A&O SHEARMAN

ie UNIVERSITY LAW SCHOOL

Corporate Climate Governance *and the road to Net Zero: relevance, challenges, and impact in practice*

LEGAL LEADERSHIP PROJECT

Credentials

IE LAW SCHOOL

IE Law School is part of the IE Higher Education Group (IE), a leading international group of higher education and research institutions. With more than 40 years of experience, the IE Law School is a national and international reference in training globally oriented jurists and law practitioners. Its LL.M. programs have been listed by the Financial Times among the top LL.M. programs in the world every year since 2008. In addition to the Master programs, the school offers Bachelor Degrees in Law, Law and Politics, and Law and Economics, and has launched innovative Dual Degrees in Management and Laws and in Law and International Relations. IE Law School has a strong commitment to generating and diffusing knowledge that is relevant to industry, society, and policy makers. To this end, it developed strong ties to industries, which led to the creation of over 30 Centers, Observatories and Chairs, where faculty are together with public and private institutions.

María de Molina, 31. 28006, Madrid/IE Tower – Paseo de la Castellana 259E. 28046, Madrid.

Telephone: +34 915 689 600

A&O SHEARMAN

A&O Shearman is an international law firm with approximately 4,000 lawyers, including 800 partners working in 29 countries worldwide.

We are a leading legal practice in Spain, providing high quality and innovative advice to steer complex transactions to a successful conclusion. Our lawyers in Madrid have both international experience and an in depth knowledge of the local market. We can leverage the resources and skills of a highly integrated worldwide network. More than 100 experienced lawyers form our office, each of whom has an exceptional track record of success and achievement across a range of industry sectors.

Our clients come first, and they include financial institutions, high profile Spanish companies, international corporations with interests in Spain and investment funds.

At A&O Shearman, our ESG team's advice is informed by decades of collective experience in environmental, social and governance matters, and by tracking the latest developments in ESG-related regulations and litigation around the world. We bring together global expertise in specialist practice areas in Environmental Law, Business and Human Rights, Sustainable Finance, Corporate Governance, Employee Engagement and Data protection and Cybersecurity, as well as Consulting Services.

Serrano, 73. 28006, Madrid.

Telephone: +34 91 782 98 00.

WORKING GROUP

Paloma Baena (dir.)
Adjunct Professor of Sustainability and Public Affairs, IE Law School

Antonio Vázquez-Guillén
Litigation Partner, A&O Shearman

Íñigo del Val
Corporate and M&A Partner, A&O Shearman

Mónica Represa (coord.)
Head of Knowledge, A&O Shearman

Fabio Almeida
Sustainability Manager, Anthos Family Office

Reka Palla
Corporate and M&A Senior Associate, A&O Shearman

Álvaro Sánchez-Bordona
Corporate and Environmental & Sanctions Senior Associate, A&O Shearman

Contents

1. Presentation

This study, '*Corporate Climate Governance and the Road to Net Zero: Relevance, Challenges, and Impact in Practice*,' confronts the pressing global challenge of climate change, focusing on the critical role that corporations can play in the energy sector in environmental impact mitigation and progression towards carbon neutrality. Our goal is to make a relevant contribution to the development of robust governance practices that enable progress towards sustainable business strategies that aligns with global environmental goals and standards.

To achieve this goal, the report provides an extensive analysis of corporate climate governance, covering areas such as environmental impact measurement, reporting standards, carbon neutrality goal-setting, and the intricacies of greenwashing. First, it examines climate governance frameworks in different jurisdictions, offering a comprehensive view of how various regions approach climate governance and the implications for global corporate operations. This analysis is then complemented with an extensive overview of related ESG metrics using well known data providers.

Designed as a strategic guide for corporations, this report aims to assist in incorporating climate considerations into business strategies, corporate governance structures and operations. It serves as a valuable resource for corporate leaders, investors, and stakeholders in evaluating and enhancing corporate governance related to sustainability. Additionally, the report holds academic value, providing insights and data for future research in environmental law, corporate governance, and sustainable business practices.

The report is the result of a collaborative effort between experts in sustainability, law, corporate governance, and sustainable finance to ensure a multifaceted analysis of corporate climate governance. This multidisciplinary team approach, led by Paloma Baena as academic director and Mónica Represa as coordinator, combines legal expertise with practical business knowledge and advanced sustainability research. The diverse expertise of the authors enriches the study, enabling a holistic understanding of the complexities in corporate climate governance.

Reflecting IE Law School's ethos of addressing global challenges through rigorous education and research, and its mission and vision to empower leaders for sustainable impact, as well as A&O Shearman's commitment to excellence and innovation in legal practice, this report serves as a testament to the collaborative effort to address critical environmental challenges through rigorous research and groundbreaking solutions. Contributing to the discourse on corporate responsibility in climate change, the report echoes IE Law School's and A&O Shearman's dedication to shaping legal practice's future, thus making a meaningful difference through the transformative power of law.

It is our hope that **the report, through a detailed exploration of corporate climate governance principles, law and metrics, will contribute to the debate on corporate responsibility in environmental sustainability and to help the development of more effective corporate strategies**.

SECTION 1

Climate Governance: *Relevance and challenges*

2. Climate change and *corporate responsibility*

2.1 Introduction

Climate change is one of the most significant challenges facing humanity today,[1] with far-reaching consequences for the environment, society, and the economy. In contrast to other global challenges, such as migration flows or security and defense, businesses are increasingly realizing that they must play a vital role not only in finding innovative solutions to mitigate climate risks and facilitate adaption, but also in leading by example, with a clear ambition to become climate neutral or climate positive actors.

Over the last three years, business has been highlighted as the most trustworthy institution in the Edelman Trust Barometer,[2] ahead of governments, civil society organizations and media. This is a new (and relatively surprising) trend, but it serves to highlight, among other things, the expectations that society has placed in business to help address societal most pressing problems, including climate change.

Other external factors are also driving this shift in company's attitude towards climate change. Financial markets mobilize trillions of dollars globally in climate-related projects and green investments, while the percentage of assets managed according to Environmental, Social and Governance (**ESG**) criteria (with a heavy focus on the E, environment) has increased substantially over the past few years. **Sustainable investing was estimated at $37.8 trillion by the end of 2021, while ESG assets will exceed $53 trillion by 2025.[3] Despite recent questioning (particularly in the USA) over the aims and principles of ESG investment, this data reflects strong interest from investors in supporting environmentally and socially responsible companies.**

Regulation and government policies aimed at combating climate change (e.g., defining economic activities aligned with environmental goals, carbon pricing, emission reduction targets, and reporting requirements) have also gained momentum, as we will see in the report, pushing companies to take proactive measures in reducing their environmental impact, measures which scope and impact may differ depending on the jurisdiction and the political context.

In addition, companies are increasingly aware that a proactive involvement in addressing climate change could bring important payoffs. First, companies become eligible for ESG-minded investment. Second, there is growing evidence that companies that are more transparent on ESG performance[4] tend to be more resilient, due to improved operational efficiency, reduced risks, and enhanced reputation.

Third, companies that take early action also position themselves for a host of economic and impact opportunities, such as accessing green technologies and participating in the transition to a low-carbon economy[5].

On the contrary, companies lagging on climate action, particularly in those economic sectors with a higher expectation to accelerate decarbonization, are exposed to legal and governance challenges. As prominent examples, we can recall some companies that have faced stakeholder mobilization and legal actions related to their climate impact and behavior, including shareholder resolutions, lawsuits, and regulatory investigations concerning a lack of transparency and also ambition regarding their decarbonization targets.

Additionally, some governments and international bodies, as well as Courts, have considered or implemented sanctions and penalties against companies and industries not taking adequate steps to address their environmental impact. Overall, companies that are perceived as failing to align with global climate goals could face reputational damage, financial repercussions, and exclusion from certain investment portfolios.

2.2 Corporate Climate Governance: relevance and key building blocks

To avoid these legal and governance challenges, companies are increasingly recognizing the importance of adopting robust corporate sustainability strategies, setting science-based emissions reduction targets, and disclosing climate-related risks and opportunities to investors and stakeholders, but progress remains uneven.

One of the most important drivers for company behavior regarding climate change is internal, and thus, dependent on a company decision: **corporate climate governance**. As the world grapples with the escalating challenges of climate change, corporations have a pivotal role to play in spearheading environmental stewardship.

The importance of governance is often more talked about than acted upon, as more urgent matters or those with a quicker pay off usually take precedent. Additionally, our analysis evidence that corporate climate governance is a mean, not the end itself, being no guarantee of high climate-related performance. Yet, factors such as the level of commitment with emission cuts, its linkages with directors' remuneration and prioritization of climate-risk management are examples of common practices adopted by energy companies with lower overall ESG risks and better climate performance.

How can companies build a sound climate governance framework?
This question is the focus of our report. In general, climate governance refers to the systems, processes, and institutions that are put in place to address climate change and its impacts on a local, national, and global scale. It encompasses a wide range of issues, including international agreements (e.g., Paris Agreement), national climate policies (e.g., national emission reduction targets, national targets of renewable energy production etc.), monitoring and reporting, or public-private partnerships (e.g., UN Global Compact).

In the context of companies, **corporate climate governance refers to the structures, policies, and practices that companies put in place to address and manage their climate-related impacts and risks, but also to seize new business opportunities. It involves the integration of climate change considerations into the decision-making processes, corporate strategy, and overall business operations.**[6] Based on our analysis, we identify a number of critical drivers for a comprehensive climate-governance framework at the company level (Box 1).

Corporate climate governance refers to the structures, policies, and practices that companies put in place to address and manage their climate-related impacts and risks, but also to seize new business opportunities. It involves the integration of climate change considerations into the decision-making processes, corporate strategy, and overall business operations.

BOX 1: TOWARDS A CORPORATE CLIMATE GOVERNANCE FRAMEWORK

- **Climate-related company goals**: integration of specific and measurable sustainability objectives and targets, related to the energy transition (e.g., science-based emission reduction target, net-zero target date and intermediate targets, alignment with business plans, capex) into corporate strategy.
- **Climate-related considerations in corporate policies and processes**: climate goals, climate risks and related considerations (e.g., stakeholder management) are integrated into decision-making processes (e.g., procurement policies, investment plan) and/or corporate policies (e.g., corporate by-laws, risk management framework, carbon offsetting policies, certifications).
- **Leadership and capacity at the board level**: members of the Board should have a clear understanding of climate change risks and opportunities and seek to integrate them into corporate strategy and long-term planning, exercising effective oversight over it.
- **Climate-linked incentives and remuneration**: climate-related targets (e.g., SDGs, energy transition goals, climate-related investments, emissions targets) are included in executive compensation schemes, linking variable remuneration to the fulfillment of climate goals for the members of the executive and management board.
- **Capacity and responsibility across the organization**: company employees are aware of climate targets and related policies and processes. There is built in capacity to support the organization's alignment towards these targets, including a dedicated management function that reports to the Executive Board or the Management Board.
- **Foresight and anticipation**: the company has the tools to analyze in a forward-looking manner climate-related scenarios with focus on material topics for economic, environmental and social impacts, in order to create, update, adapt and track its climate transition plan. This includes maintaining regular dialogue with peers, investors and other stakeholders and proactive engagement with policy makers (e.g., UN Global Compact, PRI, EU Commission etc.).
- **Climate-related control, transparency, and disclosure**: the company has in place internal control functions/tools that support the fulfillment of its climate goals. In addition, the company reports progress towards its goals in its sustainability plans, non-financial information reports, and carbon footprint reports, using clear, comparable indicators based (when possible) on frequently used standards (e.g., EU Taxonomy and GRI standards).
- **Climate specific verification and auditing**: the company procures external assurance of climate-related reporting as well as external certification on climate governance and performance, such as the SBTi validation or the ISO certifications. The audit results and certifications are easily accessible to stakeholders.

Corporate climate governance in companies is no small endeavor. Building a sound framework requires sustained commitment, capacity and processes development and of course, credible and committed leadership.

Ensuring that enough effort goes into building a sound corporate climate governance framework as a corporate priority even though its payoffs are not immediately apparent remains a challenge.

As evidenced in this report, the importance of early adoption of corporate climate governance measures must not be overstated since it has proven it pays-off, and the medium-term returns can be significant: **guided by a strong and effective corporate climate governance framework, companies can contribute to global climate action, reduce their environmental footprint, enhance their reputation, and better position themselves to thrive in a low-carbon and climate resilient economy.** This forward-thinking approach has seen early adopting companies emerge as influential change drivers. Their leadership is crucial, setting benchmarks and influencing policy through their practices and commitment to environmental responsibility, as it sends a clear signal to markets and governments alike that the path to long-term prosperity is inextricably linked with the health of our planet.

The next chapters of the study will provide a comprehensive overview of corporate climate governance frameworks in selected jurisdictions and companies. Our methodology combines a qualitative approach, including the analysis of relevant international and national legal frameworks (Chapters 3 and 5) with a benchmark analysis using well-known ESG data providers, such as Bloomberg, Sustainalytics and S&P, as well as distinct assessment frameworks with particular emphasis on corporate climate governance, such as CDP Climate Change Scores and the Climate 100+ Net Zero Company Benchmark assessments (Chapter 6). We conclude with a discussion of policy implications both at the global policy and the corporate levels (Chapter 7). Detail of the methodology is presented in the relevant Annex.

3. Global and national progress on *climate change goals*

3.1 Setting the scene: global ambitions on climate change

Public organizations at the national and international level have been active promoters of climate change goals. Their broad ambition in setting global decarbonization goals has had far reaching consequences, including a new wave of climate-related regulation.

This chapter addresses how **the political impulse at an international, European and national level has encouraged companies to adopt a corporate climate governance approach** in their actions, and, ultimately, to take proactive measures to reduce their environmental impact, which can potentially result in countless business benefits and for society as a whole.

An essential milestone in the development of a common framework for action on climate change was the approval, on September 25, 2015, of the "2030 Agenda for Sustainable Development" by the United Nations. While the primary purpose of the SDGs is to call all countries in the world to action for the achievement of the 2030 Agenda objectives, they also provide a comprehensive framework for countries to monitor and report progress on sustainable development. The 17 SDGs unfold in 169 targets, which have their progress tracked by 248 pre-defined indicators – though some indicators overlap to different targets, and, whereas the 169 targets are preferably oriented towards countries, in some ways, they also influence companies on their progress towards sustainable development[7].

Among its 17 goals, the SDGs provide a comprehensive framework for monitoring and reporting progress on climate change goals that are particularly relevant to companies. SDG No. 13 "Climate action" includes target No. 13.2 "Integrate climate change measures into national policies, strategies and planning." SDG No. 7, i.e., "Affordable and clean energy", should also be remarked, as it includes a specific target for the implementation of green energy, aimed to help fighting climate change through the substantial increase of the share of renewable energy in the global energy mix, i.e., target No. 7.2.

Governments are encouraged to develop national indicators and reporting mechanisms to track their progress towards the goals. Similarly, corporations can also integrate the SDGs into their reporting frameworks and disclose their contributions and impacts. [8] **To achieve these ambitious targets, concerted political, social, economic, environmental and financial commitments on the part of both the State and companies, are essential**.

Together with the 2030 Agenda, the **Paris Agreement of 2015** is a key milestone for the global goals on climate change. After the Kyoto Protocol expectations were not met, the parties to the United Nations Framework Convention on Climate Change (**UNFCCC**) reached the Paris Agreement in December 2015. The main commitment is to limit the increase in temperature to **well below 2ºC above pre-industrial levels and pursue efforts to limit it to 1.5°C above pre-industrial levels**. As of today, 186 states have ratified the Paris Agreement.

To find common ground between more and least developed nations, the Paris Agreement allows the parties to continue increasing their emissions until they reach a maximum point, from where to begin to decrease. Furthermore, it foresees a national "adaptation effort" and does not include a compulsory reporting mechanisms with sanctions attached.

Despite its enforcement weaknesses, the Paris Agreement provides a lasting framework to guide the global effort for decades to come and marks the starting point of a change of course with the goal of a zero-emissions world. Progress to meet its targets is essential to achieve the SDGs, with the combined efforts of public institutions, companies and citizens and consumers. In 2023,

the UN Secretary General convened a High-Level Expert Group on the net zero emissions Commitments of Non-State Entities, which have issued ten strategic recommendations[9] for net-zero, among others, that companies establish transparent, science-based and robust investment supported plans to achieve the 1.5ºC goal.

In addition, the Paris Agreement unleashed a wave of policy and regulatory changes within the European Union (**EU**) focused on decarbonization, the energy transition and the support from financial markets towards environmentally and socially responsible behavior through a **fully-fledged regulatory package on responsible investment**. Ultimately, it has led to the EU commitment to become the first carbon neutral continent by 2050.

While accelerated in the last years, Europe's awareness on climate change is a long standing one. Already, in 1992, we find the reference to "sustainable development" in an official document, the "Fifth EC Environment Action Program", called precisely "Towards Sustainability".

This concept was also rapidly incorporated into the Founding Treaties of the EU. The 1992 Maastricht Treaty already refers to the fact that the EU will have the objective of "promoting balanced and sustainable economic and social progress." Furthermore, the Treaty establishing the European Economic Community incorporated the objective of "sustainable and non-inflationary growth that respects the environment." On its part, the Treaty of Amsterdam of 1997 expressly incorporated into the Treaty of the European Union the "principle of sustainable development" in its seventh recital and article B, which is also expressly included in article 11 of the current Treaty on the Functioning of the European Union.

Today, the progress made by and in Europe on addressing climate change and alignment policy, regulation and investment along decarbonization and energy transition goals is undeniable. We can especially highlight the recent efforts carried out in energy matters, including the Clean Energy Package for All Europeans, the European Green Deal, the European Climate Law or the recent Next Generation EU Funds with a significant focus on the green transition. Throughout the report, we will also see examples of these efforts in practice.

3.2 National progress on climate goals: a comparative overview of key countries

While the importance of international treaties in aligning the objectives of different countries is undeniable, the specific obligations for companies and individuals are finally adopted on a country by country basis through the enforcement of the corresponding regulations. The implementation process of these new regulations is orchestrated by country plans, which also provide visibility on what is to come, so that individuals can prepare for the future regulatory changes.

In this Report, we have chosen to focus on five jurisdictions: Spain, France, Germany, the United Kingdom (**UK**) and the United States of America (**US**). Other than Spain, which is the reference country for the authors of this study given its leadership in energy transition, in the study, we have considered that the United States is the second country in the world in energy consumption[10] and also a referent jurisdiction for corporate governance matters. Germany, France and the UK are also the countries with the highest energy consumption in Europe [11].

(a) Spain

The Spanish Constitution of 1978 was very advanced at the time by incorporating environmental protection provisions. In recent years, Spain has demonstrated a firm will to advance in the implementation of the SDGs environmentally related goals and the Paris Agreement.

This is especially demonstrated in the efforts being carried out in terms of decarbonization of the electrical system, where Spain is positioned as one of the leading countries, thanks to its natural conditions and the strength of business investments encouraged by Next Generation EU. The approval of a National Plan for Adaptation to Climate Change 2021-2030, of the Long-Term Decarbonization Strategy 2050 and the National Integrated Energy and Climate Plan (**PNIEC**), are specific examples. Currently, the goal is to reduce gas emissions in Spain by 23% with respect to 1990 by 2030 (there is already an update draft of the PNIEC setting this objective at 52%). By 2050, the target is climate neutrality, so that no more greenhouse gas (**GHG**) emissions can be emitted than those that can be removed from the atmosphere by carbon "sinks".

At the legislative level, the approval in 2021 of Law on Climate Change and Energy Transition[12] is very notable, which serves as a legal framework for the development of the different legislative initiatives aimed at meeting the decarbonization objectives of the economy, especially in the energy sector. It also sets out the legal obligation of certain companies to disclose their exposure to climate-related risks and opportunities, as well as their strategy and actions to align with the Paris Agreement goals. Pursuant to the Spanish Climate Change Law, certain entities are required to prepare an additional yearly report to evaluate the impact of climate change risks, including the risks associated with the transition towards a sustainable economy and the measures implemented to tackle such risks.

Progress towards GHG reduction goals in Spain has been historically positive. Indeed, Spain achieved compliance with the targets set for the First Commitment Period (2008-2012) and the Second Commitment Period (2013-2020) of the Kyoto Protocol, which distributed the reduction efforts differently among EU member states.[13] As per the latest data published by the European Environment Agency (April 2023), [14] we see a gradual evolution in Spain's progress towards GHG reduction goals, where GHG emissions had been reduced by 2.3% in 2021 with respect to 1990.

(b) France

France has become, in the last year, one of Europe's leading countries in the implementation of the SDGs. This is in addition to the fact that the implementation of a clear pro-nuclear policy in the 70s and 80s has allowed France to have one of the lowest CO2 emission electric systems in the world.

To place the country on a clear trajectory for its environmental commitments, France adopted "the 2019 Climate Law", which aims to make the country carbon neutral by 2050. [15]

The "2019 Climate Law" has four main strategies: (1) the gradual exit from fossil fuels and the development of renewable energies; (2) the fight against thermal strainers; (3) the introduction of new tools for steering, governance and evaluation of climate policy; and (4) the regulation of the electricity and gas sector.

