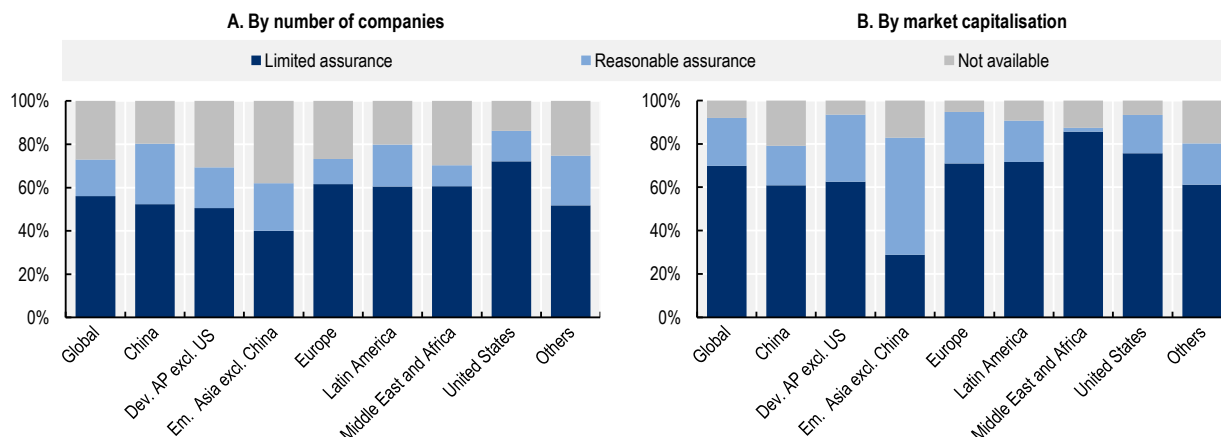
Source: OECD Corporate Sustainability dataset, LSEG, Bloomberg. See Annex A for details.

Based on the depth and scope of the verification, the International Standard on Sustainability Assurance (ISSA) 5000 distinguishes between two levels of assurance. The first level, referred to as “reasonable” assurance requires a broad and detailed set of procedures and is designed to provide a high level of confidence that the information has no material misstatement. The second level, referred to as “limited”, provides a lower degree of confidence, as the assurer undertakes fewer tests and procedures, with the objective of identifying whether anything indicates a material misstatement (IAASB, 2024^[2]).

Globally, in 2024, of the 5 458 companies that subjected their sustainability-related information to an independent assurance, 3 061 were partially or fully verified under limited assurance, while 918 were partially or fully verified under reasonable assurance. Among the assured sustainability-related information, most companies rely on limited assurance (56%), while only 17% disclose reasonable assurance of at least one data point or information (“reasonable” is the level required, as a rule, from the external auditing of financial reports). The United States (72%), Europe (62%), the Middle East and Africa (61%), and Latin America (61%) show the highest reliance on limited assurance, while China (28%) shows comparatively higher shares of reasonable assurance than other regions (Figure 2.8. Panel A).

Figure 2.8. Levels of assurance of sustainability-related information in 2024

Reasonable assurance of sustainability-related information remains uncommon, with notable exceptions in Asia.



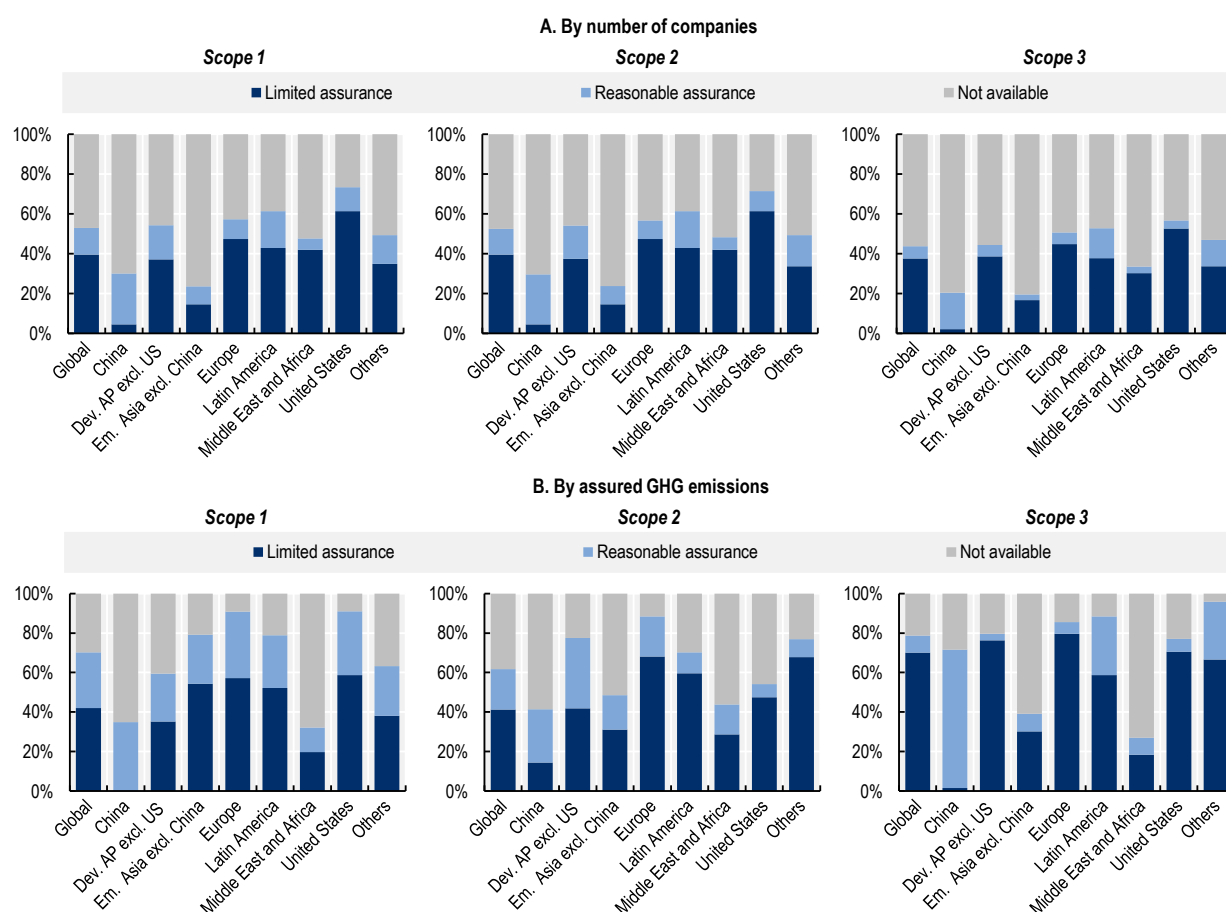
Source: OECD Corporate Sustainability dataset, LSEG, Bloomberg. See Annex A for details.

GHG emissions may be subject to a different level of assurance than the rest of the sustainability information. In all regions, GHG emissions are mainly verified with a limited level of assurance. Globally, out of the total GHG emissions verified by an independent assurance provider, limited assurance was performed on 40% of scope 1 and 2 emissions and 38% of scope 3. Only 14% of companies had a reasonable level of assurance for scope 1, 13% for scope 2, and 6% for scope 3 (Figure 2.9, Panel A).

Globally, 42% of verified scope 1 emissions and 41% of verified scope 2 emissions were assured with limited assurance while this number reached 70% for verified scope 3 emissions. In China 70% of verified scope 3 GHG emissions were assured with reasonable assurance (Figure 2.9, Panel B).

Figure 2.9. Levels of assurance of GHG emissions in 2024

Just under 15% of companies obtain reasonable assurance for scope 1 and 2 GHG emissions, despite these being largely under their direct control.

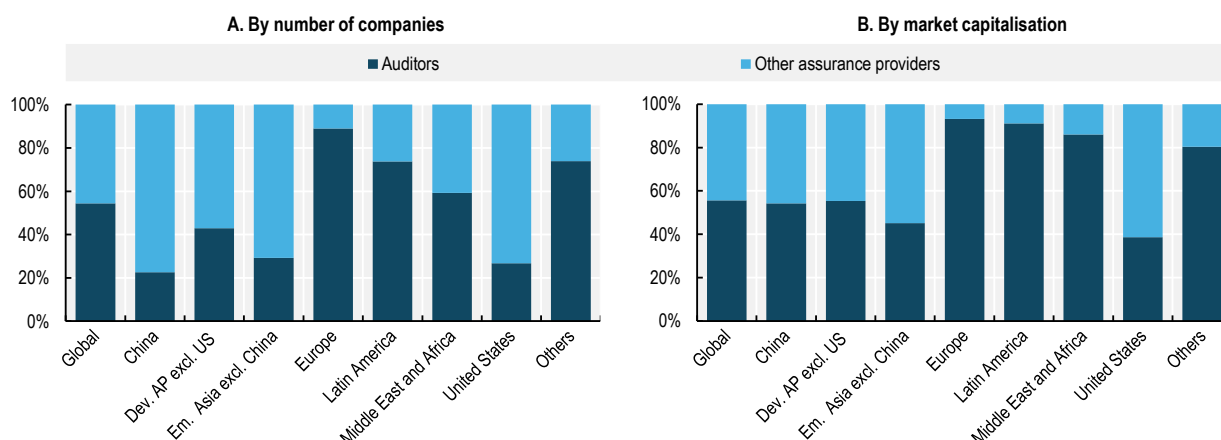


Source: OECD Corporate Sustainability dataset, LSEG, Bloomberg. See Annex A for details.

Among the companies that disclose the name of the independent assurance provider, 54% of the sustainability-related information with assurance was assured by an auditor (Figure 2.10, Panel A). Auditors assured an important share of sustainability-related information in Europe, Latin America and Others. In Latin America, this may reflect regulatory requirements in Brazil and Mexico that mandate statutory auditors as assurance providers (OECD, 2025^[11]). By contrast, in Europe – where France and Spain permit accredited non-audit providers to deliver assurance attestations – 89% were still carried out by auditors. In China and the United States, 23% and 27% of assurance attestations were developed by an auditor, and the remaining 77% and 73% by other assurance providers, respectively.

Figure 2.10. Assurance of the sustainability-related information by auditors in 2024

Auditors dominate the assurance market in Europe and Latin America, while other assurance providers are widespread in Asia and the United States.

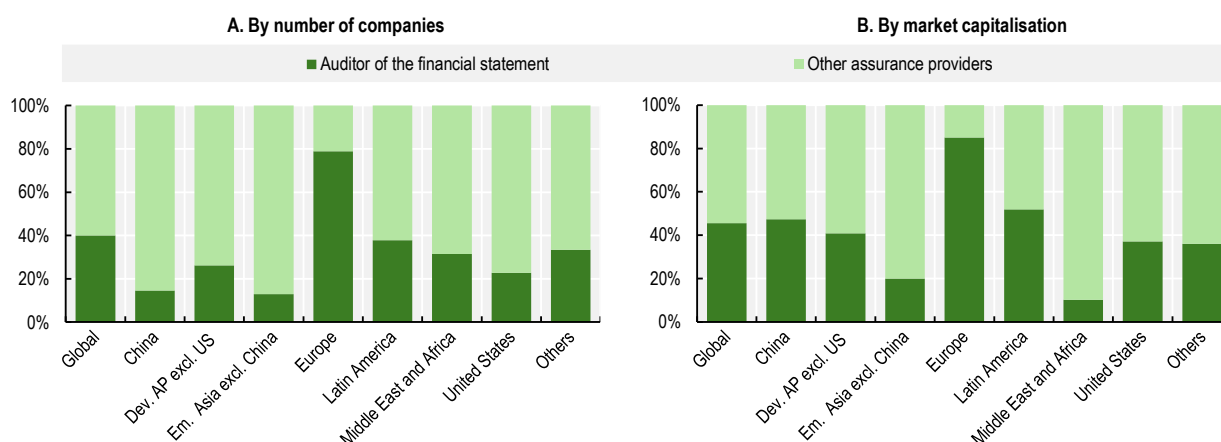


Source: OECD Corporate Sustainability dataset, LSEG, Bloomberg. See Annex A for details.

When looking at companies that disclose the name of the independent assurance provider, the share of companies that decide to engage the same auditor of the financial statement to verify their sustainability disclosure varies across regions. Globally, 1 461 companies (40%) selected their financial auditors for the assurance of their sustainability-related information (Figure 2.11, Panel A).

Figure 2.11. Assurance of the sustainability information by the auditor of the financial statement in 2024

Hiring the auditor of the financial statement to assure the sustainability report is a common practice only in Europe.



Source: OECD Corporate Sustainability dataset, LSEG, Bloomberg. See Annex A for details.

The comparability of sustainability-related information disclosed by companies in different jurisdictions enhances the efficiency of the capital market. In this regard, companies have been using different accounting standards and frameworks to disclose sustainability information. Globally, the Global Reporting Initiative (GRI) Standards are used by 6 548 companies, accounting for 61% of global market capitalisation. Task Force on Climate-Related Financial Disclosures (TCFD) recommendations are used

by 4 857 companies representing 46% of market capitalisation, and SASB Standards are used by 3 497 companies representing 56% of market capitalisation. Some of these companies use more than one standard or framework when reporting sustainability information (Figure 2.12).

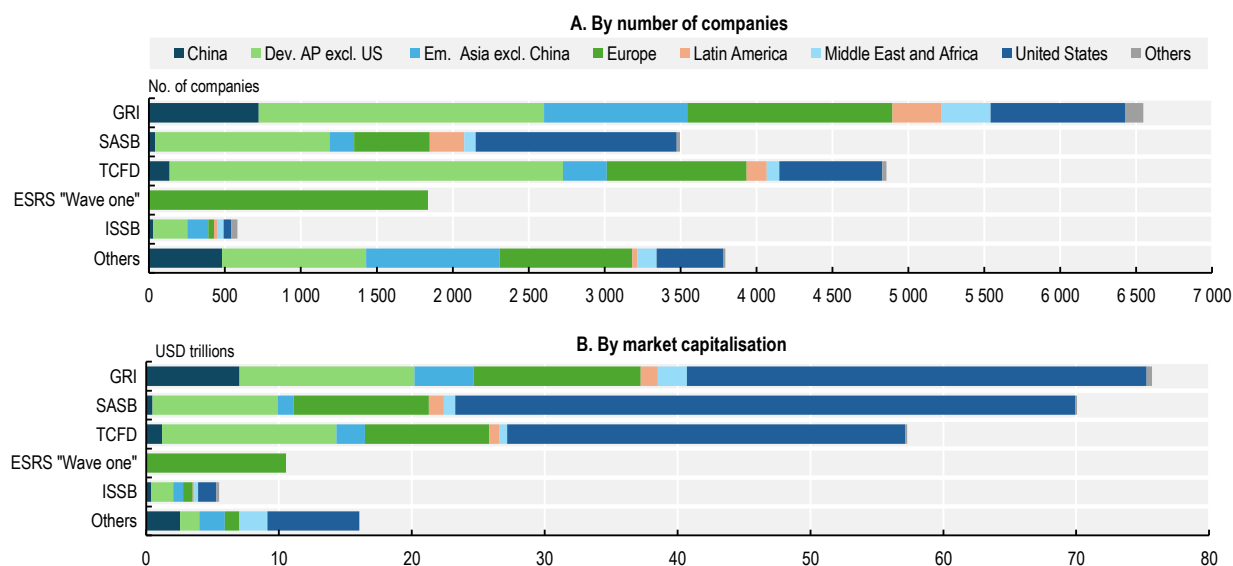
In Developed Asia-Pacific excl. US and Europe, 2 590 companies (73% of market capitalisation) and 922 companies (58% of market capitalisation), respectively, fully or partially followed TCFD recommendations. SASB Standards are mainly used in the United States, where 1 324 companies use them to disclose sustainability information. Almost all regions predominantly use the GRI Standards in their sustainability reporting: 325 companies in Latin America (85% of market capitalisation), 1 350 companies in Europe (77% of market capitalisation), 1 878 companies in Developed Asia-Pacific excl. US (73% of market capitalisation), and 944 companies in Emerging and Developing Asia excl. China (60% of market capitalisation).

Globally, 582 companies use the International Sustainability Standards Board (ISSB) standards, either stating a partial alignment, or asserting compliance. These companies are mostly from the Developed Asia-Pacific excl. US or Emerging and Developing Asia excl. China regions (226 and 139 companies respectively).

The use of the European Sustainability Reporting Standards (ESRS) remains nascent, reflecting their recent adoption in July 2023. Under the Corporate Sustainability Reporting Directive (CSRD), large, listed companies will apply the ESRS for the first time in 2025, while other companies will not be required to do so until 2028 or later (OECD, 2025^[1]). At least 1 800 companies listed in the European Union are subject to the use of ESRS “Wave one” in 2025.

Figure 2.12. Use of sustainability standards by listed companies in 2024

Larger companies tend to use global reporting standards, while smaller companies often use other frameworks.



Note: ESRS “Wave one” contains companies listed in the European Union with total assets over EUR 25 million (USD 25.97 million) or total revenues over EUR 50 million (USD 51.95 million) and over 500 employees, which would be subject to ESRS “Wave one” for their 2024 sustainability-related information.

Source: OECD Corporate Sustainability dataset, LSEG, Bloomberg, IFRS Foundation. See Annex A for details.

Box 2.1. Interoperability of sustainability disclosure standards

Prior to 2023, the global landscape for corporate sustainability disclosure became increasingly structured around three main frameworks: the GRI Standards, the TCFD recommendations, and the SASB Standards. In 2023, two new standards were established: the IFRS S1 and S2, and ESRS. As of June 2025, 36 jurisdictions have adopted or otherwise used the IFRS S1 and S2 or are in the process of finalising steps towards introducing them into their regulatory frameworks (IFRS, 2025^[3]).

The increasing number of sustainability reporting standards with varying approaches have led to efforts to improve the interoperability of standards, as regulators and standard setters seek to streamline reporting obligations and enhance global comparability. The private sector has similarly underscored the need for greater harmonisation, as evidenced by a survey conducted by Business at OECD (BIAC) between December 2024 and February 2025 (BIAC, 2025^[4]).

An example of interoperability efforts is the joint work by the ISSB and the EFRAG, supported by the European Commission. It resulted in the release of a comprehensive Interoperability Guidance in May 2024 to align IFRS S1 and S2 and the ESRS. The Guidance highlights areas of alignment and clarifies how companies can fulfil reporting requirements under both frameworks in a coherent manner, in particular in the areas of climate-related disclosure, while promoting digital tagging for parallel reporting.

EFRAG and GRI also signed a joint statement of interoperability and launched a GRI-ESRS Interoperability Index. This resource helps EU companies reporting under ESRS to leverage existing GRI disclosures, especially for materiality assessment and impact reporting.

In June 2025, GRI and the IFRS Foundation published a joint statement clarifying how GRI 102: Climate Change 2025 and IFRS S2 can be used together and considered equivalent. On GHG emissions, equivalence is deemed fulfilled when companies that report Scope 1, 2, and 3 emissions under IFRS S2, in line with the Greenhouse Gas Protocol, use those same disclosures to satisfy the relevant GRI 102 requirements, provided appropriate cross-references are included.

In nature-related reporting, the Taskforce on Nature-related Financial Disclosures (TNFD) and the GRI have jointly produced an interoperability mapping where GRI standards support TNFD recommendations and metrics, helping users to understand overlaps and identify any additional disclosures needed to meet TNFD expectations. Similarly, TNFD and EFRAG published the ESRS-TNFD Correspondence Mapping to demonstrate significant alignment across all 14 TNFD recommended disclosures and ESRS environmental standards (E2-E5).

On social and human rights issues, the Australian, British and Canadian governments published a joint template to support businesses reporting under the UK Modern Slavery Act (2015), Australian Modern Slavery Act (2018) and Canada's Fighting Against Forced Labour and Child Labour in Supply Chains Act (2023). This optional template is designed to reduce the administrative burden for organisations subject to supply chain reporting requirements in all three jurisdictions, taking stock of distinct legal requirements such as reporting deadlines (Public Safety Canada, 2025^[5]).

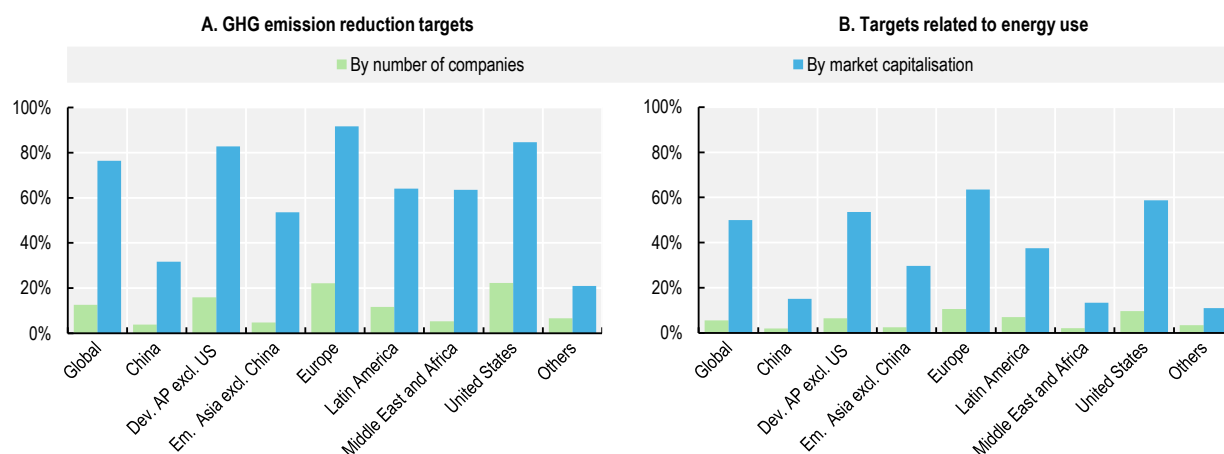
Finally, interoperability efforts are also underway across various taxonomy frameworks. The ASEAN Taxonomy Board (ATB) released the second version of its Taxonomy for Sustainable Finance, providing a multi-tiered common framework that enables comparability across member states. Together, these efforts reflect a growing consensus around the need for coherence in sustainability reporting. As reporting requirements expand, enhanced interoperability will be essential to reduce reporting burdens, improve data quality, and ensure useful information for stakeholders globally.

Globally, 76% of companies by market capitalisation disclose a target to reduce their GHG emissions over a specified time horizon. In Europe, the United States and Developed Asia-Pacific excl. US, the share is larger, at 92%, 85% and 83%, respectively. China and Others stand below, at 32% and 21% respectively (Figure 2.13, Panel A).

Targets related to energy use are targets aiming to reduce energy consumption or to increase the share of renewables in that consumption (thus reducing GHG emissions, although not explicitly tracking emissions). Globally, less companies disclose that type of target than GHG emission reduction targets, with only 50% of companies by market capitalisation doing so (Figure 2.13, Panel B).

Figure 2.13. Disclosure of GHG emissions and energy-use targets by listed companies in 2024

Almost 80% of companies by market capitalisation disclose a GHG emission reduction target.

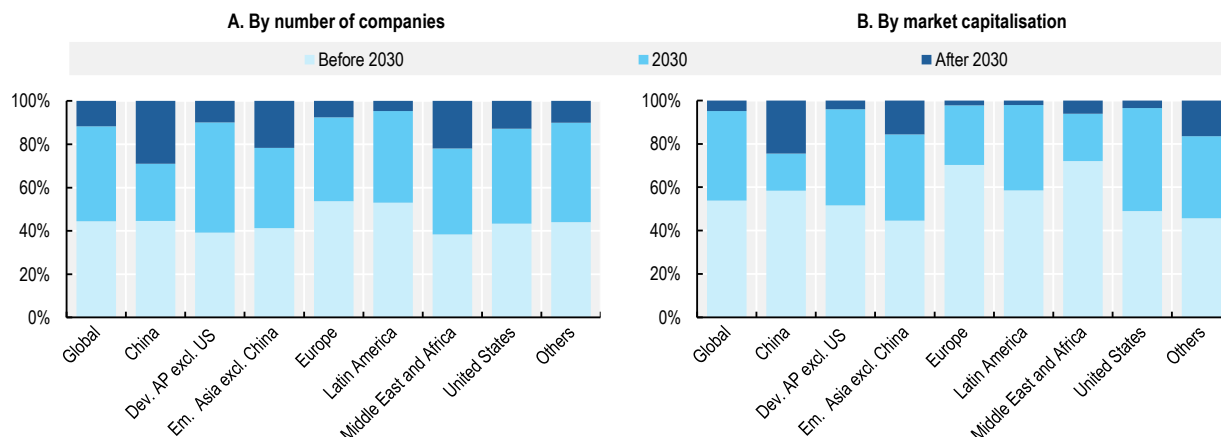


Source: OECD Corporate Sustainability dataset, MSCI. See Annex A for details.

Figure 2.14 presents the distribution of the earliest target years set by each listed company for GHG emission reduction targets (excluding targets associated with no specific year). Globally, only 44% of companies with a GHG emission reduction target have a concrete emission reduction goal before 2030 (in terms of number of companies). Including the year 2030, that number rises to 88%, as many companies chose this milestone as their target year. There are, however, regional disparities as this number drops to 71% of companies with an emission reduction target in China, while it reaches 95% in Latin America.

Figure 2.14. Target year of the earliest GHG emission reduction target in 2024

Globally, 88% of companies set GHG emission reduction targets in or before 2030.

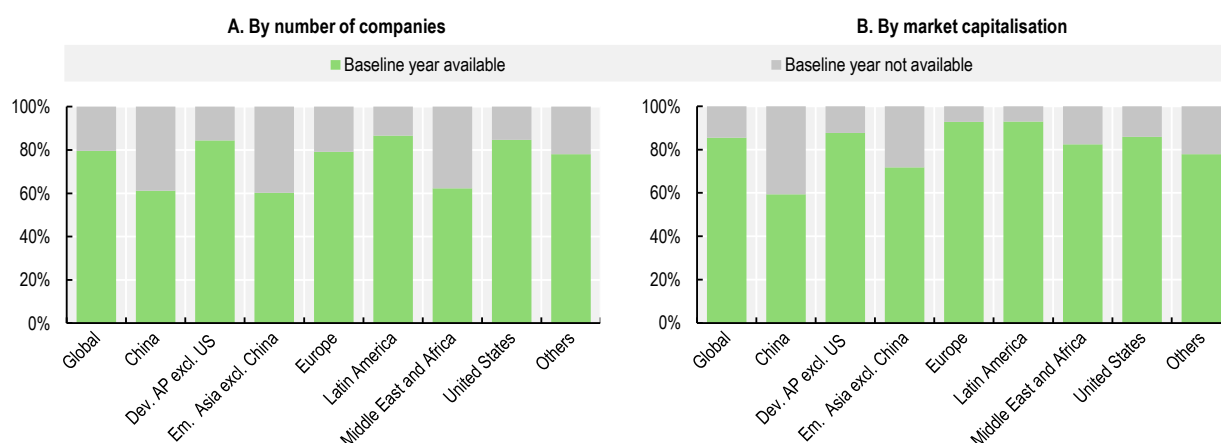


Source: OECD Corporate Sustainability dataset, MSCI. See Annex A for details.

Disclosure of a baseline year is necessary for investors to assess what the GHG emission reduction targets (both in relative and absolute terms) effectively mean for an individual company. Globally, among companies that have set specific years for their GHG emission reduction targets, there are still 20% of companies for which no associated baseline year is available (by number of companies, focusing on targets with the earliest target year for companies that have several targets). Latin America, the United States and Developed Asia-Pacific excl. US display larger shares of baseline year disclosure, at 87%, 85% and 84% respectively, while Emerging and Developing Asia excl. China (60%), China (61%) and the Middle East and Africa (62%) are lower (Figure 2.15).

Figure 2.15. Disclosure of a baseline year by listed companies with GHG emission targets in 2024

Baseline data is not always easily accessible for investors to assess GHG emission targets.



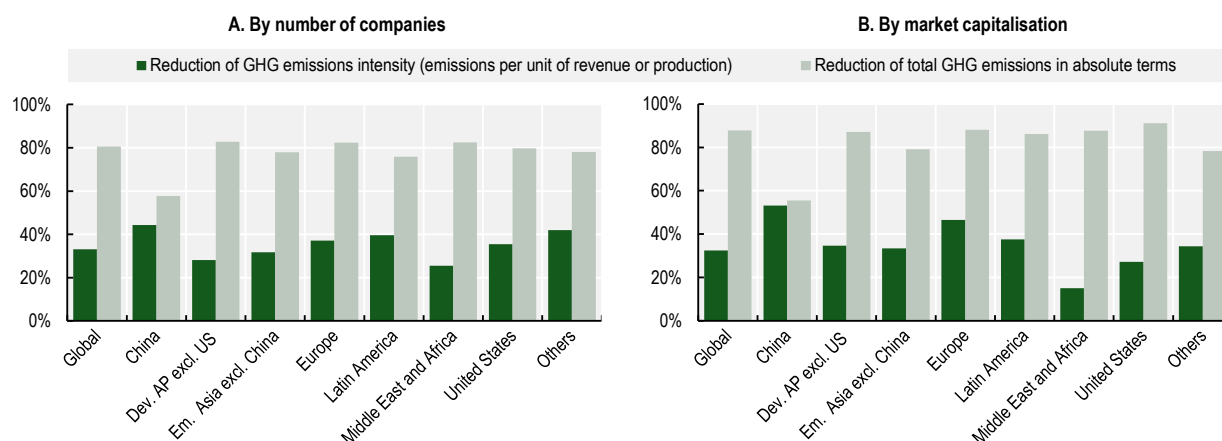
Source: OECD Corporate Sustainability dataset, MSCI. See Annex A for details.