To catalyze the achievement of the carbon neutrality objective, France has adopted the "2021 Climate Law",[16] which aims to transition a broad range of sectors, ranging from housing to transport, into a more sustainable model for development. This law was proposed by the Citizens' Convention for the Climate, a citizens' assembly held in 2019 and 2020 in response to the Yellow Vest protests, which discussed reducing France's carbon emissions. The main goal of the "2021 Climate Law" is to reduce France's GHG emissions by 40% by 2030 compared to 1990 levels. To achieve this, it aims to: (1) limit consumer incentives by regulating the advertising sector and to fight against greenwashing; (2) accelerate the development of bulk sales and glass deposits; (3) promote healthy and sustainable food; and (4) support the development of agroecology. As per the latest data published by the European Environment Agency (April 2023),[17] France has shown successful progress towards its goal. Indeed, in 2021, GHG emissions had been reduced by 23.5% with respect to 1990.

(c) Germany

Germany has traditionally been one of the most concerned EU countries about sustainability and environmental protection, being a pioneer in many aspects such as the deployment of renewable energy, the promotion of reuse and recycling schemes and the reduction in the use of polluting materials such as plastic.

Throughout the past years, Germany has adopted far more than 20 policies, programs and strategies in various sectors which shall serve the implementation of the SDGs.

The most important strategy serving the implementation of the SDGs is the German Sustainability Strategy (*Deutsche Nachhaltigkeitsstrategie*), which was first adopted in 2019 and recently updated in 2022 and has led to specific strategies and programs in different sectors. Furthermore, the German Sustainability Strategy also includes the (legally non binding) self-commitment of the Federal Government to check legislative projects for compliance with the SDGs before they are introduced to the German Parliament, and foresees that the implementation of SDGs shall be taken into account when deciding about the federal budget (*Bundeshaushalt*).

Besides the German Sustainability Strategy, the Federal Government introduced the climate protection plan 2050 (*Klimaschutzplan 2050*) and the climate protection program 2030 (*Klimaschutzprogramm 2030*). Both the climate protection plan 2050 and the climate protection program 2030 serve the achievement of the climate targets as agreed upon in the Paris Agreement.

From a legislative perspective, we can highlight the 2019 Federal Climate Protection Act (*Bundes-Klimaschutzgesetz* – **KSG**) that implements the climate protection goals of the Paris Agreement into German national law. As the KSG is a so-called "framework law" which mainly defines the climate protection goals to be achieved by Germany, any detailed measures on how to achieve those goals are set out in other laws. We should highlight that, as per the latest data published by the European Environment Agency (April 2023),[18] progress towards the Paris Agreement goal of carbon neutrality is remarkable, having achieved in 2021 a reduction in GHG emissions of 39.8% with respect to 1990.

(d) UK

The UK Government committed to the SDGs in 2015. This commitment has been reflected in several plans, including: (1) the Energy Security Plan (March 2023), which sets out a plan for enhancing security of gas supply, energy efficiency, clean heat and energy affordability. Key commitments include further investment in nuclear, offshore wind, carbon capture, utilization and storage (**CCUS**) and hydrogen; (2) the Net Zero Growth Plan (March 2023) provides for achieving net-zero in the most pro-growth, pro-business way and sets out actions to drive investment into key green industries; (3) the Government published net-zero investment roadmaps in 2023 to reflect sectoral investment needs and support investment decisions for sectors including offshore wind, hydrogen, carbon capture, utilization and storage, and heat pumps; (4) the Environmental Improvement Plan 2023 for England; (5) the Nature Markets Framework (March 2023); and (6) the Government's third National Adaptation Programme (17 July 2023), which sets out a five-year plan to boost resilience and protect people, homes, businesses and cultural heritage against climate change risks such as flooding, drought and heatwaves.

From a legislative perspective, we can highlight that the UK was the first country in the world to introduce legally binding emission reduction targets under the Climate Change Act 2008. Another very relevant regulation is the Environment Act 2021, which aims to deliver the target to halt the decline of nature by 2030, and long-term to improve air quality, biodiversity, water, and waste reduction and resource efficiency. However, we can highlight that the UK has recently reversed the new Internal Combustion Engine car ban to 2035 from 2030 (now aligned with the EU), an unexpected change of policy, which highlights a potential lack of consistency in implementing climate goals after leaving the EU. In this regard, **Brexit also raised questions on whether the UK will keep pace with the EU in the implementation of stricter climate goals, as far as European regulations are not binding anymore. In this sense, there are clear signs that the UK is traveling down the path of increasing regulation and there were moves in 2023 by the UK government to water down certain energy- and transport related policies that were designed to contribute to the net zero transition**.

Notwithstanding this, it is to be remarked that in accordance with the most recent figures published by the UK Government (March 2020),[19] the UK is precisely the country where we can appreciate the most promising progress in the goal towards GHG emissions' reduction since 1990. Indeed, as per the latest data, emissions had been reduced by 45.2% in the period 1990-2019. Changes in policy, and a potential regression in the progress made during those years, will have to be monitored once updated data is published by the UK government.

(e) US

The US is party to several international climate and environmental conventions, including the International Convention for the Prevention of Pollution from Ships, the Montreal Protocol and the Paris Agreement. The US is also a signatory country to the Global Methane Pledge, with the goal of reducing US methane emissions by 30% by 2030.

In 2021, the Biden Administration formed the National Climate Task Force to implement its climate agenda. In addition to achieving its commitments under the Paris Agreement, the Biden Administration has pledged to eliminate carbon pollution from the US electricity supply by 2035; and has earmarked 40% of climate-related federal investment to disadvantaged communities within the US. In November 2021, the US Department of State published The Long-Term Strategy of the United States: Pathways to Net-Zero Greenhouse Gas Emissions by 2050 (**US LTP**), which provides an overview of the pathways to achieving economy-wide net-zero emissions for all major GHGs by 2050. The US LTP establishes its emissions goals for 2030, 2050 and beyond, and presents the overarching themes that will drive the US climate strategy. In relation to this, and in accordance with the US Inventory on Greenhouse Gas Emissions' latest data (April 2022), [20] progress towards GHS neutrality goals from 1990 up to 2022 has been limited, taking into consideration that GHG emissions had just been reduced by 7.3% in 2022.

From a legislative perspective, we can highlight the importance of the 2022 Inflation Reduction Act (**IRA**). The IRA serves to finance the US clean energy transition primarily through tax breaks, grants and federal spending programs. In the context of the climate sustainable development goals, the IRA indirectly integrates targets related to affordable and clean energy (SDG No. 7) and industry (SDG No. 9). US Congress has recently passed two other significant climate laws: the Infrastructure Investment and Jobs Act, and the CHIPS and Science Act, which like the IRA, seek to mitigate climate change through significant federal spending in domestic infrastructure, strategic industry sectors and climate technology.

From the multijurisdictional analysis above, we can conclude that **countries with a high degree of commitment with regard to climate change, also feature a solid background of planning and regulations intended to guide the society towards those goals with a mix of incentives and obligations**. In particular, we can highlight the role of Germany and France as lead regulators in several sustainability aspects, most notably Germany was the first European country to initiate a one way deposit system for packaging in 2003 and France approved in 2020 the first European comprehensive law to prevent product waste and promote the circular economy.

Countries with a high degree of commitment with regard to climate change, also feature a solid background of planning and regulations intended to guide the society towards those goals with a mix of incentives and obligations.

4. Key Issues on *Corporate Climate Governance*

4.1 Measuring, Reporting and Setting Long-Term Goals

Measuring and reporting represent the cornerstone to put in practice accountability and transparency principles and render any corporate climate change framework truly effective.

A high-quality measuring and reporting process can deliver numerous benefits, such as accountability, transparency, informed decision-making, improved risk management, better response to investor expectations, regulatory compliance, and meaningful stakeholder engagement. And corporations are realizing that. Out of the largest 250 corporations by revenue globally, 96% report on sustainability or ESG matters, and 64% acknowledge climate change as a risk to their business. Overall, the adoption of the Task Force on Climate-related Financial Disclosures (**TCFD**) framework increased from 37% to 61% between 2020 and 2022. [21]

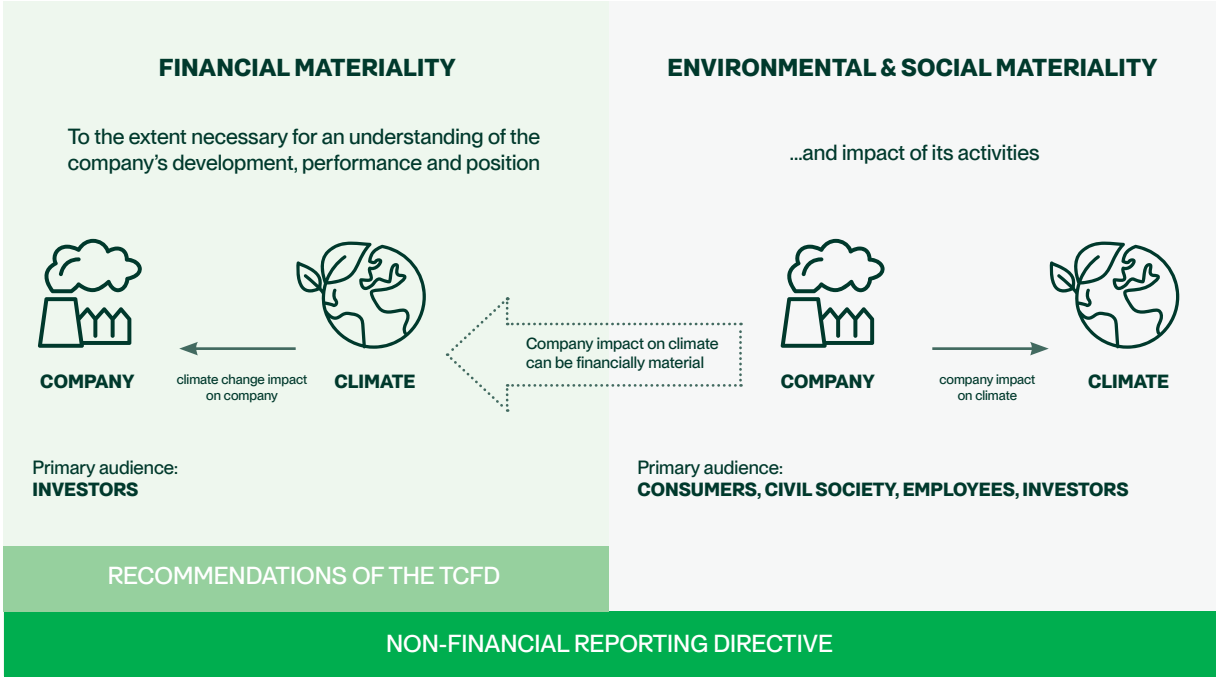
However, as we will explore further in this chapter, **reporting is not done in a uniform manner, limiting the benefits** listed above. Indeed, while at the national level, countries are subject to shared responsibilities under the UNFCCC, corporations in general have a more discretionary approach to climate change measurement and reporting. Regulatory efforts, as well as good practice principles, including from the Organization for Economic Co-operation and Development (**OECD**) and the World Economic Forum, and guidelines (see Table 1 below): seek to establish a more uniform reporting criteria and methodology. [22] However, **important challenges remain to be addressed, including: 1) data materiality; 2) reporting standards; 3) data quality; and 4) access to data**. These challenges render it more difficult to understand and compare ESG performance by investors, compromising their ability to incorporate ESG criteria into financial modeling.

(a) Scope: the importance of data materiality

Materiality [23] is not only key for reporting purposes, but for the whole corporate strategy, serving as a guide for management priorities and resource allocation. According to the World Economic Forum, "the board should ensure that material climate-related risks, opportunities and strategic decisions are consistently and transparently disclosed to all stakeholders – particularly to investors and, where required, regulators. Such disclosures should be made in financial filings, such as annual reports and accounts, and be subject to the same disclosure governance as financial reporting."

This view is particularly aligned to traditional disclosure regimes, focused on investors' needs to evaluate financial performance (financial materiality), requiring companies to report on sustainability issues (including climate) that might affect enterprise value. In 2017, the European Commission's Guidelines on Non-Financial Reporting [24] introduced a new element to be taken into account when assessing the materiality of non-financial information. "Climate-related information should be reported if it is necessary for an understanding of the external impacts of the company. This perspective is typically of most interest to citizens, consumers, employees, business partners, communities and civil society organizations. However, an increasing number of investors also need to know about the climate impacts of investee companies in order to better understand and measure the climate impacts of their investment portfolios." The combination of the financial materiality and the impact materiality resulted in the concept of double materiality.

FIGURE 1: THE DOUBLE MATERIALITY PERSPECTIVE OF THE NON-FINANCIAL REPORTING DIRECTIVE IN THE CONTEXT OF REPORTING CLIMATE-RELATED INFORMATION



*Financial materiality is used here in the broad sense of affecting the value of the company, not just in the sense of affecting financial measures recognised in the financial statements.

(b) Multiple reporting standards and data providers

As ESG and climate issues gained importance in the agenda of investors and other stakeholders, numerous frameworks and reporting standards have emerged to support corporate disclosure[25]. The introduction of the double materiality approach has also played a role in increasing disclosure requirements, often leading companies to adopt diverse, often complementary (and sometimes overlapping) reporting frameworks.

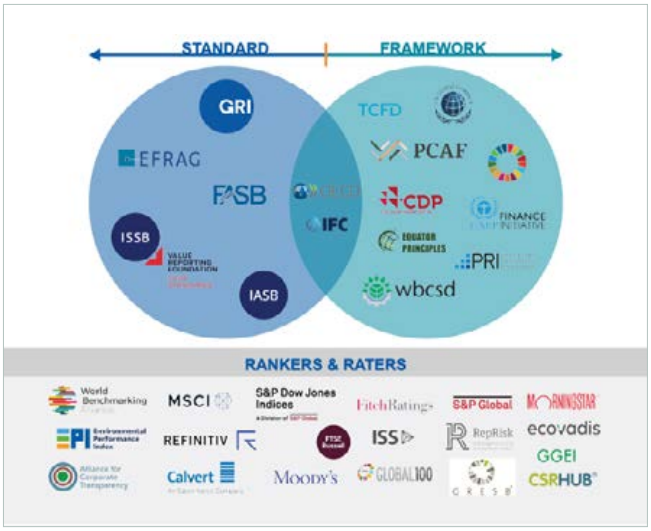
TABLE 1: CLIMATE-RELATED AND OTHER ESG REPORTING FRAMEWORKS AND STANDARDS

Institution	System	Level of detail	Materiality	Audience	Focus
FSB's TCFD	TCFD recommendations	Principles-based	Financially material	Investors, lenders and insurance underwriters	Climate-related issues
IFRS Foundation – International Sustainability Standards Board (ISSB)	IFRS Sustainability Standards	Detailed information	Financially material	Investors	Initial focus on climate-related issues, but with a plan to cover a considerable number of ESG issues
Value Reporting Foundation – SASB Standards Board	SASB Standards	Detailed information	Financially material	Investors	A considerable number of ESG issues, with subset of standards in each of 77 industries
Value Reporting Foundation – Integrated Reporting Framework Board	<IR> Framework	Principles-based	Financially material	Investors	A considerable number of ESG issues
Global Sustainability Standards Board (GSSB)	GRI Standards	Detailed information	Double materiality	Multiple stakeholders	A considerable number of ESG issues, with a plan to have a subset of standards in each of 40 sectors
GHG Protocol	GHG Protocol Corporate Standards	Detailed information	-	-	GHG emissions
CDP (previously Carbon Disclosure Project)	CDP's questionnaires	Detailed information	-	Investors and customers	Climate change, forests and water security
Climate Disclosure Standards Board (CDSB)	CDSB Framework	Principles-based	Financially material and relevant	Investors	Climate and other environmental information

Source: Adapted from Climate Change and Corporate Governance, OECD (2022)

The fact that companies are given comprehensive guidelines for measuring and reporting ESG-related data (see Table 1 above), including the suitability of their corporate governance structure to deal with climate change, only addresses part of challenge. **Fostered by investors' interests, ESG data providers emerged as key third parties to collect and analyze company-specific climate data, generating insights, assigning ratings, and providing benchmarks on companies' climate performance. They also offer independent assessments of companies' readiness to manage climate risks and opportunities, as well as integrate climate considerations into corporate governance models**.

Some of the main players in this area are: MSCI, Sustainalytics, ISS ESG, Trucost/S&P Sustainable, Bloomberg, RepRisk, CDP (which has also its disclosure standard as mentioned above), and VE (Moody's).



Source: GRI

While ESG Data providers may add significant value to climate analysis by aggregating and analyzing climate performance data, as well as comparing performance within and across industries, obstacles remain in achieving their full potential contribution. The lack of harmony and transparency in the methodologies adopted by ESG data provides a topic of increasing attention, as it prevents comparability among them and results in lack of clarity on how data is aggregated and assessed.

It is a particular point of concern in the case of ESG ratings, a factor considered by investors for ESG integration purposes such as tilting investment portfolios towards industries' top ESG performers. When investigating the divergence of ESG ratings from six prominent ESG rating agencies, Berg et al. (2019) found out that correlations between ESG ratings range from 0.38 to 0.71, while for credit ratings are correlated at 0.99. Despite the different in nature, as credit ratings have a clear goal of measuring the risk of default while ESG ratings rely on different definitions of what a good ESG performance may mean, the low correlation poses significant challenges for comparability and limits the credibility of such assessments to support investors' decision-making. The same study found out that, by decomposing the divergence in ESG ratings, measurement discrepancies contribute 56% of the divergence, while scope represents 38%, and weight deviations 6%.

For that reason, on April 24, 2024, the European Parliament approved the proposal for a Regulation on the transparency and integrity of ESG rating activities.[26] The regulation does not aim to uniformize methodologies, but rather assure transparency on the criteria adopted and clarity on how agencies operate preventing also conflicts of interest. However, they will still be conditioned by the inherent challenges and complexities of defining and measuring ESG factors and indicators and mostly by the diversity and dynamism of the ESG rating market and the sustainability preferences and expectations of stakeholders. This regulation must be understood within the broader EU action plan to tackle sustainable measurement and reporting (see Chapter 5 below), which also includes the development of the binding sustainability reporting standards for companies by the EFRAG in the context of CSRD (as defined below).

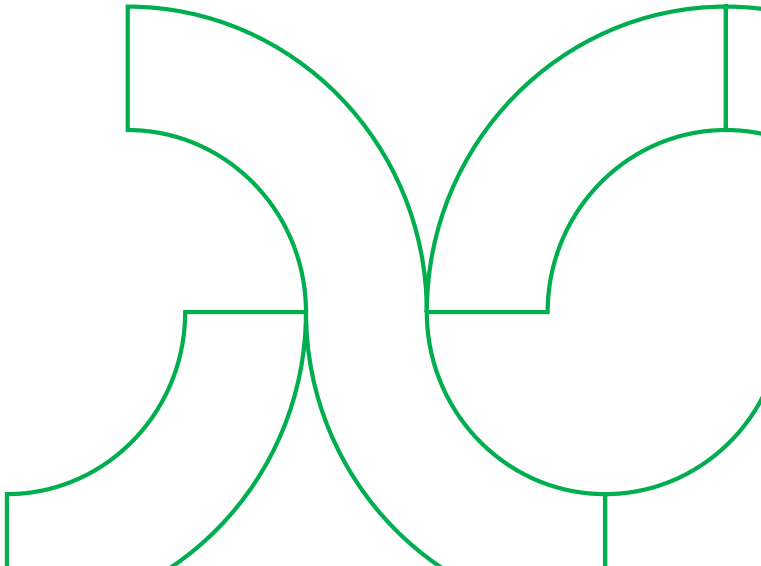
In addition to the EU, countries such as Japan or the UK have adopted or are in the process of adopting code of conduct for ESG rating providers. Additionally, in December 2023, the ICMA published a voluntary Code of Conduct for ESG ratings and data products providers, focused on promoting transparency, good governance, management of conflicts of interest, and strengthening systems and controls in the sector. [27]

(c) Remaining challenges in measurement and reporting

Despite all progress that has been made in frameworks adoption and data provision by third parties, there are still several remaining challenges to measuring and reporting when it comes to corporate climate governance.

(i) Emissions Data Availability and Quality: Although direct and indirect (those related to products sold) GHG emissions can be calculated and therefore report, some corporations, especially those with complex supply chains, struggle to gather data from multiple sources, including suppliers and subcontractors, which may use varying methodologies and reporting standards. Particularly for smaller enterprises, there are additional challenges related to

The lack of harmony and transparency in the methodologies adopted by ESG data provides a topic of increasing attention, as it prevents comparability among them and results in lack of clarity on how data is aggregated and assessed.



lack the necessary capacity, expertise, and resources to implement robust measurement and reporting systems. These challenges make it difficult to accurately measure and report GHG emissions, energy consumption, and other relevant climate metrics.