When setting GHG emission reduction targets, companies can select different metrics to measure the progress of their reduction path. Notably, most companies calculate the reduction of their GHG emissions over the baseline year either as the GHG emission reduction in absolute terms or the reduction of

GHG emissions intensity (typically per unit of revenue or per unit of production). Globally, 32% of companies that have a target commit to reducing their GHG emissions intensity and 88% set a reduction target in absolute terms (by market capitalisation, focusing on targets with the earliest target year for companies that have several targets) (Figure 2.16, Panel B). In China, GHG emission intensity metrics are used more often than in other regions, with 53% (by market capitalisation) of companies choosing them, while 55% (by market capitalisation) use absolute targets, far below the global average.

Figure 2.16. Metrics of the GHG targets in 2024

Most companies with GHG emission targets set them in absolute terms.



Source: OECD Corporate Sustainability dataset, MSCI. See Annex A for details.

2.2. Investor landscape

Equity markets play a pivotal role in fostering innovation and facilitating long-term investments, both of which are essential for sustainable economic growth. Therefore, understanding the interplay between corporations and sustainability within the framework of equity markets is crucial for a comprehensive view of global sustainable development. The *G20/OECD Principles of Corporate Governance* aim to provide a framework that incentivises companies and their investors to make decisions and manage their risks in a way that contributes to the sustainability and resilience of the corporation.

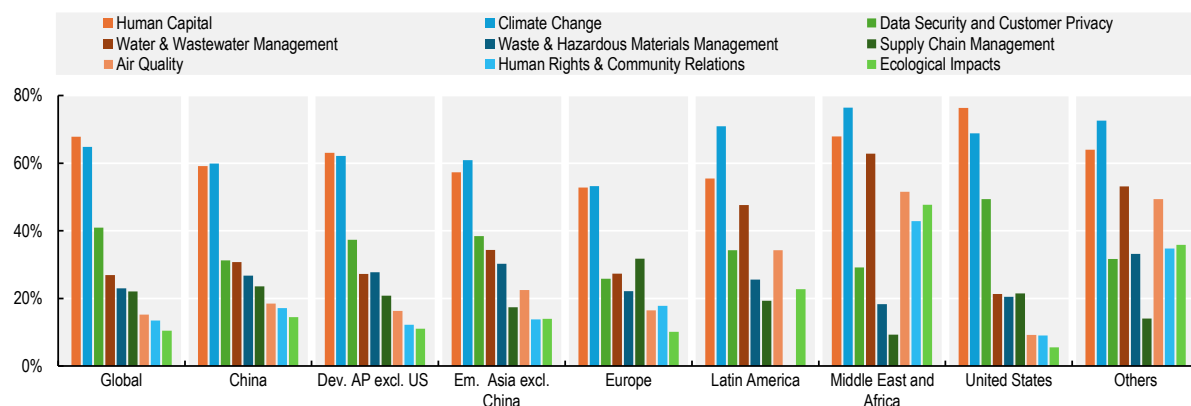
An analysis of the sustainability risks that companies are considered to be facing according to the SASB Sustainable Industry Classification System® Taxonomy (“SASB mapping”) shows that climate change is considered to be a financially material risk for listed companies that account for 65% of global market capitalisation (Figure 2.17). In particular, this risk is considered to be financially material for companies representing 76% of market capitalisation in the Middle East and Africa, 71% in Latin America, and 69% in the United States. Human capital risks are currently the most important sustainability risk with companies representing 68% facing such risks as financially material. In the United States, this share is even higher, where companies representing 76% of market capitalisation are considered to face human capital risks as financially material.

There are differences globally in companies’ sensitivity to sustainability risks from ecological impacts and data security and customer privacy. Companies representing only 10% of total market capitalisation are considered to face ecological impacts as a financially material factor. This share is the smallest in the United States (6%) (Figure 2.17). Globally, companies representing 41% of total market capitalisation are considered to face data security and customer privacy as financially material factors (this is the third most

important risk globally). In the United States, companies representing 49% of market capitalisation are considered to face data security and customer privacy as a financially material risk.

Figure 2.17. The share of market capitalisation by selected sustainability risks in 2024

Human capital and climate change pose financially material risks for most companies by market capitalisation.

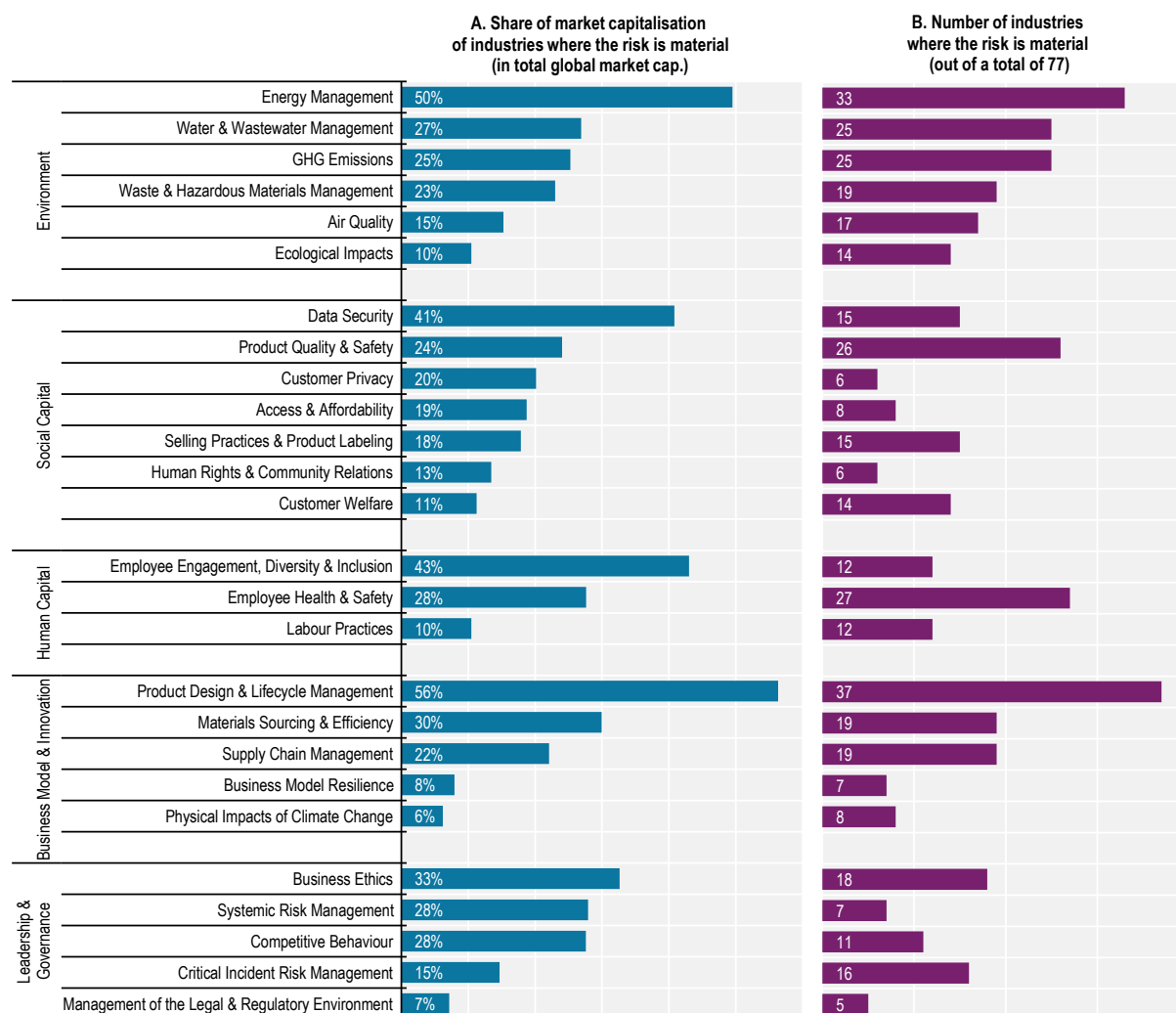


Source: OECD Capital Market Series dataset, LSEG, FactSet, Bloomberg, SASB mapping. See Annex A for details.

Product design and lifecycle management is considered to be a material risk for companies representing 56% of market capitalisation across 37 of 77 industries (Figure 2.18). Meanwhile, business ethics within the leadership and governance dimension is a risk considered to be faced by companies representing 33% of market capitalisation across 18 industries.

Figure 2.18. Sustainability indicators where risks are considered to be financially material in 2024

Beyond climate and water-related risks, some social risks are considered to be financially material across industries.



Note: The industry classification is according to SASB mapping.

Source: OECD Capital Market Series dataset, LSEG, FactSet, Bloomberg, SASB mapping. See Annex A for details.

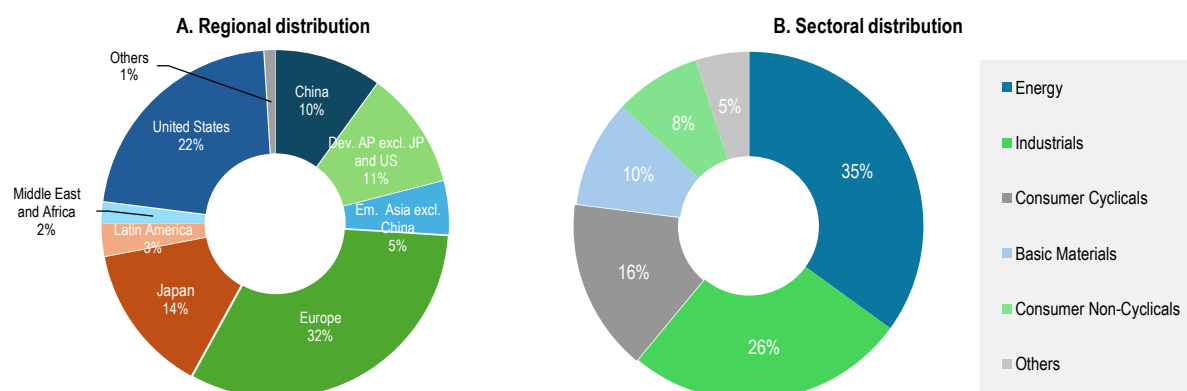
Mapping of sustainability risks cannot be equated as the market value at risk, which would depend on an individual assessment of each company's financial exposure to these risks. However, the share of market capitalisation can serve as a reference for policymakers to assess the differences in economic sectors' distribution among locally listed companies that may justify setting priorities when regulating and supervising their capital markets (OECD, 2023^[6]).

These findings are particularly relevant when considering the 100 listed companies with the highest disclosed GHG emissions, which collectively amount to a market capitalisation of approximately USD 7.1 trillion and emit a total of 33.8 Gt of carbon dioxide equivalent emissions considering all scopes. While there is double counting in this calculation since, for instance, scope 2 GHG emissions of one company may be the scope 3 GHG emissions of another, the 33.8 Gt emissions of these 100 companies are against the backdrop of 37.8 Gt emissions globally from energy combustion and industrial processes in 2024 (IEA, 2025^[7]).

Listed companies from Europe (32%), the United States (22%) and Japan (14%) represent the largest portion of companies with the highest disclosed GHG emissions (Figure 2.19, Panel A). Companies from the energy industry account for 35% of the companies with the highest disclosed GHG emissions, followed by industrials with 26%. Regional and sectoral distributions of GHG emissions are influenced by differences in disclosure rates. For example, as shown in Figure 2.3 and Figure 2.5, nearly all European companies by market capitalisation disclose scope 1 and 2 (98%) and scope 3 (97%), compared to only 67% and 29% of Chinese companies.

Figure 2.19. 100 listed companies with the highest disclosed GHG emissions in 2024

35% of the top 100 GHG emitters are energy companies.



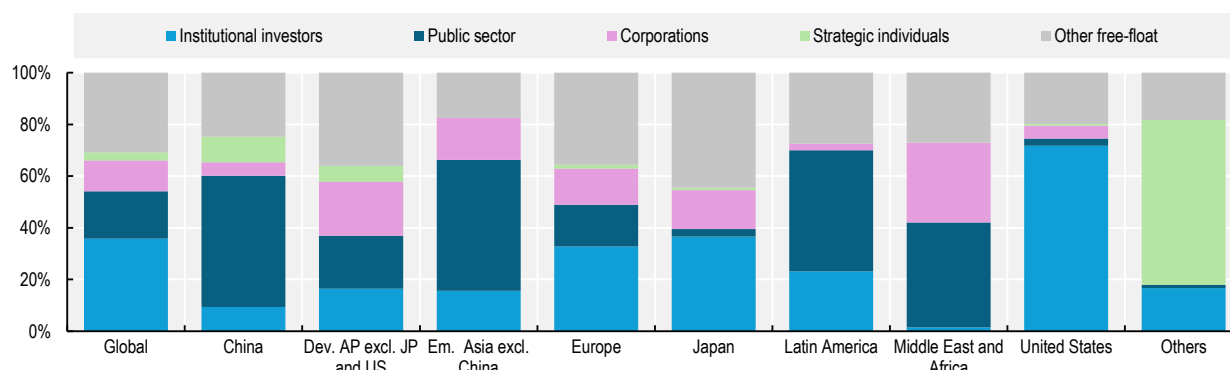
Note: The disclosed GHG emissions to rank the highest emitters include scope 1, scope 2, and scope 3 GHG emissions. The shares in this figure are calculated using the number of companies, not their market capitalisation.

Source: OECD Corporate Sustainability dataset, OECD Capital Market Series dataset, LSEG, FactSet, Bloomberg. See Annex A for details.

Figure 2.20 shows the ownership distribution for the top 100 highest emitting companies using the categories in *Owners of the World's Listed Companies* (De La Cruz, Medina and Tang, 2019^[8]). Globally, institutional investors hold the largest share at 36%. In the United States, institutional investors hold a 72% share, in line with broader trends for institutional ownership in the US equity market. In China, the public sector plays a major role, with over half of equity holdings in these high-emitting companies. Japan demonstrates a more balanced ownership structure with corporate holdings at 15% and institutional investors at 37%. In Latin America, the public sector is important, with a 47% share, while Europe shows a more diversified investor base, including corporate and institutional investors with 14% and 33%, respectively.

Figure 2.20. Investor holdings of the 100 highest-emitting companies in 2024

Institutional investors hold the highest share of equity in top-emitting listed companies, followed by the public sector.



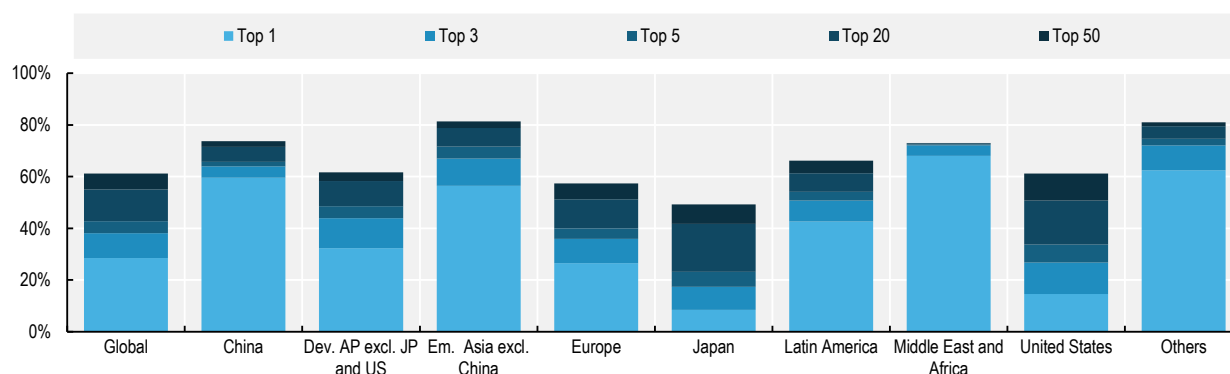
Note: "Other free-float" refers to the holdings by shareholders that do not reach the threshold for mandatory disclosure of their ownership records.
Source: OECD Capital Market Series dataset, OECD Corporate Sustainability dataset, LSEG, FactSet, Bloomberg. See Annex A for details.

The degree of concentration and control by shareholders at the company level is important when considering investors' engagement activities and effective change in the strategy of a company, for example about its climate-related goals. Figure 2.21 shows the distribution of ownership concentration among the 100 companies with the highest disclosed GHG emissions.

Globally, the largest shareholder in each of these 100 companies owns on average 28% of the shares and the largest 20 shareholders own on average 55% of the shares. This means that in markets such as Emerging Asia, the Middle East and Africa most (if not all) high-emitting companies have a well-defined controlling shareholder and, therefore, any changes in their strategy will most likely depend on the decision of the controlling shareholder. In the United States, while several high-emitting companies do not seem to have a controlling shareholder (the top 3 shareholders own 27% of the shares), the 20 largest shareholders own 51% of the shares on average, which suggests that these investors may be able to alter the sustainability-related strategy of some high-emitting companies.

Figure 2.21. Ownership concentration at the company level in the 100 highest-emitting companies in 2024

The 20 largest shareholders of the 100 highest-emitting companies would often be able to change their strategy.

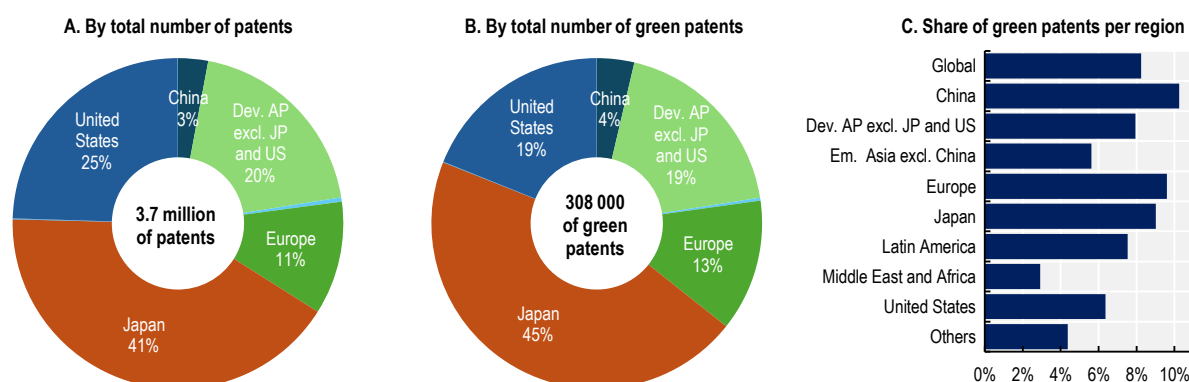


Source: OECD Capital Market Series dataset, OECD Corporate Sustainability dataset, LSEG, FactSet, Bloomberg. See Annex A for details.

While the adoption of existing green technologies by high-emitting companies is essential for the transition to a low-carbon economy, the development of new technologies will also be necessary to guarantee the transition while enhancing energy security and maintaining high standards of living. Globally, out of the existing 3.7 million patents, 308 000 (8%) are classified as green patents. The classification of a patent as green is based on a classification jointly developed by international authorities, which identifies innovations that contribute to environmental objectives. Only patents whose primary purpose is to mitigate environmental harm, adapt to climate change or contribute to smarter grids are labelled as green patents within the data set. The largest number of patents is concentrated in Japan (1.55 million), with nearly 140 000 green patents, representing a 9% share. The United States follows with 914 446 patents, of which 6% are green. Developed Asia-Pacific excl. Japan and US total almost 730 000 patents, out of which 58 000 are green. Europe displays 413 540 patents, with a green share of 10%. China contributes 109 752 patents overall, also with 10% being green (Figure 2.22).

Figure 2.22. Green patents of listed companies in 2024

Green patents account for 8% of total patents globally.



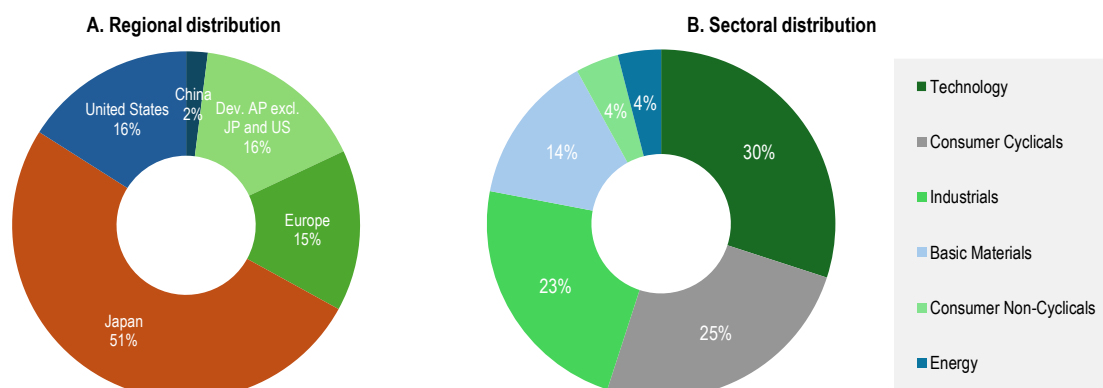
Note: Patents are attributed to regions and countries based on the company's country of exchange.

Source: OECD Corporate Sustainability dataset, MSCI. See Annex A for details.

Looking at the regional distribution of the 100 listed companies with the highest number of green patents, Japan has the highest share (51%) while the United States, Developed Asia-Pacific excl. Japan and US, and Europe represent approximately 15% each (Figure 1.23, Panel A). These companies collectively amount to a market capitalisation of approximately USD 8.8 trillion. Technology companies account for 30 of these 100 companies, followed by consumer cyclicals and industrials with over 20 each.

Figure 2.23. The 100 listed companies with the highest number of green patents in 2024

Japan leads with 51 of the top 100 companies with high green innovation.



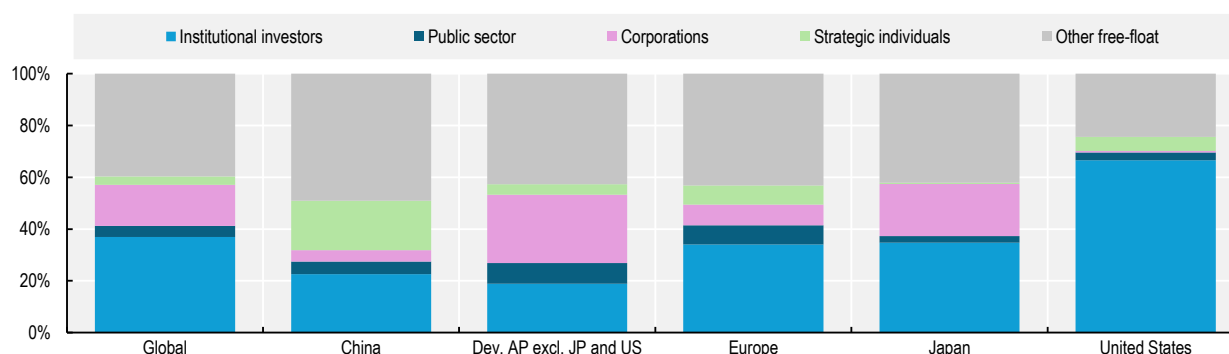
Note: The shares in this figure are calculated using the number of companies, not their market capitalisation.

Source: OECD Corporate Sustainability dataset, OECD Capital Market Series dataset, LSEG, FactSet, Bloomberg, MSCI. See Annex A for details.

Globally, institutional investors own 37% of the top 100 companies by green patents, almost the same as what they own in the 100 high-emitting companies (Figure 2.24). In the United States, institutional investors own 67% of the equity in these companies. This is in line with the pattern of institutional ownership in US high-emitting companies of 72% (as seen in Figure 2.19). In contrast, ownership in companies with high green innovation in China differs significantly from ownership in high-emitting companies, with the public sector making up a smaller portion at 5% and a higher presence of institutional investors and other free-float investors (23% and 49%, respectively).

Figure 2.24. Investor holdings of the top 100 companies by green patents in 2024

Institutional investors hold the largest share of the top 100 companies with high green innovation.



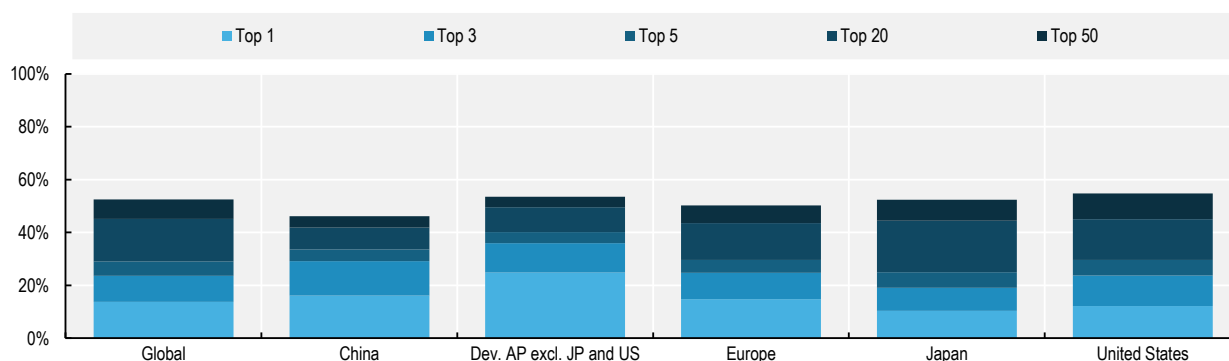
Note: "Other free-float" refers to the holdings by shareholders that do not reach the threshold for mandatory disclosure of their ownership records. Source: OECD Capital Market Series dataset, OECD Corporate Sustainability dataset, LSEG, FactSet, Bloomberg, MSCI. See Annex A for details.

Figure 2.25 shows the ownership concentration in the 100 companies with the highest stock green patents. Globally, the largest shareholder owns an average of 14%, contrasting with the 28% for high-emitting companies. For the top 20 shareholders, however, ownership concentration rises to more than 40% of the shares on average in all regions. Ownership concentration in the top 100 companies with high green

innovation is smaller than in high-emitting companies, which suggests greater potential for non-controlling shareholders to engage effectively with companies with high green innovation.

Figure 2.25. Ownership concentration in the top 100 companies by green patents in 2024

Listed companies with high green innovation show moderately lower ownership concentration than high GHG emitters.



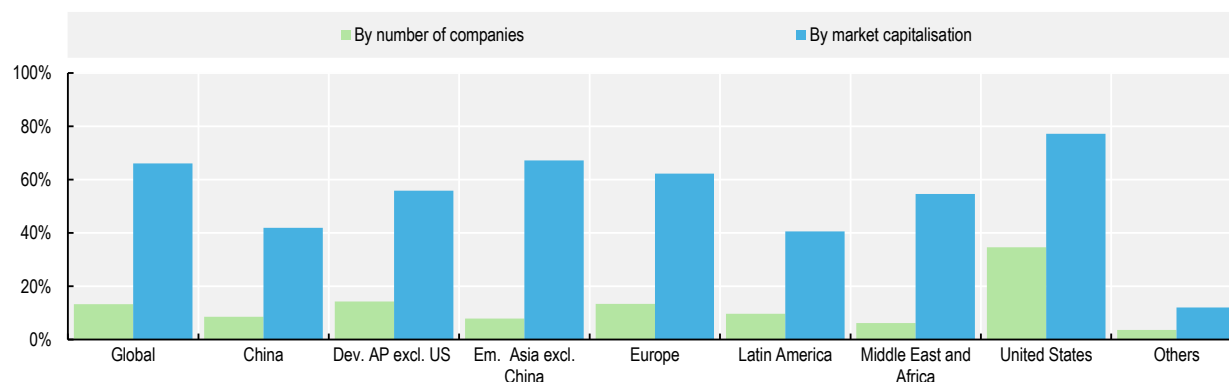
Source: OECD Capital Market Series dataset, OECD Corporate Sustainability dataset, LSEG, FactSet, Bloomberg, MSCI. See Annex A for details.

2.3. The board of directors

Establishing a board committee responsible for sustainability is not the only way for a company to manage its sustainability risks and a committee, if not well structured, may even be ineffective in doing so. However, the existence of a sustainability board committee may be a proxy for the importance given by boards to sustainability risks. Companies representing two-thirds of the world's market capitalisation have established a committee responsible for overseeing the management of sustainability risks and opportunities reporting directly to the board (Figure 2.26). In the United States, 77% of companies by market capitalisation have a committee responsible for sustainability and in Emerging and Developing Asia excl. China and in Europe, more than 60% have such a committee.

Figure 2.26. Board committees responsible for sustainability in 2024

13% of listed companies globally (two-thirds by market capitalisation) have board committees overseeing sustainability risks.



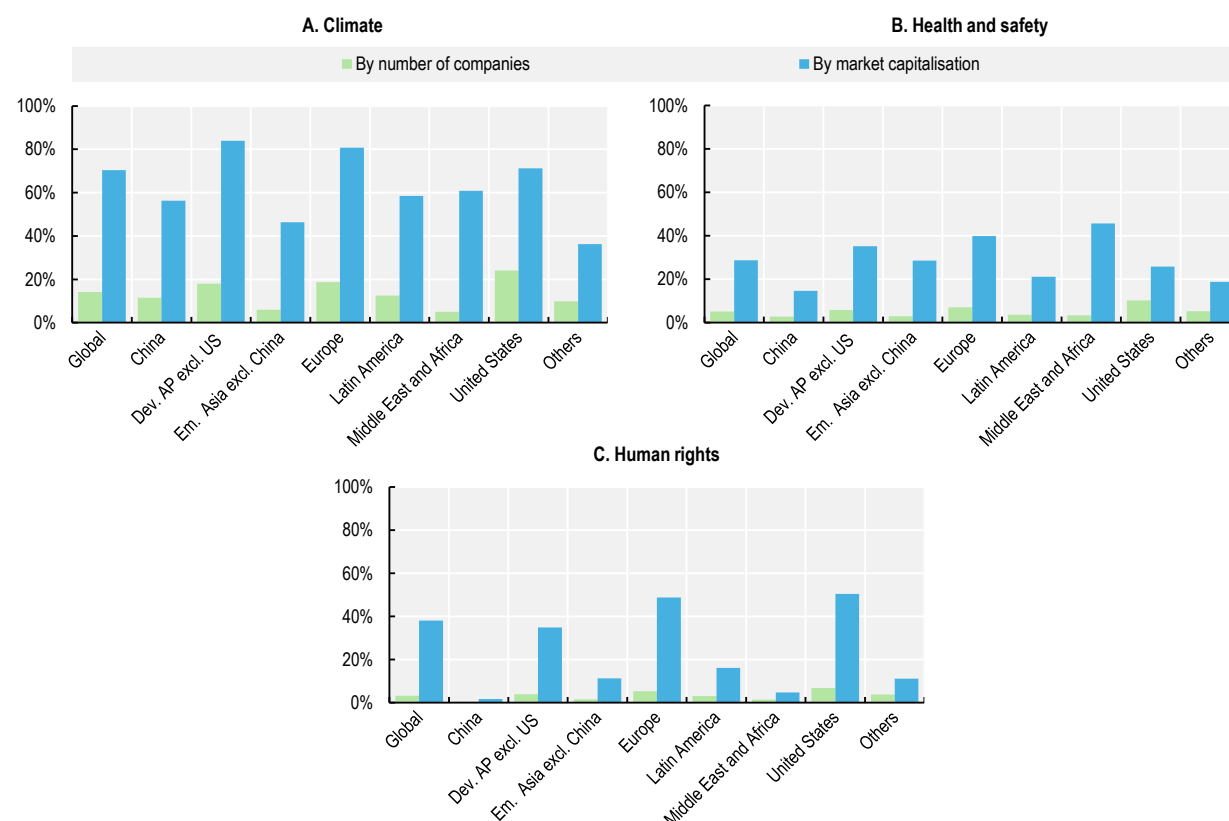
Source: OECD Corporate Sustainability dataset, Bloomberg. See Annex A for details.

The board of directors may consider specifically sustainability-related issues when overseeing management, although not necessarily via the establishment of a dedicated board committee. Globally, 6 215 companies representing 70% of global market capitalisation indicated their boards of directors oversee climate-related issues (Figure 2.27, Panel A). This is an increase from 53% in 2022 (OECD, 2024^[9]). In Developed Asia excl. China, Europe and the United States, more than 70% of companies by market capitalisation reported a board-level oversight of climate-related issues.

Board-level oversight of health and safety is reported by almost 2 260 companies worldwide, representing 29% of market capitalisation (Figure 2.27, Panel B). In the Middle East and Africa, companies that account for 46% of the region's market capitalisation reported board oversight of health and safety, and in Europe, this share totals 40%. Oversight of human rights by the board is disclosed by around 1 400 companies that account for 38% of global market capitalisation. The United States and Europe display the most significant shares by market capitalisation, reporting board-level oversight of human rights by companies representing 50% and 49% of market capitalisation, respectively (Figure 2.27, Panel C).

Figure 2.27. Board-level oversight of sustainability-related issues in 2024

While many boards prioritise climate issues, a few also oversee health, safety, and human rights.



Source: OECD Corporate Sustainability dataset, LSEG, Bloomberg. See Annex A for details.

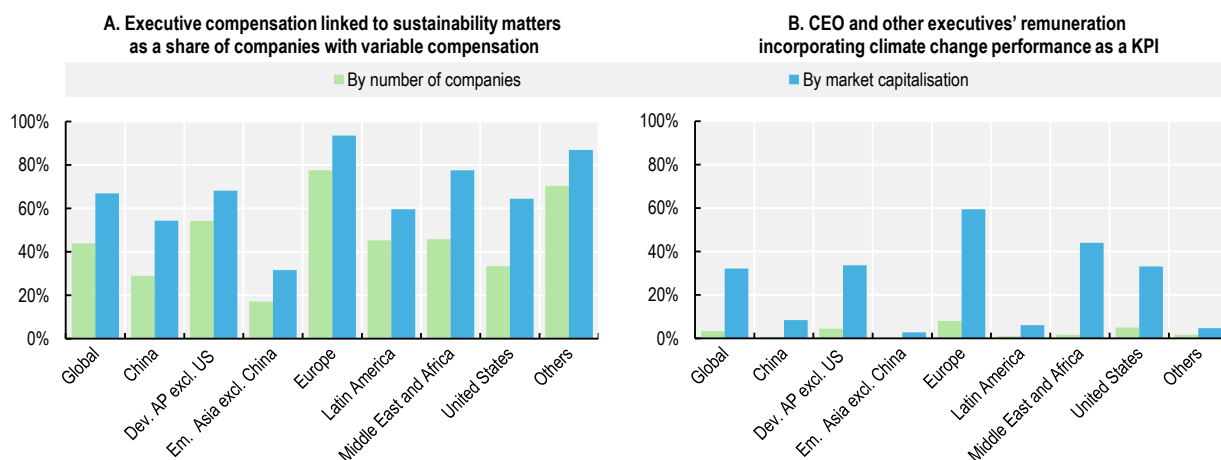
To fulfil their key functions in assessing the company's risk profile and guiding its governance practices, boards can also take into consideration sustainability matters when establishing the compensation of key executives. Almost 70% of companies by market capitalisation that have executive compensation policies linked to performance measures include a variable component based on sustainability-related factors (Figure 2.28, Panel A). Executive compensation is linked to sustainability matters in 94% of companies by

market capitalisation in Europe, followed by the “Others” category (87%) and the Middle East and Africa (77%). In China and Emerging and Developing Asia excl. China, executive compensation is linked to sustainability matters in 54% and 32% of the companies by market capitalisation, respectively.

Companies representing 32% of global market capitalisation incorporate climate change performance into the CEO and other executives’ remuneration (Figure 2.28, Panel B). Europe has the highest share with 8% of companies (59% of market capitalisation) using climate change KPIs.

Figure 2.28. Executive compensation linked to sustainability matters in 2024

Sustainability-linked executive compensation has become common in large European listed companies.



Source: OECD Corporate Sustainability dataset, LSEG, Bloomberg. See Annex A for details.

2.4. The interests of stakeholders and engagement

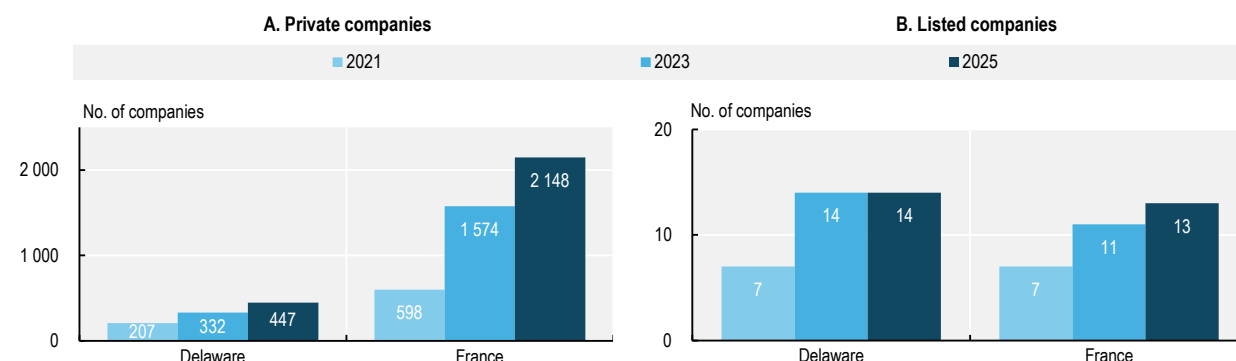
Since 2013, Delaware in the United States has allowed for-profit corporations to register as Public Benefit Corporations (PBCs), which represents a legal obligation for them to balance shareholder interests with the public benefits identified in their certificates of incorporation. PBCs must disclose their status in stock certificates and report biennially on their public benefit objectives, potentially with third-party verification.

In France, companies can register as a *société à mission* since 2019 if they meet five key conditions: defining the company’s *raison d’être*, which are the principles that the company has adopted and for which it intends to allocate resources; specifying social and environmental objectives in their articles of association; forming a monitoring committee; undergoing third-party verification of whether the company fulfilled its non-financial goals; and registering the *société à mission* in the companies’ register.

Between 2021 and 2025, there was a notable increase in the number of private companies with public benefit objectives in Delaware and France (Figure 2.29), while the number of listed companies has seen a slower increase. In Delaware, the number of private PBCs grew from 207 in 2021 to 447 in 2025. Similarly, France saw a rise in *sociétés à mission* with private entities increasing from 598 in 2021 to 2 148 in 2025 (Observatoire des sociétés à mission, 2022^[10]).

Figure 2.29. Private and listed companies with public benefit objectives

Delaware and France saw a rise in companies with public benefit objectives, yet market relevance remains limited.

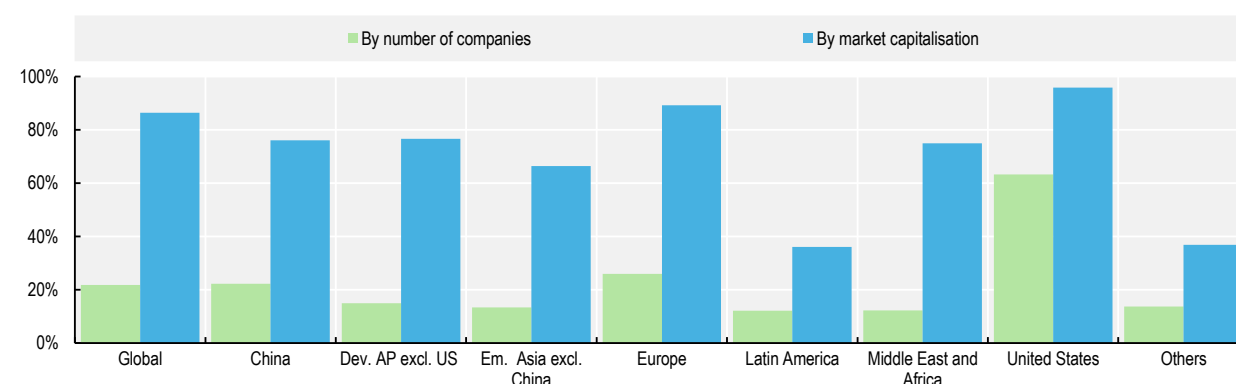


Source: OECD Corporate Sustainability dataset ; Observatoire des sociétés à mission (2024^[11]), <https://www.observatoiredessocietesamission.com/wp-content/uploads/2025/03/BAROMETRE-8-web.pdf>; LSEG. See Annex A for details.

To build trust in a long-term business strategy, companies may establish policies to facilitate shareholder engagement. Globally, 86% of companies by market capitalisation disclose policies on shareholder engagement, including, for instance, how shareholders can question the board or the management or table proposals at shareholder meetings (Figure 2.30). The share of companies that establish policies on shareholder engagement is the highest in the United States (96% of market capitalisation) and in Europe (89%), while relatively lower in Emerging and Developing Asia excl. China (66%) and Latin America (36%).

Figure 2.30. Policies on shareholder engagement in 2024

86% of companies by market capitalisation disclose policies on shareholder engagement.



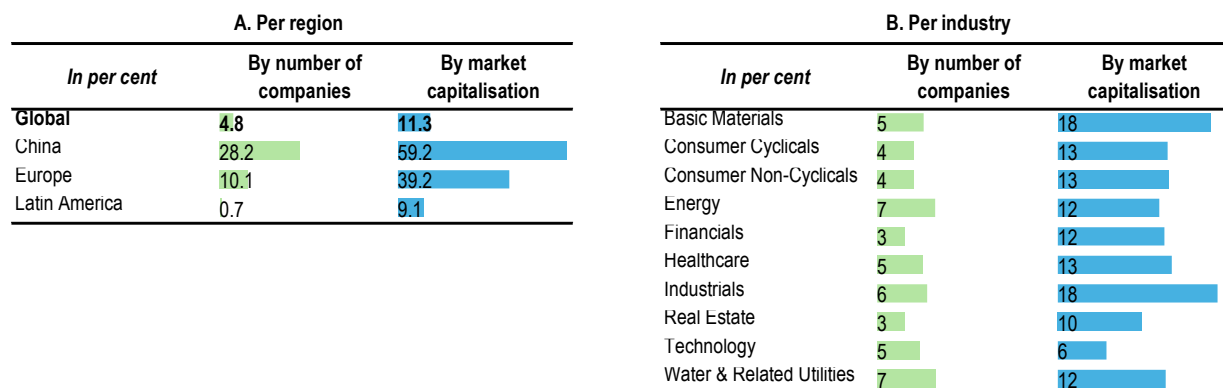
Source: OECD Corporate Sustainability dataset, LSEG. See Annex A for details.

To promote co-operation with employees, companies may establish mechanisms for employee participation, such as workers' councils that consider the position if employee in certain key decisions, or employee representation on the board. For certain jurisdictions, these mechanisms are required by legal provisions for companies above a determined size. Companies representing 11% of global market capitalisation have employee representatives on the board of directors (Figure 2.31). There are notable differences across regions, ranging from 59% in China, 39% in Europe and 9% in Latin America, to negligible amounts in other regions. Energy and water & related utilities lead, with 7% of companies in

each industry reporting employee board representation, although their market capitalisation coverage is relatively modest at 12%. Basic materials and industrials both disclosed 5-6% of companies with employee representation, yet stand out by covering 18% of market capitalisation each.

Figure 2.31. Employee representation on boards in 2024

Employee board representation accounts for almost 5% of companies globally, highest in China and Europe.



Source: OECD Corporate Sustainability dataset, Bloomberg. See Annex A for details.

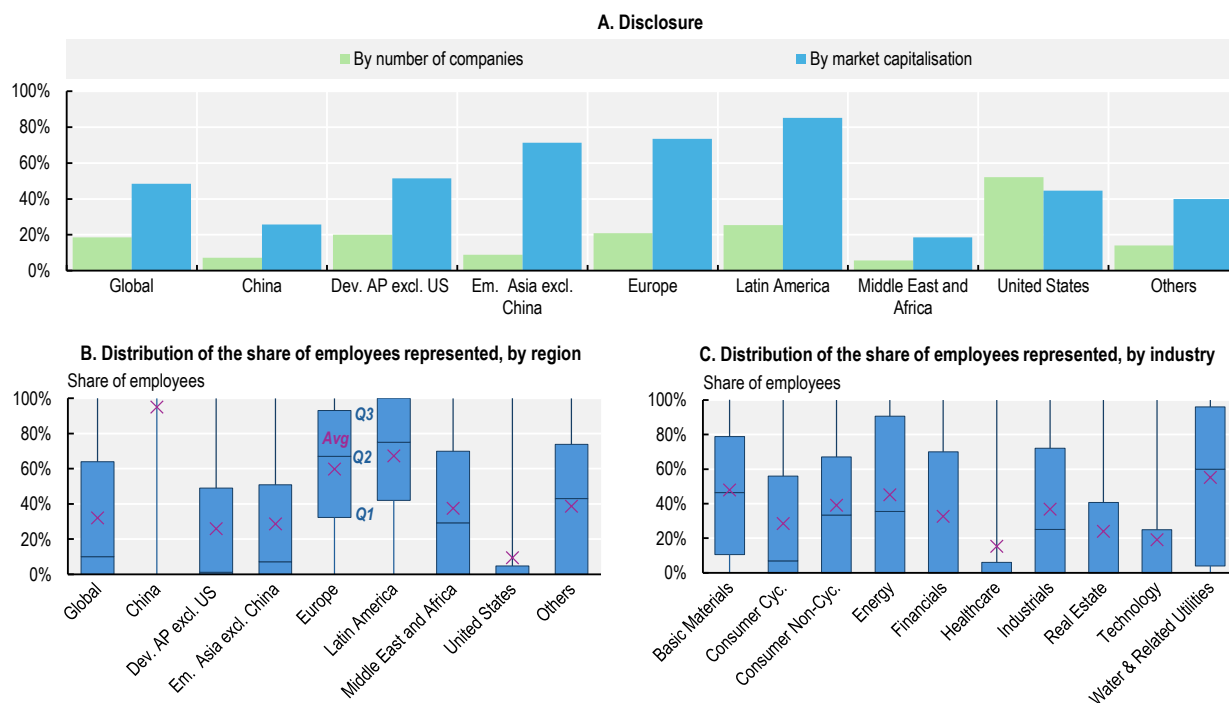
Globally, around 8 200 companies, which account for 48% of global market capitalisation, disclose information on employee representation in trade unions or coverage by collective bargaining agreements. Disclosure is highest in Latin America (25% of companies, 85% of market capitalisation) and Europe (21%, 73%) (Figure 2.32, Panel A).

These 8 200 companies disclosed that, on average, 32% of their employees are represented in trade unions or covered by collective bargaining agreements (Figure 2.32, Panel B). The median stands at 10%, while the third quartile stands at 64%. In China, employee representation in trade unions is mandatory, hence the high percentages. In Latin America and Europe, 67% and 60% of employees are represented in trade unions, on average. Employee representation in trade unions or collective bargaining agreements stands at lower levels in other regions.

At the industry level, water utilities and basic materials have the highest levels of employee representation in trade unions or coverage by collective bargaining agreements, with medians of 60% and 46% respectively, and averages above 45%. Energy also ranks high, with a median of 35% and an average of 45%. In contrast, consumer cyclicals, financials, healthcare, real estate, and technology disclosed low medians despite averages of 15-33%, suggesting that trade union representation is limited but can be significant in certain companies.

Figure 2.32. Employees represented in trade unions or covered by collective bargaining agreements in 2024

Among listed companies that disclose this information, on average two-thirds of employees are neither unionised nor covered by collective bargaining agreements.



Source: OECD Corporate Sustainability dataset, LSEG, Bloomberg. See Annex A for details.

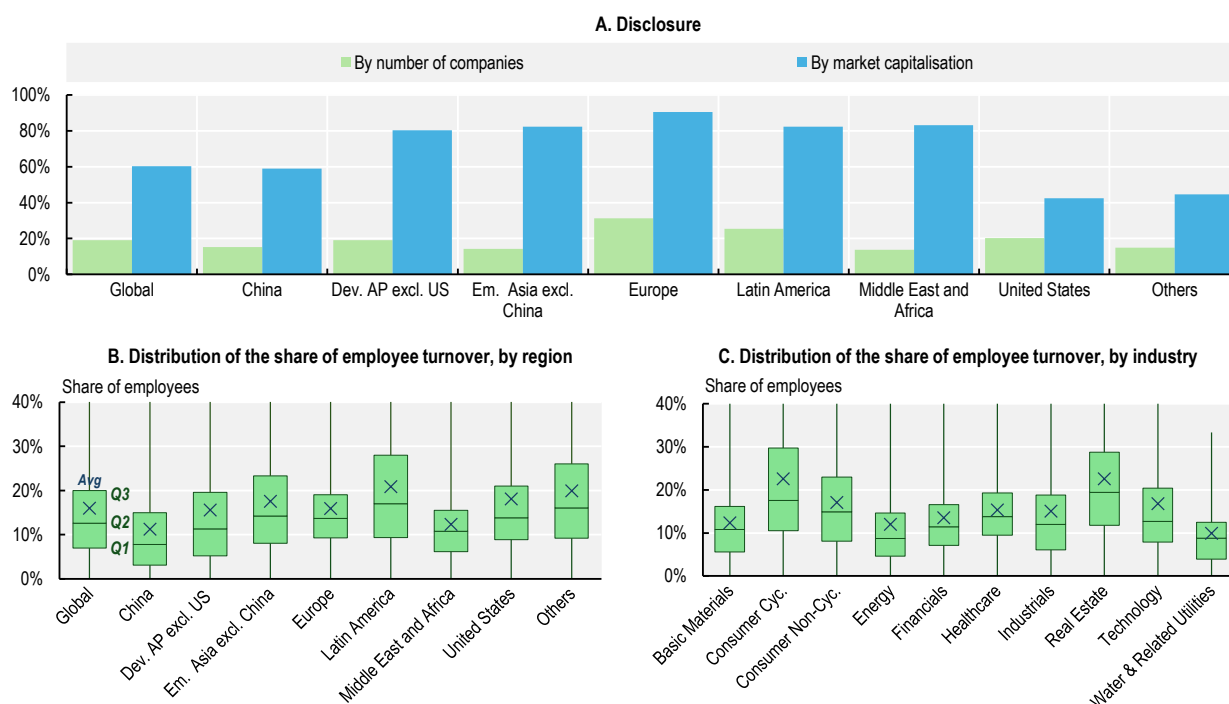
The employee turnover rate was disclosed by over 8 400 companies that account for 60% of global market capitalisation (Figure 2.33, Panel A). In Europe, 31% of companies representing 90% of market capitalisation disclosed their employees' turnover rate. In the United States, companies that account for 42% of market capitalisation disclosed an employee turnover rate.

Globally, the distribution of employee turnover rates displays a median of 13% and an average of 16%. Chinese companies disclosed the lowest levels, with a median of 8% and an average of 11%. Latin America displays higher values, with a median of 17% and an average of 21%.

Consumer cyclicals and real estate companies disclosed the highest medians of employee turnover, at 18% and 19%, with averages of 23% each and upper quartiles at around 30%. Energy and water & related utilities exhibit the lowest median turnover rates, both at 9%, with averages of 12% and 10%, respectively.

Figure 2.33. Employee turnover in 2024

Disclosure of employee turnover is high worldwide, reflecting the financial materiality of human capital in many industries, while regional differences in turnover rates may mirror variations in labour markets and legislation.



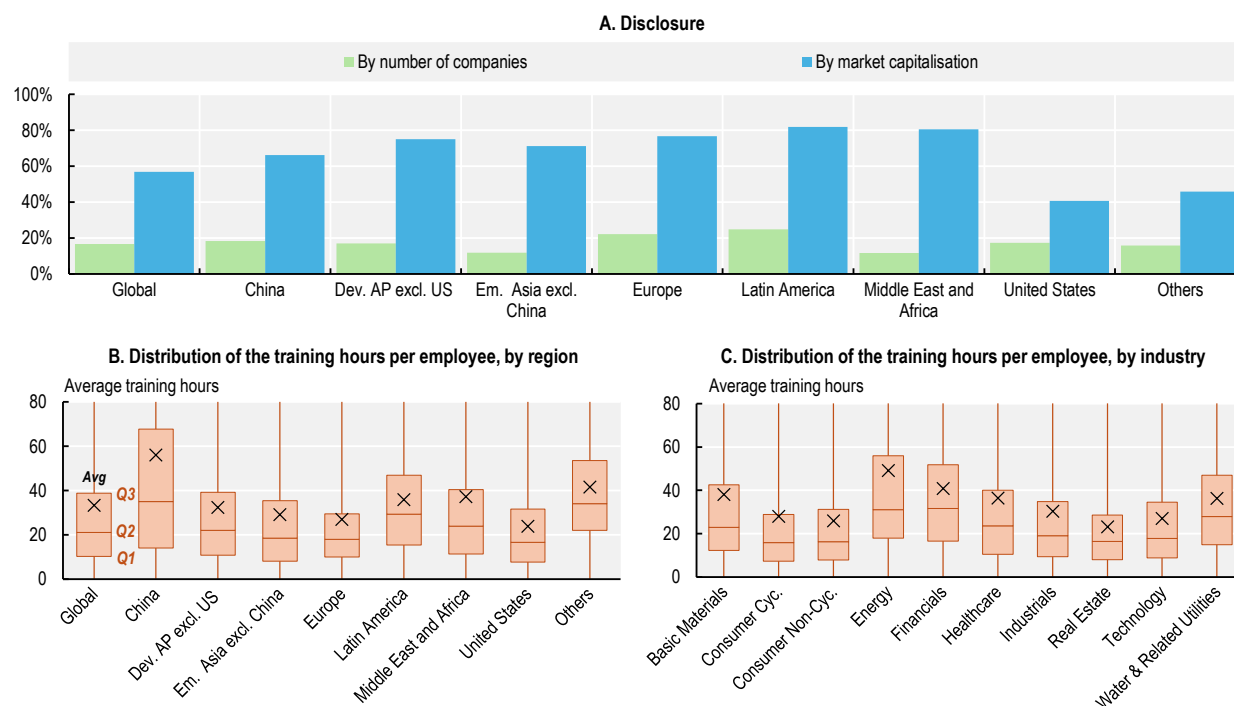
Source: OECD Corporate Sustainability dataset, LSEG, Bloomberg. See Annex A for details.

Globally, more than 7 350 companies disclosed information on the average hours of employee training per year, which represents 57% of market capitalisation. Regional patterns show that disclosure is most prevalent in Latin America (25% of companies, 82% of market capitalisation) and Europe (22%, 77%). The disclosure of employee training hours is lower in Emerging Asia excl. China (12% of companies, 71% of market capitalisation) and the Middle East and Africa (12%, 81%) (Figure 2.34. Panel A).

Companies disclose that employees receive an average of 33 hours of training per year (Figure 2.34. Panel B). Regionally, China (56 hours), Others (41), the Middle East & Africa (37) and Latin America (36) disclose the highest averages, while Europe (27) and the United States (24) stand below the global average. By industry, employee training varies widely, with energy (49 hours), financials (41), and basic materials (38) leading in average hours, while consumer non-cyclicals (26) and real estate (23) lag behind.

Figure 2.34. Average hours of training per year per employee in 2024

Training hours per employee are the highest in China, while the energy sector leads among industries.



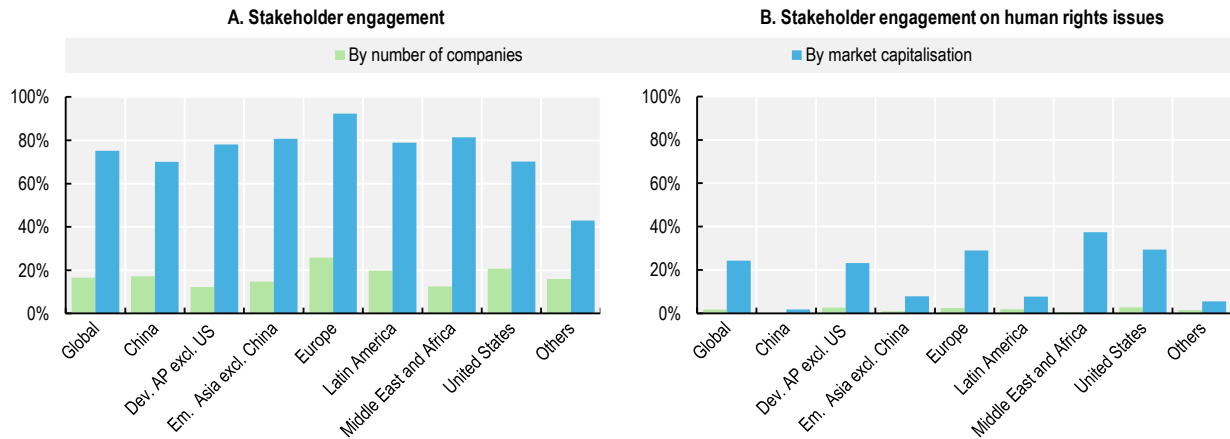
Source: OECD Corporate Sustainability dataset, LSEG, Bloomberg. See Annex A for details.