(ii) Lack of Harmonization to Report on Climate Performance and Governance: Numerous methodologies and reporting standards exist, with many of them including sector specific guidelines. Yet, choosing the most suitable methodology and standard for climate performance and reporting can be daunting. Despite some existing consolidation efforts, the absence of a universally accepted framework can lead to confusion and inconsistency in reporting practices. Additionally, the emergence of new jurisdictional level initiatives, such as US' SEC Climate Disclosure Guidance, adds another layer of complexity, requiring companies to adapt and comply with evolving expectations.

Standardization and harmonization efforts are necessary to streamline reporting practices and enable meaningful comparisons and benchmarking. It could also worth mentioning the SASB Standards, since 2022 under the responsibility of the International Sustainability Standards Board (**ISSB**) of the IFRS Foundation. The SASB Standards are sector-specific guidelines for disclosure of sustainability risks and opportunities, covering 77 industries. Its main target group consists of investors and other capital providers for companies. Recently, the IFRS Foundation, which developed the SASB, has also taken on the monitoring responsibilities for the TCFD, aiming for more alignment between different standards.

(iii) Data Verification and Assurance: While third-party verification and assurance can ensure the accuracy and reliability of reported climate data, companies face challenges in finding qualified verifiers, managing the costs associated with verification processes, and addressing discrepancies or limitations in their reported data. Furthermore, even the verification of historical performance data could have consolidated, meaning the verification of risks and prospective estimations, for which there is no available methodology, is still complex. Limited availability of qualified verifiers and the absence of standardized verification processes further complicate that verification and assurance.

The challenges above should not downplay the importance of measurement and reporting for corporate climate governance systems. Rather, they reflect an **increased relevance of the topics for companies around the world, while practices and solutions are still in a consolidation stage**.

Climate change is a topic that goes beyond the traditional duties of corporate boards. This gives measurement and reporting a heavy weight within corporate climate governance systems, not only as a continuous improvement guide, but as tool to minimize the risk of making promises that cannot be delivered or painting a nicer picture than reality. Under pressure of stakeholders, practices often dubbed as greenwashing.

4.2 Climate governance related risks: greenwashing and climate litigation

(a) Climate disclosures and greenwashing

Although definitions of "greenwashing" vary across jurisdictions, it is broadly understood to mean **misleading the public into believing that a company or entity is doing more to protect the environment than it actually is**. In a generic sense, it implies the process of conveying a false impression or providing misleading information about either a company's or a product's "ESG" performance to create an overly positive image.

Greenwashing can take many forms, such as hiding GHG emissions, masking them under a new emerging business line (for example, biofuels or renewables), and lacking a real climatic strategy or decoupling goals from the business model. For example, a company may claim to be carbon neutral by offsetting its emissions with dubious projects in developing countries, while continuing to emit large amounts of GHG emissions. Or a company may announce ambitious targets for reducing its environmental impact by 2050 without providing any clear roadmap or interim milestones on how to achieve them. Alternatively, a company may tout its support for renewable energy projects, while lobbying against climate regulations. Or a company may launch a green product line or brand, while neglecting or hiding the environmental costs of its core activities.

Accusations of greenwashing could also relate to statements made by a business in an attempt to revamp its green credentials, or the marketing of any product where environmental credentials are promoted.

Considering the above, the spectrum of what can be described as greenwashing is broad and there is not yet a legal cross-sectorial/jurisdictional common concept of greenwashing, although it is possible to identify specific definitions, in particular in financial regulation. According to the EU Taxonomy Regulation, greenwashing is defined as the **practice of gaining an unfair competitive advantage by marketing a financial product as environmentally friendly, when in fact basic environmental standards have not been met**.

Also, the European Supervisory Authorities – ESAs (EBA, EIOPA and ESMA) – has published their Progress Reports on Greenwashing but for the financial sector. The ESAs understand greenwashing as a **practice where sustainability-related statements, declarations, actions, or communications do not clearly and fairly reflect the underlying sustainability profile of an entity, a financial product, or financial services**. This practice may be misleading to consumers, investors, or other market participants. In addition, corporates and financial institutions also face greenwashing risk from incorrect or omitted information in financial reports, non-financial statements and prospectuses, as well as a lack of transparency around the limitations of the methodologies that underpin disclosures.

The EU aims to put an end to greenwashing and on February 28, 2024, a Directive[28] was approved to update EU consumer rules to support green transition, addressing practices that are considered misleading after a case-by-case assessment and including greenwashing-like situations to the existing "black list" of prohibited unfair commercial practices (such as making an environmental claim related to future environmental performance without clear, objective and verifiable commitments and targets, and without an independent monitoring system). The UK FCA's anti-greenwashing rule and sustainability labeling rules are due to apply from May and July 2024, respectively. Also, in 2021, France approved the Climate and Resilience Law, which addresses some greenwashing practices in relation to carbon neutrality claims for certain types of energy production.

To some extent, the risk of greenwashing is no different from the risks inherent in any misleading statement about a product, service or fund. However, the lack of uniform international standards increases the complexity of the challenge and therefore the potential liabilities for business. In

addition, markets often develop faster than regulation and this can create exposure. For this, companies should ensure that their strategy for managing greenwashing risks are aligned with the latest developments in the shifting sustainable regulatory landscape.

(b) Climate litigation or how climate disclosures and greenwashing drive risk for companies

Alongside the rising risk of regulatory enforcement, the threat of **shareholders' activism and civil litigation for companies is also on the rise**. In 2022, the UN's Intergovernmental Panel on Climate Change (**IPCC**) acknowledged that litigation is having an increasing influence on "the outcome and ambition of climate governance." Non-governmental organizations (**NGOs**) and individuals are increasingly suing private entities over their impact on the climate. These cases seek to discourage high-carbon activities, sometimes even presented as sustainable or claiming energy transition focused, target alleged failures to adapt to the net-zero transition and claim compensation for climate damage. Also, litigation is being used in a bid to hold directors and management accountable for perceived corporate failures to manage climate risks.

Research[29] from the London School of Economics (**LSE**) reveals the number of climate change-related lawsuits, with more than 2,000 cases filed around the world. A quarter were launched between 2020 and 2022, and while most involved governments, dozens are aimed at businesses. The LSE has been able to track claimants – often NGOs – using ever-more creative approaches in pursuit of their goals. In many instances, their aim is not to win but to draw attention to climate issues and force a change in corporate behavior.

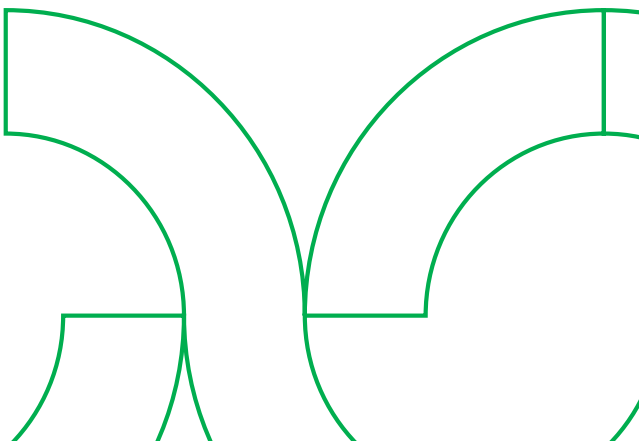
In a landmark decision, in May 2021, the District Court in The Hague ordered a major oil company (itself an adherent to the UNGPs) to cut its global carbon emissions by 45% from their 2019 levels by the end of 2030. The ruling in the case applies not just to the company's own emissions, but also to those created by its products. It is the first example of a court ordering a company to reduce its carbon output.

Away from their direct impact on the environment, companies also face growing litigation risk from their climate-related disclosures. These cases seek, among others, to highlight instances of greenwashing. In particular, greenwashing litigation comes in a variety of forms:

BOX 2. GREENWASHING RELATED LITIGATION AND ACTIVISM

- **Investors' litigation activism**. One of the best-known examples involves a major US oil producer, one whose stockholders filed a securities fraud class action against it and three of its directors in a Texas district court in 2016. The complaint alleged the company's public statements were materially false and misleading because they failed to adequately disclose the impact of climate change on the business, and that, as a result, its stock price was artificially inflated. When the company subsequently announced that it might need to write down the value of some of its fossil fuel assets, its share price dropped. Also, in the UK, the Advertising Standards Authority banned a series of advertisements from a number of large oil & gas companies for including misleading information about their environmental credentials.

  Where greenwashing litigation relate to financial products marketed as "green," claims have been brought on the grounds of mis-selling, misleading advertising and unfair business practices. It can be challenging for investors to win these cases, however, as doing so requires them to demonstrate they have suffered a loss. As a result, any uptick in mis-selling claims in relation to green financial products is likely to arise in jurisdictions with claimant-friendly class action regimes, such as the US.
- **Civil society litigation activism**. It is possible that we may see NGOs taking a closer look at corporate offsetting, and whether emissions reduction credits deliver their stated decarbonization benefits. In Europe, we have seen cases brought against energy majors over whether their pledges to be carbon neutral by 2050 are misleading given their fossil fuel investments today, and lawsuits targeting airlines in relation to "responsible flying" campaigns that NGOs claim give consumers "the false impression that … flights won't worsen the climate emergency." In 2017, a group of NGOs filed a complaint in the Netherlands against an international bank alleging it had failed to disclose the quantity of GHG emissions emitted as a result of its financing activities. The complaint resulted in the bank making a number of commitments to reduce its climate impact, including by steering its lending portfolio in a direction more compatible with the aims of the Paris Agreement.
- **"Advocacy" initiatives**. Here we are seeing private parties engage with authorities to put pressure on companies. As an example, in 2017, an NGO asked a Canadian securities regulator to stop an infrastructure company's initial public offering based on allegations that the prospectus had deficient disclosures around climate-related risks. After the regulator agreed to review the request, the company amended the prospectus.



ESMA reports[30] that, in the two-year period from January 1, 2020 to December 31, 2021, 191 companies (32% of the STOXX Europe 600 index) faced 257 communication incidents expressly related to greenwashing, with half of them concerning environmental issues only. However, the financial impact of greenwashing is still unclear. Materiality of greenwashing for companies may not only come from climate litigation and regulatory consequences, but also through investors' loss of confidence and market competitiveness. Greenwashing practices end up eroding consumer trust in sustainability initiatives. Some institutional investors have withdrawn from or avoided companies that fail to meet their climate commitments or that operate in high-risk sectors, such as oil & gas, finance, and food and beverage, which account for most of the greenwashing controversies. Moreover, greenwashing can harm companies' future earnings by damaging their reputation, as shown by the recent case of a global fashion retailer that had to remove the "conscious choice" label from its products after facing greenwashing accusations (although the case was later dismissed in court).

(c) How are companies reacting to these risks?

There is no uniform trend on how companies are addressing the risks arising from greenwashing or increased exposure to climate-related litigation. Most corporates are starting to be cautious in their public disclosures, aware of the risks of any overstatement regarding their ESG-related commitments and concerned of the legal and regulatory developments that may impact the need for – and nature of – those disclosures, including applicable legal grounds, regulators' recommendations and industry standards and guidance.

In order to settle regulatory investigations into their sustainability disclosures we have also seen a number of corporates agreeing to take on additional, ongoing reporting obligations, but, on the other hand, some companies are even opting not to disclose or report on their sustainability goals, practices and achievements, despite the growing demand from investors, customers and regulators for more transparency and accountability on ESG issues, driven by the fear of being accused of greenwashing.

"Greenhushing" practices are starting to be adopted by some corporates, which prefer to keep their sustainability efforts low-profile or confidential, rather than risk being scrutinized or criticized by stakeholders or the public. However, this strategy may also have drawbacks. To assess corporate climate goals, learn from decarbonization successes and measure indirect emissions, we need clear reporting from many sources. This is what Scope 3 emissions demand by their nature. Likewise, the absence of reporting may be interpreted as a lack of commitment, triggering legal action from shareholders, or other stakeholders that may deem as insufficient the company's action on climate change.

There is still room for hope and certainly some of the upcoming initiatives, such as the Green Claims Directive[31] in the EU or the Financial Conduct Authority (**FCA**) new anti-greenwashing rule, plus the new ESG product labeling regime that will be a sounding board for greenwashing risk management.

Greenwashing practices end up eroding consumer trust in sustainability initiatives. Some institutional investors have withdrawn from or avoided companies that fail to meet their climate commitments or that operate in high-risk sectors, such as oil & gas, finance, and food and beverage, which account for most of the greenwashing controversies.

SECTION 2

Climate Governance: *Impact in practice*

5. Corporate Climate Governance Systems: *a multi jurisdictional comparative approach*

The implications of corporate climate governance range from integrating ESG considerations into the decision-making, to redefining strategy, developing new tools for risk management and building new capacities and processes at the company and Board levels. A good example of the wide-ranging implications of the inclusion of sustainability in corporate governance can be seen in the 2023 G20/OECD Principles of Corporate Governance, [32] which include a new chapter on corporate sustainability and resilience, presenting a range of recommendations on disclosure, on the dialogue between a company and its stakeholders on sustainability-related matters, and the role of the board in addressing these matters.

The OECD Principles are also at the base of the Climate Governance Initiative (**CGI**), an initiative aiming to mobilize boards of directors around the world to adequately address climate change in their businesses. The CGI operates in a decentralized way, relying on several national associations to develop and offer knowledge and capacity building to boards locally[33].

This chapter provides a brief overview of the legal and regulatory frameworks governing the corporate governance of listed companies in France, Spain, Germany, the UK and the US, with a focus on the obligations and incentives related to energy transition and climate change. For the purposes of this chapter, we define "corporate climate governance" as **"the structures, policies, and practices that companies put in place to address and manage their climate-related impacts and risks, but also to seize new business opportunities. It involves the integration and disclosure of climate change considerations into the governance structures, decision-making processes, corporate strategy, and overall business operations."**

(a) The EU

Consistent with its long-standing commitment on climate change, the EU has adopted several directives and regulations that set out the minimum standards and requirements for sustainability reporting and corporate governance for listed companies and other large public-interest entities, such as banks, insurance companies and pension funds. These include, among others, the Non-Financial Reporting Directive (**NFRD**), the Corporate Sustainability Reporting Directive [34] (**CSRD**) and the EU Taxonomy Regulation. [35]

The NFRD, the first major piece of legislation approved by the EU, was intended to regulate the non financial and diversity reporting to be made by certain large public-interest entities within the EU. The NFRD added a new obligation for large public-interest entities [36] with more than 500 employees to include in their management reports a non-financial statement that covers, among others, environmental matters. In addition, information on the company's business model, policies, outcomes, risks, and KPIs related to these aspects had to be included in the management account, as well as on the due diligence processes implemented to identify and mitiga'e the adverse impacts of the company's activities. The NFRD allowed some flexibility for the companies to use national, EU, or international frameworks to report the non-financial information, such as the GRI Standards. There were also certain aspects over which the NFRD gave Member States some flexibility when transposing the Directive into their national systems, such as the requirement of the information to be audited by an independent auditor.

Despite the progress it represents, the NFRD faced important challenges, including a lack of consistency and reliability of the reported information, the limited coverage and scope, the insufficient enforcement and verification mechanisms, and the lack of alignment with the EU taxonomy.

By approving the CSRD in December 2022 the EU positioned itself at the forefront of a transition to sustainability. The CSRD aims to ensure that certain EU and non-EU companies provide adequate public disclosure of the risks that sustainability issues present and the impacts of those companies on the environment. Through the provision of information in a comparable way, the CSRD ultimately seeks to make companies more accountable for the risks, opportunities and impacts of their activities on people and the environment.

The CSRD is to be transposed by EU member states by July 6, 2024, although its application will be by phases – the Directive will be applicable to companies

to which the NFRD already applies from January 1, 2024. From January 1, 2025, it will be applicable to the rest of large companies, and from January 1, 2026, it will be applicable to small and medium enterprises. The CSRD will be complemented by binding sustainability reporting standards – **ESRS** – proposed by the European Financial Reporting Advisory Group (**EFRAG**), with the ultimate goal of ensuring transparency and more consistency on climate-related reporting and other sustainability matters.

On December 14, 2023, the long-awaited proposal for a Directive on Corporate Sustainable Due Diligence [37] (**CSDDD**) was informally agreed by EU co-legislators. CSDDD aims to foster the sustainable and responsible behavior of in-scope companies operating in the EU throughout their global value chains. However, on March 15, 2024, and after several months of heavy negotiations with a significant setback on February 28, 2024, the proposal received the endorsement by the COREPER. Finally, on April 24, 2024, the European Parliament approved that the proposal, although in its final version, has entailed a notable dilution of the directive's initial scope.

First, large in-scope companies [38] (both EU and non-EU) must adopt a "plan" to ensure that its business model and strategy are compatible with the transition to a sustainable economy and with the limiting of global warming to 1.5°C, in line with the Paris Agreement.

Second, climate change becomes directly linked to directors' duties. Obligations related to climate change plans must be considered when setting variable remuneration, but only if that variable remuneration is linked to the contribution of a director to the company's business strategy and long term interests and sustainability. Furthermore, but only for EU companies, the directors' duty of care will need to integrate the consequences of their decisions on climate change, including in the short, medium, and long term. An attention point is the directive's review contemplated seven years after its entry into force. The European Commission will be expected to assess whether, in addition to the climate change plans, the general due diligence process should be extended to adverse climate impacts.

At the time this study is closed, CSDDD needs to be formally endorsed by the Council, signed and published in the EU Official Journal. Member states will have two years to transpose the new rules into their national laws. The new rules (except for the communication obligations) will apply gradually to EU companies (and non EU companies reaching the same turnover thresholds in the EU).

BOX 3. THE NEW EU ARCHITECTURE TOWARDS SUSTAINABILITY

The proposed Directive on Corporate Sustainable Due Diligence (CSDDD) is a new building block in the new architecture that the EC is building to reorient corporate business and finance towards sustainability and the goals of the Paris Agreement. The CSDDD proposal was launched in parallel to CSRD, which focuses on disclosure obligation (and related accountability rules). Both CSRD and CSDDD are closely interrelated and CSRD is seen as the "last step", or "reporting state", of the due diligence under CSDDD. The combined effect that both regulations will have in the director's duties and responsibilities would be significant. Not only considering the type of information and data to be disclosed – for example, CSRD already mandates disclosure by companies in the management report of their plans, business models and strategies to ensure transition to a sustainable economy, with a specific reference to the limiting of global warming to 1.5°C in line with the Paris Agreement and the EU's climate neutrality goal by 2050 – but also due to direct and indirect impact on the shaping of the director's responsibility. Under CSRD, the ESRS 2 provides for describing the mandate, roles and responsibilities of directors and supervisory bodies over sustainability matters, specifying the aspects of sustainability, over which oversight is being exercised, covering each one of the ESG sustainability-related issues. Such disclosure will be under regulatory supervision and, if non-compliant, it may entail potential sanctions. However, the direct impact of CSDDD and CSRD goes beyond regulatory enforcement and, since sustainable risk will be directly linked to the director's fiduciary duties, it may be a source of direct liability for company's directors.

(b) France

The main sources of corporate governance for listed companies in France are the French Commercial Code, the French Monetary and Financial Code, and the General Regulation of the *Autorité des Marchés Financiers* (**AMF**), the French securities regulator. In addition, listed companies are expected to comply with the recommendations of the AFEP-MEDEF Code, a soft law instrument issued by two business associations representing large companies, or to explain why they depart from them. The AFEP-MEDEF Code is endorsed by the AMF as a reference for corporate governance best practices.

France has been a pioneer in corporate climate governance regulation, having introduced several laws and initiatives that go beyond the NFRD requirements. In 2010, before the approval of the NFRD, France approved the Grenelle II Law of 2010, [39] which amended, among others, the French Commercial Code and required listed companies to report on their ESG performance and impacts, as well as their contribution to the national and international objectives on sustainable development and climate change. The law also requires third-party verification of the non-financial information and the inclusion of stakeholder views in the reporting process. From the accounting year opened after December 31, 2012, ESG reporting became mandatory for listed companies in France, although the choice of quantitative and qualitative indicators were then left to the discretion of the companies in the scope. In addition, the Grenelle II Law requires companies with more than 500 employees to publish a transition plan to reduce their GHG emissions setting out the objectives, means and actions envisaged for this purpose and, where applicable, the actions implemented during the previous assessment. This GHG emissions assessment and transition plan shall be made public and updated every four years.

In 2019, the PACTE Law [40] was approved, reforming the corporate law and governance framework to promote social and environmental responsibility, innovation, and long-term value creation. The law introduces the concept of "*raison d'être*" (purpose) for companies, which can be defined in their articles of association and guide their strategic decisions. The law also sets out that ESG issues and objectives are the responsibility of the board and must be considered for corporate interest purposes and defining the company's strategy. The law strengthens the role and independence of the board of directors and the audit committee in overseeing the ESG performance and reporting of the company.

French law does not prescribe a specific format or standard for the disclosure of non-financial information, but it does require companies to disclose the frameworks and standards they have used and the methods of consultation of this standard.