Globally, 17% of companies representing 75% of market capitalisation disclose information on whether they engage with their stakeholders and how they involve them in decision-making (Figure 2.35, Panel A). In every region, apart from Others, at least 70% of companies by market capitalisation disclose such information, and in Europe, 92% do so.

Regarding stakeholder engagement on human rights issues, 2% of companies disclose this practice, covering 24% of market capitalisation. Europe (2% of companies, 29% by market capitalisation) and the United States (3%, 29%) show the highest coverage, while China (0.2%, 2%) disclosed almost no stakeholder engagement on human rights issues (Figure 2.35, Panel B).

Figure 2.35. Disclosure on stakeholder engagement in 2024

Over 7 000 companies disclose stakeholder engagement globally, including around 760 on human rights.

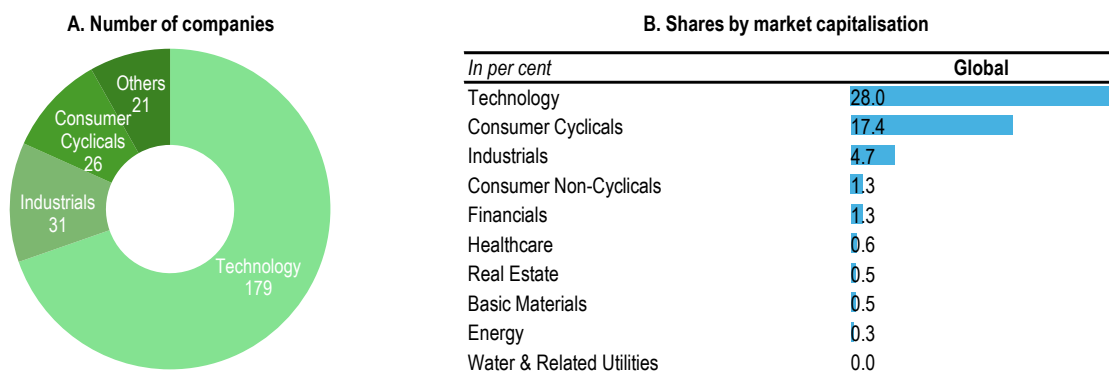


Source: OECD Corporate Sustainability dataset, LSEG. See Annex A for details.

Almost 260 companies disclosed that they had established ethical guidelines and/or compliance activities for designing and developing artificial intelligence, with 179 of these companies being from the technology sector. Industrials follow with 31 companies, and consumer cyclicals with 26 (Figure 2.36. Panel A). These 179 technology companies account for 28% of the industry's global market capitalisation, while industrials and consumer cyclicals represent 17.4% and 4.7%, respectively.

Figure 2.36. Artificial intelligence ethics policy in 2024

Nearly 30% of technology companies by market capitalisation disclosed an artificial intelligence ethics policy.



Source: OECD Corporate Sustainability dataset, Bloomberg. See Annex A for details.

2.5. Disclosure of human rights information

Reporting human rights-related information has become an emerging aspect of corporate sustainability disclosure. In the past decade, various jurisdictions have introduced policies and legislation that require entities to disclose human rights information, including with regard to how companies address adverse human rights impacts in their global supply chains.

These policies and laws include disclosure-based due diligence measures (e.g. modern slavery legislation), mandatory human rights due diligence legislation, or product and market-based measures related, for example, to products or commodities associated with forced labour. Meanwhile, several reporting frameworks have evolved to integrate reporting expectations on human rights risks and impacts, including through disclosure of supply chain due diligence measures. For instance, GRI Standards and the ESRS have integrated or drawn from international standards of responsible business conduct.

Against this backdrop, understanding what human rights information companies are disclosing can provide insights on the uptake by business of international standards for responsible business conduct and related domestic policies and regulations. The below indicators were selected to assess how companies are reporting on selected measures of human rights due diligence, relevant for the due diligence framework outlined in the OECD MNE Guidelines and associated OECD Due Diligence Guidance for Responsible Business Conduct.

The selected indicators include the allocation of responsibilities and resources for human rights oversight (relevant for due diligence step 1), the identification and disclosure of salient human rights issues (relevant for due diligence step 2) and reported actions to avoid, prevent or mitigate human rights impacts, as well as the disclosure of supply chain health and safety trainings (relevant for due diligence 3). They also cover disclosure of supply chain monitoring results and responses to non-compliance and demonstration of supply chain health and safety improvements (relevant for due diligence step 4), reporting of human rights impacts (relevant for due diligence step 5), and the presence of formal grievance mechanisms accessible to stakeholders (relevant for due diligence step 6).

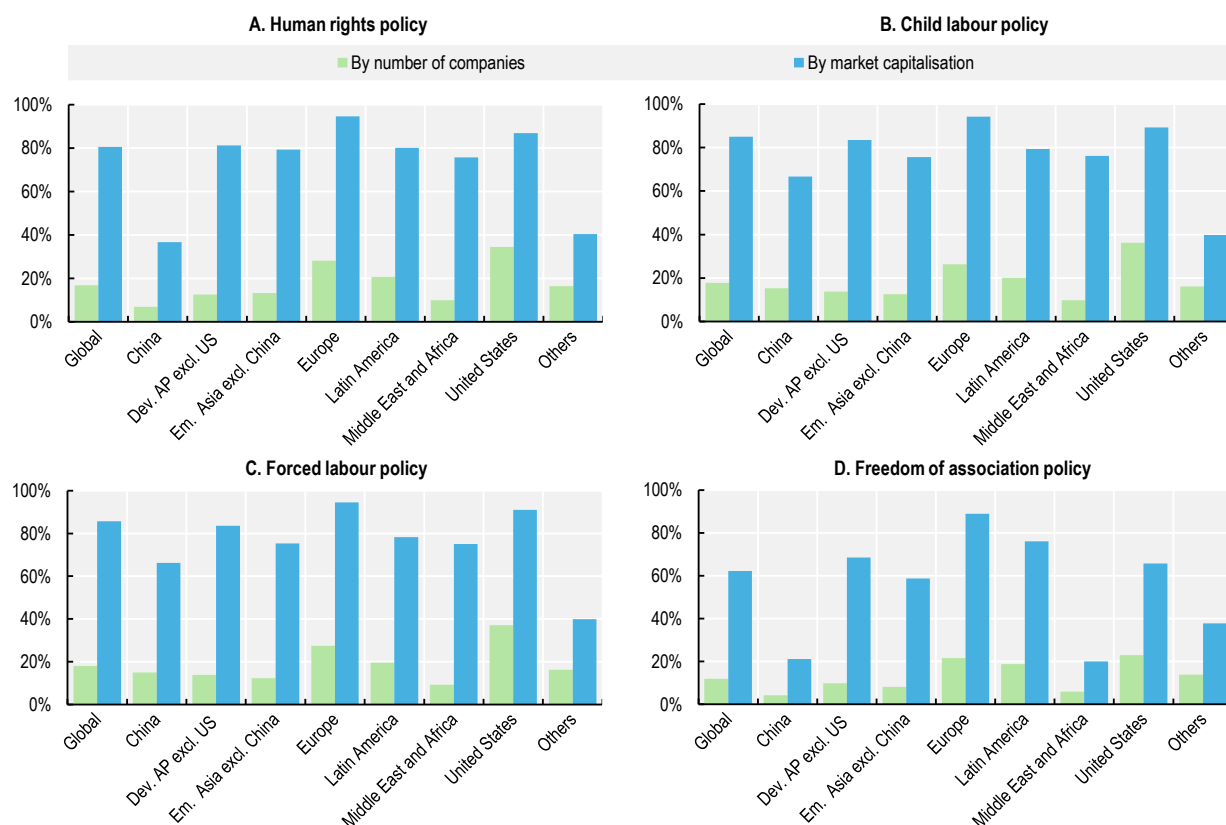
Disclosures related to policies are the most commonly reported type of human rights information. Having a policy can often be a first step taken by companies towards addressing human rights risks and impacts in their activities. Moreover, sustainability data providers largely assess human rights performance through the existence of corporate policies and commitments (OECD, 2025^[12]).

Human rights-related policy can cover a broad range of topics, including rights of own workers, supply chain workers, communities, end-users or consumers. Globally, companies representing 81% of market capitalisation (17% of listed companies) disclose having a human rights policy. A higher share (85% of global market capitalisation) report having a specific forced or child labour policy, and a lower share (62%) report having a policy on freedom of association. Disclosure of human rights policies is relatively even across regions, with the highest uptake in Europe and the United States, and lowest in China (37% of market capitalisation) (Figure 2.37).

Outside of reporting on human rights related policies, disclosure on human rights due diligence is low and driven by very large companies. Such disclosure ranges from 13% to 50% of listed companies measured by market capitalisation and only 1% to 6% when measured by the number of companies (see Figure 2.38). In comparison, 91% of companies by global market capitalisation are reporting any type of sustainability-related information (see Figure 2.1).

Figure 2.37. Disclosure of human rights policies in 2024

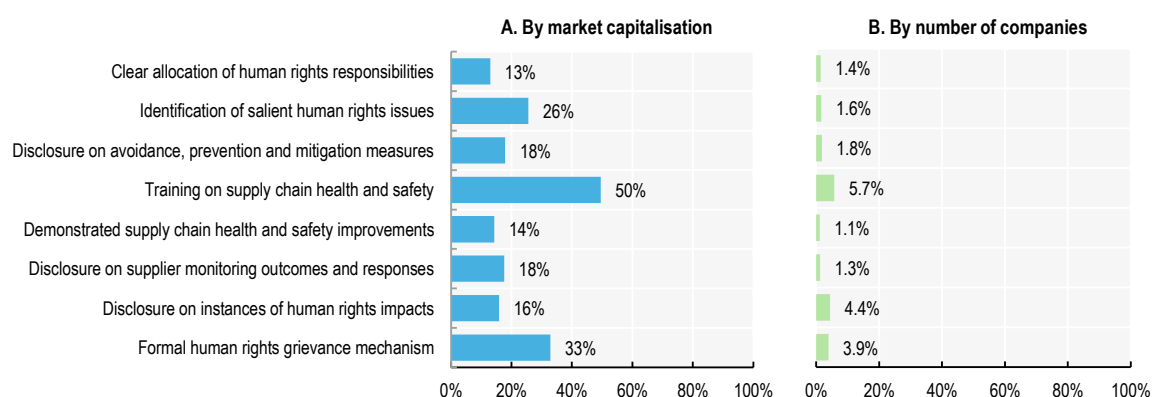
Human rights issues such as child and forced labour are commonly captured by corporate policies.



Source: OECD Corporate Sustainability dataset, LSEG. See Annex A for details.

Figure 2.38. Disclosure of human rights due diligence-related measures in 2024

Companies accounting for 26% of global market capitalisation (1.6% of companies) identify and disclose salient human rights issues.



Source: OECD Corporate Sustainability dataset, LSEG. See Annex A for details.

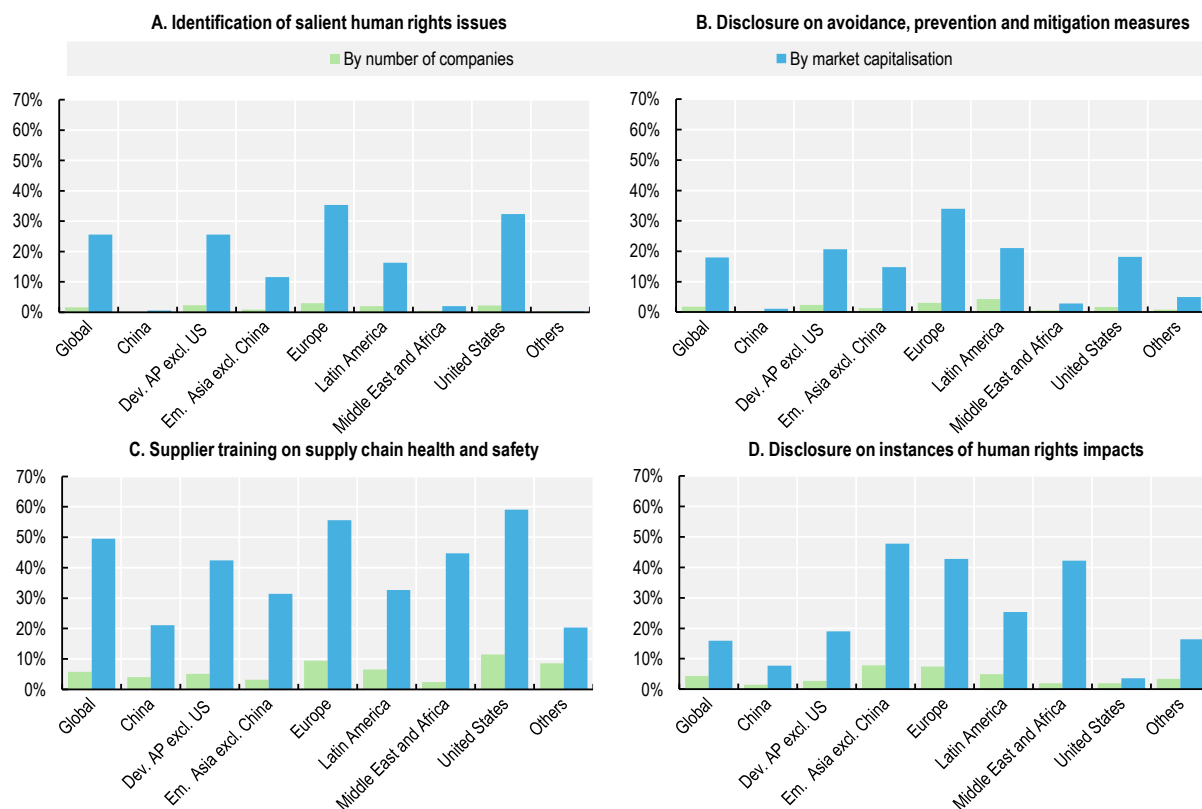
The two most reported measures are supply chain health and safety trainings and the existence of a grievance mechanism (50% and 33% respectively in terms of global market capitalisation). However, while 50% of companies by market capitalisation report conducting supply chain health and safety trainings, only 14% are tracking health and safety improvements over time. Meanwhile, only 26% of companies by market capitalisation (1.6% of companies) report on their process for identifying salient human rights risks. Effective human rights due diligence requires a process for identifying salient human rights risks and impacts. Thus, whilst many companies report having policy commitments on human rights related topics, far fewer companies report having a process in place for identifying which specific human rights could be impacted by their business activities.

Disclosure of human rights information is higher among larger companies. The share of listed companies disclosing human rights information is, on average, ten times higher when measured by market capitalisation – across all indicators and all regions. This suggests that the larger a company's market capitalisation, the more likely it is to disclose on human rights. The gap is particularly striking for indicators related to human rights risk identification and supplier monitoring. For example, disclosure on supplier monitoring results and corrective actions covers 18% of market capitalisation, but just 1.3% of companies.

Human rights disclosure varies widely across regions (see Figure 2.39). On average, European and United States companies lead disclosure of human rights-related information. US companies rank high on disclosure of potential salient human rights risks (32% of market capitalisation) but their disclosure on actual human rights impacts and related incidents is lower (4%). In contrast, reporting on actual instances of human rights impacts is higher in Emerging Asia excl. China, Europe, and the Middle East and Africa, covering 48%, 43% and 42% of regional market capitalisation, respectively.

Figure 2.39. Disclosure of human rights due diligence-related measures by geography in 2024

Human rights-related disclosure varies significantly across geographies, with companies in Europe, the United States, and Emerging Asia leading disclosure on selected indicators.



Source: OECD Corporate Sustainability dataset, LSEG. See Annex A for details.

References

- BIAC (2025), *The Risks of Divergence Between Global ESG Reporting Standards*, [4]
<https://www.businessatoecd.org/hubfs/The%20Risks%20of%20Divergence%20Between%20Global%20ESG%20Reporting%20Standards.pdf>.
- De La Cruz, A., A. Medina and Y. Tang (2019), "Owners of the World's Listed Companies", [8]
OECD Capital Market Series, OECD, Paris, https://www.oecd.org/en/publications/owners-of-the-world-s-listed-companies_ed7ca2f3-en.html.
- IAASB (2024), *International Standard on Sustainability Assurance 5000, General Requirements for Sustainability Assurance Engagements*, [2]
<https://ifacweb.blob.core.windows.net/publicfiles/2025-01/IAASB-International-Standard-on-Sustainability-Assurance-ISSA-5000.pdf>.
- IEA (2025), *Global Energy Review 2025*, IEA, Paris, <https://www.iea.org/reports/global-energy-review-2025>. [7]

- IFRS (2025), *IFRS Foundation publishes jurisdictional profiles providing transparency and evidencing progress towards adoption of ISSB Standards*, <https://www.ifrs.org/news-and-events/news/2025/06/ifrs-foundation-publishes-jurisdictional-profiles-issb-standards/#:~:text=Thirty%2Dsix%20jurisdictions%20have%20adopted,them%20into%20their%20regulatory%20frameworks.> [3]
- Observatoire des sociétés à mission (2024), *Portrait des sociétés à mission*, <https://www.observatoiredessocietesamission.com/wp-content/uploads/2025/03/BAROMETRE-8-web.pdf>. [11]
- Observatoire des sociétés à mission (2022), *Portrait et chiffres clés des sociétés à mission*, https://www.observatoiredessocietesamission.com/wp-content/uploads/2022/09/OBS_CEM_infograph_8.pdf. [10]
- OECD (2025), *Behind ESG ratings: Unpacking sustainability metrics*, OECD Publishing, Paris, <https://doi.org/10.1787/3f055f0c-en>. [12]
- OECD (2025), *OECD Corporate Governance Factbook 2025*, OECD Publishing, Paris, <https://doi.org/10.1787/f4f43735-en>. [1]
- OECD (2024), *Global Corporate Sustainability Report 2024*, OECD Publishing, Paris, <https://doi.org/10.1787/8416b635-en>. [9]
- OECD (2023), *G20/OECD Principles of Corporate Governance 2023*, OECD Publishing, Paris, <https://doi.org/10.1787/ed750b30-en>. [13]
- OECD (2023), *OECD Guidelines for Multinational Enterprises on Responsible Business Conduct*, OECD Publishing, Paris, <https://doi.org/10.1787/81f92357-en>. [14]
- OECD (2023), *Sustainability Policies and Practices for Corporate Governance in Latin America*, Corporate Governance, OECD Publishing, Paris, <https://doi.org/10.1787/76df2285-en>. [6]
- Public Safety Canada (2025), *International Reporting on Modern Slavery Forced Labour and Child Labour*, <https://www.securitepublique.gc.ca/cnt/cntrng-crm/frcd-lbr-cndn-spply-chns/ntrntnl-rprtng-frcd-lbr-chld-lbr-tmplt-en.aspx>. [5]

3 Corporate sustainability in the energy sector

This chapter outlines how the energy sector, as both the largest emitter of greenhouse gases and enabler of the clean energy transition, discloses material information regarding corporate sustainability, including GHG emissions and corporate governance.

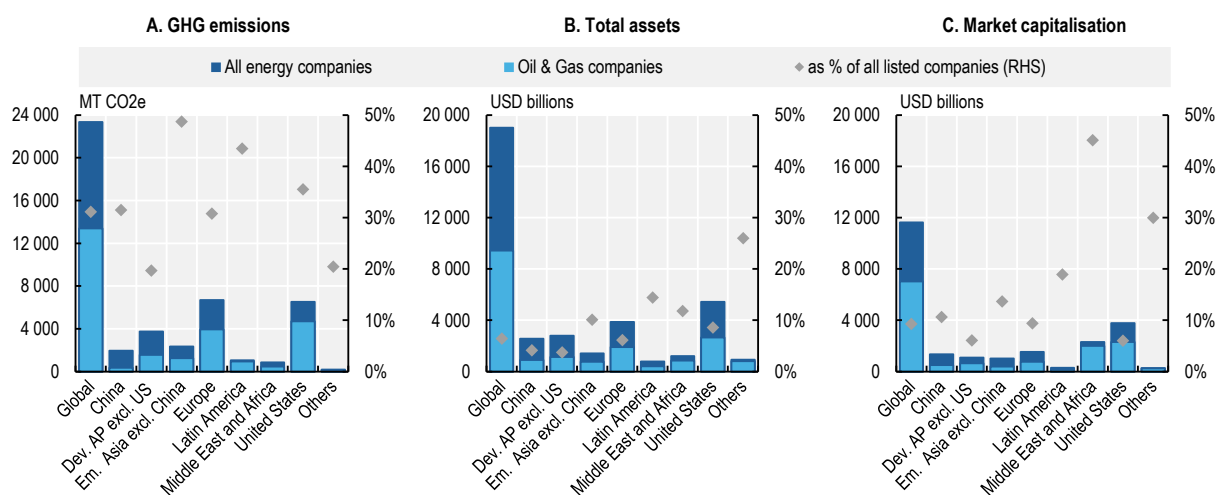
The energy sector – encompassing oil, gas, coal and electric power industries – is both a major emitter of greenhouse gases and a pivotal actor for deploying clean energy technologies. As governments design strategies for net-zero emissions by mid-century, understanding how energy companies are managing the transition is crucial. Investors, too, may demand transparency and credible action plans, given the financial risks and opportunities associated with, for instance, stranded assets or the need of countries to enhance their energy security.

The energy sector is the largest source of anthropogenic GHG emissions: electricity and heat production account for one-third of global emissions (IPCC, 2022^[1]). With global energy-related CO₂ emissions climbing to an all-time high of 37.8 Gt in 2024 (IEA, 2025^[2]), the sector's carbon footprint remains on an unsustainable trajectory. This underscores that without a major shift in energy systems, climate goals will be missed. At the same time, the energy sector is also an indispensable part of the solution: it marshals the capital, management expertise and technological know-how needed to deploy low-carbon alternatives at scale. This chapter focuses on the energy sector, specifically its disclosure of material information related to corporate governance and greenhouse gas emissions.

At the global level, listed energy companies disclosed around 23 350 MtCO₂e emissions (of which almost 13 400 MtCO₂e were disclosed by oil & gas companies), accounting for almost a third of total emissions disclosed by all listed companies (Figure 3.1, Panel A). Despite this substantial environmental footprint, the energy sector represents only 6% of total assets of listed companies and 9% of global market capitalisation (Figure 3.1, Panels B and C). Europe reports the highest volume of disclosed GHG emissions from listed energy companies, followed by the United States, although this may also be influenced by the number and size of listed companies in each region. In China, energy companies disclosed almost 1 950 MtCO₂e in GHG emissions, representing almost a third of the emissions of the country's listed companies.

Figure 3.1. All listed energy companies' overview in 2024

Listed energy companies account for 31% of disclosed GHG emissions by all listed companies but represent only 6% of assets and 9% of market value, led by Europe and the United States.



Source: OECD Corporate Sustainability dataset, LSEG, Bloomberg. See Annex A for details.

Global investment in clean energy has accelerated markedly in recent years, driven by falling clean technology costs and supportive policies. In 2024, worldwide energy investment was on track to exceed USD 3 trillion, with about USD 2 trillion (two-thirds) going into clean energy technologies and infrastructure. Solar power is a standout example: since 2015, prices for solar photovoltaic systems have decreased by

more than 50% for rooftop photovoltaic and about 40% for utility-scale, making them a cost-effective option, with investment reaching close to USD 95 billion in 2024 (IEA, 2025^[3]). Investment in solar, both utility-scale and rooftop, is expected to reach USD 450 billion in 2025, making it the largest single item in the IEA's inventory of the world's investment spending (IEA, 2025^[3]).

Making deep emissions cuts will require rapid deployment of existing clean tech *and* the maturing of new solutions that are not yet market ready. In fact, almost 50% of the CO₂ reductions needed by 2050 in the IEA's Net Zero by 2050 Roadmap rely on technologies currently at demonstration or prototype stage (IEA, 2021^[4]). The biggest innovation opportunities identified include next-generation batteries (for grid storage and EVs), low-cost hydrogen electrolyzers, and direct air carbon capture.

3.1. Greenhouse gas emissions

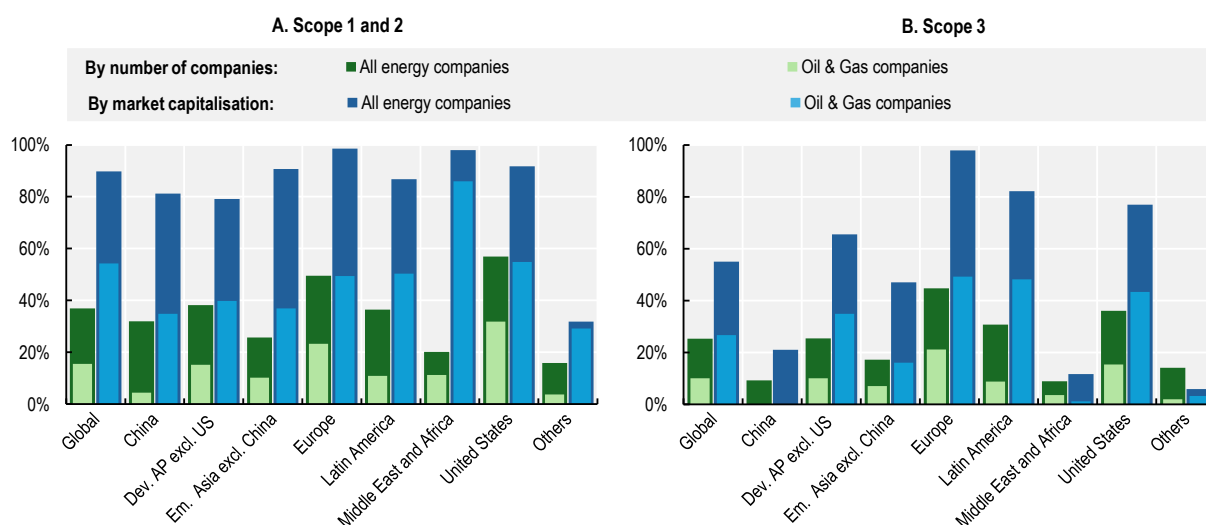
Energy companies have greater control, at least in the short and medium-term, over their scope 1 and 2 GHG emissions – those arising from their own operations and purchased energy. This includes CO₂ from fuel combustion at facilities and methane released in oil & gas extraction. However, scope 3 emissions – notably those from the use of their sold products – dwarf energy companies' operational footprints and represent the biggest challenge of decarbonisation.

The latest data on corporate sustainability disclosures of energy companies reveals regional differences in the disclosure of GHG emissions. In the United States, more than half (57%) of all energy companies disclose scope 1 and 2 emissions, and 36% disclose at least one category of scope 3 emissions. In terms of market capitalisation, Europe leads with listed energy companies representing 99% of market capitalisation disclosing scope 1 and 2 emissions, and 98% at least one category of scope 3 (Figure 3.2).

The disclosure rates of China's energy companies are lower, with 32% of companies reporting scope 1 and 2 emissions and 9% disclosing at least one category of scope 3. The Middle East and Africa shows the lowest levels of emissions disclosure: only 20% of energy companies report scope 1 and 2 emissions, and 9% disclose at least one category of scope 3.

Figure 3.2. All listed energy companies – disclosure of scope 1 & 2 and scope 3 emissions in 2024

Scope 1 and 2 disclosures are relatively high, but many energy companies – especially in Emerging Asia, the Middle East and Africa – lag behind in scope 3 emissions disclosure.



Source: OECD Corporate Sustainability dataset, LSEG, Bloomberg, MSCI. See Annex A for details.

Globally, listed energy companies reported 5 622 MtCO₂e in scope 1 emissions (among which oil & gas companies disclosed 27% of the total emissions), almost 450 MtCO₂e in scope 2 (49% for oil & gas companies), and 17 285 MtCO₂e in scope 3 (67% for oil & gas companies) (Figure 3.3, Panels A, B and E). Total disclosed emissions by energy companies across all scopes were the highest in Europe, driven largely by scope 3 emissions, with: 596 MtCO₂e in scope 1, 55 MtCO₂e in scope 2, and 6 033 MtCO₂e in scope 3. The United States followed a similar pattern, with energy companies disclosing 1 242 MtCO₂e in scope 1, 104 MtCO₂e in scope 2, and 5 182 MtCO₂e in scope 3.

Important nuances appear in the disaggregation of GHG emissions, whether in distinguishing the individual greenhouse gases reported under scope 1, in the methodological approaches applied to scope 2 calculations, or in the breadth of value-chain activities encompassed within scope 3.