France opted for, when transposing the NFRD Directive in 2017, a higher level of assurance than the NFRD, as it requires a reasonable assurance opinion instead of a limited assurance opinion. The independent third-party body, whose opinion is communicated to shareholders, must include a reasoned opinion on the conformity of the declaration with the data required to be included therein under French law and on the fairness of the information provided. Additionally, the report must describe the steps taken to conduct the verification.

France was not only a pioneer in sustainability disclosure obligations. In 2017, more than five years before the draft CSDDD was published, France was the first country in the world to include an obligation on French companies to prepare a vigilance plan. Largest companies must draw up and publish an annual vigilance plan setting out the risks attached to the activity of the company or the group and of their suppliers or subcontractors relating to, among others, environmental issues (mapping of the relevant risks). Additionally, companies have an obligation to define the appropriate actions to be carried out in order to reduce any risk identified.

BOX 4. DIRECTORS' STATUTE IN FRANCE

Directors of listed companies in France have a fiduciary duty to act in the best interest of the company, which includes considering the interests of all stakeholders, such as employees, customers, suppliers, creditors, and the community. Directors also have a duty of care and diligence, which requires them to exercise their powers with competence, prudence, and loyalty, and to avoid any conflicts of interest. They are liable for any breach of their duties, as well as for any violation of the law or the company's by-laws, or for any mismanagement that causes damage to the company or third parties.

Directors are expected to consider the environmental and social impacts of the company's activities, as well as the risks and opportunities related to climate change and energy transition, as part of their fiduciary duty and duty of care. The Code AFEP MEDEF recommends that the board of directors defines and oversees the company's strategy and objectives in terms of sustainable development and corporate social responsibility, and that it monitors the implementation and performance of the company's policies and actions in this regard. The Code also suggests that the board of directors establishes a specialized committee on sustainable development and corporate social responsibility, or assigns this responsibility to an existing committee, such as the audit committee or the strategy committee.

(c) Germany

The main sources of corporate governance for listed companies in Germany are the German Stock Corporation Act and the German Corporate Governance Code, a soft law instrument issued by a government-appointed commission and revised in 2022. The German Corporate Governance Code is based on the principles of the OECD Corporate Governance Guidelines and the EU Corporate Governance Framework and provides recommendations and suggestions for good corporate governance practices. Listed companies are expected to comply with the recommendations of the Code, or to explain why they depart from them, in an annual declaration of conformity.

Germany transposed the NFRD into sections 289 b-c, 315 b-c of the German Commercial Code. Although NFRD opens the door to Member States requiring additional assurance on the non-financial information that is disclosed, through verification by an independent expert, German transposition of this aspect limited the assurance to the auditor verifying that the non-financial report is issued when applicable, without requiring the review by an independent expert.

France is not the only EU member state that has approved legislation requiring companies to respect human rights and the environment in their supply chains. From January 1, 2023, German companies with over 3,000 employees are required to comply with the Act on Corporate Due Diligence Obligation in Supply Change (**German CDD Act**). Companies that fall within the scope of the German CDD Act are required, among others, to conduct appropriate due diligence focusing on risks relating to infringement of environmental standards, establishing a risk management system and designating a responsible person within the company. [41]

BOX 5. GERMAN CORPORATE GOVERNANCE CODE SCOPE

The German Corporate Governance Code, as revised in 2022, includes a recommendation, by virtue of which the management board shall consider environmental and ecological impacts when assessing risks and opportunities as well as in its corporate strategy and long-term economic objectives. Additionally, sustainability-related objectives should be included within the risk management systems of the companies.

(d) Spain

The main legal sources of corporate governance for listed companies in Spain are the Spanish Companies Law, the Spanish Securities Market Law, and the Circulars and Recommendations of the *Comisión Nacional del Mercado de Valores* (**CNMV**), the Spanish securities supervisor. In addition, the Good Governance Code of Listed Companies, a soft law instrument issued by the CNMV in 2015 and amended in 2020, applies to listed companies on a comply or to explain basis.

Spain has transposed the NFRD into its national law through Royal Decree-Law 18/2017, [42] Law 11/2018 [43] and Law 5/2021, [44] which amended the Spanish Commercial Code, the Spanish Companies Act [45] and the Audit Law. [46] Like Germany, Spanish transposition of the NFRD limited the assurance to the auditor verifying that the non-financial report is issued when applicable, without requiring the review by an independent expert. However, the Spanish legislator chose to expand the obligation of disclosure not only to listed companies but also to public interest companies, companies with assets of over €20 million or with annual revenues of over €40 million and with over 250 employees.

The CNMV monitors the compliance of listed companies with the Good Governance Code's recommendations on directors' remuneration and publishes an annual report on the remuneration practices and trends in the Spanish market. According to the latest CNMV report on director remuneration, published in September 2023, 62% of the Ibex-35 companies included ESG parameters criteria to determine the variable component of director remuneration. [47]

BOX 6. HIGHLIGHTS ON THE CORPORATE GOVERNANCE PRINCIPLES IN SPAIN

Among the main principles of corporate governance in Spain, there is the consideration of the interests of stakeholders and the social and environmental responsibility of the company.

While there is no express reference under Spanish law yet to the obligation of directors to consider the environmental impacts of the company's activities or the risks and opportunities related to climate change and energy transition, as part of their fiduciary duty, the Spanish Good Governance Code recommends that in pursuing the corporate interest, the board should also strive to reconcile its own interests with the legitimate interests of its employees, suppliers, clients and other stakeholders, as well as with the impact of its activities on the broader community and the environment.

The Spanish Good Governance Code also suggests that the board of directors establishes a specialized committee on sustainability, or assigns this responsibility to an existing committee, such as the audit committee or the nomination and remuneration committee.

Director remuneration for listed companies in Spain is subject to the approval of the shareholders' meeting, and must be consistent with the company's strategy, performance, and long-term interests. The Spanish Good Governance Code recommends that director remuneration should include a variable component that is linked to the achievement of quantitative and qualitative criteria, to promote the company's sustainability. The Spanish Good Governance Code also advises that the variable component should include a long-term incentive scheme, such as stock options or performance shares, that is subject to performance conditions related to the company's sustainability goals and indicators.

(e) UK

The main legal sources of corporate governance for listed companies in the UK are the Companies Act 2006 (the **UK Companies Act**) and the UK Corporate Governance Code (the **UK Code**).

The FCA has implemented several listing rules which specifically address climate-related issues.

In order to help users of their financial statements understand how they are managing climate-related risks, there is a listing rule which requires disclosures in annual reports to be consistent with the recommendations and recommended TCFD disclosures. If companies do not report in accordance with TCFD they must explain why they do not do so.

Additionally, the disclosures made by companies should provide sufficient detail to enable users to assess the company's exposure and approach to addressing climate-related issues, considering its exposure to climate-related risks and opportunities and the scope and objectives of its climate-related strategy.

The UK government is also due to consult and/or legislate on regulatory changes across a range of sustainability-related policy areas in 2024, including the UK green taxonomy. And the UK Sustainability Disclosure Standards are expected to be created based on the ISSB standards by July 2024.

ESG matters may also be incorporated into the remuneration of directors or executives, either as part of the statutory requirements or the best practices. For example, the UK Companies Act requires public companies to prepare and publish a directors' remuneration report, which must include information on how the remuneration policy and practices are aligned with the company's strategy, performance, and ESG objectives, and how the views of shareholders and other stakeholders have been taken into account. The UK Code also recommends that the remuneration committee should consider the alignment of incentives and rewards with the company's culture, values, and ESG goals, and that the remuneration policy should include provisions to enable the company to recover or withhold variable pay in case of ESG misconduct or failure.

(f) US

There is no single or uniform framework for ESG governance or disclosure in the US, but rather a patchwork of federal and state laws (e.g., new legislation in California will require extensive disclosures of climate-related risks and scope 1, 2 and 3 emissions), regulations, standards, and guidelines that may apply to different sectors, industries, or issuers.

The Securities and Exchange Commission (**SEC**) has the primary authority to regulate the disclosure of material information by public companies and has issued some guidance on how to address certain ESG topics, such as climate change, diversity, human capital, and cybersecurity, in their filings. The SEC has a task force to identify potential

violations, including material gaps or misstatements in companies' disclosure of climate-related risks under existing rules.

On March 2022, it made a proposal, captioned The Enhancement and Standardization of Climate Related Disclosures for Investors, which would require SEC registrants, including foreign private issuers, to include certain climate-related disclosures in their registration statements and periodic reports, including annual reports on Form 10-K. Under the proposal, registrants would be obligated to disclose (i) the impact of climate-related risks on their business, (ii) their climate-related governance and risk management systems, (iii) GHG emissions, including Scope 1 and Scope 2 emissions for all registrants, and Scope 3 emissions for many registrants, (iv) climate-related financial statement metrics and related disclosures, and (v) information regarding climate-related targets and goals, if applicable. The proposal was finalized only on March 6, 2024, although it is a substantially scaled down version of the 2022 proposal – among other things, it does not require Scope 3 emissions reporting and only requires certain registrants to report "material" Scope 1 and 2 emissions. Several US state attorneys general have already challenged the new rule and the SEC's authority to issue it, and additional legal challenges, are likely. Some environmental groups, such as Earth Justice and Sierra Club, have also raised the possibility of challenging the SEC's removal of certain parts of its initial proposal.

In the meantime, new legislation in California will require extensive disclosures of climate-related risks and scope 1, 2 and 3 emissions. The US is therefore adding to the growing global tapestry of climate-related disclosure rules that businesses (and, indirectly, their supply chains) must contend with.

ESG governance and disclosure may also be affected by shareholder activism, proxy voting, litigation, or public pressure, as various stakeholders may seek to influence or challenge the ESG policies, practices, or performance of public companies. For example, shareholders may propose resolutions or engage with management on ESG issues, such as climate change, diversity, human rights, or political spending, and seek to hold directors or executives accountable for ESG outcomes. Moreover, public opinion, media attention, political views or social movements may also shape the ESG expectations or reputation of public companies. Also, in the US, for years corporate law has been cited as a barrier to decarbonization because of the widely held view that fiduciaries must give primacy to shareholder returns over broader societal objectives. However, there is now a growing body of case law which values first decision-making that has been protected under states' business judgment rules.

6. Corporate Climate Governance in practice: *Focus on the energy sector*

6.1 Introduction to the benchmarking analysis

To complement the earlier qualitative analysis focused on national legal frameworks, this chapter presents a benchmarking analysis of the corporate climate governance systems of 25 listed companies in each of the five jurisdictions under the scope of this study as explained in Chapter 1: Spain, Germany, France, the US and the UK. In each country, we have chosen the top five companies in the energy sector listed in the main stock exchange taking into account their market capitalization.

The benchmarking adopts a comprehensive and multidimensional approach to evaluate the corporate climate governance systems of the companies, using a set of KPIs that reflect different aspects of their corporate strategy, internal regulations, remuneration, supervision, risk management, reporting and auditing related to the climate goals, following those identified in Box 1 of this study. These KPIs are based on traditional good corporate governance indicators across the board in the world and are also referred and considered in the ESRS 2 among the standards for sustainability disclosures (see the corresponding Annex) for further detail on the methodology of the benchmarking).

The benchmarking analysis relies on two main sources of data: (i) the information provided by selected ESG data providers, which offer detailed information on the performance of the companies; and (ii) public available information reported as by the companies, which offer more detailed and specific data on their corporate climate governance systems. The benchmarking compares the data from these two sources, as well as the data across the jurisdictions and the companies, to identify the level of alignment, consistency, and transparency of the corporate climate governance systems, in order to identify opportunities and best practices for improvement that will be presented as conclusions in Chapter 7.

The specific issues analyzed as part of this benchmarking mimic the earlier qualitative analysis and include: 1) the alignment with the climate-focused SDGs; 2) the definition of a specific corporate decarbonization target; and 3) a discussion of specific company performance in the selected jurisdictions. Finally, the chapter concludes with a discussion on the impact of corporate climate governance on risk metrics and ESG performance.

BOX 7. THE IMPORTANCE OF PIONEERSHIP

Although it could not be presented as a KPI and, therefore, it is not included among the selected indicators for the benchmarking, the early adoption of corporate climate governance measures is a relevant factor to weigh. The maturity of a company's corporate climate governance system is indicative of its commitment to long-term sustainability goals and its capacity to integrate climate considerations into strategic decision-making.

Mature systems are characterized by comprehensive policies, clear accountability mechanisms, and regular reporting on climate-related performance. Companies with mature climate governance are more likely to have robust data collection and analysis capabilities, enabling them to track progress and make informed decisions. By proactively integrating climate-related objectives and KPIs into their corporate governance frameworks, companies are better positioned to anticipate and manage risks associated with climate change.

Generally, investors recognize the value of such maturity, which should also be reflected in higher ESG ratings.

6.2 Alignment with selected SDGs (7 and 13 in particular) and identification of specific decarbonization goals

The sample covered by this study shows a high level of support to the SDGs, with 92% (23) of the corporations identifying priority goals related to their business strategy. Most of them (16, representing a 64%), also report divide their SDG alignment according to their materiality. **Only four companies (16%) identify the specific SDG targets and disclose their specific contribution at the target level**.

TABLE 2. SDGS TARGETS BY COMPANY

		Identification of priority SDGs	First-level contribution	Second-level contribution	Identification of SDG targets
SPAIN	Spanish Company 3	Y	7, 13	6, 9, 15, 17	Y
	Spanish Company 5	Y	7, 8, 13	6, 9, 12	N
	Spanish Company 1	Y	5, 7, 8, 9, 13	3, 15, 17	N
	Spanish Company 2	Y	7, 9, 11, 13	4, 8, 12, 17	N
	Spanish Company 4	Y	7, 8, 9, 13, 14, 15	2, 4, 5, 6, 12, 17	N
FRANCE	French Company 3	Y	7, 8, 9, 13	1, 4, 5, 10, 12, 14, 15, 16	Y
	French Company 5	Y	7, 8, 12, 13, 17	1, 2, 3, 4, 5, 6, 9, 10, 11, 14, 15, 16	N
	French Company 4	Y	5, 7, 8, 9, 11, 13	3, 6, 10, 12, 14, 15, 16, 17	Y
	French Company 2	Y	7, 13	5, 8, 9, 11	N
	French Company 1	Y	1, 2, 3, 6, 7, 9, 11, 12, 13, 14, 15	NA	N
UNITED KINDGOM	UK Company 4	Y	3, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15, 16, 17	NA	N
	UK Company 1	Y	1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17	NA	N
	UK Company 3	Y	7, 13	3, 4, 5, 8, 12, 15	N
	UK Company 5	Y	5, 7, 8, 9, 12, 13	NA	N
	UK Company 2	Y	5, 7, 8	4, 9, 10, 11, 13	Y
UNITED STATES	US Company 4	Y	7, 12, 13	NA	N
	US Company 1	Y	3, 4, 7, 8 , 13	NA	N
	US Company 3	N	NA	NA	N
	US Company 5	Y	3, 5, 7, 13	NA	Y
	US Company 2	N	NA	NA	N
GERMANY	German Company 4	Y	5, 7, 8, 9, 12, 13, 14, 15, 16	NA	Y
	German Company 2	Y	7, 11, 13	3, 4, 5, 7, 8, 9, 12, 17	N
	German Company 5	Y	5, 7, 8, 9, 13	3, 4, 6, 11, 12, 14, 17	N
	German Company 1	Y	7, 9, 11, 13	4, 5, 6, 8, 12	N
	German Company 3	Y	1, 7, 8, 9, 11, 12, 13, 16	NA	N

Given the selection criteria, it is natural that "SDG 7 – Affordable and Clean Energy" is deemed as central for all companies that report on SDG alignment. Similarly, and considering the intrinsic link between the energy sector and global challenge of climate change, "SDG 13 – Climate Action" also prevails as a priority SDG those organizations, except for UK Company 2, that considers SDG No. 13 a supporting goal for its central SDG No. 7-aligned goals.

However, while there is a high level of alignment around SDGs No. 7 and No. 13, the range of focus SDGs considered by the companies differ substantially, with some of them prioritizing as few as two SDGs, and on the other side of the spectrum there is one company claiming to prioritize as many as 16 goals.

The extent to which corporations use the SDGs as a foundation for their corporate climate governance systems also vary substantially. As there is no regulatory or voluntary framework providing such guidance, it is not possible to compare objectively their practices in that regards. Instead, looking at different practices of SDG integration across the different jurisdictions is likely the most effective way to understand how companies may bring together the UN goals and their corporate climate governance mechanisms.

Regarding specific climate goals, all sample established climate goals, with very diverse levels of ambitions and coverage though. Across jurisdictions, the US lags behind its peers, as companies often do not address value chain emissions and do not establish a decarbonization pathway through interim targets, while the corporations analyzed in France, Germany and Spain have defined consistent targets, both in the near (i.e., before 2030) and long-term, covering material Scope 3 value chain emissions.

At the company level, it stands out that among 14 of the 25 companies have near-term goals validated by the Science-Based Targets Initiative (**SBTi**), but only five cover value chain emissions, being them Spanish Company 3, French Company 5, French Company 4, UK Company 3 and German Company 1.

Looking at long-term validated net-zero Scope 1, 2 and 3 targets, only four companies meet this criterion: Spanish Company 3, Spanish Company 4, German Company 3 and French Company 5. It is important to note the SBTi pauses the validation of fossil fuel sector targets and has removed previous commitments from those companies until a consistent methodology is in place to assess the consistency of their goals. Similarly, since July 2022, SBTi only validates targets consistent with limiting global warming to 1.5°C, even though previously existing well-below 2°C or 2°C targets will continue to be valid.

TABLE 3. SPECIFIC CLIMATE GOALS BY COMPANY

		Net-Zero Pledge					Interim Targets								
		Scope 1/2	Scope 3 (value chain)	Latest target year	Use of offsets	SBTi validation	Baseline year	Scope 1/2	Absolute X Intensity	Target year	Baseline year	Scope 3 (value chain)	Absolute X Intensity	Target year	SBTi validation
SPAIN	Spanish Company 3	Y	Y	2039	Y	Scopes 1/2/3 1,5°C	2020	65%	Absolute	2030	2020	65%	Absolute	2030	Scopes 1/2/3 1,5°C
	Spanish Company 5	Y	Y	2050	Y	N	2016	55%	Absolute	2030	2016	30%	Absolute	2030	N
	Spanish Company 1	Y	N	2040	Y	N	2018	50,40%	Absolute	2030	2021	25%	Absolute	2030	N
	(*) Spanish Company 2	Y	Y	2040	N	N	2017	80%	Absolute	2030	2017	55%	Absolute	2030	N
	Spanish Company 4	Y	Y	2050	Y	Scopes 1/2/3 1,5°C	2019	55%	Absolute	2030	2019	28%	Absolute	2030	Scopes 1/2 1,5°C
FRANCE	French Company 3	Y	Y	2050	Y	N	2015	40%	Absolute	2030	2015	30%	Absolute	2030	N
	French Company 5	Y	Y	2050	Y	Scopes 1/2/3 1,5°C	2021	76%	Absolute	2030	2021	25%	Absolute	2030	Scopes 1/2/3 1,5°C
	French Company 4	Y	Y	2045	Y	N	2017	55%	Intensity	2030	2017	56%	Intensity	2030	Scopes 1/2/3 Well-below 2°C
	French Company 2	Y	Y	2050	Y	N	2019	50%	Absolute	2030	2019	28%	Absolute	2030	Scopes 1/2 Well-below 2°C
	French Company 1	N	N	NA	NA	NA	2018	40%	Absolute	2034	NA	N	NA	NA	Scopes 1/2 Well-below 2°C
UNITED KINDGOM	UK Company 4	Y	Y	2050	Y	N	2016	50%	Absolute	2030	NA	N	NA	NA	N
	UK Company 1	Y	Y	2050	Y	N	2019	50%	Absolute	2030	2019	Y	Intensity	15-20%	N
	UK Company 3	Y	Y	2050	Y	N	2018	60%	Absolute	2030	2018	37,50%	Absolute	2033	Scopes 1/2/3 1,5°C
	UK Company 5	Y	Y	2050	Y	N	2018	72,50%	Absolute	2030	2018	50%	Absolute	2034	Scopes 1/2 1,5°C
	UK Company 2	Y	Y	2050	Y	N	2019	40%	Absolute	2034	2019	28%	Intensity	2030	N
UNITED STATES	US Company 4	Y	N	2050	Y	N	2016	20-30%	Intensity	2030	NA	N	NA	NA	N
	US Company 1	Y	N	2050	Y	N	2016	5%	Intensity	2028	NA	N	NA	NA	N
	US Company 3	Y	N	2040	Y	N	NA	N	NA	NA	NA	N	NA	NA	N
	US Company 5	Y	N	2050	Y	N	2014	50%	Absolute	2025	NA	N	NA	NA	Scopes 1/2 +3 business travel - 1,5°C
	US Company 2	Y	Y	2050	Y	N	2005	50% - only scope 1	Absolute	2030	NA	N	NA	NA	N
GERMANY	German Company 4	Y	Y	2040	Y	N	2019	50%	Intensity	2030	2019	30%	Absolute	2030	Scopes 1/2 Well-below 2°C
	German Company 2	Y	Y	2040 (Scope 1/2) 2050 (Scope 3)	N	N	2019	50%	Absolute	2030	2019	75%	Intensity	2030	Scopes 1/2 1,5°C
	German Company 5	Y	N	2030	N	N	2019	46%	Absolute	2030	2019	28%	Absolute	2030	Scopes 1/2+3 sold products 1,5°C
	German Company 1	Y	Y	2035	Y	N	2018	87,40%	Intensity	2035	2018	42,50%	Absolute	2035	Scopes 1/2/3 1,5°C
	German Company 3	Y	Y	2040	Y	Scopes 1/2/3 1,5°C	2018	83%	Intensity	2030	2018	83%	Absolute	2030	Scopes 1/2/3 1,5°C

* Although Spanish Company 2 itself does not have SBTi validated targets, the foreign conglomerate that owns 70% of its shares has both near-term and net-zero targets validated at the group level for Scope 1/2/3, aligned with the 1.5°C climate scenario. These targets therefore include Spanish Company 2.