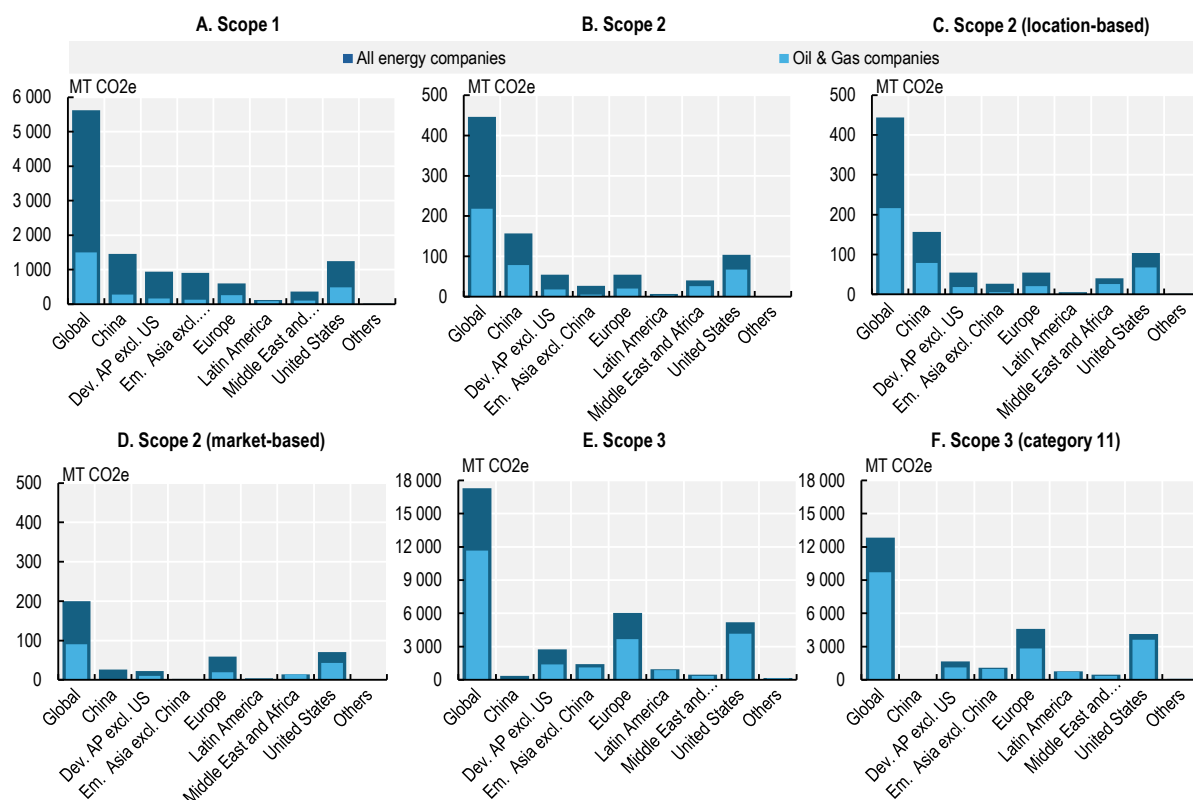
Scope 2 GHG emissions can be calculated using two methodologies under the GHG Protocol. Location-based scope 2 reflects the average grid emissions where electricity is consumed. Market-based scope 2 reflects the emissions associated with the specific electricity products a company has procured (e.g. Power Purchase Agreements and Energy Attribute Certificates). While virtually all energy companies disclose location-based Scope 2 emissions, only a minority also disclose their market-based scope 2 emissions (Figure 3.3, Panels C-E).

Scope 3, category 11 (“Use of sold products”) covers downstream emissions from customers’ use of a company’s products. In the energy sector, this category is typically the most significant for oil and gas companies, as it includes GHG emissions released when end-users combust fuels such as gasoline, diesel, and natural gas. As expected, listed energy companies’ scope 3 emissions are largely driven by category 11, yet other categories remain material – exceeding 4 400 MtCO₂e – reflecting supply-chain emissions from energy companies outside the oil and gas industry as well (Figure 3.3, Panels E and F).

Unlike scope 1 and 2, scope 3 GHG emissions cannot be reduced by the company alone; they depend on the global demand for fossil fuels and the availability of cleaner end-use technologies. This creates a dilemma: an oil company can reduce its direct emissions, but if it continues to sell oil, the CO₂ from customers’ combustion remains. This may explain why some companies have been reluctant to set quantitative scope 3 reduction targets, as such targets may not actually curtail demand or global emissions and might simply shift market share rather than achieve climate benefits. For instance, listed companies may be compelled by investors to divest carbon-intensive assets (mature oilfields, coal mines, etc.) to non-listed operators. While this can lower a company’s reported emissions, it does not necessarily help the climate – the pollution is simply transferred to another legal entity.

Figure 3.3. Listed energy companies' total disclosed GHG emissions by scope in 2024

Listed energy companies' total disclosed GHG emissions are largely driven by scope 3 emissions, with wide discrepancies in disclosure rates among regions.



Source: OECD Corporate Sustainability dataset, LSEG, Bloomberg. See Annex A for details.

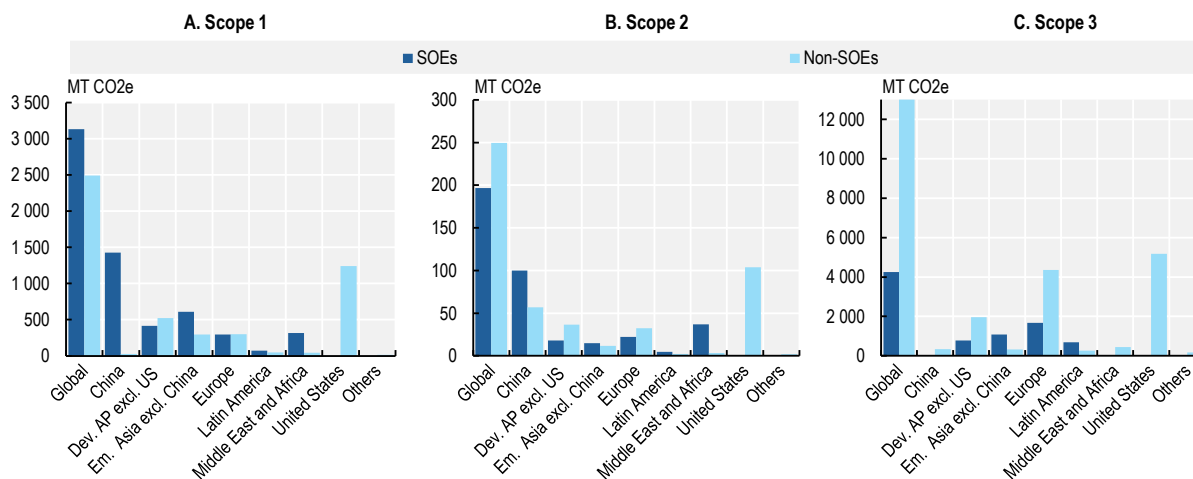
Governments have a significant role to play in enabling or curbing sector emissions. They not only issue the permits for exploration and production, but they also often have significant ownership stakes in companies that account for 32% of the energy sector listed companies' GHG emissions.

At the global level, listed state-owned enterprises (SOEs) – defined in this report as companies in which the state exercises control or holds more than 25% of the shares – are responsible for 3 132 MtCO₂e in scope 1 emissions and almost 4 250 MtCO₂e in scope 3 emissions, underscoring their dominant role in operational and upstream activities. Non-SOEs report lower scope 1 emissions at 2 490 MtCO₂e, but disclose substantially larger scope 3 emissions, totalling 13 037 MtCO₂e (Figure 3.4).

In China, SOEs are the primary source of emissions among listed companies in the energy sector. They account for 1 426 MtCO₂e in scope 1 and 100 MtCO₂e for scope 2 emissions, whereas non-SOEs only contribute 27 MtCO₂e in scope 1 and 57 MtCO₂e in scope 2. Similarly, in the Middle East and Africa, SOEs contribute nearly all reported scope 1 and 2 emissions.

Figure 3.4. Listed energy companies' disclosed emissions by scope: SOE and non-SOE companies in 2024

State-owned enterprises account for one-third of the emissions disclosed by energy sector listed companies, while seemingly underreporting their scope 3 emissions.



Note: The SOE categorisation corresponds to companies that are either owned or controlled by the government or any governmental body, if the latter has more than 25% of shares, or 50% of votes or has a golden share in the company giving it veto power.

Source: OECD Corporate Sustainability dataset, LSEG, Bloomberg. See Annex A for details.

3.2. Emission reduction targets

The quality of corporate emissions targets – their ambition, feasibility and comprehensiveness – varies widely across the energy sector. Many large companies now advertise net-zero emissions by 2050 ambitions. However, the fine print matters: whether net-zero covers only their own operations (scope 1 and 2), or also customer use (scope 3); and if it is to be achieved with actual emission reductions or also by buying carbon offsets. Targets to 2030 or 2035 are arguably even more critical, as they translate ambition into near-term action (or lack thereof).

To conduct a more in-depth analysis, a sample of 100 energy companies was selected to examine their sustainability reports and assess the disclosure of key environmental and corporate governance information. This sample consists of 34 large companies, 33 medium-sized companies and 33 small-sized companies, grouped according to their total assets. The sample was selected among the 2 475 listed companies from the energy sector, of which the “large” group (779 companies) amounts to USD 18 trillion in total assets and has an average total asset size per company of USD 23 billion. The “medium” group (779 companies) amounts to USD 618 billion in total assets and has an average total asset size per company of USD 794 million. The “small” group (780 companies) amounts to USD 46 billion in total assets and has an average total asset size per company of USD 59 million.

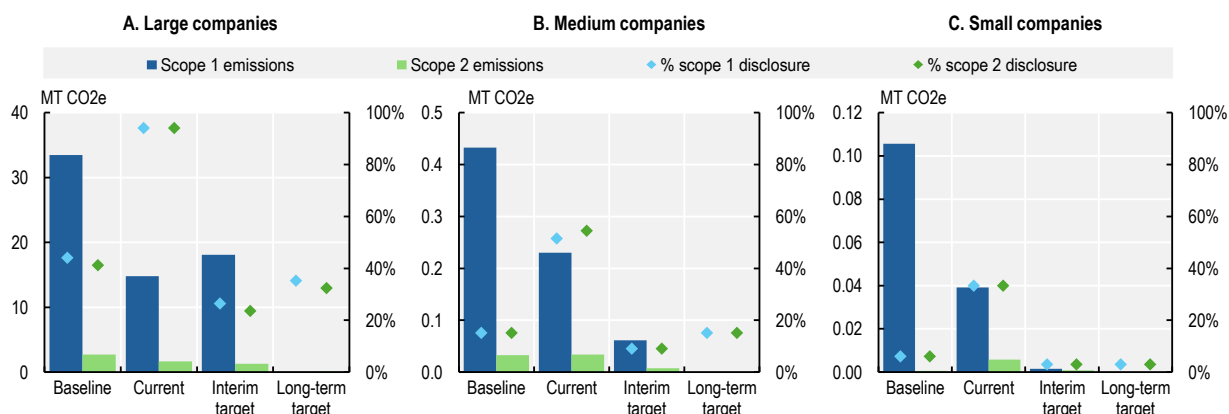
Large companies demonstrate the highest overall climate disclosure and target-setting. While 94% of the large companies disclose their current emissions, only 44% disclose baseline emissions (Figure 3.5, Panel A). Interim target-setting among large firms is moderate, with around one-fourth having established such targets. The average number of years between the baseline year and the interim target (which is set between 2025 and 2035) stands at 11 years. Long-term target-setting is more prevalent, with 35% of large companies committing to scope 1 and scope 2 emission reduction though not always aiming for net zero.

Regarding medium-sized companies, 52% disclose current scope 1 and 2 emissions, while only 15% disclose baseline emissions (Figure 3.5, Panel B). In terms of target-setting, only three companies out of

33 adopted interim targets (with 12 years between the baseline year and the interim target), and five set long-term net-zero goals. Small companies lag behind in both emission disclosure and target-setting. While one-third of small companies reported current scope 1 and 2 emissions, only 6% disclosed baseline emissions (Figure 3.5, Panel C). Target-setting remains sparse, with only one company reporting interim (with eight years against the baseline year) or long-term targets.

Figure 3.5. Scope 1 and 2 emissions and targets for a sample of 100 energy companies in 2024

Large energy companies lead in emissions disclosure and target-setting, while medium and small companies disclose far less often and rarely set emission targets.

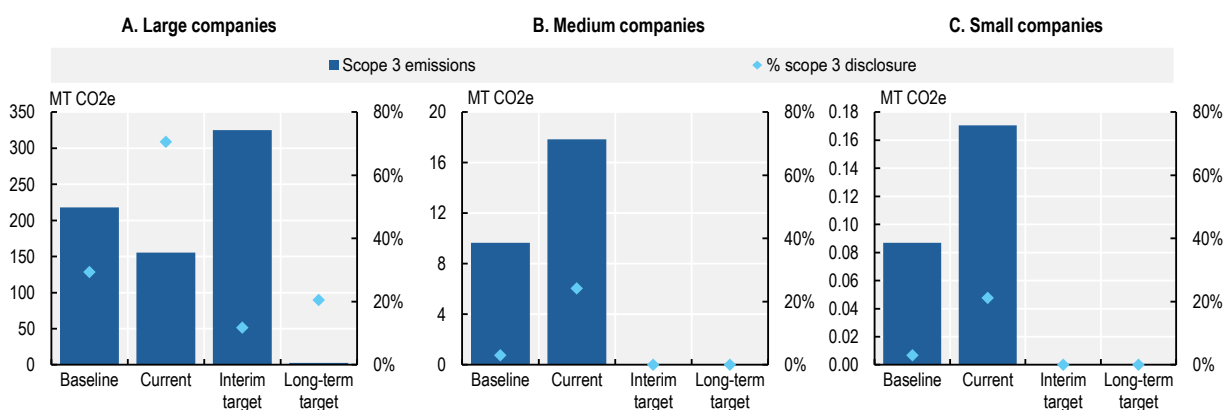


Source: OECD compilation based on each company's publicly available disclosure. See Annex A for details.

With regards to scope 3 emissions disclosure and target-setting, 29% of large companies disclose scope 3 baseline emissions, compared to one medium-sized company and one small. Seventy-one per cent of large companies (24 out of 34) disclose their current scope 3 emissions, while 24% (8 out of 33) of medium-sized and 21% of small companies do (7 out of 33) (Figure 3.6). When it comes to target-setting, only four large companies (12%) have established an interim target for scope 3 emissions with an average period of 10 years against the baseline value, and seven (21%) have set long-term targets. No medium nor small companies have disclosed interim nor long-term targets reduction for scope 3 emissions.

Figure 3.6. Scope 3 emissions and targets for a sample of 100 energy companies in 2024

Disclosure of scope 3 emissions is mostly limited to large companies, which rarely set reduction targets for this scope – and when such targets are set, their interim targets tend to remain limited.

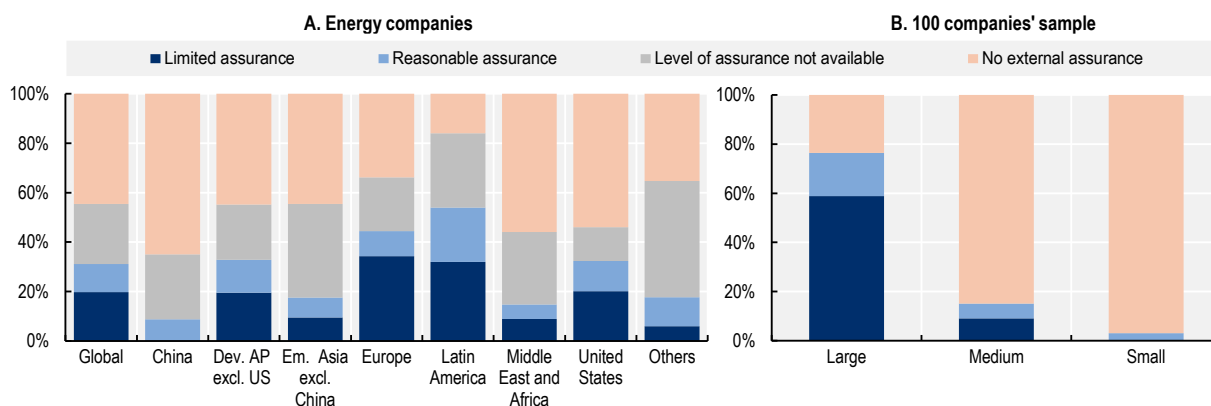


Source: OECD compilation based on each company's publicly available disclosure. See Annex A for details.

Globally, among the 924 listed energy companies that disclosed their GHG emissions, an external service provider assures the emissions of 512 of them. One-fifth of the companies disclosed a limited level of assurance, while 11% disclosed their emissions were subject to a reasonable level of assurance. In Europe and Latin America, 34% and 32% of the companies assured their emissions with a limited level of assurance, respectively (Figure 3.7, Panel A). Among the large companies' sample, more than 75% of the GHG emissions disclosed are assured externally: 59% are subject to limited assurance and 18% to reasonable assurance. Most medium-sized companies (85%) do not undergo any form of external assurance, with 6% disclosing a reasonable assurance of their GHG emissions and 9% opting for a limited assurance. For small companies, the vast majority of the GHG emissions disclosed are unassured, with only 3% assured with reasonable level (Figure 3.7, Panel B).

Figure 3.7. External assurance of GHG emissions in 2024

A detailed analysis of a sample of 100 companies confirms what widely used commercial databases also suggest: external assurance of GHG emissions disclosure is common only among large energy companies.



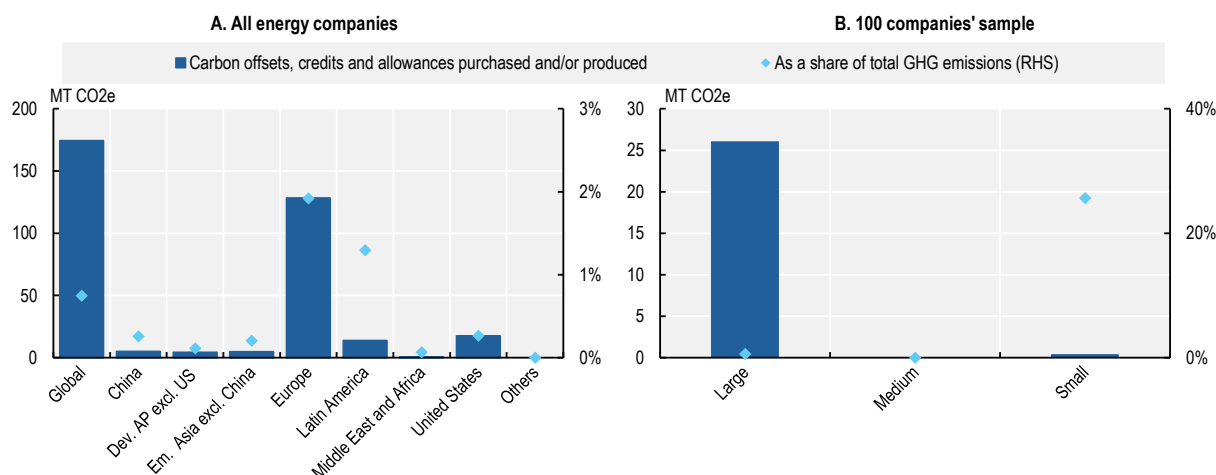
Source: OECD Corporate Sustainability dataset, LSEG, Bloomberg, OECD compilation based on each company's publicly available disclosure. See Annex A for details.

Several market mechanisms aiming to reduce greenhouse gas emissions exist. Carbon offsets and allowances are two important ones. Carbon offsets are certificates companies can buy from actors conducting projects to avoid or capture GHG emissions. The buyer can then claim that the emission reduction that it financed by buying the certificate partially offset its own emissions. Carbon offsets are typically traded on a voluntary basis. Allowances are certificates giving companies the right to emit a certain amount of greenhouse gases. They exist under emission trading schemes, which are in place in jurisdictions where allowances are required to be able to emit greenhouse gases without paying fines.

Both these instruments are referred to as carbon credits. Figure 3.8 presents the total GHG emissions against carbon credit retirement rates. Globally, around 1 000 listed companies disclosed carbon credits corresponding to 258 MtCO₂e, of which 116 are energy companies amounting to 174 MtCO₂e (Figure 3.8, Panel A). These 174 MtCO₂e represent 0.7% of total reported emissions by these companies. European companies disclosed the highest ratio of carbon credit retirements to emissions (1.9%). When examining the sample of 100 companies, large firms disclosed 26 MtCO₂e in carbon credits, representing 0.6% of their total emissions.

Figure 3.8. Retired carbon credits against total emissions in 2024

Retired carbon credits account for only a negligible share of total GHG emissions among energy companies across all sizes and regions, with Europe standing out as the exception.



Source: OECD Corporate Sustainability dataset, LSEG, OECD compilation based on each company's publicly available disclosure. See Annex A for details.

3.3. Lobbying and influence

One area where energy companies' commitment to addressing GHG emissions can be tested is lobbying and influence activities. Some companies are under scrutiny to ensure their lobbying and influence activities are consistent with their commitments and goals on responsible business conduct matters (OECD, 2024^[5]). For example, companies that have a net-zero-by-2050 pledge that includes scope 3 emissions could be expected to advocate for aggressive climate policies that reduce fossil fuel demand (e.g. carbon pricing, efficiency standards, subsidies for electric vehicle adoption). In practice, however, short-term profit increases may incentivise companies to lobby against or weaken climate regulations, which would be a misalignment with their sustainability goals.

Sub-Principle VI.C.1 of the *G20/OECD Principles of Corporate Governance* recommends that the corporate governance framework should ensure that boards oversee whether companies' lobbying activities are coherent with their sustainability-related goals and targets. According to the annotations to the principle, boards should effectively oversee the lobbying activities management conducts and finances on behalf of the company, in order to ensure that management gives due regard to the long-term strategy for sustainability adopted by the board.

An increasing number of countries are establishing a lobbying regulatory framework that clearly specifies definitions and transparency requirements for lobbying activities. Currently, around half of OECD countries have defined lobbying activities and which actors are considered lobbyists in their regulatory framework, and 17 OECD countries have a publicly available lobbying register (OECD, 2024^[6]).

These frameworks are not intended to restrict or discourage lobbying, but rather to establish safeguards and standards that ensure interests are represented fairly, and that citizens can understand who is seeking to influence policy decisions. However, experience from these countries has found that, providing effective definitions remains a challenge, in particular because those who seek to influence the policy making process are not necessarily what might typically be considered lobbyists. Indeed, lobbying and influence landscape has evolved in recent years, not only the actors and practices involved but also the context in which these activities operate (OECD, 2021^[7]). The definitions of "lobbying" and "lobbyist" may need to be

tailored to the specific context and sufficiently robust, comprehensive and explicit to avoid misinterpretation and to prevent loopholes. This includes clarifying:

1. “who” carries out the lobbying and “on behalf of whom”
2. “who” are the public officials lobbied
3. “what” matters are lobbied about (i.e. the objective pursued and the specific public decision that was targeted) and
4. “how” is the lobbying taking place.

The *OECD Recommendation on Transparency and Integrity in Lobbying and Influence* upholds lobbying and seeking to influence government decisions as legitimate ways in which stakeholders participate in public decision-making processes. It defines lobbying and influence activities as “actions, conducted directly or through any other natural or legal person, targeted at public officials carrying out the decision-making process, its stakeholders, the media or a wider audience, and aimed at promoting the interests of lobbying and influence actors with reference to public decision-making and electoral processes.” (OECD, 2024^[5]).

Table 3.1 provides an overview of four selected legislative frameworks governing lobbying activities in Australia, Chile, the European Union, and the United States. It outlines the scope of each legislation by identifying the individuals and entities to whom the rules apply and details the types of information that must be disclosed under each regime. It also indicates whether the jurisdiction has designated a competent authority or institution with the legal capacity to monitor and enforce compliance with lobbying rules. This comparative approach aims to highlight key similarities and differences in transparency requirements across jurisdictions.

Table 3.1. Lobbying frameworks across selected jurisdictions

	Applicable to companies lobbying on their own behalf	Applicable to consultant lobbyists (lobbying on behalf of third-party clients)	Disclose source of the funding	Disclose lobbying expenditures	Disclose the piece of legislation or regulation targeted	Designation of an oversight function
Australia		•	•			•
Chile	•	•	•		•	•
European Union	•	•	•	•	•	•
United States	•	•	•	•	•	•

Note: Bullet-points correspond to a positive answer; blank cells correspond to a negative answer.

Sources: OECD (2021^[7]), *Lobbying in the 21st Century: Transparency, Integrity and Access*, <https://doi.org/10.1787/c6d8eff8-en>; OECD (2022^[8]), *Regulating Corporate Political Engagement: Trends, challenges and the role for investors*, <https://doi.org/10.1787/8c5615fe-en>; OECD (2024^[9]), *The Regulation of Lobbying and Influence in Chile: Recommendations for Strengthening Transparency and Integrity in Decision Making*, <https://doi.org/10.1787/e84a846f-en>.

The United States and the European Union stand out for fulfilling all six criteria. Chile fulfils all the criteria but the obligation to disclose lobbying expenditures. Australia fulfils only three categories, and most importantly, its framework does not cover companies lobbying on their own behalf.

These corporate disclosure requirements support transparency of lobbying activities by providing information about who is doing the lobbying, on whose behalf, and with what resources. Such disclosures enable investors, stakeholders and oversight bodies to assess the scale of lobbying efforts and compare

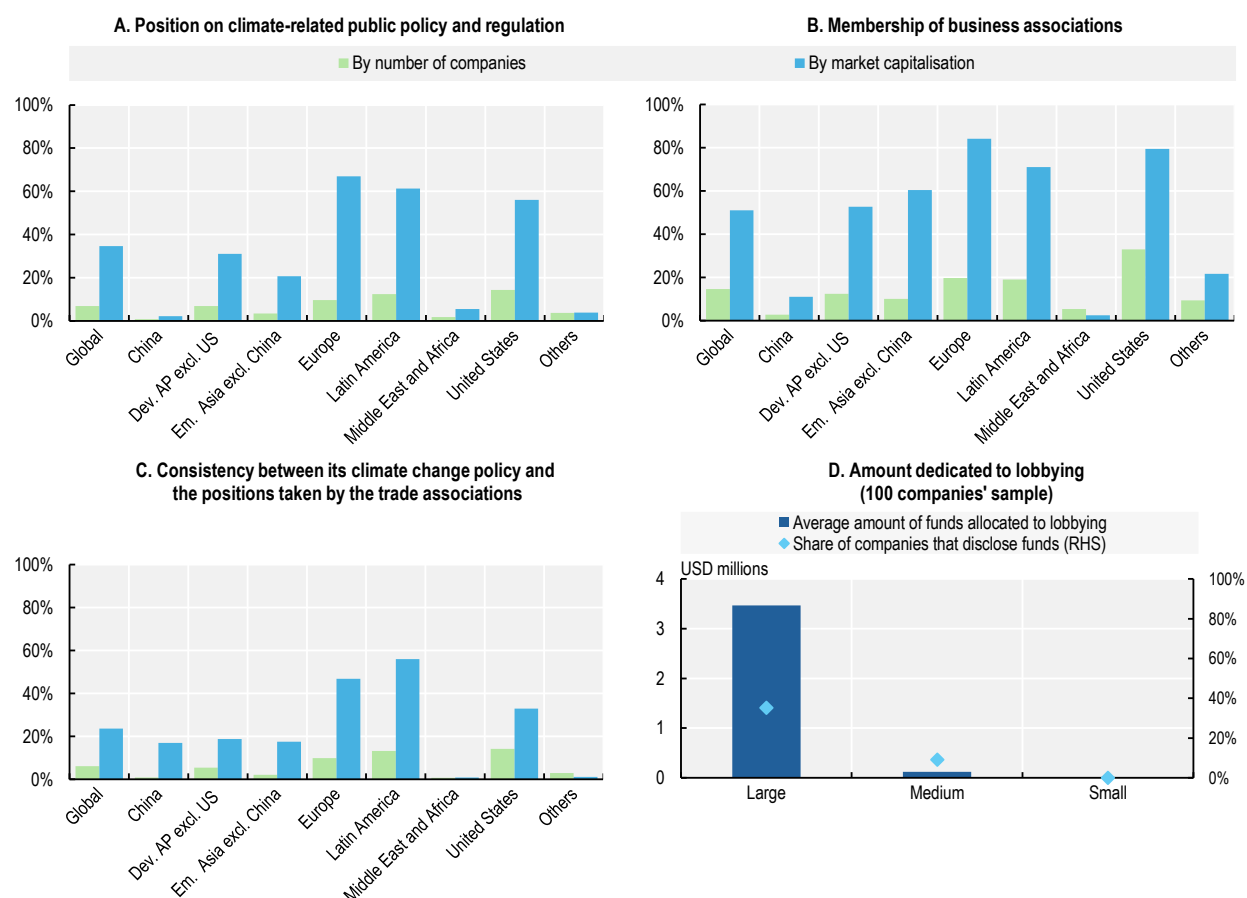
the relative influence of various actors. This can also show whether public commitments or sustainability goals and actual lobbying practices are aligned.

At the global level, 7% of listed energy companies (representing 35% of market capitalisation) publicly disclose their position on climate-related public policy and regulation (Figure 3.9, Panel A). Membership in business associations is more commonly disclosed, with 15% of companies by number and 51% by market capitalisation reporting such affiliations (Figure 3.9, Panel B). However, only 6% of companies by number – and 24% by market capitalisation – assess whether their climate policies are consistent with those of the associations to which they belong (Figure 3.9, Panel C). Europe and the United States lead across all three measures.

With regards to the 100-company sample, large companies disclosed allocating USD 3.5 million on average to lobbying activities in 2024. In comparison, medium-sized companies disclosed an average of USD 120 000, and no small companies disclosed this information. These figures are shaped by limited disclosure: only 12 out of 34 large firms (35%) disclosed lobbying expenditures, 3 out of 33 among medium-sized companies (9%) and no small firm (Figure 3.9, Panel D).

Figure 3.9. Energy companies' lobbying activities in 2024

Globally, 7% of listed energy companies disclose climate policy positions and 15% report business association memberships, with large companies disclosing on average USD 3.5 million in lobbying.



Source: OECD Corporate Sustainability dataset, LSEG, OECD compilation based on each company's publicly available disclosure. See Annex A for details.

In the 100-company sample, 68% of large companies disclosed their lobbying activities, and half disclosed the goal of their lobbying activities. Indirect lobbying activities (encompassing a wide range of activities to influence public policies through third parties, such as trade associations memberships, social media, and grassroots movements, among others) were disclosed by 71% of large companies, while 35% disclosed both funds dedicated to lobbying, and jurisdictions in which they operate. A code applicable to both in-house and external lobbying exists in 38% of large companies, and 15% provide training for employees involved in lobbying. Annual reviews of lobbying activities are conducted by 47% of large companies. Among medium-sized companies, 12% disclosed lobbying activities, but none disclosed the goal of their lobbying activities. Small companies show uniformly low levels of disclosure, with each of the indicators ranging between 0% and 9% (Figure 3.10).

Figure 3.10. Lobbying activities for a sample of 100 energy companies in 2024

In the 100-company sample, large companies' disclosure of lobbying practices varies widely across activities, while medium companies disclose little and small companies almost none.

Lobbying activities (in per cent)	Large	Medium	Small
Disclosure of lobbying activities	68	12	6
Direct lobbying activities	62	6	9
Indirect lobbying activities	71	15	9
Energy or climate-related lobbying activities	59	12	6
Disclose amount of funds dedicated to lobbying	35	9	0
A code applicable to lobbying activities	38	12	6
Disclose jurisdictions in which they lobby	35	0	3
Providing training program to employees involved in lobbying	15	0	0
Annual review of the lobbying activities	47	3	3
Goal of lobbying	50	0	9

Source: OECD compilation based on each company's publicly available disclosure. See Annex A for details.

3.4. R&D and capital expenditure

Tackling GHG emissions will require massive investment in alternative technologies to replace the combustion of fossil fuels. In the private sector, many companies have considerable technical expertise and R&D capacity that could be directed to climate solutions.

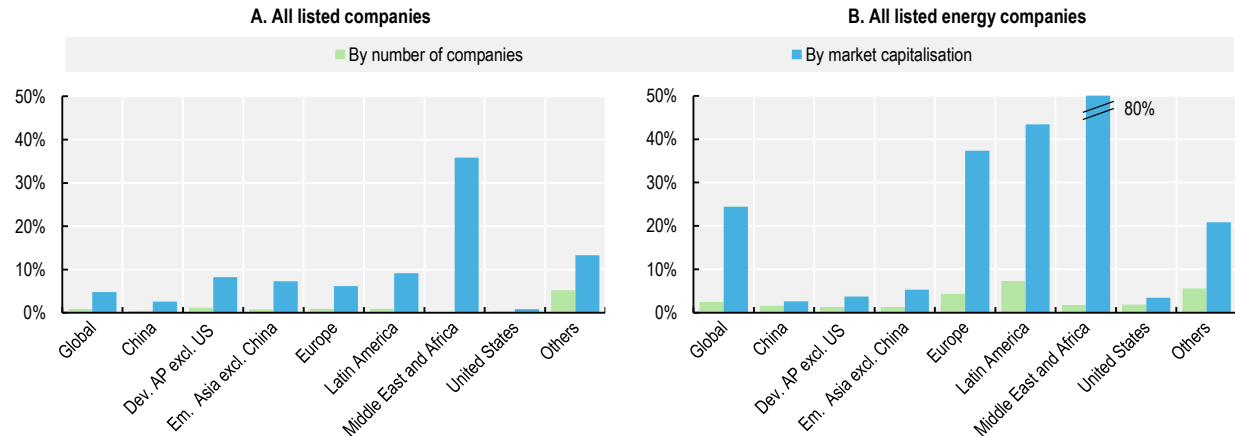
Environmental R&D and environmental CapEx figures reported by companies do not adhere to a harmonised classification system such as a taxonomy for sustainable activities; instead, they are based on company-specific disclosure, which limits the comparability of the data.

Globally, only 1% (381) of all listed companies by number disclose environmental R&D, though this figure rises to 5% when considered by market capitalisation (Figure 3.11). In the energy sector, 2.5% (61) of companies disclose such R&D, and these represent 24% of the sector's market capitalisation.

In the Middle East and Africa, while few companies (3 companies, corresponding to 1.8% of listed companies in the region) report environmental R&D, they account for 80% of market capitalisation – the highest share globally. Latin American companies from the energy sector present the highest share in disclosure of environmental R&D (7% of companies), representing 43% of the sector's market capitalisation.

Figure 3.11. Listed companies disclosing environmental R&D in 2024

Environmental R&D and CapEx disclosure is rare and non-harmonised – only 2.5% of listed energy companies report globally, with figures reaching 7% of energy companies in Latin America and just 1.8% of firms in the Middle East and Africa, yet covering 80% of the region's market cap.



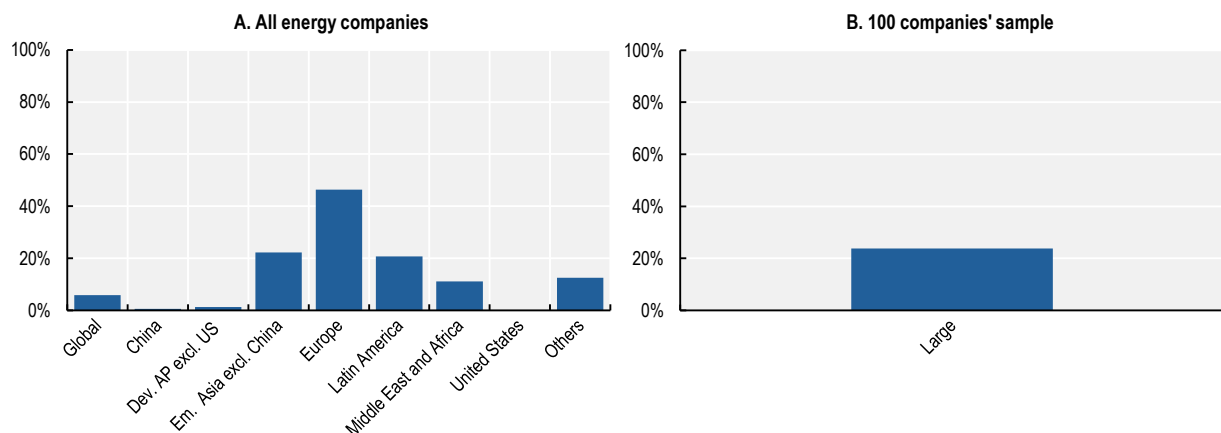
Source: OECD Corporate Sustainability dataset, LSEG. See Annex A for details.

Environmental R&D accounts for 6% of total R&D costs among energy companies globally (Figure 3.12, Panel A). This share is considerably higher in Europe in where it amounts to 46%. In Emerging and Developing Asia excl. China, and Latin America, more than 20% of the R&D costs are oriented towards the development of products and services focusing on improving the environmental impact reduction and innovation.

In the 100-company sample, environmental R&D accounted for 24% of total R&D investments among large companies (Figure 3.12, Panel B). This metric could not be computed for medium and small companies, given the scarce availability of data on research and development for these companies.

Figure 3.12. Environmental R&D over all R&D for companies disclosing this information in 2024

Except in Europe, reported R&D dedicated to environmentally friendly technologies remains low, suggesting either weak disclosure or limited long-term ambition by energy companies in transitioning to a low-carbon economy.



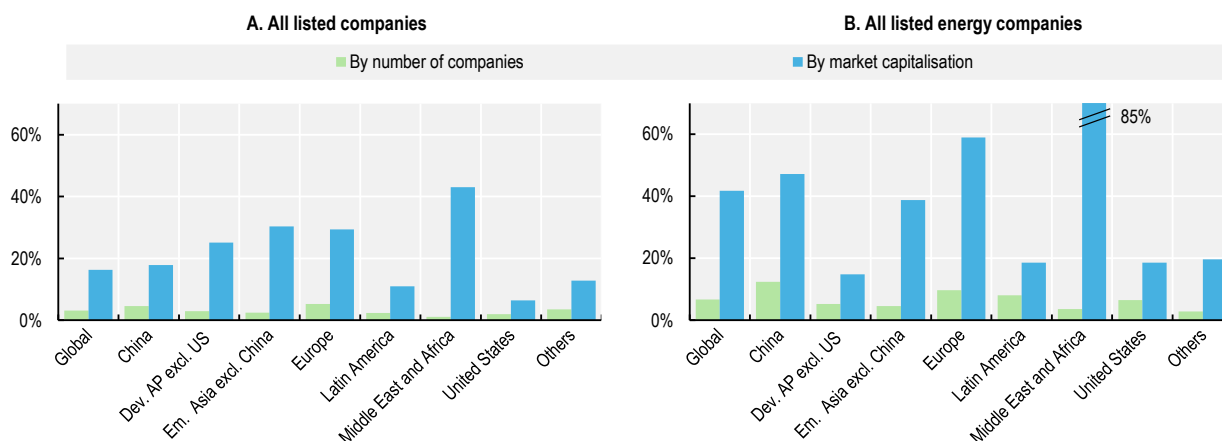
Source: OECD Corporate Sustainability dataset, LSEG, OECD compilation based on each company's publicly available disclosure. See Annex A for details.

Where and how a company directs its capital expenditures (CapEx) can reveal its strategic priorities more tangibly than pledges. If a company continues to invest heavily in exploring new oil fields or building new coal power units, it indicates an expectation of continued fossil fuel business. Conversely, significant and growing green CapEx may signal a pivot to a low-carbon future. The availability and transparency of such capital expenditure plans are therefore of interest to investors and policymakers alike.

The disclosure of environmental CapEx remains limited across global markets. Globally, only 3% of all listed companies report environmental CapEx, yet these represent 16% of total market capitalisation (Figure 3.13). In the energy sector, disclosure is more prevalent, with 7% of companies reporting, accounting for 42% of the sector's market capitalisation. China and Europe lead in terms of the share of energy companies disclosing environmental CapEx in the energy sector, with 12% and 10% of companies respectively, corresponding to 47% and 59% of market capitalisation.

Figure 3.13. Listed companies disclosing environmental CapEx in 2024

An investor assessing companies' preparedness for a Paris-aligned transition would find environmental CapEx disclosure for only 7% of energy companies globally, with more substantive reporting largely concentrated in Emerging Asia and Europe.

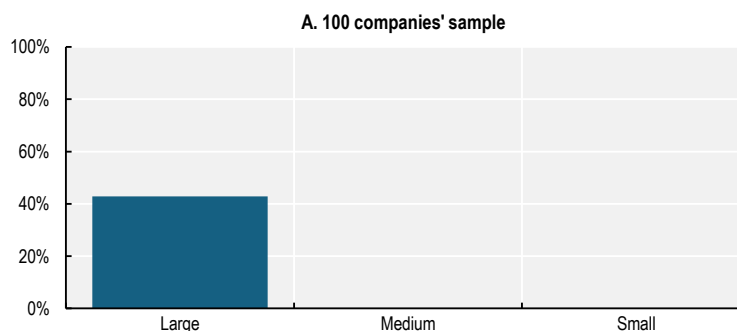


Source: OECD Corporate Sustainability dataset, LSEG. See Annex A for details.

In the 100-company sample, large companies reported USD 267 billion in CapEx, of which USD 114 billion (43%) was directed towards low-carbon assets and projects. Figure 3.14 reveals that environmental CapEx accounted for less than 1% of total CapEx for medium and small-sized companies.

Figure 3.14. Environmental CapEx over all CapEx for companies disclosing this information in 2024

While disclosure from medium and small companies is limited, the 43% of CapEx that large energy companies report allocating to low-carbon assets may indicate expectations of a gradual transition to a low-carbon economy.



Note: Environmental CapEx displayed in Figure 3.13 refers to whether the company has disclosed environmental CapEx; however, the actual value of environmental CapEx is not available.

Source: OECD compilation based on each company's publicly available disclosure. See Annex A for details.

In addition to missing information from many companies, another major complication in the analysis above is the lack of standardised disclosure. An investor trying to compare how “green” different energy companies’ R&D and CapEx is will struggle, because definitions vary, and many companies do not break out low-carbon spending at all

IFRS S1 does not explicitly require the disclosure of green or environmental CapEx as a standalone metric. However, it mandates that companies disclose material information about sustainability-related risks and opportunities, including how these are integrated into governance, strategy, and resource allocation. GRI Standards, particularly GRI 302 (Energy) and GRI 305 (Emissions), do not mandate specific disclosures on green CapEx. However, they encourage organisations to report on investments in energy efficiency, renewable energy, and emissions reduction initiatives.

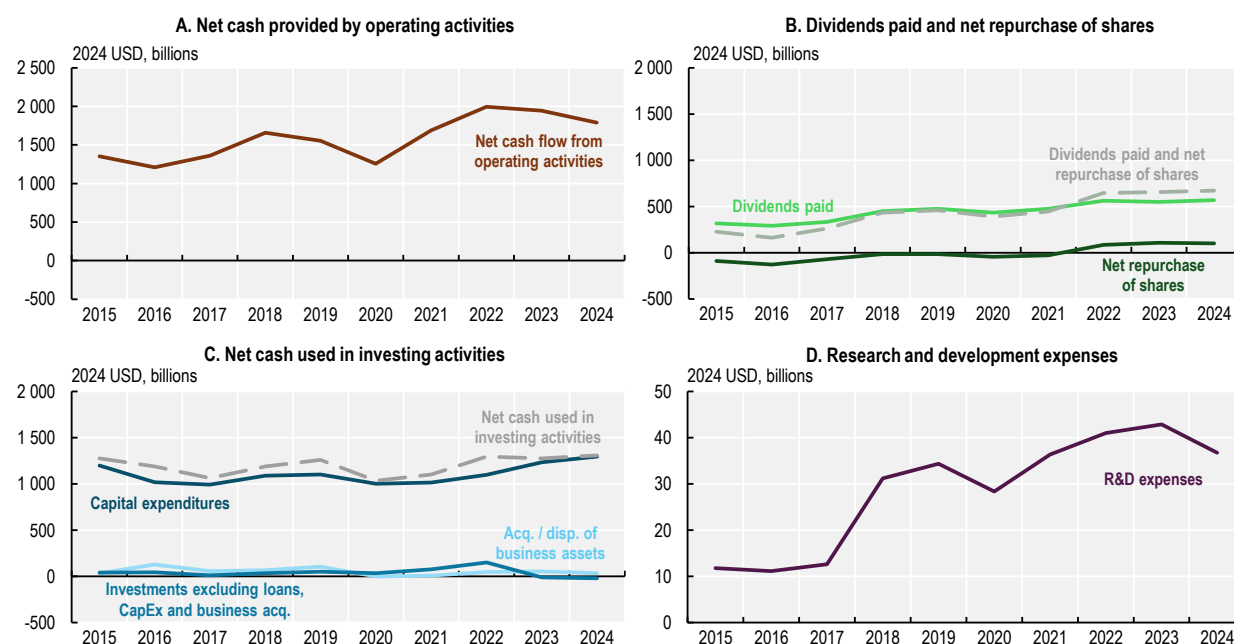
ESRS E1, aligned with the EU Taxonomy, explicitly requires companies to disclose the proportion of CapEx and OpEx that is aligned with the EU Taxonomy’s environmental objectives, including climate change mitigation and adaptation. This includes reporting on the share of green CapEx as a percentage of total CapEx and providing details on how these investments contribute to the transition to a climate-neutral economy.

Another challenge in the engagement between companies and investors is the capacity of energy companies to invest in CapEx and R&D – regardless of whether green or not – in light of competing priorities. Panel B of Figure 3.15 shows that from 2015 to 2024, the cash used by listed energy companies to pay dividends and repurchase shares has tripled, reaching a peak of USD 671 billion in 2024. Panel C shows that, over the same period, net cash used in investing activities has increased by less than 5%. In 2022, for the first year in this period, more cash was used to repurchase shares than cash received from issuing shares.

Since 2022, energy companies’ net cash flows from operating activities have been falling, but dividends paid and net shares repurchased, and net cash used in investing activities have remained stable (Figure 3.15, Panels A, B and C). Meanwhile, R&D expenses fell by 14% between 2023 and 2024 (Figure 3.15, Panel D).

Figure 3.15. Cash flows and R&D expenses of listed energy companies from 2015 to 2024

Rising operating cash flows enabled energy companies to triple dividend payments and share buybacks between 2015 and 2024, while investment activities grew by less than 5%.



Source: OECD Corporate Sustainability dataset, LSEG. See Annex A for details.

3.5. Executive remuneration

In energy companies, traditional executive remuneration metrics have included reserves replacement, production growth, and short-term financial returns – factors which, if left unchanged, could motivate behaviour that does not align with decarbonisation objectives. Globally, 23% of companies link executive pay to performance metrics, representing 90% of market capitalisation. In the energy sector, 34% of companies by number and 89% by market capitalisation link remuneration with performance (Figure 3.16, Panel A).

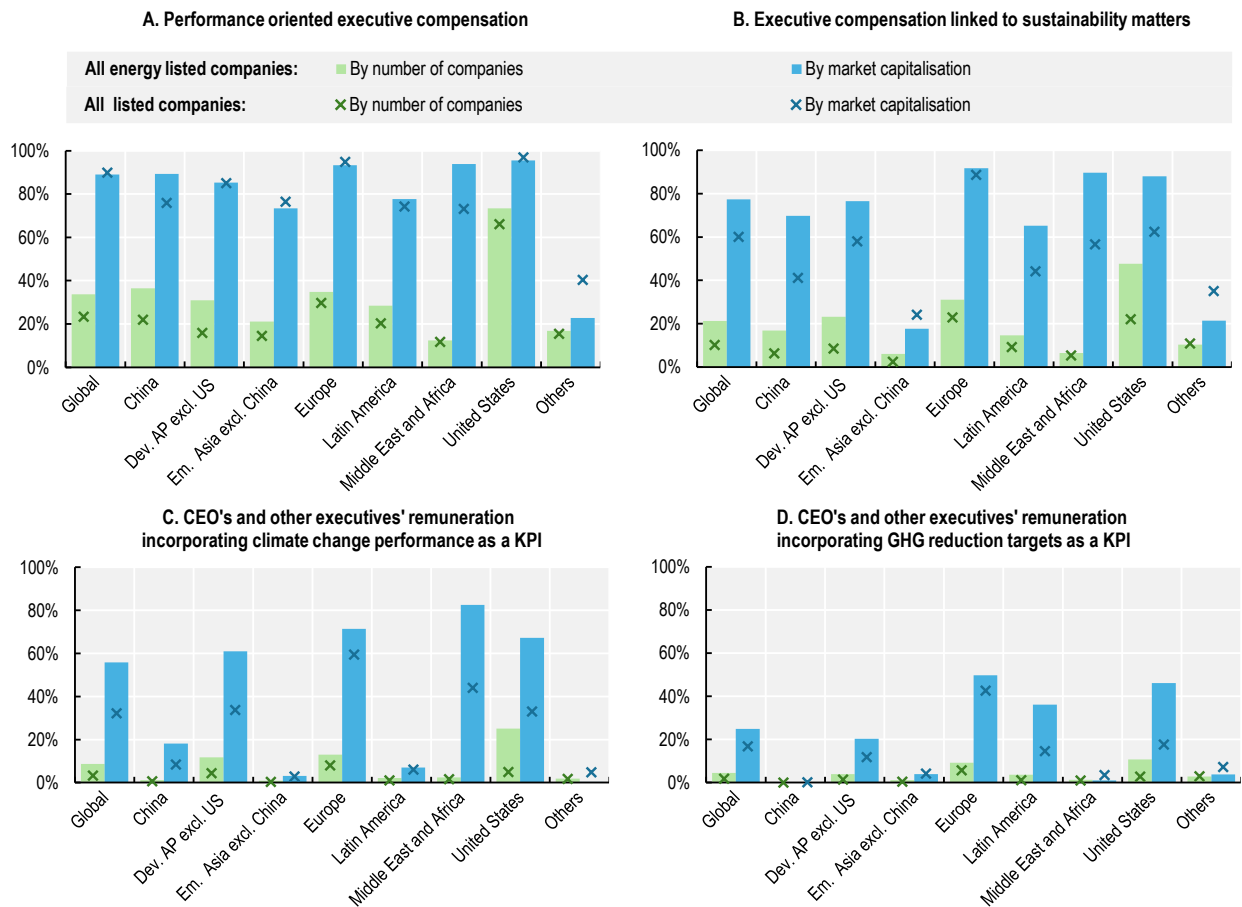
Principle VI.C. of the G20/OECD Corporate Governance Principles recommends that “the corporate governance framework should ensure that boards adequately consider material sustainability risks and opportunities when fulfilling their key functions [...]”. Boards can take into consideration sustainability matters when establishing key executives’ compensation.

At the global level, 10% of all listed companies disclosed linking their executives’ remuneration to sustainability-related metrics. These companies represent 60% of global market capitalisation. In the energy sector, 21% of companies by number and 77% by market capitalisation have established such remuneration linkages (Figure 3.16, Panel B). Europe leads in both the number and in market capitalisation for all listed companies: 23% incorporate sustainability into executive remuneration, covering 89% of the region’s market capitalisation. In the energy sector, 31% of companies – representing 92% of market capitalisation – have adopted such practices. The United States has the highest percentage of energy sector companies (48% by number) disclosing having such remuneration arrangements. In contrast, in Emerging and Developing Asia excl. China, only 6% of companies by number and 18% by market capitalisation disclose sustainability-linked remuneration (Figure 3.16, Panel B).

Across all listed companies, only 3% (representing 32% of market capitalisation) disclosed linking CEO and executive remuneration to climate-related performance indicators. In the energy sector, these figures increase to 9% of companies and 56% of market capitalisation (Figure 3.16, Panel C). When focusing specifically on the integration of GHG reduction targets as a remuneration KPI, disclosure remains limited: 2% of companies (17% of market capitalisation) disclosed such practices, compared with 4% of companies (25% of market capitalisation) in the energy sector (Figure 3.16, Panel D).

Figure 3.16. All listed companies and energy listed companies linking executive pay to sustainability in 2024

Globally, only 10% of listed companies link executive pay to sustainability metrics – rising to 21% in the energy sector – while explicit climate- or GHG-related remuneration linkages remain far less common.

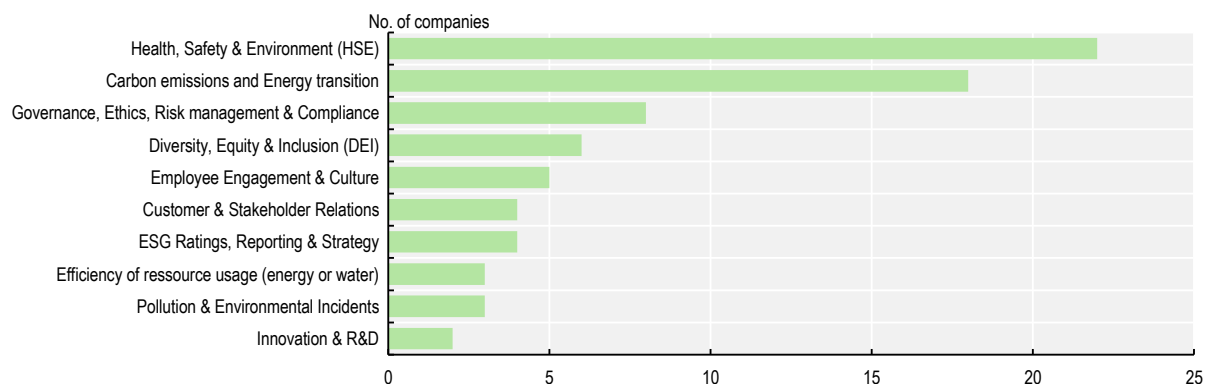


Source: OECD Corporate Sustainability dataset, LSEG, Bloomberg. See Annex A for details.

Energy companies' non-financial performance indicators in their remuneration policies most typically take the form of metrics tied to health, safety and environment (HSE), or carbon emissions reduction and energy transition (Figure 3.17). Other common KPI categories related to non-financial issues include matters tied to governance, ethics, risk management and compliance, but also topics linked to diversity, equity and inclusion (DEI) or employee engagement and culture.

Figure 3.17. Ten most common non-financial KPIs in executive remuneration in 100 energy companies in 2024

In energy companies' executive remuneration, KPIs related to "Health, Safety and Environment" and the energy transition are by far the most common.



Note: The figure displays sustainability-related KPIs, excluding financial KPIs, for the 100-company sample used in previous figures.

Source: OECD compilation based on each company's publicly available disclosure. See Annex A for details.

3.6. Double materiality assessments

The year 2025 marks the first wave of corporate disclosures aligned with the EU's Corporate Sustainability Reporting Directive (CSRD) and the European Sustainability Reporting Standards (ESRS). The ESRS draw on international standards on responsible business conduct (RBC) in several ways. First, several disclosure requirements pertain directly to the measures and steps outlined in the OECD Guidelines for Multinational Enterprises on Responsible Business Conduct (OECD MNE Guidelines) and the related Due Diligence Guidance for Responsible Business Conduct, including by requiring undertakings to disclose information related to their due diligence process (GOV-3). In addition, undertakings are also required to conduct their impact materiality assessment in accordance with this risk-based due diligence approach.

Specifically, as part of the CSRD reporting process, companies are required to perform a double materiality assessment (DMA) to identify and disclose material impacts (positive and negative), as well as material financial risks and opportunities (IROs) associated with their operations and value chains. Companies are expected to disclose IROs against a list of ten sustainability topics, and potentially sub-topics (as outlined in the ESRS AR 16).

Against this background, Figure 3.18 and Figure 3.19 analyse the outcome of double materiality assessments performed by 42 listed energy companies that reported under the CSRD's first reporting cycle. The primary objective is to identify which topics are most and least frequently associated with material negative impacts and risks respectively, and to assess the extent to which these two assessments overlap. Where companies' material negative sustainability impacts exceed their material sustainability risks, this may be an indication that companies may lack incentives to improve their sustainability performance. Identifying these gaps can help policy makers assess where further market-based or regulatory incentives may be relevant in order to improve the sustainability impact of business.

The 42 energy companies in the analysis have identified material sustainability impacts on a wide range of topics, and 9 of the 10 ESRS topics are considered to be material impacts by at least half of the companies in the energy sector (Figure 3.18). The only topic *not* considered a material negative impact by most companies is consumers and end-users (S4), which is considered a material impact by approximately one third of companies (36%). By contrast, only 4 of the 10 topics are considered a material financial risk

by more than half of the companies. These are climate change (98%), own workforce (81%), workers in value chain (52%), and business conduct (52%).

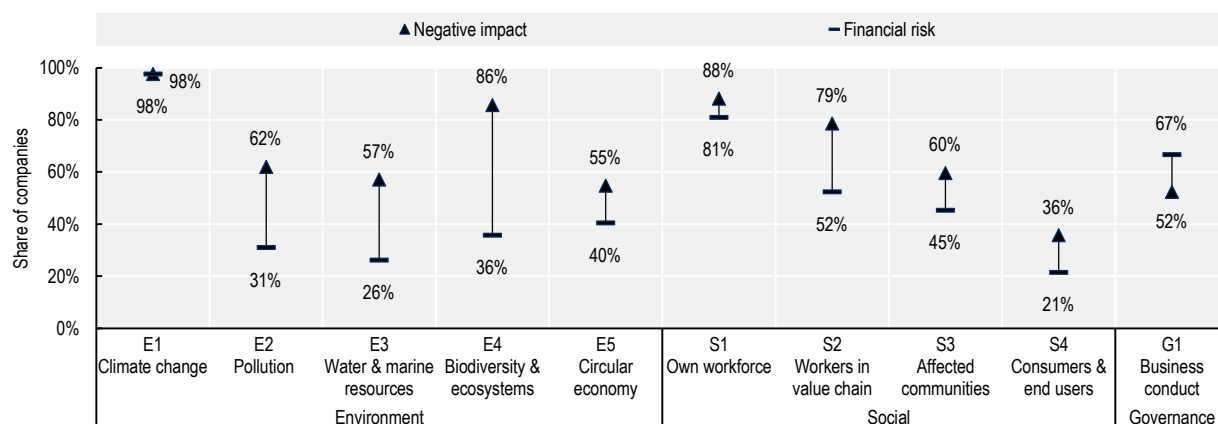
Two topics are considered as both a material impact and a material financial risk by a large majority of the companies. Climate change (E1) is the most consistently identified material topic across both types of materiality assessment (see Figure 3.18). All but one company (98%) considered climate change a material negative impact as well as a material financial risk. Negative impacts related to companies' own workforce (S1) are the second-most frequently reported material impact, considered a material negative impact by 88% of energy companies and a financial risk by 81% of the companies.