6.3 Analysis of the corporate climate governance framework in sample companies by jurisdiction

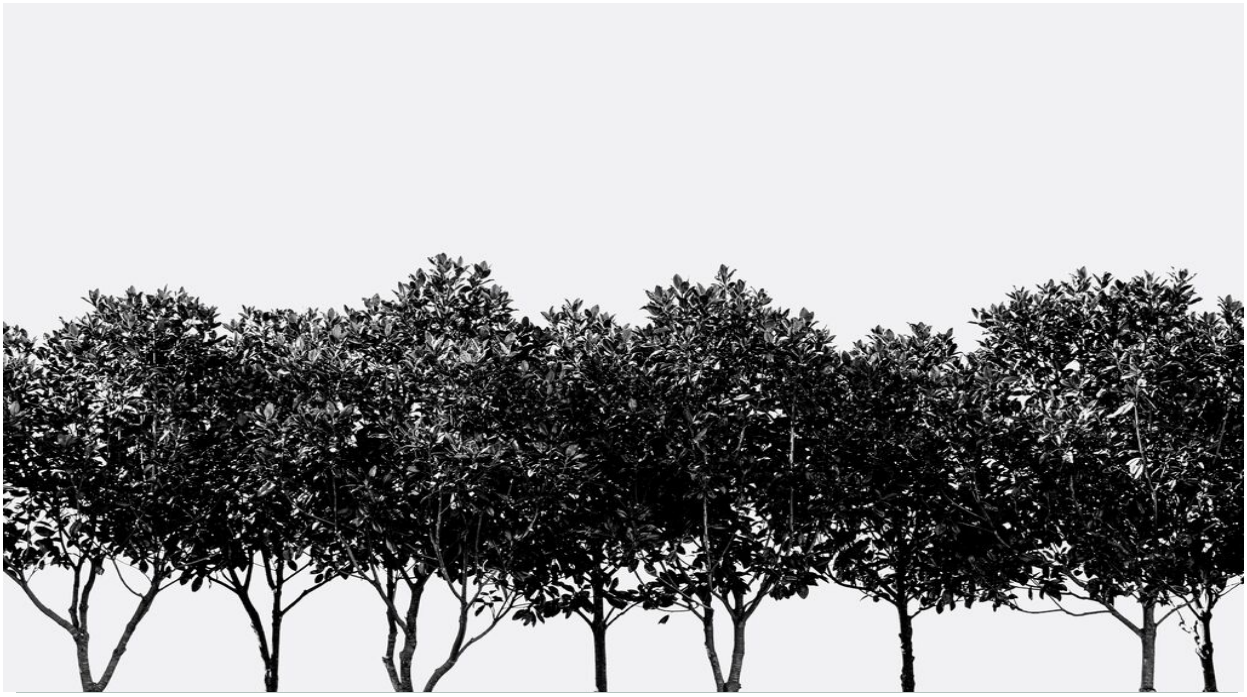
FRANCE

(a) Integration of sustainability objectives, in particular energy transition, into the strategy of the companies analyzed

The companies considered in this study have diverse business focuses, reflecting in a variety of approaches to climate change. The most exposed companies to carbon-intense activities, French Company 3 and French Company 4, pledge to achieve net-zero by 2050 and 2045, respectively, mainly through investments in renewables and de-scalation of carbon-intensive energy production. French Company 4 has shown a faster pace for the transition and has had its near-term targets validated by SBTi for Scope 1, 2 and 3, in line with the well-below 2°C climate scenario. The integration of climate goals and energy transition into corporate strategy is exemplified by its commitment to fully exit coal in France by 2025 and by 2027 in the rest of the world, as well as by the deployment of renewable energy, having reached 38% of the total energy mix in the end of 2022. The investment in renewables is also part of the strategy of the electricity-producer French Company 2 to meet its 2050 net-zero pledge. The company has a significant lower carbon intensity, given that 76% of its energy mix relies on nuclear production, yet only SBTi validated targets refer to near-term Scope 1 and 2 emissions.

In the case of French Company 5, although an energy process and technology player rather than an energy producer, it presents a high Scope 3 footprint. The fact that more than 99.5% of its footprint refers to value chain emission, it confers materiality to its interim and net-zero SBTi validated targets for Scope 1, 2 and 3, in line with the 1.5°C climate scenario.

French Company 1 has also a very unique business model compared to its French peers in the study, operating in the areas of water, waste and energy. The organization has not set net-zero ambitions, though has set near-term Scope 1 and 2 targets aligned with the well-below 2°C climate scenario, validated by SBTi.



(b) Reflection of the climate goals in their internal regulations

	Climate corporate purpose reference	By-laws	Policies covering sustainability	Binding on third parties
French Company 1	Y Decarbonization reference	N	Y URD and vigilance plan	N
French Company 2	Y Net-zero energy broken down into 16 CSR commitments	Y	Y 16 CSR commitments	Y
French Company 3	N	N	Y Climate policy and Code of Conduct	N subject to shareholder scrutiny
French Company 4	Y Carbon-neutral economy	Y	Y CSR policy and other programs	Y
French Company 5	Y Bridging progress and sustainability for all	N	Y Six commitments	N

As we saw earlier, French law has promoted the obligation on companies to consider ESG issues in their corporate interest purposes (*raison d'être*) and defining the company's strategy. They differ in the level of integration of these objectives into their corporate purpose and their internal binding regulations, particularly in their by-laws. Four of the companies (all save for French Company 3) have explicitly included a reference to climate goals in their corporate purpose. However:

- French Company 2 and French Company 4 have included their corporate purpose in their by laws, and therefore have made them binding vis-à-vis third parties, which could claim for violation of the by-laws resulting in the company or its directors being held liable; and
- French Company 1 and French Company 5 have set a climate goal related corporate purpose but have not reflected it in their by-laws. Therefore, they are subject, to a certain extent, to a voluntary explicit control by their stakeholders, with limited enforcement capacity.

Additional actions adopted by the French companies which could lead to a voluntary explicit control by their stakeholders, with limited enforcement capacity, include:

- the vigilance plan (as is mandatory under French law) through which stakeholders may verify that the company has taken the measures, under an obligation of means, to comply with it;
- a Say on Climate resolution submitted to their shareholders (French Company 2, French Company 3 and French Company 5). French Company 4 has explicitly not accepted an annual vote on the implementation of its strategy, arguing that year-on-year developments are affected by cyclical factors that make the analysis complex; and
- climate-related information included in the Universal Registration Document (**URD**)[48] that expresses the climate commitment for the five companies or the Internal Rules of the Board of Directors, as it is the case for French Company 1, for example, where it is stated that the board of directors is in charge of defining and monitoring the company's objectives, including those related to ESG issues and climate change.

(c) Integration of the SDGs or other energy transition goals in the directors' remuneration system

	Director remuneration	Type of remuneration	Amount of remuneration	Penalties for not achieving climate goals	Senior management remuneration
French Company 1	Y Chairperson and CEO	Variable annual, short term remuneration (STIP)	5%	N	N
French Company 2	Y Executive directors	STIP and long-term remuneration (LTIP)	15% of the STIP 20% of LTIP	N	Y
French Company 3	Y CEO	STIP and LTIP	10% of the STIP and 15% of LTIP	N	Y
French Company 4	Y Chairperson and CEO	STIP and LTIP	20% of the STIP and 30% of LTIP	N	N
French Company 5	Y CEO	STIP and LTIP	20% of the STIP and 6.25% of LTIP	N	N

All the companies have set up variable remuneration linked to the fulfillment of climate goals for the CEOs and/or the Chairperson of the Board but only French Company 2 and French Company 3 link the remuneration of their senior management to the climate goals too.

The climate goals affect both their annual remuneration (short-term incentive) as well as the long-term incentive of the directors. In relation to the annual remuneration, the weight of the climate goals usually represents among a 15% to 30% of the total variable remuneration except for one of the companies where it drops to a 5% only. The scope of those goals is different among companies.

In three of the companies, the variable remuneration is linked to specific targets, including Scope 3 emissions reduction objectives (French Company 5), change in GHG emissions from operated facilities (Scope 1+2), based on the achievement of a specific GHG reduction target by 2025 (French Company 3), and reduction of CO2 emissions related to power generation and improvement of the Group's ESG rating (French Company 4).

The other two companies refer to fewer specific goals, declaring, for example, a climate criterion and two social criteria or other environmental objectives different to climate goals (e.g., the hazardous waste treatment and the recovery indicator). It is the case of French Company 1, in which that climate indicator represents only 5% of the variable annual remuneration.

Regarding the long-term remuneration of directors and senior management, it is usually based on the award of company's shares and usually calculated considering relevant climatic criteria.

The weight of the climate goals in the LTIP represents between 15% to 30% of the total remuneration, save for one of the companies which drops to a 6.25%. The criteria for accruing the LTIP is linked to an external indicator, CDP Climate Change score, for one of the companies (French Company 5) and to reduction of GHG emissions in another company (French Company 3), with the remaining two companies having a more generic corporate and social responsibility (**CSR**) criteria for accrual of the LTIP. Only French Company 1 does not include any climate criterion for the determination of the LTIP remuneration.

None of the companies have disclosed weighting measures or penalties for the reduction or cancellation of the remuneration in case of underperformance of any of the climate goals.

(d) Existence of internal supervision/control or consulting bodies with specific functions related to the implementation and fulfillment of the selected climate goals

	Committee	Composition of committee	Binding power
French Company 1	Purpose Committee and Research, Innovation and Sustainable Development Committee	Four and five directors with skills in ESG and/or sustainability matters	N
French Company 2	Corporate Responsibility Committee	Chaired by the Climate Point Person, a member of the Board of Directors	N
French Company 3	Strategy & CSR Committee	Six members, four of whom are independent directors	N
French Company 4	Ethics, Environment and Sustainable Development Committee	Three directors, who are also experts in ESG and/or sustainability carbon related matters, being two of them independent directors	N
French Company 5	Human Resources & CSR Committee	Four directors with knowledge on ESG/sustainability carbon related matters	N

All companies have corporate committees within the board of directors that have specific functions for the implementation and supervision of the climate goals. However, none of these committees have decision-making or binding powers, but rather issue recommendations, opinions, or reports to the board of directors or the executive committee.

The number of directors who have knowledge on ESG/sustainability carbon related matters varies among the companies, ranging from six out of 18 in French Company 2 to 11 out of 14 in French Company 1.

Only French Company 3 has a specific director in charge of climate change and energy transition matters, who is also the Chairperson and CEO of the company and the leader of its transformation strategy, but he is not currently a member of the Strategy & CSR Committee. The other companies do not have a specific director in charge of sustainability carbon related objectives, but some of them have designated a Climate Point Person (French Company 2) or experts in ESG and/or sustainability carbon related matters (French Company 4 and French Company 5) within their committees.

Four of the companies (French Company 2, French Company 3, French Company 4 and French Company 5) have a senior manager in charge of ESG/sustainability carbon related matters, who is also a member of the executive committee or a division president, but only in two of them, French Company 4 and French Company 5, that senior manager is in charge of specific compliance with specifically climate change and/or energy transition and sustainability goals. French Company 5 has a Chief Strategy and Sustainability Officer, who is one of the six members of the Group Sustainability Committee, which oversees the Group's sustainability strategy and performance. French Company 4 has an Executive Vice President in charge of Strategy and Innovation, Industrial Development, Research and Technology, and Procurement, who is also the Group's Chief Climate Officer, and is responsible for defining and implementing the Group's climate strategy, as well as ensuring the consistency and coherence of the Group's actions and commitments in this area.

(e) Forecasting and recognition of the risks related to the climate goals in the companies' risk management and control systems

All companies identify and report on climate-related risks as part of their risk mapping and non financial statements, but they use diverse sources, methods, and tools to assess the materiality and impact of these risks. Three of the companies (French Company 1, French Company 2 and French Company 5) use a materiality matrix of CSR issues to prioritize the expectations of their stakeholders and align their sustainability strategies and objectives. French Company 3 and French Company 4 do not explicitly mention a materiality matrix, but they report on the main environmental risks and their policies or action plans to address them, with specific objectives and indicators.

French Company 2 and French Company 3 use scenarios developed by the IPCC and the IEA to evaluate the physical and transition risks of climate change. French Company 2 also sets out the relationship between the CSR issues derived from the materiality matrix and the sustainability risks derived from the Group's major risk mapping. French Company 1 and French Company 5 use own internal and external tools to assess the operational and financial consequences of chronic and acute physical risks and the opportunities and impacts of their ecological transformation. French Company 5 also reviews its materiality assessment every year considering issues with an impact in the short, medium and long term, while French Company 2 updates its matrix annually with the input of its external stakeholder panel.

French Company 4 does not specify the sources or methods of its risk assessment, but it identifies the risk of climate change affecting energy demand and generation and the risk of adaptation of industrial assets based on the significance and coverage of their activities, as so does French Company 3.

The companies also have procurement policies that include climate-related and/or energy transition criteria, but again, there are differences in the level of detail, scope, and implementation of these policies. French Company 3 has the most explicit and quantified policy, as it requires its 400 largest suppliers, representing 70% of its Scope 3 emissions, to adopt emission reduction targets by 2025, and integrates the cost of carbon emissions into its procurement decisions. Two companies (French Company 4 and French Company 5) have sustainable procurement programs for their preferred suppliers that requires them to comply with certain requirements, such as emission reduction by 50% or to commit to a decarbonization trajectory. French Company 2 has adopted a new supplier policy that takes CSR into account in its relations with its suppliers and French Company 1 has a supplier charter that includes environmental and social criteria too.

All companies have made some investments to mitigate climate risks. French Company 3 has the most ambitious and comprehensive investment strategy, as it aims to become a multi-energy company with a net-zero carbon footprint by 2050 and has allocated 20% of its capital expenditure to low-carbon electricity in 2021. Other companies, like French Company 2 or French Company 4, has also funded its investments through green bonds or issued other finance instruments indexed on environmental indicators.

Finally, all the companies have R&D policies that include climate-related and/or energy transition provisions, but the focus, budget, and outcomes of these policies differ among them. The five of them have invested different amounts (from €1.8 billion invested by French Company 3 in 2021 to €91 million in R&D in 2021 by French Company 1, focused on developing solutions to reduce GHG emissions) to achieving the net-zero goal and the energy transition.

(f) Measurement and Reporting

	Reporting	Standards	Scope 1, 2, 3	Certificates
French Company 1	URD	EU Taxonomy, GHG Protocol, SBTi, Net Zero Initiative	Y	ISO 14001, ISO 50001, SBTi validation, Net Zero pledge
French Company 2	URD	SBTi, TCFD, GRI, European Green Deal, Paris Agreement, GHG Protocol	Y	SBTi validation, CDP A- rating, ISO 14001, ISO 50001, Business Ambition for 1.5 degrees, Race to Zero
French Company 3	Financial statements and Sustainability & Climate Progress Report	EU Taxonomy, TCFD, GHG Protocol	Y	CDP Climate A List, CDP Supplier Engagement Leader, EcoVadis Gold, Sustainalytics Leader
French Company 4	URD and 2023 First-Half Financial Report	EU Taxonomy, SBTi, EMAS, AFEP-MEDEF Code, GHG Protocol	Y	SBTi certification, ISO 14001, ISO 14064
French Company 5	URD, half-year and full-year results, integrated report, quarterly sustainability performance updates	EU Taxonomy, TCFD, TNFD, SASB	Y	SBTi validation, ISO 14001, ISO 26000

All companies report on an annual basis through the URDs, with French Company 4 and French Company 5 also reporting on a half-year basis, and French Company 5 publishing quarterly sustainability performance updates, where it reports on its GHG emissions, its energy consumption, its renewable energy share, and its avoided emissions for its customers.

As the standards are not mandatory, but are voluntarily adopted by the companies, either in response to stakeholder expectations, regulatory incentives, or strategic objectives, each company uses different standards which can make difficult the comparison of the information reported by the companies. EU Taxonomy is the most widely used (French Company 1, French Company 3, French Company 4 and French Company 5) followed by TCFD (French Company 2, French Company 3 and French Company 5).

All companies report on their Scope 1, 2, and 3 emissions. However, the methodologies and boundaries for calculating and reporting these emissions may differ across the companies, depending on the GHG protocol guidance or other specific rules they follow. For example, French Company 1 also reports on the emissions avoided by its customers due to its own solutions and services.

All companies use some certificates related to their corporate climate governance and performance, such as the SBTi validation, the CDP rating, the ISO certifications, or the Business Ambition for 1.5°C pledge. These certificates indicate that the companies have set and achieved science-based or net-zero targets, disclosed their climate risks and opportunities, implemented environmental and energy management systems, or committed to the highest level of ambition for the climate. However, the number and type of certificates or distinctions vary across the companies, depending on their sector, scope, and level of achievement. French Company 2 has obtained the ISO 50001 certification for its energy management system, which is relevant for its energy-intensive activities, while French Company 5 has obtained the ISO 26000 standard for its social responsibility, which is relevant for its stakeholder engagement. Only French Company 4 has the ISO 14064 certification, which is a standard for quantifying, monitoring and reporting GHG emissions and removals and only French Company 1 has the Net Zero Initiative certification, which is a framework for companies to achieve net-zero emissions across their value chains by 2050.

(g) Information Auditing

All the companies comply with the minimum legal requirements of the AMF – Medef Code and NFRD for auditing their climate change and energy transition related information. However, French Company 3 and French Company 5 go beyond the legal requirements and apply the recommendations of the TCFD or in their own ESG program.

The audit is conducted by the statutory auditor of the company for French Company 1, French Company 2 and French Company 4, appointed as an independent third party, who provides a reasonable assurance opinion on the compliance and the accuracy of the information disclosed. The audit is conducted by a different entity than the statutory auditor of the company for French Company 3 and French Company 5, who choose an external independent expert.

The outcome of the audit is a report that expresses a reasonable assurance opinion for French Company 2, a moderate assurance opinion for French Company 5, and a limited assurance opinion for the other three French companies.

GERMANY

(a) Integration of sustainability objectives, in particular energy transition, into the strategy of the companies analyzed

All selected German companies have clear climate goals, with SBTi validated near-term targets, though with varying scopes and levels of ambition. German Company 4 intends to achieve net-zero emissions by 2040, to be achieved through substantial investments in renewable energy, and commits with Scope 1 and 2 well-below 2°C aligned reduction by 2030, including phasing out coal energy generation within the same timeframe.

German Company 2, the largest company in the German cohort, has 2030 Scope 1 and 2 targets aligned with the 1.5°C scenario, expressed in carbon intensity. It also pledges to achieve value chain net-zero by 2050 (2040 for Scope 1 and 2), based on an investment plan to foster smart and green energy solutions.

German Company 5's near-term commitments also include Scope 1 and 2 by 2030, complemented by a reduction in the emissions of sold products (Scope 3 downstream) by 28%, in alignment with the 1.5°C scenario. Given the nature of its business, as an energy technology company, much of its efforts are focused on enabling other businesses to achieve net-zero.

German Company 1 and German Company 3 have the most ambitious near-term targets among the German companies considered in the study, covering Scope 1, 2 and 3, in alignment with the 1.5°C scenario. German Company 3 also has validated SBTi net-zero 2040 targets. Both organizations intend to achieve their goals through relevant investments in renewable energy infrastructure.

(b) Reflection of the climate goals in their internal regulations

	Climate corporate purpose reference	By-laws	Policies covering sustainability	Binding on third parties
German Company 1	N	N	Y e.g., 25 Point Sustainability Program	N
German Company 2	N	Y Sustainability committee	Y e.g., Environment Climate Protection Statement	N
German Company 3	N	N	Y e.g., Policy Statement Respecting the Environment and Human Rights	N
German Company 4	N	N	Y e.g., Sustainability Policy	N
German Company 5	N	N	Y e.g., Environment, Health and Safety Policy	N

Although all German companies have, to some extent, included provisions for climate change and energy transition in their internal regulations, none of the German companies have included any reference to climate change or energy transition commitments in their corporate purpose. Additionally, the inclusion of climate change provisions in their by-laws is very limited, with German Company 2 being the only company that has included a requirement to establish a sustainability committee.