All other topics display significant differences across the two materiality assessments. The gap is most pronounced for biodiversity and ecosystems (E4), which is considered a material impact by 86% of the companies, but only considered a material financial risk by 36% of the companies, resulting in a difference of 50 percentage points (p.p.). Other topics with particularly significant gaps are pollution (E2, 31 pp), water and marine resources (E3, 31 pp), and workers in the value chain (S2, 26 pp).

Notably, for 8 out of 10 topics, the impact materiality exceeds the risk materiality, implying that generally companies in the sector may lack financial incentives to improve their sustainability performance and risk management in relation to these topics. This gap is generally wider for environmental issues than for social issues. The only topic for which the financial risk materiality exceeds the impact materiality is business conduct (G1), relating to issues such as corruption, political influence or lobbying activities. This is considered a material impact by 52% of the companies, whereas 67% consider it a material risk, possibly reflecting that corruption risks can be associated with significant legal and financial liability.

Figure 3.18. Outcomes of energy companies' double materiality assessments in 2024

For 8 out of 10 topics, the impact materiality exceeds the financial risk materiality, implying that generally companies in the energy sector may lack financial incentives to improve their sustainability performance.



Note: Based on a sample of 42 double materiality assessments by energy companies reporting under the CSRD, as listed by Accounting for Transparency's *Sustainability Reporting Navigator*.

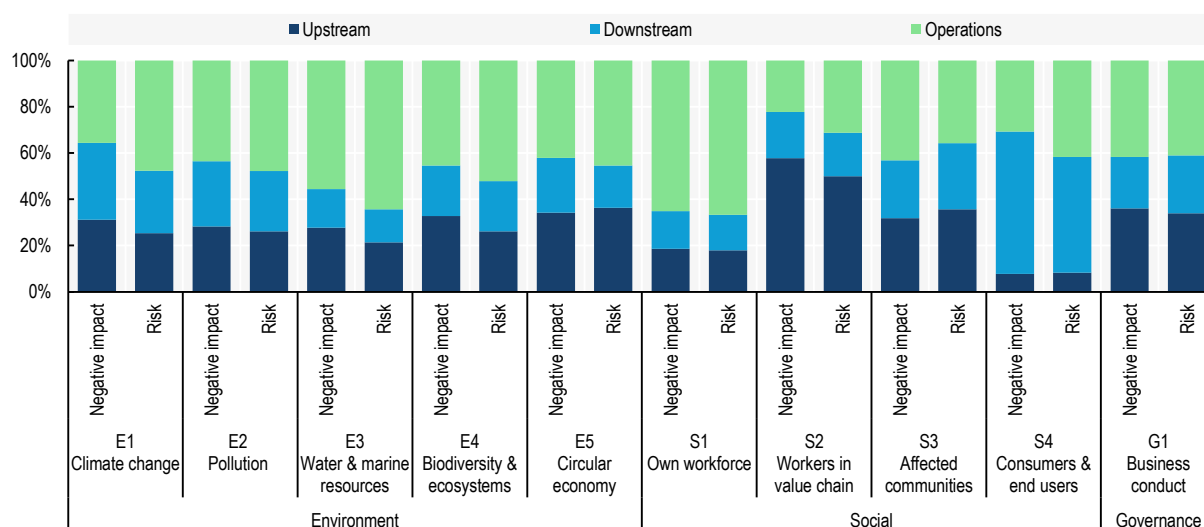
Source: OECD compilation based on each company's publicly available disclosure. See Annex A for details.

The majority of reported material impacts and risks are associated with companies' value chains. Overall, 58% of reported material negative impacts are associated with companies' value chains, including both the upstream (32%) and downstream (25%) segments (Figure 3.19). The identification of negative impacts in the value chain is more pronounced for workers in the value chain (S2), consumers and end users (S4), climate change (E1), and business conduct (G1). On the contrary, topics for which negative impacts have been primarily identified in companies' own operations are own workforce (S1), water and

marine resources (E3), and biodiversity and ecosystems (E4). Considering material financial risks, the share of risks associated with the value chain is only slightly lower, at 53%, and the distribution across ESRS topics is broadly similar. While this distribution appears to vary with the topic, it will likely also reflect factors specific to the energy industry as well as the availability and quality of companies' data on value chain impacts and risks.

Figure 3.19. Share of material negative impacts and financial risks in upstream and downstream value chain segments vs. own operations in 2024

In the energy sector, 58% of material sustainability impacts and 53% of material sustainability risks are linked to companies' value chains.



Source: OECD compilation based on each company's publicly available disclosure. See Annex A for details.

References

- IEA (2025), *Global Energy Review 2025*, IEA, Paris, <https://www.iea.org/reports/global-energy-review-2025>. [2]
- IEA (2025), *World Energy Investment 2025*, IEA, Paris, <https://www.iea.org/reports/world-energy-investment-2025>. [3]
- IEA (2021), *Net Zero by 2050*, IEA, Paris, <https://www.iea.org/reports/net-zero-by-2050>. [4]
- IPCC (2022), *Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change.*, Cambridge University Press, <https://doi.org/10.1017/9781009157926.004>. [1]
- OECD (2024), *Anti-Corruption and Integrity Outlook 2024*, OECD Publishing, Paris, <https://doi.org/10.1787/968587cd-en>. [6]
- OECD (2024), *Recommendation of the Council on Transparency and Integrity in Lobbying and Influence*, OECD Publishing, Paris, <https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0379>. [5]

- OECD (2024), *The Regulation of Lobbying and Influence in Chile: Recommendations for Strengthening Transparency and Integrity in Decision Making*, OECD Public Governance Reviews, OECD Publishing, Paris, <https://doi.org/10.1787/e84a846f-en>. [9]
- OECD (2022), "Regulating corporate political engagement: Trends, challenges and the role for investors", *OECD Public Governance Policy Papers*, No. 13, OECD Publishing, Paris, <https://doi.org/10.1787/8c5615fe-en>. [8]
- OECD (2021), *Lobbying in the 21st Century: Transparency, Integrity and Access*, OECD Publishing, Paris, <https://doi.org/10.1787/c6d8eff8-en>. [7]

Annex A. Methodology for data collection and classification

A.1. OECD Corporate Sustainability dataset

A.1.1. Regional classification

The category “Developed Asia-Pacific excl. US” includes Australia, Canada, Hong Kong (China), Japan, Macau, New Zealand, Singapore, South Korea and Chinese Taipei. “Latin America” includes jurisdictions both in Latin America and in the Caribbean. “Europe” includes all jurisdictions that are fully located in the region, including the United Kingdom and Switzerland but excluding Russia and Türkiye. “Middle East and Africa” includes jurisdictions classified as “Middle East and Central Asia” in IMF’s World Economic Outlook Database. Excluding those already considered in “Developed Asia-Pacific excl. US” and Israel. “Emerging and Developing Asia excl. China” includes all jurisdictions in Asia that are classified as emerging market and developing economies in IMF’s World Economic Outlook Database excluding China. “Others” includes jurisdictions that are not represented in the other categories in the figure (e.g., Türkiye).

A.1.2. Listed companies

The information on the number of listed companies and their market capitalisation is based on LSEG Screener and the following criteria are used to clean the data:

- Security type classified as “units” and “trust” are excluded.
- For firms with multiple listings, only primary listings are kept.
- For firms with multiple observations but different countries of domicile, their true country of domicile is manually checked to remove the duplicates.
- Firms trading on over-the-counter (OTC) markets and those listed on multilateral trading facilities (MTFs) or SME/growth markets are excluded. SME/growth markets included in the analysis are: Korea Exchange (KOSDAQ), New York Stock Exchange (NYSE) and Nasdaq Capital Market (NASDAQ).
- Special Purpose Acquisition Companies (SPACs) are excluded.
- Investment funds are excluded.
- Real Estate Investment Trusts (REITs) are excluded.

A.1.3. Corporate sustainability

This firm-level dataset presents information on whether companies disclose sustainability information and the used accounting standards, the external assurance of sustainability information, GHG emission reduction targets, sustainability risks faced by companies, highest emitting companies, green R&D and green patents, companies with high green innovation, the presence of a sustainability committee reporting directly to the board, self-reported board level oversight of climate-related issues, executive remuneration linked to sustainability factors, companies with public benefit objectives, policies on shareholder

engagement, employee representation on the board, trade unions, turnover rates, training hours, disclosure on stakeholder engagement, artificial intelligence ethics policies, disclosure of human rights information, financials, GHG emissions, carbon offsets / credits / allowances, lobbying disclosure and lobbying-related practices, environmental R&D and CapEx, double materiality assessments, .

The dataset's coverage varies depending on the specific datapoint but, for instance, it includes information on more than 16 829 companies listed on 89 markets with a total USD 120 trillion market capitalisation at the end of 2024 with respect to whether they disclosed sustainability information or not in 2024 or 2025. Out of the 44 152 listed companies, the difference of 27 323 listed companies represents the companies for which the information is unavailable in the commercial databases used to develop the OECD Corporate Sustainability Dataset.

The main data sources (LSEG, Bloomberg and MSCI) were controlled against each other to ensure consistency and complementarity. Information was retrieved as of September 2025.

Sustainability disclosure by trusts, funds or special purpose acquisition companies was excluded from the universe under analysis. Sustainability disclosure for years prior to 2023 was also excluded.

Figure 2.1 displays the shares of companies that disclosed sustainability-related information (by no. of companies and by market capitalisation) among all listed companies within each region. It includes the disclosure in either English or another language of a sustainability report, an integrated annual report with sustainability data, a corporate social responsibility report with substantial data and a full or partial report of GHG emissions scope 1 and 2 or scope 3. The figure also presents the change with respect to 2022 in percentage points regarding this metric.

Figure 2.2 displays the share of companies that reported sustainability information by market capitalisation (and by no. of companies in Annex Figure A A.1) among all listed companies in each industry. For instance, out of the 5 704 basic materials companies globally with a total market capitalisation of USD 6.5 trillion, 1 550 basic materials companies with USD 5.7 trillion of market capitalisation report sustainability information, accounting for 88 % of the total market capitalisation of the industry.

Figure A A.1. Share of companies disclosing sustainability information by industry in 2024, by number of companies and by market capitalisation

A. By number of companies									
<i>In per cent</i>	Global	China	Dev. AP excl. US	Em. Asia excl. China	Europe	Latin America	Middle East and Africa	United States	Others
Basic Materials	27	26	28	20	39	30	18	65	23
Consumer Cyclicals	27	17	31	13	44	23	12	48	17
Consumer Non-Cyclicals	29	25	38	19	36	30	16	50	16
Energy	42	48	42	28	51	45	22	64	17
Financials	31	85	45	16	38	22	22	40	23
Healthcare	25	27	25	23	40	35	13	19	10
Industrials	30	20	34	19	44	29	13	52	16
Real Estate	26	38	41	17	27	24	11	23	0
Technology	31	19	29	23	50	44	20	43	17
Water & Related Utilities	26	20	29	29	16	78	22	43	0

B. By market capitalisation									
<i>In per cent</i>	Global	China	Dev. AP excl. US	Em. Asia excl. China	Europe	Latin America	Middle East and Africa	United States	Others
Basic Materials	88	65	93	90	99	87	79	98	66
Consumer Cyclicals	92	62	92	81	99	88	48	95	65
Consumer Non-Cyclicals	84	83	95	90	99	90	81	76	47
Energy	94	93	93	91	99	91	98	95	32
Financials	94	99	97	92	98	82	84	92	49
Healthcare	91	68	85	89	99	92	74	92	41
Industrials	89	65	93	88	97	89	57	95	45
Real Estate	78	69	90	82	79	75	50	86	0
Technology	94	65	96	94	98	94	83	96	53
Water & Related Utilities	81	49	89	74	99	94	71	94	0

Source: OECD Corporate Sustainability dataset, LSEG, Bloomberg, MSCI.

Figure 2.3, Panel A displays the shares of companies that disclosed scope 1 and 2 GHG emissions (by no. of companies and by market capitalisation) among all listed companies within each region. Only the companies that reported both scope 1 and scope 2 GHG emissions are counted in the analysis. Panel B displays the shares of companies for which third party estimations of scope 1 and 2 GHG emissions are available. In some cases, these estimations are only available if the company has not reported the information itself, so the shares of companies for which either reported or estimated information is available are slightly higher than the shares visible in Panel B.

Figure 2.4 displays the shares of companies that disclosed scope 1 and 2 GHG emissions by market capitalisation (and by no. of companies in Annex Figure A A.2) among all listed companies in each industry. For instance, out of the 5 704 basic materials companies globally with a total market capitalisation of USD 6.5 trillion, 1 355 basic materials companies with USD 5.5 trillion of market capitalisation report scope 1 and 2 emissions information, accounting for 84% of the total market capitalisation of the industry. Only the companies that reported both scope 1 and scope 2 emissions are counted in the analysis.

Figure A A.2. Share of companies disclosing scope 1 and 2 GHG emissions by industry in 2024, by number of companies and by market capitalisation

A. By number of companies									
<i>In per cent</i>	Global	China	Dev. AP excl. US	Em. Asia excl. China	Europe	Latin America	Middle East and Africa	United States	Others
Basic Materials	24	19	25	18	36	25	13	60	20
Consumer Cyclical	23	12	27	11	42	19	9	40	16
Consumer Non-Cyclical	26	19	34	17	35	27	9	45	14
Energy	37	32	38	26	50	36	20	57	16
Financials	26	71	40	14	36	19	16	24	23
Healthcare	20	19	23	21	37	32	9	13	7
Industrials	26	16	31	16	41	26	10	44	15
Real Estate	23	25	38	14	25	21	9	16	0
Technology	27	14	26	18	45	35	17	36	15
Water & Related Utilities	24	15	29	29	16	78	11	36	0

B. By market capitalisation									
<i>In per cent</i>	Global	China	Dev. AP excl. US	Em. Asia excl. China	Europe	Latin America	Middle East and Africa	United States	Others
Basic Materials	84	52	92	88	98	83	73	97	64
Consumer Cyclical	89	52	90	79	99	83	39	93	63
Consumer Non-Cyclical	82	76	93	89	99	84	77	75	46
Energy	90	81	79	91	99	87	98	92	32
Financials	90	97	95	86	97	81	78	87	49
Healthcare	87	57	84	88	98	92	72	88	38
Industrials	85	55	92	85	97	86	52	90	44
Real Estate	74	53	89	78	79	70	47	80	0
Technology	92	54	92	93	98	93	81	94	53
Water & Related Utilities	75	39	89	74	99	94	23	93	0

Source: OECD Corporate Sustainability dataset, LSEG, Bloomberg, MSCI.

Figure 2.5, Panel A displays the shares of companies that disclosed scope 3 GHG emissions (by no. of companies and by market capitalisation) among all listed companies within each region. Panel B displays the shares of companies for which third party estimations of scope 3 GHG emissions are available. In some cases, these estimations are only available if the company has not reported the information itself, so the shares of companies for which either reported or estimated information is available are slightly higher than the shares visible in Panel B.

Figure 2.6 displays the shares of companies that disclosed scope 3 GHG emissions (by market capitalisation and by no. of companies in Annex Figure A A.3) among all listed companies in each industry. For instance, out of the 5 704 basic materials companies globally with a total market capitalisation of USD 6.5 trillion, 815 basic materials companies with USD 4.3 trillion of market capitalisation report scope 3 emissions information, accounting for 67% of the total market capitalisation of the industry.

Figure A A.3. Share of companies disclosing scope 3 GHG emissions by industry in 2024, by number of companies and by market capitalisation

A. By number of companies									
<i>In per cent</i>	Global	China	Dev. AP excl. US	Em. Asia excl. China	Europe	Latin America	Middle East and Africa	United States	Others
Basic Materials	14	4	16	9	32	22	9	35	15
Consumer Cyclical	16	3	19	5	38	15	6	28	14
Consumer Non-Cyclical	18	3	23	10	32	21	4	35	11
Energy	25	9	25	17	45	31	9	36	14
Financials	21	32	34	9	35	18	12	18	22
Healthcare	12	4	12	10	33	26	7	8	3
Industrials	18	3	23	8	36	21	6	27	15
Real Estate	14	5	19	10	23	17	5	11	0
Technology	20	5	20	12	42	31	11	28	12
Water & Related Utilities	19	7	13	29	15	78	11	36	0

B. By market capitalisation									
<i>In per cent</i>	Global	China	Dev. AP excl. US	Em. Asia excl. China	Europe	Latin America	Middle East and Africa	United States	Others
Basic Materials	67	15	79	65	98	80	41	84	53
Consumer Cyclical	80	26	76	48	98	72	24	88	60
Consumer Non-Cyclical	70	18	75	63	98	57	65	72	46
Energy	55	21	65	47	98	82	12	77	6
Financials	78	57	91	66	97	80	54	80	49
Healthcare	75	19	65	55	96	90	66	79	27
Industrials	70	17	83	53	95	75	31	77	44
Real Estate	55	27	69	51	75	64	18	73	0
Technology	88	31	87	80	97	90	59	93	48
Water & Related Utilities	65	23	15	74	98	94	23	93	0

Source: OECD Corporate Sustainability dataset, LSEG, Bloomberg, MSCI.

Figure 2.7 displays the shares of companies that had their sustainability information verified by an independent third party (by no. of companies and by market capitalisation), among all listed companies disclosing sustainability information within each region. This includes companies that had either their sustainability report, or their GHG emissions, or other sustainability information assured by a third party. For instance, in the case of the global category, out of the 12 890 worldwide listed companies that disclosed sustainability-related information with a market capitalisation of USD 114.3 trillion, 5 458 companies with a market capitalisation of USD 92.5 trillion had their sustainability information assured by an independent third party, accounting for 81% in terms of market capitalisation.

Figure 2.8 displays the level of assurance of the sustainability information (by no. of companies and by market capitalisation), among all listed companies that had their sustainability information verified by an independent third party within each region. For instance, in the case of the global category, the share is calculated over 5 458 worldwide listed companies that had their sustainability information verified by an independent third party with a market capitalisation of USD 92.5 trillion. The figure indicates (by no. of companies and by market capitalisation) whether the level of assurance is “limited” or “reasonable”, or whether the information is not available. The analysis was conducted by recognition of the words “limited” and “reasonable” within the assurance reports, translated into the local language when necessary. When, within the same sustainability report, some information was verified with a limited level of assurance and other information with a reasonable level, the verification was considered as reasonable assurance.

Figure 2.9 displays the level of assurance of the GHG emissions (by no. of companies and by assured GHG emissions). The share by number of companies is computed among all listed companies that had their sustainability information verified by an independent third party within each region. For instance, in the case of the global category, the share is calculated over 5 458 worldwide listed companies that had their sustainability information verified by an independent third party with a market capitalisation of USD 92.5 trillion. The figure indicates (by no. of companies and by assured GHG emissions) whether the level of assurance of the GHG emissions is “limited” or “reasonable”, or whether the information is not available, for each emissions scope. The level of assurance identified for the GHG emissions corresponds to the level of assurance that has been predominantly applied to the verified scope 1, 2 and 3 GHG emissions. In relatively few cases, the assurance level was classified as “high” or “moderate”, which are not levels of assurance recognised by the ISAE 3000. In the figure, “high” was considered as “reasonable” and “moderate” as “limited”.

Figure 2.10 displays the shares of companies (by no. of companies and by market capitalisation) with sustainability information assured by auditors against those assured by other assurance providers, among all listed companies that verified their sustainability information by an independent third party and for which the name of the independent third party was disclosed, within each region. For instance, in the case of the global category, out of the 5 458 companies that had their sustainability information assured by an independent third party with a market capitalisation of USD 92.5 trillion, 3 650 disclosed the name of the independent third party, among which 1 985 identified an auditor and 1 665 other assurance providers. The independent third party was classified as an auditor right away if it appeared more frequently in financial statements than in sustainability reports. A series of checks was conducted on the other independent third parties to determine whether they are auditors or not.

Figure 2.11 displays the shares of companies (by no. of companies and by market capitalisation) that engaged their financial statement’s auditor for the assurance of their sustainability information compared to the shares of companies that rely on other assurance providers, among those reporting the name of the independent third party. For instance, in the case of the global category, the share is calculated over 3 650 companies that disclosed the name of their assurance provider with a market capitalisation of USD 74.8 trillion. The independent third party was classified as the same auditor of the financial statement if the third party was part of the same group that audited the financial statement.

Figure 2.12 displays the number of companies (and their market capitalisation) that use one or more sustainability standards for their sustainability information, within each region. The sustainability disclosure can be either partially or fully compliant with a reporting standard. Likewise, a single company can report compliance with one or more reporting standards. The category “Others” contains all companies that disclosed sustainability information but did not report compliance with any specific reporting standard among the ones highlighted in the figure.

Figure 2.13 displays the shares of companies that disclosed GHG emission reduction targets and targets related to energy use (by no. of companies and by market capitalisation) among all listed companies within each region. GHG emission reduction targets mainly include specific GHG emission reductions but can also include related targets that are aimed at reducing GHG emissions (except such targets related to energy use, which make up the other category). Targets related to energy use typically aim to reduce energy consumption or to increase the share of renewable energy in that consumption. They might be implicitly aimed at reducing GHG emissions but were classified separately here. If such a target was expressed in a unit measuring the resulting GHG emissions reduction, it was classified as a GHG target rather than an energy use target. Overall, targets from a targets database were classified into either category using information such as the intended scope of the target, the unit of the target or the presence of some key words in the description of the target. Targets with a target year set prior to 2024 or a baseline year set in the future were not taken into account.

Figure 2.14 displays the shares of companies that have their earliest GHG emission reduction target set before 2030, in 2030, and after 2030 (by no. of companies and by market capitalisation) among all listed companies that disclosed GHG emission reduction targets, within each region. Contrarily to Figure 2.13, targets related to energy use were not taken into account, nor were GHG emission reduction targets associated with no specific year. Targets with a target year set prior to 2024 or a baseline year set in the future were not taken into account. “Earliest target” means the target with the earliest target year among all targets disclosed by a company. For instance, in the case of the global category, the share is calculated over 5 504 listed companies with a market capitalisation of USD 95.5 trillion that disclosed GHG emission reduction targets associated to a target year set in 2024 or after, and associated either to no baseline year or to a baseline year set before 2025.

Figure 2.15 displays the shares of companies that disclosed a baseline year (by no. of companies and by market capitalisation) among all listed companies that disclosed GHG emission reduction targets, within each region. Only targets with a baseline year inferior to their target year were counted as having a baseline year. For each company, the targets considered here are only the earliest ones. For companies with several targets set in their earliest target year, having at least one target associated to a baseline year was counted as having a baseline year. Contrarily to Figure 2.13, targets related to energy use were not taken into account, nor were GHG emission reduction targets associated with no specific year. Targets with a target year set prior to 2024 or a baseline year set in the future were not taken into account. For instance, in the case of the global category, the share is calculated over 5 504 listed companies with a market capitalisation of USD 95.5 trillion that disclosed GHG emission reduction targets associated to a target year set in 2024 or after, and associated either to no baseline year or to a baseline year set before 2025.

Figure 2.16 displays the shares of companies using targets expressed in absolute amounts of GHG emissions and targets expressed in GHG emissions intensity (by no. of companies and by market capitalisation) among all listed companies that disclosed GHG emission reduction targets, within each region. Targets expressed in absolute terms are goals directly expressed in total amounts of GHG emitted by one part or all of the company, for a given scope of emissions or for several, etc. Targets expressed in GHG emissions intensity are goals set in terms of emissions per unit of something (typically a unit of revenue, or some type of production unit). For each company, the targets considered here are only the earliest ones. For companies with several targets set in their earliest target year, the type of each target was taken into account, meaning that a company can count towards both categories. Contrarily to Figure 2.13, targets related to energy use were not taken into account, but contrarily to Figure 2.14 and Figure 2.15, GHG emission reduction targets associated with no specific year were taken into account. Targets with a target year set prior to 2024 or a baseline year set in the future were not taken into account. For instance, in the case of the global category, the shares are calculated considering the metrics disclosed by 5 524 listed companies with a market capitalisation of USD 95.6 trillion that disclosed GHG emission reduction targets associated either to no target year or to a target year set in 2024 or after, and associated either to no baseline year or to a baseline year set before 2025.

Figure 2.19 displays the 100 listed companies with the highest total disclosed GHG emissions, which includes scope 1, 2 and 3 GHG emissions. They are broken down by region and by industry. The percentages are based on the number of companies in each category, not the market capitalisation.

Figure 2.20 displays the type of investors that hold shares of the 100 listed companies with the highest total disclosed GHG emissions. Percentages are obtained for each region and investor class combination by dividing the sum of the shares owned by that investor class in each company of the list from that region (with the shares owned expressed as a percentage of total shares for each company), by the total number of companies of the list from that region. Hence, companies of the list are treated as if they were the same size in market capitalisation, i.e. owning 1% of the shares in company A is counted as equivalent to owning 1% of the shares in company B.

Figure 2.21 displays, for each region, the average percentage of shares held by the largest shareholder, 3 largest shareholders, 5 largest shareholders, 20 largest shareholders, and 50 largest shareholders, for companies which are part of the 100 listed companies with the highest total disclosed GHG emissions.

Figure 2.22 displays the breakdown by regions of the total global number of patents held by listed companies and the total global number of green patents held by listed companies. Patents are attributed to regions and countries based on the company's country of exchange. The number of patents totals 3.7 million for the 44 152 listed companies globally, out of 8.9 million of patents included in the MSCI dataset, which also includes patents held by non-listed companies. Patents are available for almost 5 300 companies among the 44 152 listed companies, with patents being available, for instance, for 4% of companies in China, 25% in Japan, 37% in the United States, and 50% in Switzerland. The figure also presents the percentage of green patents among all patents for each region. Patents are classified as green based on MSCI's low-carbon patent classification which relies on the Cooperative Patent Classification (CPC), developed by the European Patent Office (EPO), the International Centre for Trade and Sustainable Development (ICTSD) and the United Nations Framework Convention on Climate Change (UNFCCC), and further helped by the Intergovernmental Panel on Climate Change (IPCC), the International Renewable Energy Agency (IRENA) and the Organization for Economic Cooperation and Development (OECD)). Low-carbon patents are those falling in subclasses Y02 and Y04 of the CPC (respectively "technologies or applications for mitigation or adaptation against climate change" and "information or communication technologies having an impact on other technology areas" which comprises smart grids).

Figure 2.23 displays the 100 listed companies with the highest number of green patents. They are broken down by region and by industry. The percentages are based on the number of companies in each category, not the market capitalisation.

Figure 2.24 displays the type of investors that hold shares of the 100 listed companies with the highest number of green patents. Percentages are obtained for each region and investor class combination by dividing the sum of the shares owned by that investor class in each company of the list from that region (with the shares owned expressed as a percentage of total shares for each company), by the total number of companies of the list from that region. Hence, companies of the list are treated as if they were the same size in market capitalisation i.e. owning 1% of the shares in company A is counted as equivalent to owning 1% of the shares in company B.

Figure 2.25 displays, for each region, the average percentage of shares held by the largest shareholder, 3 largest shareholders, 5 largest shareholders, 20 largest shareholders, and 50 largest shareholders, for companies which are part of the 100 listed companies with the highest number of green patents.

Figure 2.26 displays the share of companies that disclosed having a board committee responsible for sustainability (by no. of companies and by market capitalisation) among all listed companies within each region. A company is considered to have such a committee if its responsibilities explicitly include oversight of CSR, sustainability, health and safety, and energy efficiency activities, regardless of the name of the committee. For example, a company with a "risk management committee" would be included in the categorisation if it mentioned the committee is responsible for managing sustainability risks.

Figure 2.27, Panel A displays the share of companies that have a board-level oversight of climate-related issues and risk management (by no. of companies and by market capitalisation) among all listed companies within each region. Panel B displays the share of companies that have a board-level oversight of management of health and safety risks, beyond simply signing a health and safety policy. Panel C displays the share of companies that have a board-level oversight of human rights, i.e. if the oversight responsibility and resources to ensure respect for human rights is assigned to a member or committee of the board.