All five companies have internal policies in place that refer to climate change and energy transition commitments. These policies are normally updated periodically and are only internally binding.

Therefore, there is no internal regulations that could result in the German companies, or its directors, being held liable for breach of these internal regulations, unless they are incorporated into contracts or agreements with the third parties, or they are required by law or regulation. However, the internal regulations may have reputational, legal, or financial implications for the companies if they are not complied with, as they may affect their ESG ratings, their access to sustainable finance or their stakeholder relations.

(c) Integration of the SDGs or other energy transition goals in the directors' remuneration system

	Executive Board remuneration	Type of remuneration	Amount of remuneration	Penalties for not achieving climate goals	Remuneration of senior management
German Company 1	Y	LTIP	30-50% of the Stock Awards	N	N
German Company 2	Y	LTIP	25% of the Performance Plan is linked to its Sustainability Index	N	N
German Company 3	N	N/A	N/A	N/A	N
German Company 4	Y	LTIP	33.33% of the LTIP	N	N
German Company 5	Y	LTIP	20% of the total target value of the Stock Awards	N	N

Four of the German companies (all of them but German Company 3) have set up variable remuneration linked to the fulfillment of climate goals for the members of the executive/management board. The type of remuneration that is linked to the climate goals is the long-term variable remuneration, which is based on different performance criteria and indicators depending on the company. It includes Scope 1 and 2 carbon emission reduction, the carbon footprint of the group's power plant fleet (German Company 2, German Company 4 and German Company 5) and results in ESG-Ratings (German Company 2). The amount of remuneration linked to climate goals varies from 20% to 50% of the total target value or attainment of the long-term variable remuneration.

None of the companies have disclosed weighting measures or penalties for the reduction or cancellation of the remuneration in case of underperformance of any of the climate goals.

(d) Existence of internal supervision/control or consulting bodies with specific functions related to the implementation and fulfillment of the selected climate goals

	Committee	Composition of committee	Binding power
German Company 1	N	N/A	N
German Company 2	Innovation and Sustainability Committee	Sub-committee of the Supervisory Board	N
German Company 3	N	N/A	N
German Company 4	Strategy and Sustainability Committee	Sub-committee of the Supervisory Board	N
German Company 5	Sustainability Committee	Sub-committee of the Supervisory Board	N

Three of the companies (German Company 2, German Company 4 and German Company 5) have corporate committees within the supervisory board that have specific functions for the implementation and supervision of the climate goals. However, none of these committees have decision-making or binding powers, but rather issue recommendations, opinions, or reports to the board of directors or the executive committee.

Four of the companies (all save for German Company 3) have a specific director in charge of carbon-related objectives, who is also a member of the Executive Board or the Management Board. However, the scope and responsibilities of this director vary across the companies. For German Company 2, German Company 4 and German Company 5, this director is also the Chief Executive Officer, who oversees the overall sustainability strategy and agenda of the company. For German Company 1, this director is the Chief Operating Officer Sustainability Generation Infrastructure, which is responsible for all growth areas, including in renewable energy.

All five companies also have a senior manager in charge of ESG/sustainability carbon related matters, who leads a department or a team of experts on sustainability issues and reports to the Executive Board or the Management Board. For German Company 5, this senior manager is the Chief Sustainability Officer, who is also the Chief Executive Officer. For German Company 4, this senior manager is the head of sustainability (Director Sustainability) within the Strategy and Sustainability Department. For German Company 3, this senior manager is the head of the sustainability department. For German Company 2, this senior manager is the Vice President Sustainability & Climate, who leads the department Sustainability & Climate at the corporate headquarters. For German Company 1, there are two senior managers which lead the Sustainability Team and report directly to the CEO.

Both German Company 2 and German Company 5 have a Sustainability Council, which consists of senior managers of various areas of the business, which provides advice on corporate policies relating to sustainability.

(e) Forecasting and recognition of the risks related to the climate goals in the companies' risk management and control systems

All companies rely on climate change scenario analysis to inform their strategy and business planning. German Company 2 use three scenarios based on different levels of ambition and policy action, while German Company 5 uses climate scenarios to support its customers in their decarbonization efforts and German Company 4 uses qualitive and quantitative scenario analysis. German Company 3 has identified changes in climate as material aspects for its business.

All companies have run a materiality assessment as part of their sustainability strategy, which determines the topics that have significant economic, environmental, and social impacts and that influence their stakeholders' assessments and decisions. In the case of German Company 1 one of the key themes identified was new energy and climate change.

All companies have made investments to reduce future risks or increase future opportunities related to the environment, especially in the areas of renewable energy, energy efficiency, and decarbonization. The scale and scope of these investments vary depending on the company's business model, portfolio, and targets. For instance, German Company 2 plans to invest €27 billion in energy transition until 2026, mainly in the expansion of energy networks, while German Company 5 invests around €1 billion annually in research and development for transition into renewable energies.

All German companies' procurement policies include climate-related and/or energy transition criteria, which they expect and require their suppliers and business partners to comply with. These criteria cover aspects such as GHG emissions, energy efficiency, environmental protection, and human rights. The companies use different tools and mechanisms to monitor and enforce these criteria, such as codes of conduct, supplier audits, certifications, and ratings.

(f) Measurement and Reporting

	Reporting	Standards	Scope 1, 2, 3	Certificates
German Company 1	Annual Report	EU Taxonomy, IIRC, GRI, COP, TCFD, UNGC, GHG Protocol	Y	SBTi validation, ISO 14001
German Company 2	Annual Report	EU Taxonomy, GRI, SASB, TCFD, UNGC, GHG Protocol	Y	SBTi validation, ISO 14001 / EMAS, ISO 50001
German Company 3	Annual Report	EU Taxonomy, UNGC, GRI, TCFD	Y	SBTi certification, DIN EN ISO 14001
German Company 4	Annual Report, Sustainability Strategy Report, Sustainability Performance Report and Sustainability Management Report	EU Taxonomy, GRI, SASB, TCFD	Y	ISO 14001
German Company 5	Annual Report	EU Taxonomy, GRI, UNGC	Y	SBTi validation, ISO 9001, ISO 14001, ISO 45001

All companies report on an annual basis through the annual report and use EU Taxonomy and GRI standards. This allows for an easier comparison of metrics between the companies. There are additional standards that are considered by the companies such as UNGC, SASB or TCFD.

All companies report on their Scope 1, 2, and 3 emissions. However, the methodologies and boundaries for calculating and reporting these emissions differ across the companies, depending on the GHG Protocol guidance or other specific rules they follow.

All companies use some certificates related to their climate governance and performance, such as the SBTi validation or the ISO certifications. German Company 3 is the first German energy company, and one of the only three worldwide, whose targets have been verified as net-zero compatible by SBTi. All companies, save for German Company 4, have SBTi validation of their scientific targets and all companies have achieved ISO 14001 for environmental management systems.

(g) Information Auditing

All the companies comply with the minimum legal requirements of the NFRD for auditing their climate change and energy transition related information.

The audit is conducted by the statutory auditor of each company, appointed as an independent third party, who provides a reasonable assurance opinion on the compliance and the sincerity of the information disclosed. The outcome of the audit is a report that expresses a limited assurance opinion for all the companies.

SPAIN

(a) Integration of sustainability objectives, in particular energy transition, into the strategy of the companies analyzed

The five Spanish companies considered in the analysis integrate climate goals to their corporate strategies. Only Spanish Company 3 and, indirectly, Spanish Company 2, as part of a foreign conglomerate, have near-term and net-zero validated science-based targets covering Scope 1, 2 and 3, in line with the 1.5°C climate scenario. The companies plan to achieve its goals through increased investments in renewable energy sources and, for Spanish Company 3, establishing specific levers and actions linked to its climate and investment plan, and aiming to be net-zero by 2039 while Spanish Company 2 by 2040. Both, Spanish Company 2 and Spanish Company 3 plan to achieve it without any carbon credits. These are also the two companies with the more ambitious interim targets, pledging to reduce more than half of its emissions in all scopes by 2030. Both Spanish Company 3 and Spanish Company 2 state their support to electrification of the economy as a way to speed-up the transition to a low-carbon society.

Similarly, Spanish Company 4 also has validated net-zero and interim targets, even though the latter does not include Scope 3 emissions. The timeframe for its net-zero pledge is 2050. Due to the nature of its electricity transmission-focus operations, it plans to contribute to the fight against climate change by fully integrating the renewable energy available into the electricity system, thus greening the energy mix offered to clients.

On the other side of the spectrum, Spanish Company 1 and Spanish Company 5 have most of their operations and revenues associated to the oil & gas industry, whose targets are currently not being validated by SBTi. Spanish Company 1 has set Scope 1 and 2 net-zero targets to be achieved by 2040, while taking on a reduction commitment of 50% for Scope 3 within the same timeframe. Spanish Company 5 has pledged to be net-zero by 2050. Both have more modest Scope 3 reduction commitments by 2030, not higher than 30%. Their actions towards near-term targets include expanding investments in renewables in general, for example, green hydrogen – a key solution for hard-to-abate industries.

(b) Reflection of the climate goals in their internal regulations

	Climate corporate purpose reference	By-laws	Policies covering sustainability	Binding on third parties
Spanish Company 1	N	Y Sustainability and appointment committee	Y e.g., climate action policy	N
Spanish Company 2	N	Y Sustainability and corporate governance committee	Y e.g., Environmental Policy	Y
Spanish Company 3	Climate corporate interest	Y Climatic corporate interest and goal, Climate Action Plan and Sustainable Development Committee	Y e.g., Climate Action Policy	Y
Spanish Company 4	N	Y Sustainability Committee	Y e.g., Net Zero Transition Plan	N
Spanish Company 5	N	Y Sustainability committee	Y e.g., Environment Policy	Y

All Spanish companies have, to some extent, included provisions for climate change and energy transition in their internal regulations. However, only Spanish Company 3 expressly recognizes in its by-laws a corporate interest that includes a reference to sustainable value creation. None of the Spanish companies have directly set out a climate goal or explicit reference within its corporate purpose, but Spanish Company 3 includes the commitment that all the corporate activities that develop its corporate purpose must be oriented to create sustainable value. Likewise for the majority of the Spanish companies the inclusion of climate change provisions in their by-laws is limited and only Spanish Company 3 makes express references in its by-laws to the SDGs and to a climate action commitment. All the companies require a committee dedicated to sustainability issues to be created but only Spanish Company 3 requests the board to adopt a Climate Action Plan.

All five companies have a sustainability plan or policy that covers various aspects of sustainability, including climate change and energy transition, and that are updated periodically. Spanish Company 3 is the only company that has a comprehensive climate governance system that establishes a specific corporate goal against climate change and that adopts a specific climate action policy, which it is required to approve under its by-laws. Spanish Company 4 has a Net Zero Transition Plan and Spanish Company 5 has a global Sustainability Plan which has a specific chapter dedicated to climate change.

Other than the referred by-laws' provisions, the most legally binding internal regulations in respect of climate change assumed by the Spanish companies are included in the board regulations. Spanish Company 3 requires from directors their personal and express commitment to comply and make comply the company's sustainable and governance system, which recognizes their corporate climate goal. In the internal regulations of Spanish Company 5 and Spanish Company 1, it is provided that sustainability shall be one of the guidelines of the board's management. This could lead to a voluntary explicit control by their stakeholders, with limited enforcement capacity.

Otherwise, there is an extensive part of the internal regulations of all companies that are only binding internally, with a limited capacity from any third parties to claim for breach, unless they are incorporated into contracts or agreements with the third parties, or they are required by law or regulation. However, the internal regulations may have reputational, legal, or financial implications for the companies if they are not complied with, as they may affect their ESG ratings, their access to sustainable finance or their stakeholder relations.

(c) Integration of the SDGs or other energy transition goals in the directors' remuneration system

	Director remuneration	Type of remuneration	Amount of remuneration	Penalties for not achieving climate goals	Senior management remuneration
Spanish Company 1	Y Executive directors	STIP	50% for Executive Chairperson 15% for CEO	N	Y
Spanish Company 2	Y Executive directors	STIP	20-25% of STIP	N	Y
Spanish Company 3	Y Executive directors	STIP and LTIP	25% STIP and 50% LTIP for CEO 15% of STIP for other executive directors	Y Claw back and malus provisions	Y
Spanish Company 4	Y CEO	STIP and LTIP	15% STIP and 10% LTIP for CEO	N/A	Y
Spanish Company 5	Y Executive directors	STIP and LTIP	20% of STIP and 30% of LTIP for CEO 15% of STIP and 20% of LTIP for other executive directors	N	Y

The linkage of the remuneration to the climate goals is not mandatory in Spain, but it is a voluntary practice, included as recommendation in the Good Governance Code, which reflects the commitment of the companies to the energy transition and the sustainability strategy. All the companies have set up variable remuneration linked to the fulfillment of climate goals for the executive directors and have linked the remuneration of their senior management to the climate goals.

All the companies link the annual remuneration (short-term incentive) to climate goals, with only Spanish Company 3, Spanish Company 4 and Spanish Company 5 also linking the long-term incentive of the directors to the climate goals. In relation to the short-term remuneration, the weight of the climate goals represents between 15% to 50% of the total variable remuneration, depending on the company and the position. The variable remuneration is linked to specific targets, including reduction of carbon emissions (all of them except Spanish Company 1), percentage of renewable energies developed (Spanish Company 2 and Spanish Company 3) and ESG ratings (Spanish Company 4).

Regarding the long-term remuneration of directors and senior management, it is usually based on the award of company's shares and usually calculated considering relevant climatic criteria. The weight of the climate goals in the LTIP represents between 10% to 30% of the total remuneration, save for Spanish Company 3, where it increases to 50%.

Spanish Company 3 establishes claw back or malus provisions for directors' remuneration in case of underperformance of the relevant goals. None of the rest of the companies have disclosed weighting measures or penalties for the reduction or cancellation of the remuneration in case of underperformance of any of the climate goals.

(d) Existence of internal supervision/control or consulting bodies with specific functions related to the implementation and fulfillment of the selected climate goals

	Committee	Composition of committee	Binding power
Spanish Company 1	Sustainability and Appointments Committee	Majority of independent directors, no executive directors	N
Spanish Company 2	Sustainability and Corporate Governance Committee	Four non-executive directors, three independent directors	N
Spanish Company 3	Sustainable Development Committee	At least three independent directors	N
Spanish Company 4	Commission on Sustainability	Currently three directors, two of whom are independent	N
Spanish Company 5	Sustainability Committee	At least three directors of the board, who have experience and skills related to sustainability matters	N

All companies have corporate committees within the board of directors that have specific functions for the implementation and supervision of the climate goals. However, none of these committees have decision-making or binding powers, but rather issue recommendations, opinions, or reports to the board of directors or the executive committee. Spanish Company 1, Spanish Company 2 and Spanish Company 3 require a majority of independent directors in their committees and exclude executive directors from them. On the other hand, Spanish Company 5 is the only company that specifically requires the members of the committee to have experience and skills related to sustainability.

All companies have a sustainable Development Committee and at least a member of the management team that is specialized in sustainability.

(e) Forecasting and recognition of the risks related to the climate goals in the companies' risk management and control systems

All companies rely on climate change scenario analysis to identify and assess some risks and opportunities for their businesses, as well as to define adaptation measures for relevant risks. However, the scope and depth of the analysis vary. For example, Spanish Company 2 analysis is reviewed by the organization "2° Investing Initiative" and focuses on installed capacity and production, while Spanish Company 5 analysis is supervised by CDP Organization and details the company's climate related scenario analysis, the focal questions addressed and a summary of the results.

All companies have also run a materiality assessment as part of their sustainability strategy, reflecting their commitment to combating climate change, to green recovery, and to the energy transition. Spanish Company 1 and Spanish Company 4 identify climate action and energy efficiency as the most critical issue for their companies, while Spanish Company 5 identifies energy transition and sustainability as the most critical issue for its company.

The procurement policies of the five companies also include some environmental requirements or criteria, but not all of them explicitly refer to climate change or energy transition. For example, Spanish Company 2 and Spanish Company 3 require their suppliers to undergo a specific and mandatory environmental assessment, while Spanish Company 4 and Spanish Company 5 state that they will act and demand to act in alignment with their values and the guidelines, policies and norms on environment and sustainability. In addition, Spanish Company 3 analyses the alignment of the key organizations in which it participates with the company's commitment to sustainable development.

The five companies have also made some investments to reduce future risks or increase future opportunities related to the environment, although the amount and the type of investments differ among them. Spanish Company 3 announced a €75 billion strategic plan to invest in new facilities enhancing renewable energies, while the investments of Spanish Company 5 in low carbon business and technologies already represent a 35% of the total investments for the period 2021-2025.

Finally, the R&D policies of the five companies also include some climate-related and/or energy transition projects, but the level of ambition and the focus of the projects vary among them. Spanish Company 3 is currently investing on 26 ongoing projects for the development of energy storage instruments based on both hydraulic systems and other alternative technologies and the search for alternatives to gas, while Spanish Company 5 has a specific objective to have 50% of its R&D investments related to energy transition by 2027.

(f) Measurement and Reporting

	Reporting	Standards	Scope 1, 2, 3	Certificates
Spanish Company 1	Annual Report, Non-financial information report	GRI, SASB, TCFD, GHG Protocol	Y	ISO 14001, ISO 20400
Spanish Company 2	Annual Report, Sustainability Plan Non-financial information report	GRI, SASB	Y	ISO 14001
Spanish Company 3	Annual Report, GHG Report, Non-financial information report	EU Taxonomy, GRI, SASB, TCFD, GHG Protocol	Y	SBTi validation, ISO 14001, ISO 20400, ISO 14064
Spanish Company 4	Annual Report, Non-financial information report	GRI	Y	ISO 14001
Spanish Company 5	Annual Report, Sustainability Plan, Sustainable Development Objectives Report, Non-financial information report	EU Taxonomy, GRI, SASB, TCFD,	Y	ISO 14001, ISO 14064

All the companies reviewed use the GRI Standards as a reference framework for reporting on ESG matters, although some also use other additional standards or frameworks, such as EU Taxonomy, SASB and TCFD, which vary among the companies and may indicate different levels of alignment with international best practices or regulatory requirements.

Spanish Company 2 and Spanish Company 3 have science-based targets validated by SBTi, net-zero commitments, and carbon offsetting policies, which are aligned with the Paris Agreement and the European Green Deal. They report their progress in reducing their carbon emissions in their sustainability plans, non-financial information reports, and carbon footprint reports, using indicators such as the carbon intensity indicator, the emissions intensity ratio, or the emissions reduction factor. Furthermore, Spanish Company 3 details the level of achievement and any updates to its Climate Action Plan in the referred non-financial information report. Spanish Company 5 also has science based targets, net-zero commitments, and carbon offsetting policies, but it uses only the carbon intensity indicator, which aggregates the emissions in each scope and determines which activities are included in each scope. It reports its progress in its non-financial information report and its decarbonization plans. Spanish Company 1 and Spanish Company 4 do not have science-based targets or net-zero commitments, but they have their own decarbonization strategies and emission reduction plans, which are based on implementing measures to reduce and offset their emissions, as well as promoting renewable energy sources and green hydrogen. They report their progress in their sustainability reports and their non-financial information reports, using indicators such as the emission intensity ratio, the emission reduction factor, or the renewable energy ratio.

All five companies report their emissions from Scope 1, 2 and 3. Spanish Company 3 and Spanish Company 5 have also set targets to reduce their emissions from Scope 3, while the other three companies have not. Reporting Scope 3 emissions is not mandatory, but it is recommended by the GRI standards and the TCFD, as it provides a more comprehensive and accurate picture of the company's carbon footprint and its exposure to climate risks and opportunities.

All companies use some certificates related to their climate governance and performance, such as the SBTi validation or the ISO certifications. All companies achieved ISO 14001 for environmental management systems.

(g) Information Auditing

All the companies comply with the minimum legal requirements of the NFRD for auditing their climate change and energy transition related information.

The audit is conducted by the statutory auditor of the company for Spanish Company 2, Spanish Company 3 and Spanish Company 5, appointed as an independent third-party, who provides an assurance opinion on the compliance and the sincerity of the information disclosed. The audit is conducted by a different entity than the statutory auditor of the company for Spanish Company 1 and Spanish Company 4, who choose an external independent expert. Additionally, Spanish Company 2 has also its carbon footprint evaluated by and independent expert.

The outcome of the audit is a report that expresses a reasonable assurance opinion for Spanish Company 5, a moderate assurance opinion for Spanish Company 1, and a limited assurance opinion for the other three of them.

UK

(a) Integration of sustainability objectives, in particular energy transition, into the strategy of the companies analyzed

The British cohort is made up of companies with diverse business models, reflecting in a range of different climate strategies. Operating as integrated oil & gas companies, UK Company 1 and UK Company 4 do not have validated SBTi targets, even though both pledge to achieve net-zero emissions by 2050. Both also commit to reduce 50% of Scope 1 and 2 emissions by 2030, while only UK Company 1 has a Scope 3 intensity reduction target. UK Company 2, despite a business model incorporating other stages of the energy value chain such as distribution and energy trading, has a similar level of ambition, committing with net-zero by 2050, as well as near-term absolute reduction for Scope 1 and 2 and intensity goal for Scope 3.

UK Company 3 and UK Company 5, as operators of transmission and distribution businesses while also generating renewable energy, have more ambitious near-term climate goals. Both have 2030 validated SBTi targets aligned with the 1.5°C scenario, though UK Company 5 does not cover Scope 3 emissions. These companies also pledge to achieve net-zero by 2050.

(b) Reflection of the climate goals in their internal regulations

	Climate corporate purpose reference	By-laws	Policies covering sustainability	Binding on third parties
UK Company 1	N	N	Y e.g., Environmental policy	N
UK Company 2	But it has a corporate purpose statement	N	Y e.g., Climate Transition Plan	N
UK Company 3	N	N	Y e.g., Climate Transition Plan	N
UK Company 4	But it has a corporate purpose statement	N	Y e.g., Powering Progress Energy Transition Strategy	N
UK Company 5	N	N	Y e.g., Net Zero Transition Plan	N

The five companies analyzed have different degrees of regulation on sustainability and specifically climate change and energy transition in their internal regulations. None of the companies have any specific regulation in their by-laws on these matters, but some of them have included references to their corporate purpose or vision that align with their sustainability goals. However, these statements are not legally binding within the context of their corporate governance framework, and shareholders and other stakeholders may not be able to enforce them through their articles of association.

All the companies have adopted various policies that cover sustainability and specifically climate change and energy transition, such as energy transition strategies, climate transition plans, environmental policies, sustainability policies, and responsible business charters. These policies set out the companies' commitments, targets, and actions to reduce their GHG emissions, increase their renewable energy portfolio, and contribute to the net-zero transition. Some of these policies are subject to periodic reviews and updates, and some are also subject to shareholders' advisory votes in the general meetings.

These policies are not legally binding by themselves, but shareholders and stakeholders may enforce them through other legal mechanisms such as statutory or common law claims for breach of any applicable directors' duties, or through a special resolution by 75% of the share capital or advisory votes to put pressure on the relevant company with its ESG obligations.

(c) Integration of the SDGs or other energy transition goals in the directors' remuneration system

	Director remuneration	Type of remuneration	Amount of remuneration	Penalties for not achieving climate goals	Senior management remuneration
UK Company 1	Y Executive directors	STIP and LTIP	STIP: 40% LTIP: 15% for Scope 1 and 2 objectives by 2050 and 8.3% (in 2023) for low carbon energy	STIP: malus and claw back provisions for material failures impacting sustainability	Y
UK Company 2	Y Executive directors	STIP and LTIP	STIP: 37.5%	N	Y
UK Company 3	Y Executive and independent directors	LTIP	STIP: 20% based on reduction of Scope 1, 2 and 3 emissions	N	Y
UK Company 4	Y Executive directors	STIP and LTIP	STIP: 15% LTIP: 25% linked to quantitative and qualitative energy transition performance indicators	N	Y
UK Company 5	Y Executive directors	STIP and LTIP	STIP: 10% LTIP: 30% based on external rating, performance against 2030 Business Goals and Net Zero program	N	Y

All the companies have set up variable remuneration linked to the fulfillment of climate goals for their executive directors and their senior management teams.

The most common type of remuneration linked to climate goals is the long-term incentive or performance plan, followed by the annual bonus. The amount of remuneration in the annual bonuses linked to climate goals ranges from 10% to 40% of the total variable remuneration and between 15% to 30% for the long-term incentive plans. Not all the companies disclose the details on the metrics used to accrue the remuneration, but at least two of the companies (UK Company 1 and UK Company 3) link the remuneration of the directors and senior management to Scope 1 and 2 emissions.

The remuneration of the senior management is also linked to the same objectives as that of the directors in all cases, although in two of the companies, the senior management only accrues the annual bonus and not the long-term incentive plan. Two of the companies (UK Company 1 and UK Company 3) have specifically disclosed that the annual bonus of all their workforce is partially linked to the achievement of certain climate change and energy transition metrics.

None of the companies have disclosed weighting measures or penalties for the reduction or cancellation of the remuneration in case of underperformance of any of the climate goals. All of them have malus and claw back provisions that could be triggered by material failures which could eventually be ESG-related, but only one of the companies (UK Company 1) makes a specific reference in these provisions to material failures impacting sustainability.

(d) Existence of internal supervision/control or consulting bodies with specific functions related to the implementation and fulfillment of the selected climate goals

	Committee	Composition of committee	Binding power
UK Company 1	Safety and Sustainability Committee	No specific requirement	N
UK Company 2	Safety, Environment and Sustainability Committee	At least three independent non-executive directors	N
UK Company 3	Safety and Sustainability Committee	Two non-executive directors	N
UK Company 4	Safety, Environmental and Sustainability Committee	At least three independent non-executive directors	N
UK Company 5	Safety, Sustainability, Health and Environment Advisory Committee	At least two independent non-executive directors	N

All companies have a specific committee at the board level that reviews and advises on sustainability and climate-related matters, such as setting or overseeing the companies' climate goals, strategies and performance. However, none of these committees has binding decision-making authority, and they mainly provide input and recommendations to the board or the executive management.

The number and expertise of directors who have knowledge on ESG/sustainability and climate-related matters vary across the five companies. UK Company 1 and UK Company 2 report that six and five of their non-executive directors, respectively, have "climate change and sustainability" skills or competency, while UK Company 3 and UK Company 5 report that nine and seven of their directors, respectively, have "sustainability including climate change" or "clean energy, renewables and climate science" skills. UK Company 4 reports that only one of its directors has expertise in ESG and/or sustainability matters. However, these skills do not necessarily reflect the level or depth of expertise, and only UK Company 5 specifies that it has two experts in renewable matters and one sustainability/climate science expert on its board.

The CFO of UK Company 4 oversees all sustainability matters, while UK Company 3 and UK Company 5 have a Chief Sustainability Officer or equivalent who leads the sustainability strategy and performance of the companies. Four companies have disclosed that they have specific sustainability related executive committees – UK Company 1 has a Group Sustainability Committee at the Executive VP level that oversees the implementation and supervision of the sustainability, climate change and energy transition objectives in the business plan; UK Company 2 has a Climate Leadership Team at the executive level; UK Company 4 has a Carbon Reporting Committee; and UK Company 5 has a Group Safety, Health & Environment Committee.

(e) Forecasting and recognition of climate risks related to the climate goals in the companies' risk management and control systems

All companies rely on climate change scenario analyses to assess the potential impacts of different pathways of global warming and energy transition on their businesses. However, the level of detail and disclosure of their scenario analysis and risk identification varies across the companies, with UK Company 1 and UK Company 4 providing more comprehensive and transparent information than the others.

All companies have run a materiality assessment as part of their sustainability strategy, considering the importance of different topics to their stakeholders and their business impact. Four of the companies (all save for UK Company 4) have disclosed the outcome of the materiality, with UK Company 1 identifying 20 material issues of which six relate to net-zero ambitions and energy transition, UK Company 2 identifying four climate-related focus areas, and with UK Company 3 and UK Company 5 identifying GHG emissions and clean energy transition as focus areas.

All five companies have made significant investments to reduce GHG emissions and encourage decarbonization, such as UK Company 1, UK Company 4 and UK Company 5 investing in carbon capture, e-mobility and high-integrated natural climate solutions and carbon credit projects, UK Company 2 planning to invest GBP100 million per year in low carbon transition assets, or UK Company 3 developing low-carbon gas alternatives.

Four of the companies have procurement policies that require their suppliers and contractors to comply with certain environmental standards and certifications, such as ISO 14001, or to support their sustainability goals and commitments. Only UK Company 1 does not explicitly include such criteria in its procurement policies, but it does state that it expects its suppliers to support its health, safety and environmental goals.

All companies have a commitment to increase their spend in R&D on climate-related initiatives. Only UK Company 3 and UK Company 5 have specific innovation strategies centered around enabling the net-zero transition. The remaining companies have not disclosed any R&D or innovation policies, but UK Company 1 has reported that it will focus on reducing carbon emissions and enabling low carbon businesses, UK Company 3 has reported it will focus on clean hydrogen heating and other low-carbon combined heat and power sources and UK Company 4 has reported that 41% of its total R&D spend in 2022 was in connection with decarbonization and reduction in GHG emissions.

(f) Measurement and Reporting

	Reporting	Standards	Scope 1, 2, 3	Certificates
UK Company 1	Financial statements, annual net-zero ambition progress update, annual ESG datasheet	GRI, TCFD, SASB	Y	ISO 14001
UK Company 2	Annual report, climate transition plan	TCFD, SASB, Defra	Y	ISO 14001 (for some divisions)
UK Company 3	Annual report and annual responsible business report	TCFD, SASB, GRI, GHG Protocol	Y	SBTi validation, ISO 14001, Prime status by ISS
UK Company 4	Annual report, annual sustainability report, annual energy transition progress report	IPIECA/API/IOGP, GRI, TCFD, SASB, WEF, GHG Protocol	Y	ISO 14001, OGMP 2.0 gold standard
UK Company 5	Annual report, annual net-zero transition report	TCFD, SASB, GRI, GHG Protocol	Y	SBTi validation, ISO 14001

All companies report on an annual basis through their annual reports and additional documents, such as the annual net-zero ambition progress update or the climate transition plan.

All the companies reviewed use the SASB and TCFD standards as a reference framework for reporting on ESG matters, although some also use additional standards or frameworks, such as GRI, which vary among the companies and may indicate diverse levels of alignment with international best practices or regulatory requirements.

All companies report on their Scope 1, 2 and 3 emissions, as well as other indicators such as carbon intensity, methane intensity, energy consumption and renewable energy connected data. However, the methodologies and boundaries for calculating and reporting these emissions differ across the companies, depending on the GHG Protocol guidance or other specific rules they follow. UK Company 3, for example, determines Scope 1, 2 and 3 emissions in accordance with the GHG Protocol.

All companies use some certificates related to their climate governance and performance, such as the SBTi validation or the ISO certifications. All of the companies achieved ISO 14001 for environmental management systems. Only UK Company 3 and UK Company 5 have validated their targets with SBTi. UK Company 1, UK Company 2 and UK Company 4 have targets that have not been verified by SBTi, but that they assess to be scienced-based. However, only UK Company 2 has committed to have its target validated by SBTi.

(g) Information Auditing

The audit of the climate change and energy transition related information is voluntary for all five companies, as none of them are legally required to do so by any regulation or standard. However, they all choose to have some or all of their climate-related data assured by an external expert, either by their statutory auditor or by a different auditor. UK Company 2, UK Company 3 and UK Company 4 have their information reviewed by an external expert which is not the company's auditor, while UK Company 5 and UK Company 1 have the information reviewed by their statutory auditor.

The outcome of the audit does not imply any mandatory follow-up actions by the companies, but it does provide them with an opportunity to improve their data quality, transparency and credibility, as well as to identify and address any gaps or risks in their climate-related performance and reporting.

US

(a) Integration of sustainability objectives, in particular energy transition, into the strategy of the companies analyzed

The companies in the US considered in the study show a general low level of engagement in near-term reduction targets, with no commitments with regard to Scope 3. US Company 1 and US Company 4 have modest reduction goals for Scope 1 and 2, and pledge to achieve net-zero by 2050, while US Company 3 does not have any interim targets commitment, with a net-zero goal for 2040. There is little information on investment plans and roadmaps for the achievement of the targets for the three companies.

US Company 5 and US Company 2 also pledge to achieve net-zero emissions by 2050, with only US Company 2 covering value-chain emissions (Scope 3). US Company 5 also has near-term reduction goals for Scope 1 and 2 validated by SBTi, in line with the with the 1.5°C scenario, while US Company 2 is committed to a reduction limited to Scope 1 emissions.

(b) Reflection of the climate goals in their internal regulations

	Climate corporate purpose reference	By-laws	Policies covering sustainability	Binding on third parties
US Company 1	N	N	Y e.g., GHG Reporting Protocol	N
US Company 2	N	N	Y e.g., Environmental Policy	N
US Company 3	N	N	Y e.g., Safety and environmental policy	N
US Company 4	N	N	Y e.g., Environment policy	N
US Company 5	N	N	Y e.g., Climate Change Principles	N

None of the US companies have included climate change or energy transition in their corporate purpose or in their by-laws. All five companies have internal policies and regulations in place that refer to climate change and energy transition commitments. They are normally updated periodically and are only binding internally, so shareholders and/or other stakeholders may only be able to enforce them through other legal mechanisms, such as proxy battles, shareholder proposals,[49] or litigation. Therefore, there are no internal regulations that could result in the US companies, or their directors, being held liable for breach of these internal regulations, unless they are incorporated into contracts or agreements with third parties, or through other legal mechanisms.

(c) Integration of the SDGs or other energy transition goals in the directors' remuneration system

	Director remuneration	Type of remuneration	Amount of remuneration	Penalties for not achieving climate goals	Senior management remuneration
US Company 1	Y Executive directors	STIP	10%	N	Y
US Company 2	Y Executive directors	STIP	12.5% for quantitative goal, 9.375% for operational excellence metrics, up to 25% for qualitative goal	N	Y
US Company 3	Y Executive and independent directors	STIP	15%	N	Not disclosed
US Company 4	Y Executive directors	LTIP	Not disclosed	N	Y
US Company 5	Y Executive directors	STIP	ESG Indicator (15%)	N	Y

All the companies have set up variable remuneration linked to the fulfillment of climate goals for their executive directors and their senior management teams (save in the case of US Company 3, for which this data is not available).

The most common type of remuneration linked to climate goals is the annual bonus (STIP). Only one company (US Company 4) has a long-term incentive plan that is directly tied to a specific carbon reduction target, while the other companies use either short-term or qualitative metrics that are related to environmental performance or energy transition such as oil spill rates or oil recovery rates (US Company 3). The amount of remuneration in the annual bonus linked to climate goals ranges from 10% to 47% of the total variable remuneration. US Company 4 does not disclose the amount that the climate goals represent over the LTIP, but at most, the LTIP would be 12.5%.

None of the companies have disclosed weighting measures or penalties for the reduction or cancellation of the remuneration in case of underperformance of any of the climate goals.

(d) Existence of internal supervision/control or consulting bodies with specific functions related to the implementation and fulfillment of the selected climate goals

	Committee	Composition of committee	Binding power
US Company 1	Public Policy and Sustainability Committee	Three independent directors Nine directors have "environmental" skills, eight of which are independent	N
US Company 2	Corporate Governance Committee Operations and Nuclear Oversight Committee	CGC: at least three independent directors. ONOC: at least four independent directors Ten directors have ESG skills	N
US Company 3	Nomination, Governance and Sustainability Committee	At least three independent directors Eight directors have "environmental, health and safety" skills	N
US Company 4	Environment, Safety and Public Policy Committee	Five of the directors have relevant scientific/technology experience;[50] seven of the directors have low carbon solutions technology and safety experience	N
US Company 5	Governance and Nominating Committee	Four of the directors have "environmental/ sustainability/corporate responsibility" skills	N

All the companies have a specific committee at the board level that reviews and advises on sustainability and climate-related matters, such as setting or overseeing the companies' climate goals, strategies and performance. However, none of these committees have binding decision-making authority, and they mainly provide input and recommendations to the board or the executive management.

The number and expertise of directors who have knowledge on ESG/ sustainability and climate-related matters vary across the five companies. US Company 5 is the company with the lowest number of directors with environmental or sustainability skills (four directors) with the remaining companies having around ten directors with these skills. However, most companies specifically refer to environmental or low carbon solutions experience, while US Company 3 includes environmental, health and safety experience, so the number of directors with sustainability experience could be lower.

A difference among the five companies is the senior management structure and responsibility for ESG, climate change and sustainability matters. US Company 2 reports that its CEO has primary responsibility for these matters, although there are several senior managers with responsibility for climate-related issues, including a Chief Sustainability and Philanthropy Officer. US Company 1 and US Company 5 have two corporate officers each with specific responsibility for climate-related issues and US Company 5 and US Company 3 have the COO or a chief sustainability officer in charge of these issues. Additionally, all of the companies have executive level committees in charge of ESG issues, such as the ESG Strategy and Disclosures Committee or the Sustainable Power Group.

(e) Forecasting and recognition of climate risks related to the climate goals in the companies' risk management and control systems

Four of the companies (all save for US Company 3) rely on climate change scenario analyses, in part to assess the resilience of their portfolios and strategies under different energy demand and policy outcomes. US Company 1 assesses the resilience of its portfolio and strategy under different energy demand and policy outcomes, US Company 2 makes an assessment (although not annually) against three different time horizons, while US Company 4 does not assess this risk against clearly defined time horizons.

All the companies have run a materiality assessment as part of their sustainability strategy, to identify the relative importance of various issues, including climate-related issues, for their stakeholders and their businesses. However, US Company 1, US Company 5 and US Company 3 have conducted limited materiality assessments. Only one of the 14 sustainability focus areas identified by US Company 4 relates to climate change, while one-third of the areas identified by US Company 2 relate to climate issues.

All the companies have made some investments to reduce future risks or increase future opportunities related to the environment, such as developing low-carbon technologies, products and services, enhancing energy efficiency, reducing emissions intensity, and investing in CCUS. US Company 1 intends to spend $8 billion on lower carbon investments and $2 billion on carbon reduction/GHG abatement projects, US Company 2 has reported that it is focused on commercializing and deploying new zero-emitting, load-following resources by mid-2030, US Company 4 announced in 2019 it would spend over $100 million over ten years to research and develop advanced lower-emissions technologies and US Company 5 invested 20% of its total R&D expenditure on CCUS. On the other hand, US Company 3 reported that it expected most of its capex in 2023 to be spent on crude oil drilling, with a portion to go to environmental projects.

The procurement policies of all the companies (save for US Company 3) include climate-related and/or energy transition criteria, such as environmental objectives, standards or certifications that apply to their suppliers and contractors. However, some of them (such as US Company 1) do not disclose any specific climate-related or energy transition criteria that they use in their procurement decisions, and it is unclear how they monitor and enforce their suppliers' compliance with their environmental expectations.

(f) Measurement and Reporting

	Reporting	Standards	Scope 1, 2, 3	Certificates
US Company 1	Annual Report, Sustainability Report, Climate Change Resilience Report, Climate Lobbying Report, Methane Report, ESG Data Tables	TCFD, SASB, IPIECA/API/IOGP, API Compendium, GHG Protocol, IPIECA Category 11	Y	ISO 14001 certification
US Company 2	Annual Report, Impact Report, Climate Report, EEI/AGA Sustainability Report, Trade Associations Climate Review, CDP questionnaires	TCFD, SASB, GRI, IPIECA/API/IOGP, GHG Protocol	Y	N
US Company 3	Annual Report, ESG Performance Data Tear Sheet, Sustainability Report	TCFD, SASB, AXPC, OGMP 2.0, GHG Protocol, IPIECA/API Scope 3	Y	N
US Company 4	Annual Report, Advancing Climate Solutions Progress Report, GHG Data Supplement	TCFD, GRI, IPIECA/API/IOGP, GHG Protocol	Y	ISO 14001 certification American Chemistry Council Responsible Care
US Company 5	Annual Report, Year in Review Report, TCFD Report, GHG Emissions Statement, CDP questionnaires	SASB, GRI, TCFD, EPA CFR, GHG Protocol	Y	SBTi accreditation

All the companies report on climate change and energy transition issues in various documents, such as annual reports, sustainability reports, and CDP questionnaires, and align their disclosures to some extent with the TCFD recommendations and the GHG Protocol. However, US Company 2 and US Company 5 provide more comprehensive and regular reporting than US Company 4 and US Company 3. Moreover, the companies use different standards and frameworks to report on their ESG performance, such as SASB, GRI, IPIECA/API/IOGP, and AXPC, which may reflect their different stakeholder expectations and industry associations.

Another common trend is that all five companies report on their Scope 1 and 2 emissions, and some categories of their Scope 3 emissions, mainly from the use of their products. However, the scope and quality of their Scope 3 reporting also differs considerably. For instance, US Company 2 and US Company 5 are in the process of quantifying their entire Scope 3 emissions, while US Company 1 and US Company 4 only report on their Scope 3 emissions from products sold, and US Company 3 only reports on its Scope 3 emissions from products used. Additionally, only US Company 5 has obtained external assurance of its Scope 1, 2 and 3 (category 6) emissions, while US Company 1 and US Company 3 have obtained external assurance of their Scope 1 and 2 emissions, and US Company 4 has had its methodology and assumptions for calculating its GHG emissions reviewed by a third party.