Figure 2.28, Panel A displays the share of companies that have a performance-oriented compensation policy based on sustainability factors or goals (by no. of companies and by market capitalisation) among all listed companies that have any type of performance-oriented compensation policy within each region. The compensation policy includes remuneration for the CEO, executive directors, non-board executives, and other management bodies. Panel B displays the share of companies that have some executive compensation based on climate-related goals and performance (by no. of companies and by market capitalisation) among all listed companies. Contrarily to Panel A, shares for Panel B are computed among all listed companies, not just the ones with a performance-oriented compensation policy.

Figure 2.29 displays the number of private and listed companies with public benefit objectives incorporated in Delaware and France as of 2021, 2023 and 2025. The analysis was conducted by selecting all listed companies registered in Delaware with either the “PBC”, “P.B.C.”, or “public benefit” included in the company name. Information on other US states that allow for the incorporation of companies with public benefit objectives was not shown in the figure due to low data coverage. Data for France have been sourced from 2022 and 2024 reports from the Observatoire des sociétés à mission, as well as from the organization’s website. The thirteen listed sociétés à mission are (in alphabetical order) Arverne Group (Arverne Drilling), Clariane, Danone, Electricité de Strasbourg, Frey, LNA Santé, Obiz, Ramsay Générale De Santé, Realites, Teract, Versity (Les Agences de Papa), Voltalia, Vranken Pommery Monopole.

Figure 2.30 displays the share of companies that disclosed their policies on shareholder engagement (by no. of companies and by market capitalisation) among all listed companies within each region. The disclosure of policies on shareholder engagement considers whether the company has a policy to facilitate shareholder engagement, resolutions, or proposals. It takes into account whether the company facilitates shareholders to have the right to ask a question to the board or management or allows shareholders to table resolutions or shareholder proposals at shareholder meetings.

Figure 2.31, Panel A displays the share of companies that indicated having an employee representation on the board (by no. of companies and by market capitalisation) among all listed companies, by region. Panel B shows those shares by industry. The employee representation includes the board members who serve as designated employee representatives. Data is sourced mainly from the company’s primary corporate governance filing, and is complemented with information from other corporate filings, company websites or other sources.

Figure 2.32, Panel A displays the share of companies that disclosed the share of their employees represented by independent trade union organisations or covered by collective bargaining agreements (including disclosed shares of 0%) (by no. of companies and by market capitalisation). Panel B provides the mean, median and quartiles of this metric for each region. Panel C shows these same statistics for this same metric by industry.

Figure 2.33, Panel A displays the share of companies that disclosed their employee turnover rate (including disclosed rates of 0%) (by no. of companies and by market capitalisation). Panel B provides the mean, median and quartiles of this metric for each region. Panel C shows these same statistics for this same metric by industry.

Figure 2.34, Panel A displays the share of companies that disclosed their average training hours per employee (including disclosed averages of 0 hours) (by no. of companies and by market capitalisation). Panel B provides the mean, median and quartiles of this metric for each region. Panel C shows these same statistics for this same metric by industry.

Figure 2.35, Panel A displays the share of companies that disclosed information on whether they engage with their stakeholders (by no. of companies and by market capitalisation) among all listed companies within each region. The disclosure on stakeholder engagement takes account of the company’s disclosed information on how it is engaging with its stakeholders and how it is involving the stakeholders in its decision-making process. The information notably includes what procedures are in place for engagement

and if a two-way communication has been established between the company and its various stakeholders. Panel B shows the share of companies that have undertaken stakeholder engagement on human rights issues. Companies taken into account are the ones for which there is clear evidence of ongoing engagement/consultation with affected stakeholders (or representatives) to address and uphold human rights concerns and interests.

Figure 2.36, Panel A displays the number of listed companies that have disclosed an artificial intelligence policy by industry. Panel B shows the share of listed companies that have disclosed such a policy for each industry, by market capitalisation. This metric takes into account ethical guidelines or compliance activity linked to a company's commitment to AI that minimises bias and promotes inclusive representation.

Figure 2.37 displays the share of companies, by region, that have disclosed having in place each of the following policies or processes (by number of companies and by market capitalisation):

- a policy to ensure the respect of human rights in general (Panel A)
- a policy to avoid the use of child labour (Panel B)
- a policy to avoid the use of forced labour (Panel C)
- processes to ensure the freedom of association of its employees (Panel D).

Figure 2.38 and Figure 2.39 display the share of companies that have taken each of the following actions/disclosed each of the following information:

- Clear allocation of human rights responsibilities: whether the company has a clear process of assigning daily tasks and necessary resources to relevant departments for the supervision and protection of human rights
- Identification of salient human rights issues: whether the company has identified and disclosed which specific human rights could be impacted by its business activities
- Formal human rights grievance mechanism: whether the company has formal grievance mechanisms which cover human rights explicitly, guarantee confidentiality or anonymity, and are available to internal and external stakeholders
- Disclosure on avoidance, prevention and mitigation measures: whether the company has taken actions in response to human rights risks to its business
- Disclosure on supplier monitoring outcomes and responses: whether the company discloses the results from the monitoring or auditing of its suppliers and from investigations to identify and evaluate the non-compliance related to social responsibilities within their operation.
- Disclosure on instances of human rights violations: whether the company discloses incidents of human rights violations and responses to them, or states that no incidents occurred in the reporting period.

Figure 3.1, Panel A displays the sum of scope 1 (direct CO₂ and CO₂ equivalent emissions), scope 2 (indirect CO₂ and CO₂ equivalent emissions resulting from the energy consumed by the company and produced by another actor) and scope 3 (other indirect CO₂ and CO₂ equivalent emissions) GHG emissions disclosed by companies. For each region, this metric is shown for all energy companies, oil & gas companies only, and for energy companies as a percentage of all listed companies. For instance, globally energy companies disclose emitting 23 352 MtCO₂e annually, of which 13 382 MtCO₂e are emitted by oil & gas companies. As all listed companies disclose emitting 75 069 MtCO₂e annually, energy companies are responsible for 31% of these emissions. Panels B and C follow the same logic, presenting respectively total assets and market capitalisation.

Figure 3.2, Panel A displays the shares of companies that disclosed scope 1 and 2 GHG emissions (by no. of companies and by market capitalisation) among all listed energy companies within each region. Only the companies that reported both scope 1 and scope 2 GHG emissions are counted in the analysis.

It also shows the share of all listed energy companies that are oil & gas companies disclosing both scope 1 and scope 2 GHG emissions. For instance, out of the 2 475 listed energy companies 37% (915 companies) disclosed scope 1 and 2 emissions, and 16% (still of the 2 475 listed energy companies) (386 companies) are oil & gas companies that have disclosed scope 1 and 2 GHG emissions. Panel B follows the same logic, displaying the share of companies that reported scope 3 GHG emissions.

Figure 3.3 displays, in absolute terms, by region, for all energy companies and for oil & gas companies, scope 1 GHG emissions, scope 2 GHG emissions, scope 2 GHG emissions using the location-based method only, scope 2 GHG emissions using the market-based method only, scope 3 GHG emissions, and scope 3 category 11 GHG emissions (emissions from the use of sold products), respectively in Panel A, Panel B, Panel C, Panel D, Panel E, and Panel F.

Figure 3.4 displays the total scope 1, scope 2 and scope 3 GHG emissions (respectively Panel A, Panel B and Panel C) of listed energy companies that are SOEs, and of listed energy companies that are not SOEs, by region. The SOE categorisation corresponds to companies that are either owned or controlled by the government or any governmental body, if the latter has more than 25% of shares, or 50% of votes, or has a golden share in the company, which gives it veto power.

Figure 3.7, Panel A displays, for each region, by number of companies, the share of listed energy companies that had their GHG emissions assured to a “limited” assurance level by an independent third party, the share that had their GHG emissions assured to a “reasonable” assurance level by an independent third party, the share that had their GHG emissions assured but for which the level of assurance could not be found, and the share that did not have their GHG emissions assured. The shares are computed among listed energy companies that disclosed either their scope 1 and scope 2 GHG emissions or their scope 3 GHG emissions. For instance, in the case of the global category, the shares are calculated over 909 listed energy companies that disclosed either their scope 1 and 2 emissions or their scope 3 emissions. Among these 924 companies, 412 (45%) did not assure their GHG emissions, 224 (24%) assured their emissions but the level of assurance could not be found, 183 (20%) had their emissions assured by an independent third party to a “limited” level, and 105 (11%) had their emissions assured by such a third party to a “reasonable” level. If for the same company some scopes were assured but not others, its GHG emissions were considered to be assured to the level of the assured scope. If for the same company some scopes were assured to a “limited” level and others to a “reasonable” level, GHG emissions were considered to be assured to a “reasonable” level for that company. In relatively few cases, the assurance level was classified as “high” or “moderate”, which are not levels of assurance recognised by the ISAE 3000. In the figure, “high” was considered as “reasonable” and “moderate” as “limited”. For Panel B, see A.1.4.6 below.

Figure 3.8, Panel A displays the equivalent of the CO₂ offsets, credits and allowances purchased and/or produced by listed energy companies during the fiscal year. Companies evolving in certain sectors have a limit on the amount of emissions if they exceed this limit, they purchase credit to balance it and if they are short from this limit, they can sell the remainder of the allowance. Only carbon credit purchased and produced are considered. Investments in green projects reported as carbon offsets are also in scope. The figure also presents this amount as a share of the total GHG emissions reported by listed energy companies. For Panel B, see A.1.4.6 below.

Figure 3.9, Panel A displays, for each region, the share of listed energy companies that disclose their position on climate-related public policy and regulation (by no. of companies and by market capitalisation). Panel B shows the share of listed energy companies that disclose the general trade or business associations of which they are members and those associations' positions on climate, by region. Panel C presents, for each region, the share of listed energy companies that have a policy or commitment statement to ensure consistency between their climate change policy and the positions taken by the trade associations of which they are members. For Panel D, see A.1.4.6 below.

Figure 3.11, Panel A displays the shares of companies that disclosed environmental R&D costs (by no. of companies and by market capitalisation) among all listed companies within each region. The environmental R&D costs include research and development costs for the development of products and services focusing on improving the environmental impact reduction and innovation. Panel B shows that same information for listed energy companies only (share of companies that disclosed environmental R&D among all listed energy companies within each region).

Figure 3.12, Panel A displays, for each region, the ratio between the sum of environmental/green R&D expenses incurred by all listed energy companies and the sum of all R&D expenses incurred by these companies (the two sums are computed independently for each region, then the ratio is calculated, so this is not an average of the ratios of each individual company). R&D expenses represent expenses for research and development of new products and services by a company in order to obtain a competitive advantage. It represents the portion expensed during the year, and excludes the portion capitalised to tangible or intangible assets. Capitalisation of research and development expenditure is rare for US companies. In cases where this measure was not available, it was complemented by an estimate from the Institutional Brokers' Estimate System. Environmental R&D expenses include research and development costs for the development of products and services focusing on improving the environmental impact reduction and innovation. Companies reporting a higher amount for green R&D than for total R&D were excluded from the computation. For Panel B, see A.1.4.6 below.

Figure 3.13, Panel A displays the share of companies disclosing the current percentage or amount of capital expenditures (CapEx) that they deploy to climate-related opportunities, among all listed companies, by region. Panel B shows that same information for listed energy companies only (share of companies that disclosed environmental CapEx among all listed energy companies within each region).

Figure 3.15, Panel A displays the evolution of the sum of the net cash provided by operating activities of all listed energy companies in 2024, from 2015 to 2024. Panel B shows the evolution of the sums of dividends paid and of net repurchase of shares by the same companies over the same period. Dividends paid represents all cash dividends paid to common and preferred stockholders (it can also include stock dividends if the company reports them as a cash distribution). Net repurchase of shares means the net cash outflow obtained by subtracting cash inflows due to issuance of common or preferred stock from cash outflows due to repurchase or retirement of stock. In addition, the dashed line in the panel represents the total net cash outflow for all of those companies for each year, obtained by summing dividends paid and net repurchase of shares. Panel C presents the evolution of the main components of the net cash used in investing activities, with each one summed for all listed energy companies from 2015 to 2024. These components are (i) capital expenditures, (ii) net acquisition of business assets, and (iii) investments excluding loans, CapEx and business acquisition. Capital expenditures (or CapEx) here are the net cash outflows from the purchase (or sale) of property, plant and equipment, and intangible assets (they might also include financial investments for companies that do not break down their net cash used in investment activities enough to distinguish between the necessary components). Cash flows linked to the purchase or sale of investment property are also included in CapEx for property companies only. Net acquisition of business assets represents the net cash outflow from the sale or purchase of new businesses. Investments excluding loans, CapEx and business acquisition are the net cash outflows linked to the purchase or sale of investment Property excluded from capital expenditures and of unclassified investment securities. In addition, the dashed line in the panel represents the total net cash used in investing activities for all companies for each year, obtained by summing components (i) – (iii). Beyond these three components, companies occasionally report other cash flows from investing activities. However, these cumulatively account for only ~0.5% of total net cash used in investing activities for all listed companies according to LSEG and are therefore excluded from Panel C. Panel D displays the evolution of the sum of R&D expenses for all listed energy companies from 2015 to 2024. R&D expenses represent expenses for research and development of new products and services by a company in order to obtain a competitive advantage. It represents the portion expensed during the year, and excludes the

portion capitalised to tangible or intangible assets. Capitalisation of research and development expenditure is rare for US companies. In cases where this measure was not available, it was complemented by an estimate from the Institutional Brokers' Estimate System

Figure 3.16, Panel A displays the share of companies that have any type of performance-oriented compensation policy for the CEO, executive directors, non-board executives, or other management bodies (not specifically a sustainability-related one). Panel B shows the share of companies that have a performance-oriented compensation policy for these same actors based on sustainability factors or goals. Panel C presents the share of companies that have such a remuneration policy which incorporates climate change performance and goals as KPIs. Panel D displays the share of companies that have remuneration arrangements for its CEO or other members of the executive committee that incorporate progress towards achieving the company's GHG reduction targets as a KPI determining compensation. For all panels, shares are computed separately among all listed companies and among energy listed companies. Each panel presents those shares for each region by no. of companies and by market capitalisation.

Figure 3.18 and Figure 3.19, the OECD identified 48 EU-listed companies operating in the energy sector and registered in the Accounting for Transparency's *Sustainability Reporting Navigator*. All but one had conducted a DMA and 42 companies explicitly mapped material IROs to the ten ESRS topics. The final sample of 42 listed energy companies includes companies headquartered in 18 EU Member States and one from the United Kingdom. By SICs industry classification, 19 fall under *Electric Utilities & Power Generators*, 14 under *Oil & Gas* (e.g. *Exploration & Production*, *Midstream*, etc.), and nine under diverse industries such as *Engineering & Construction Services* and *Wind Technology & Project Developers*. On average, the companies in the sample report EUR 42 million in total assets (CSRD threshold: 25 million), EUR 25 million in annual revenue (threshold: 50 million), and 21 000 employees (threshold: 250).

A.1.4. 100 energy companies' sample

1. Purpose and scope

The methodology detailed below was applied for the 100 listed energy companies sample used in Chapter 3 in addition to the data sample about all listed energy companies. Chapter 3 focuses on corporate sustainability disclosures by energy companies globally. The assessment covers publicly listed energy companies and focuses on five governance-relevant metrics directly related to sustainability: (i) greenhouse-gas emissions, (ii) lobbying, (iii) executive remuneration, (iv) research and development, and (v) capital expenditure. The data cut-off for documents reviewed was August 2025.

2. Company selection

The sample of companies comprises publicly listed energy companies, including SOEs, with primary activities in upstream, midstream, downstream, power generation, integrated utilities, or diversified energy technology. The first step consisted of ranking all the energy firms listed by market capitalisation. This list was then segmented in three categories based on the companies' total assets: large, medium and small-sized companies.

The initial target sample covered 50 companies, with one-third drawn from each category (17/17/16). The sample was later extended to 100 companies while keeping the same proportions (see 4. *Prompt development* and 5. *Data extraction* below). Among each group, companies were picked randomly ensuring a balanced distribution across world regions based on the country of exchange.

If a company's disclosures were unobtainable, not machine-readable, or not reasonably translatable, it was replaced by another firm from the same category.

3. Metric selection

For comparability and replicability, metrics divided into five categories were developed:

1. GHG emissions: disclosures of scope 1, 2, 3 and additional fields capture baselines, interim/long-term targets, carbon credits and assurance.
2. Lobbying: disclosures of direct and indirect lobbying, jurisdictions in which the company lobbies, amount of funds dedicated to lobbying, climate-related positions, a code of conduct application to lobbying activities.
3. Executive remuneration: linkages with transition goals, KPI sustainability-related goals for senior executives and all employees.
4. Research & Development: disclosed total R&D and, when disclosed, the share dedicated to low-carbon/transition technologies.
5. Capital expenditures: disclosed CapEx and, when disclosed, allocation to low-carbon vs carbon-intensive assets.

4. Prompt development

To enhance consistency and efficiency across heterogeneous documents, a standardised instruction set (“**the prompt**”) to guide a generative AI model (“**the GenAI**”) to extract the data matching was developed. The development of the prompt was iteratively refined by analysing the mistakes it made when extracting the data. Revisions focused on the prioritisation of the sources it extracted (e.g., hierarchy of sources, year of the document) and the quality of the data it extracted (e.g., repeated mistakes relating to the unit used, material understanding of a notion).

The standardised prompt instructed the AI to extract targeted information from the most recent corporate disclosures (from fiscal years 2023, 2024, or 2025). To ensure consistency, the prompt also requested the exact source (report type, page number, and hyperlink if available) and contextual notes (e.g. currency conversions, partial disclosures, or discrepancies). These details enabled human verification of the extracted data for 100 companies.

While the primary working language of the AI model was English, documents in other languages were reviewed when sufficiently machine-readable translations were available. However, limited access to high-quality translations may have constrained full analysis of disclosures from certain non-Anglophone jurisdictions. In fact, in the few cases where reliable translation was not possible, or where important difficulties in obtaining company reports were encountered, the company was replaced with another one from the top part of the random list of the size group to which the company belonged.

The objective of the prompt was to get the GenAI to produce five tables corresponding to the developed metrics that could be extracted on excel.

5. Data extraction

The data extraction occurred in three phases:

- Phase 1: Extraction of information for 20 companies (7/7/6). Each metric was independently (a) manually researched by an analyst, then (b) extracted by AI, then (c) manually checked by confronting results by an analyst.
- Phase 2: Extension of the sample of 30 additional companies (10/10/10), amounting to a total of 50 companies (17/17/16). Each metric was (a) extracted by AI, then (b) manually checked by confronting results by an analyst.

The process followed in phase 1 and 2 allowed the calculation of an AI accuracy rate of **69%**.

- Phase 3: Extension of the sample of 50 additional companies (17/16/17), amounting to a total of 100 companies (34/33/33), by using the Deepsearch feature. Each metric was (a) extracted in a

batch by AI using the Deepsearch feature, then (b) manually checked by confronting results by an analyst. This process allowed the calculation of a Deepsearch AI accuracy rate of **80%**.

For quantitative metrics, conversions were operated to standardise units, and spot exchange rates were used to standardise currencies. For “yes/no” metrics, both “no” and “NA” (not applicable / not available) answers were considered as negative answers for the purpose of the present report. When computing the percentage of companies doing X for instance, the percentage is the percentage of “yes” for metric X among all 100 companies including both the companies which explicitly say they do not do X (“no”) and the ones for which any officially disclosed information on whether they do X or not (“NA”) was found.

6. Figures

Figure 3.5, Panel A displays the average amount of scope 1 and scope 2 GHG emissions reported by large companies from the sample for their baseline year (the year that they are using as a baseline against which to measure their progress towards their reduction target), the current year, their interim target year, and their long-term target year. Averages for interim and long-term target years were obtained by first computing the amount of scope 1 and scope 2 GHG emissions emitted by the company during that year if it reached exactly its reduction target for these scopes (target often expressed in percentage). Net-zero targets were interpreted as a 100% reduction in GHG emissions of the relevant scope. Only companies that reported each metric / target could be included in that average, hence the number of companies taken into account for each average varies. On the right-hand side scale, the panel shows the percentage of companies from the sample that disclosed each of the aforementioned metrics/targets for each of the two scopes. Panels B and C follow the same logic for medium and small companies, respectively.

Figure 3.6, Panel B displays the average amount of scope 3 GHG emissions reported by large companies from the sample for their baseline year (the year that they are using as a baseline against which to measure their progress towards their reduction target), the current year, their interim target year, and their long-term target year. Averages for interim and long-term target years were obtained by first computing what would be the amount of scope 3 GHG emissions emitted by the company during that year if it reached exactly its reduction target for these scopes (target often expressed in percentage). Net-zero targets were interpreted as a 100% reduction in GHG emissions of the relevant scope. Only companies that reported each metric/target could be included in that average; hence, the number of companies taken into account for each average varies. On the right-hand side scale, the panel shows the percentage of companies from the sample that disclosed each of the aforementioned metrics/targets for each of the two scopes. Panels B and C follow the same logic for medium and small companies, respectively.

Figure 3.7, Panel B displays, for each of the three market capitalisation category, the share of companies from the sample that disclosed having their GHG emissions assured to a “limited” assurance level by an independent third party, the share that disclosed having their GHG emissions assured to a “reasonable” assurance level by an independent third party, and the share that did not report having their GHG emissions assured. For Panel A, see A.1.3 above.

Figure 3.8, Panel B displays the total of CO₂ offsets, credits and allowances that were purchased, retired, or produced by the companies from each category of the sample during the fiscal year, as reported by companies. It also shows, for each category, that same number as a share of the total GHG emissions reported by companies from that category. For Panel A, see A.1.3 above.

Figure 3.9, Panel D displays the average amount of funds allocated to lobbying reported by companies from each category of the sample for the fiscal year. It also shows the share of companies from each category that disclosed the amount of funds they dedicate to lobbying. For Panels A, B and C, see A.1.3 above.

Figure 3.10 displays, for each category of the sample, the percentage of companies that disclosed any lobbying activities, that disclosed direct lobbying activities, that disclosed indirect lobbying activities, that

disclosed energy or climate-related activities, that disclosed the amount of funds they used in the fiscal year for lobbying, that have or disclosed having a lobbying code, that disclosed the jurisdictions in which they lobby, that disclosed providing training programs to employees involved in lobbying, that conducted or disclosed conducting an annual review of their lobbying activities, and that disclosed the goal of their lobbying activities.

Figure 3.12, Panel B displays the ratio between the sum of environmental/green R&D expenses incurred by all large companies from the sample and the sum of all R&D expenses incurred by these companies (the two sums are computed independently for each region, then the ratio is calculated, so this is not an average of the ratios of each individual company). For environmental R&D expenses, only R&D expenses reported as green or low-carbon by the company or explicitly associated with green or low-carbon projects were taken into account. Companies reporting a higher amount for green R&D than for total R&D were excluded from the computation. Similarly, companies reporting a green R&D amount but no total R&D amount were excluded from the computation. The computation could not be done for the medium and small categories of the sample, as the data was too scarce. For Panel A, see A.1.3 above.

Figure 3.14 displays, for each category of the sample, the share of capital expenditures reported as being green/low-carbon capital expenditures among the total of reported capital expenditures. For each category, this was computed by taking the total of capital expenditures and the total of low-carbon capital expenditures reported by companies from that category and then dividing the second by the first. Hence, ratios were not computed separately for each company, and the fact that companies report their total capital expenditures much more often than their low-carbon capital expenditure can drive the ratios down, especially for the medium and small categories. When a company did not explicitly report a number called “capital expenditures”, the total capital expenditures of the company were assumed to be the sum of cash used to purchase property, plant and equipment and cash used to purchase intangible assets (only cash outflows were considered, hence gross capital expenditures were used and not net capital expenditures). For low-carbon / green CapEx, only amounts explicitly reported by the company as low-carbon / green CapEx or CapEx used for green projects were considered.

Figure 3.17 displays extra-financial remuneration KPIs and displays the number of companies of the 100 companies’ sample having at least one remuneration KPI in each of the 10 chosen KPI categories. These categories are “Health, Safety & Environment (HSE)”, “Carbon emissions and Energy transition”, “Governance, Ethics, Risk management & Compliance”, “Diversity, Equity & Inclusion (DEI)”, “Employee Engagement & Culture”, “Customer & Stakeholder Relations”, “ESG Ratings”, “Reporting & Strategy, Efficiency of resources usage (energy or water)”, “Pollution & Environmental Incidents”, and “Innovation & R&D”. The “Carbon emissions and Energy transition” category includes KPIs linked to GHG emissions, carbon management, renewable energy, and energy transition. “Pollution & Environmental Incidents” notably include KPIs linked to fluid spills.

A.2. SASB Sustainable Industry Classification System® Taxonomy

© 2021 Value Reporting Foundation (merged into the IFRS Foundation in July 2022). All Rights Reserved. OECD licenses the SASB SICS Taxonomy (or “SASB Mapping”). The SASB Mapping presents 26 sustainability issues categorised into five dimensions, classifying which issues would be financially material in each of 77 industries in total.

Figure 2.17 merges some sustainability issues in the SASB mapping: “Climate Change” is a merger of “energy management”, “GHG emissions” and “physical impacts of climate change” in the SASB mapping; “Human Capital” merges all three sustainability issues within this dimension in the SASB mapping; “Data Security and Customer Privacy” are two different issues in the SASB mapping.

A.3. MSCI data

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A.4. Ownership information

The ownership figures for publicly listed companies are based on OECD calculations using firm-level information from the FactSet Ownership database. The data are complemented and verified using LSEG and Bloomberg. Data are collected at the end of 2024 in current USD, thus no inflation adjustment is needed. Market information for each company is collected from LSEG. The dataset includes the records of owners for 46 086 companies listed across 98 countries covering 99% of the world market capitalisation. For each of the countries/regions presented, the information corresponds to all listed companies in those countries/regions with available information.

The records of owners are collected for each company. Some companies have up to 5 000 records in their list of owners. Each record contains the name of the institution, the percentage of outstanding shares owned, the investor type classification, the origin country of the investor, the ultimate parent name, among other things.

The table below presents the five categories of owners defined and used in this report following De La Cruz, Medina and Tang (2019^[1]). Different types of investors are grouped into these five categories of owners. In many cases, when the ultimate owner is identified as a government, a province or a city and the direct owner was not identified as such, ownership records are reclassified as public sector.

For example, public pension funds that are regulated under public sector law are classified as public sector, and sovereign wealth funds (SWFs) are also included in that same category.

Table A A.1. Categories of owners defined and used in the report

Investor category	Categories of owners – Investor type	
Private corporations and holding companies	Business Association	Operating Division
	Employee Stock Ownership Plan	Private Company
	Holding Company	Public Company
	Joint Venture	Subsidiary
	Non-profit organisation	
Public sector	Government	Regional Governments
	Sovereign Wealth Manager	Public Pension Funds
Strategic individuals and family members	Individual (Strategic Owners)	Family Office
Institutional investors	Bank Investment Division	Mutual Fund Manager
	Broker	Other
	College/University	Pension Fund
	Foundation/Endowment Manager	Pension Fund Manager
	Fund of Funds Manager	Private Banking/Wealth Management
	Fund of Hedge Funds Manager	Private Equity Fund/Alternative Inv.
	Hedge Fund	Real Estate Manager
	Hedge Fund Manager	Research Firm
	Insurance Company	Stock Borrowing/Lending
	Investment Adviser	Trust/Trustee
	Market Maker	Umbrella Fund
	Mutual Fund-Closed End	Venture Capital/Private Equity
Other free float including retail investors	Shares in the hands of investors that are not required to disclose their holdings. It includes the direct holdings of retail investors who are not required to disclose their ownership and institutional investors that did not exceed the required thresholds for public disclosure of their holdings.	

References

De La Cruz, A., A. Medina and Y. Tang (2019), “Owners of the World’s Listed Companies”, *OECD Capital Market Series*, OECD, Paris, https://www.oecd.org/en/publications/owners-of-the-world-s-listed-companies_ed7ca2f3-en.html.

[1]

Global Corporate Sustainability Report 2025

The *OECD Global Corporate Sustainability Report* aims to support the adoption of corporate governance policies that strengthen the sustainability and resilience of companies. It provides policymakers, regulators and market participants with a comprehensive overview of policies and practices in corporate sustainability globally. Anchored in key dimensions of the G20/OECD Principles of Corporate Governance and drawing on original data, the report examines recent developments in sustainability-related disclosure, shareholder-company dialogue, board responsibilities, stakeholder interests and human rights. This edition features an in-depth analysis of the energy sector, assessing emission reduction targets, executive compensation, capital expenditures and investments in green research and development.



PRINT ISBN 978-92-64-72759-5
PDF ISBN 978-92-64-58803-5