A main difference among the five companies is the use of certificates related to their climatic governance systems and the achievement of their climate goals. Only US Company 1 and US Company 4 have ISO 14001 certification across their operations. Moreover, only US Company 5 has its emission targets accredited by the SBTi. The other companies do not use any particular certificate.

(g) Information Auditing

The audit of the climate change and energy transition related information is voluntary for all five companies, as none of them is required by any law or regulation to obtain external assurance on their climate metrics. However, the scope and quality of the audit varies among the companies. US Company 1 and US Company 3 have their Scope 1, 2 and 3 (in respect of products sold) audited by external experts, with reasonable assurance for US Company 1. US Company 3 does not disclose the assurance letter itself or identify the third party that conducts the review. US Company 4 and US Company 5 have their Scope 1 and 2 audited by external experts, with limited assurance for both. US Company 2 does not have any of its climate information audited by an external independent party, but only reviews its methodology and assumptions for calculating its GHG emissions by a third party.

The audit is conducted by different external experts for each company, except for US Company 5, which uses its statutory auditor. US Company 1 and US Company 4 use an internationally recognized certification body and a provider of environmental and sustainability services as auditor for their climate information.

6.4 Impact of corporate climate governance on risk metrics and ESG performance

Considering that corporate climate governance is gaining traction, prompted by several regulations and voluntary standards as shown in the previous chapters, this chapter explores the extent to which it is embedded into different assessments, ratings and rankings used by investors to incorporate ESG in their decision-making processes. The insights shared below are not intended to be exhaustive, but rather to be a starting point for a discussion on how these assessments do or do not represent an incentive for companies to improve their climate governance systems.

#1 Very few initiatives or data providers assess corporate climate governance as a key aspect of ESG risk and performance, despite the relevance of the topic for energy companies

While several disclosure standards and frameworks offer recommendations on how companies may address different aspects of corporate climate governance (see Chapter 5), very few initiatives offer a comparative assessment of such elements.

As part of its work to support climate-related investor engagement, Climate 100+ publishes The Net Zero Company Benchmark, a comprehensive assessment of focus corporations covering governance, emission reduction across the value chain and transition plans. These performance indicators, which draw on public and self-disclosed data, are grouped into *disclosure framework* indicators and *alignment assessments*, the first focused on the adequacy of corporate disclosure and the latter on company actions towards the Paris Agreement goals. Corporate climate governance is part of the disclosure framework indicators group, and it is directly linked to one of the three engagement goals of the initiative: *implement a strong governance framework which clearly articulates the board's accountability and oversight of climate change risk*. Metrics are assessed on a binary Yes/No basis.[51]

The CDP Climate Change Score is also a key initiative looking at specific elements of corporate climate governance, although those elements are not scored individually. Rather, the consolidated final score is the result of an overall analysis conducted by an internal scoring team based on companies' responses to CDP questionnaires, complemented by data quality checks to ensure that scoring standards are accurate and consistent. Its questionnaire indicates the stage at which a company is on a path towards operating in line with the 1.5°C scenario, starting at "D" (Disclosure), moving to "C" (Awareness), "B" (Management) and "A" (Leadership). Companies that do not disclose information are rated as "F" (Failures to disclose). Out of its 15 modules, at least ten can be considered directly linked to climate governance: governance (including board oversight, management responsibilities and employee incentives), risks and opportunities, business strategy, targets and performance, emissions methodology, emissions data, energy, verification, carbon pricing and engagement.

TABLE 4. CDP CLIMATE CHANGE SCORES

	CDP Climate Change Score
Year of assessment	2023
Spanish Company 3	**A | Leadership**
Spanish Company 4	**A | Leadership**
Spanish Company 2	A- | Leadership
Spanish Company 5	A- | Leadership
Spanish Company 1	B | Management
French Company 1	**A | Leadership**
French Company 5	**A | Leadership**
French Company 2	**A | Leadership**
French Company 3	A- | Leadership
French Company 4	A- | Leadership
UK Company 3	**A | Leadership**
UK Company 5	**A | Leadership**
UK Company 2	**A | Leadership**
UK Company 1	B | Management
UK Company 4	B | Management
US Company 5	B | Management
US Company 4	F | Failure to disclose
US Company 1	F | Failure to disclose
US Company 3	Submitted, but not scored
US Company 2	Submitted, but not scored
German Company 2	**A | Leadership**
German Company 4	A-| Leadership
German Company 5	B | Management
German Company 1	B | Management
German Company 3	F | Failure to disclose

#2 In the case of ESG ratings and rankings, corporate climate governance is often diluted among several indicators, having a low weight in final ratings and scores

While ESG ratings and scoring methodologies often use materiality screenings to assign weight to varied factors depending on the industry and, sometimes, on the company's particularities, corporate climate governance is overlooked even for activities as carbon intensive as energy production based on fossil fuels.

Based on this paper's definition, we assessed how some of the key ESG rating providers incorporate corporate climate governance in their methodologies. As an example, within the energy sector, MSCI ESG Ratings for the Integrated Oil & Gas subindustry, the *carbon emissions key issue* contributes with 14.1% of companies' overall risk. The management of such issue by the company is divided into target setting, mitigation efforts and performance, and is the first the only one directly linked to a corporate climate governance system. Under the governance pillar, which contributes with 33.0% of total ESG risk, the key climate governance topics considered are *pay linked to sustainability key metric* and, indirectly, *risk management expertise key metric*. Together, these two metrics may represent less than 5% of the potential impact of governance issues. Therefore, elements of corporate climate governance considered in this study may account in total for less than 10% of this subindustry's ESG risk, while MSCI Climate Value-at-Risk reports for the Integrated Oil & Gas companies considered in this study, for example, range from over -30% to -100%.

Similarly, the Sustainalytics ESG Ratings do not consider corporate climate governance as a separate topic, but rather as part of broader issues under environmental and governance issues. Within the corporate governance issue, which is deemed as material for all companies regardless the industry, the pillar defined as stakeholder management comprises different indicators related to corporate climate governance, such as ESG governance, ESG performance targets, verification of ESG reporting, environmental policy and GHG reduction program, the latter being the only one with a climate-related focus. This pillar has 15 indicators, whose combined weight is typically around 10% of the total corporate governance issue management score. As corporate governance's contribution to the overall ESG rating ranges from 7.5% to 35.7% for the selected companies, the stakeholder management pillar's total weight varies from less than 1% to around 3.5%. Another important element of corporate climate governance, GHG risk management, appears under the issues *Carbon – Products and Services* and *Carbon – Own Operations*, representing up to 9% of overall risk in the case of Integrated Oil & Gas companies. Even considering some other related elements under *Carbon – Own Operations*, such as environmental management system, environmental policy and scope of GHG reporting, corporate climate governance's top contribution for an overall ESG rating would be around 20% for those companies with a high exposure to climate-related risks.

While ESG ratings and scoring methodologies often use materiality screenings to assign weight to varied factors depending on the industry and, sometimes, on the company's particularities, corporate climate governance is overlooked even for activities as carbon intensive as energy production based on fossil fuels.

TABLE 5. COMPARATIVE ESG RATINGS FROM MSCI, SUSTAINALYTICS AND S&P

	Rating ESG MSCI	Rating ESG Sustainalytics	S&P ESG Global Score
Spanish Company 3	AAA Leader	22.2 Medium risk	85
Spanish Company 4	AAA Leader	10.4 Low risk	83
Spanish Company 1	AA Leader	14.8 Low risk	85
Spanish Company 2	AAA Leader	16.4 Low risk	86
Spanish Company 5	A Average	25.9 Medium risk	56
French Company 3	AA Leader	27.3 Medium risk	74
French Company 5	AAA Leader	11.3 Low risk	88
French Company 4	AA Leader	29.6 Medium risk	80
French Company 2	A Average	25.0 Medium risk	69
French Company 1	A Average	20.9 Medium risk	81
UK Company 4	AA Leader	33.7 High risk	46
UK Company 1	A Average	35.1 High risk	50
UK Company 3	AAA Leader	18.2 Low risk	61
UK Company 5	AAA Leader	20.4 Medium risk	73
UK Company 2	AA Leader	24.5 Medium risk	48
US Company 1	BBB Average	41.6 Severe risk	41
US Company 3	A Average	36.8 High risk	39
US Company 5	A Average	34.1 High risk	40
US Company 2	B Laggard	32.1 High risk	34
US Company 1	AA Leader	28.3 Medium risk	57
German Company 4	A Average	23.3 Medium risk	57
German Company 2	AA Leader	17.6 Low risk	46
German Company 5	A Average	13.6 Low risk	46
German Company 1	Not assessed	28.5 Medium risk	Not assessed
German Company 3	Not assessed	Not assessed	Not assessed

#3: Corporate climate governance enhances management of climate issues, but it is no guarantee of good climate performance and/or low climate risk as perceived by ESG ratings

While good corporate climate governance intends to deliver excellence in climate performance, performance is also influenced by other key drivers, such as transition costs and shareholder pressure. The ISS 2023 report on corporate climate governance[52] concluded that climate governance measures are positively associated with GHG emissions disclosure and progress towards Net Zero.

An analysis of the performance of the companies under scope in the ESG ratings compared to their corporate climate governance shows the paramount importance of the operating sector in the risk rating. A strong corporate climate governance system helps risk-rate assessment when the measures included within the governance system are specific and have a financial or business impact in the company. On the other hand, a poor corporate climate governance structure does have a negative impact.

The benchmarking reveals that the companies perform well overall in all regions, except for the US, where oil & gas producers are more prevalent and where there are also jurisdictional specificities (as explained below).

Among the oil & gas entities under study, one French and one Spanish company are the best performers, while two US companies have the lowest ratings. Among the utilities in the sample, two Spanish companies are the best performers,[53] while again, two US companies have the lowest valuations. The main factors that distinguish the performance of these companies are:

- The degree of **specificity and commitment of their emission reduction targets**, especially for Scope 3 emissions, and the **effective integration** of these climate goals into their business strategy and investment plans.

  All the highest rated companies have committed to achieving net-zero emissions by 2050, covering all three scopes, and have science-based validated targets. They also present a clear roadmap for reaching these goals, including interim targets, and align them with their business plans, capex (e.g., 20% capex allocated to low carbon electricity by the French company) or corporate investments (e.g., 35% investment in low carbon business by the Spanish oil & gas company). In contrast, US companies have committed to achieving net-zero by 2050, but only for Scope 1 and 2 emissions, or with a limited consideration of Scope 3. They also do not provide detailed information on their investment strategies and plans for reaching their targets.

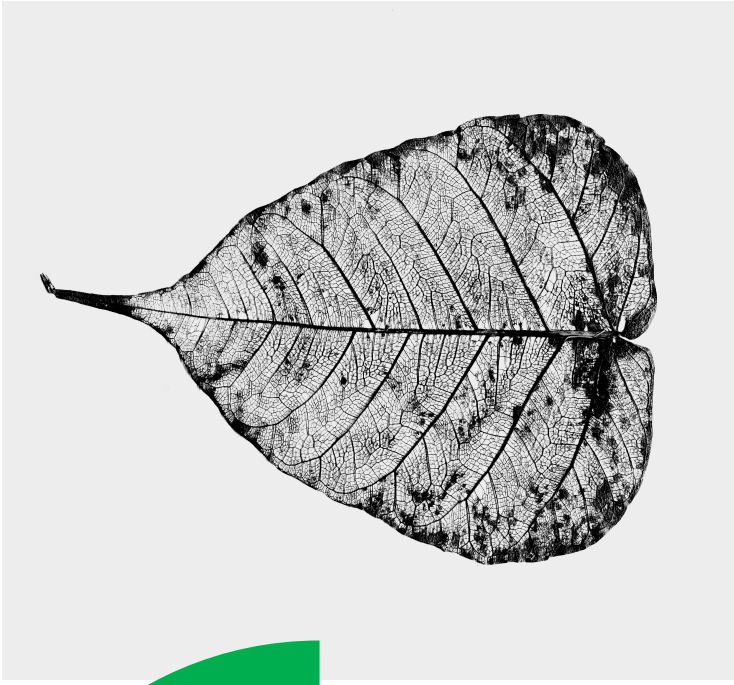
- The **linkage of the remuneration of directors to specific and clear targets**, which usually is a key indicator of corporate governance, and most importantly, the objective measurement of the achievement. In general, all the companies consider corporate climate goals to determine the remuneration of their directors and most of them set up objective performance indicators (e.g., achieving a specific GHG reduction target, concrete improvement of an ESG rating, etc.). However, the best rated companies disclose the assessment of the achievement of the relevant goals. For example, one company has this assessment audited by an independent expert; another provides the details of the quantification method in its corporate regulatory disclosures. US companies, on the other hand, present a more discretionary assessment methodology that may also change in each award cycle.
- The use of **well-known equivalent standards for measurement and reporting** (rather than their own internal metrics) and the use of specific comparable data and frameworks in their disclosures, **covering Scope 3 reporting**. The best performing companies adopt EU Taxonomy, TCFD or GRI as reference standards and they also use a comparable report framework (e.g., non-financial information reports). In companies with a lower rating, the alignment of their disclosure to

the relevant standard (e.g., TCFD) is incomplete and partial, and their reporting on Scope 3 is limited to certain categories only. Note, however, that simply measuring and reporting ESG metrics without an accompanying, robust sustainability strategy is not likely to be a powerful performance driver.

- The prioritization of climate risks in **risk management**, as critical factors, assessing their materiality with recognized methods and against a clearly defined timeframe. The best rated companies use, for example, IPCC or the IEA to evaluate the impacts and opportunities of climate change for their businesses. They also address risk management with specific measures that affect the financials of the company (e.g., investments, R&D, etc.,) and corporate operations (e.g., procurement). US companies, on the contrary, rely on limited materiality assessments without specialized climate risk criteria, and may use more generic risk management frameworks.

The auditing of the disclosed information is a de minimis must-have, so even when companies go beyond what is required in the regulations or the market practice, it does not have a relevant weight in the risk assessment. In this sense, some US companies use internationally recognized certification bodies or sustainability services providers as auditors, while one of the best-rated Spanish companies just uses its statutory auditor.

Finally, it is interesting to note how the relevance of other corporate governance metrics, which would be considered evidence of a strong commitment to climate goals from a traditional perspective, prove to have limited relevance for the ESG risk assessments. In this sense, the integration of climate goals in a company's by-laws or within its corporate purpose could be considered as one of the most binding measures for companies from a legal perspective. However, it does not improve the rating of some of the French companies when all of them have adopted this measure. Likewise, the existence of internal committees, their composition and their members' different skills and qualifications on sustainability matters do not tip the balance in favor of US companies, which have strong internal organic governance structures.



#4 Yet, there is a correlation between jurisdictional regulations, corporate climate governance and ESG risk rating

The analysis indicates a correlation between jurisdictional regulations, corporate climate governance and ESG risk rating. Companies operating in jurisdictions with stricter and more proactive climate regulations tend to adopt better climate governance practices and have lower ESG risk ratings than those in jurisdictions with weaker or less consistent regulations. This suggests that regulation can significantly influence corporate action and disclosure on climate issues, as well as the environmental performance and risk exposure of companies as perceived by investors and stakeholders.

France and Spain have the best rated companies for climate governance. France has been a leader in climate regulation, enacting laws before and beyond the EU requirements. Spain, as an EU member state, has transposed the EU legislation into its national laws. However, the better performance of Spanish companies compared to, for example, German companies, cannot be explained solely by the jurisdictional regulations, which are quite similar, but also by a stronger private sector interest in Spain. In this sense, being an early adopter of corporate climate governance practices could enhance performance, reputation, and resilience of companies, so they can gain a competitive edge by anticipating the expectations of their stakeholders. Anticipation in corporate climate governance leads to a consistent development of mitigation and adaptation strategies towards net zero, avoiding stranded assets and liabilities. This is the case for Spanish Company 3 and French Company 1, both of which started building up best climate governance practices more than a decade ago in some cases.[DP: Fix this]

In contrast, the US has the worst rated companies for climate governance. The US has lagged in integrating climate issues into its regulations, despite its historically strong and more sophisticated corporate governance standards. Consequently, US companies have not yet incorporated climate issues into their core business decisions and not yet fully reported their climate impacts and performance either.

BOX 8. CASES OF SUCCESS: HOW FRENCH COMPANY 1 AND SPANISH COMPANY 3 THRIVE IN ROLE MODELING FOR NET ZERO PATHWAY

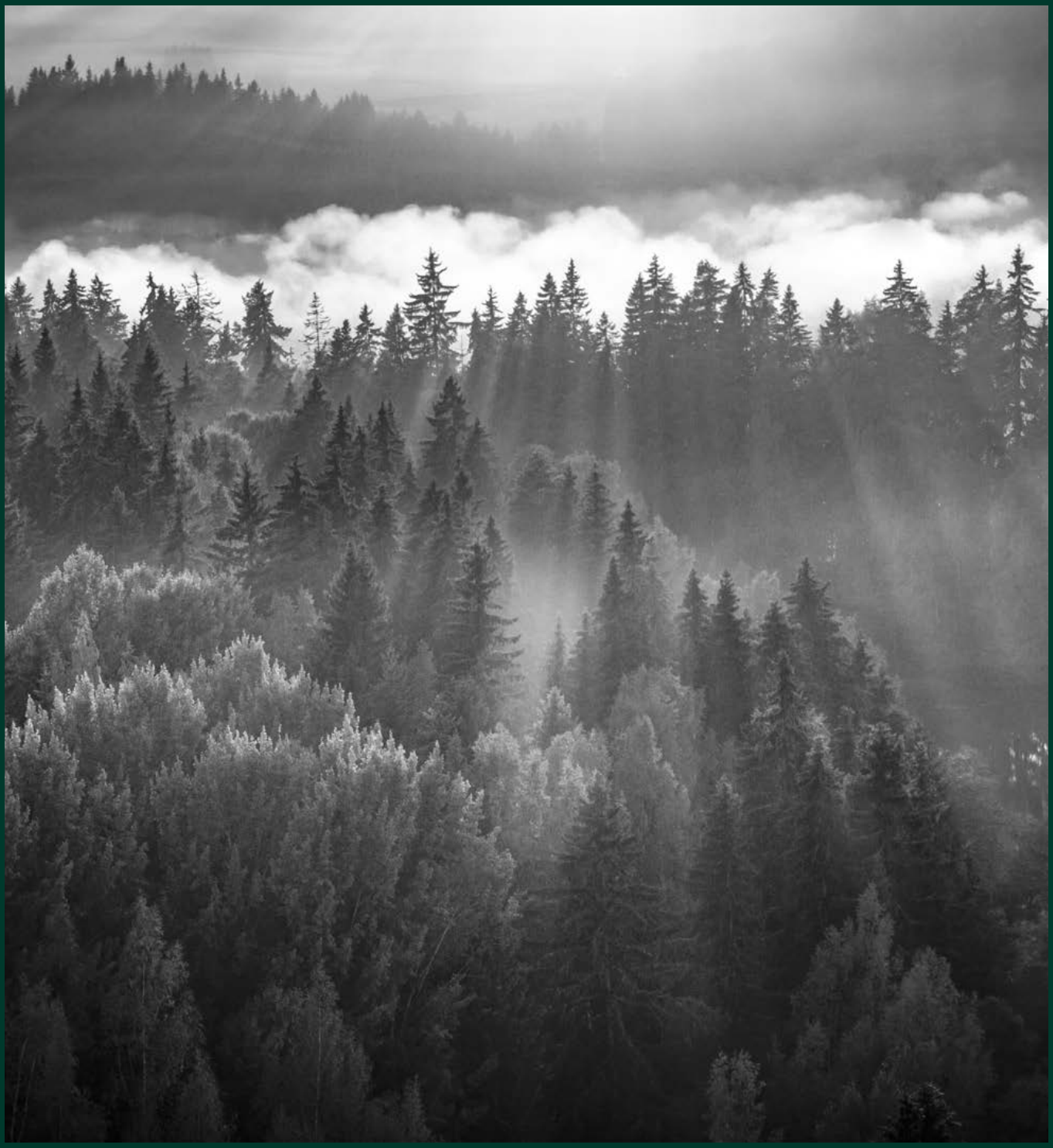
French Company 1

France has been a leading jurisdiction in climate regulation, being at the forefront of net zero for years. Therefore, it is no surprise that the rating and performance of French companies, in terms of climate governance, stand out over the rest. In particular, the consistent and early positioning of French Company 1 made this company one of the top references in corporate climate governance. It was one of the first companies to adopt a corporate purpose considering environmental issues and was a pioneer in its commitment to reduce GHG emissions, its own or that of its clients, since 2002.

French Company 1 has also, for more than 15 years, been providing quantitative information to demonstrate its effective contribution to the SDGs that it has identified as relevant to its business, disclosing its due diligence procedures to address its risk management, providing details on the governance associated with its environmental policies and having an active dialogue with its stakeholders to conduct a self-assessment of its sustainable practices. All of this has allowed French Company 1 to achieve 100 million metric tons of CO2 equivalent of reduced emissions between 2015 and 2020 in the facilities it manages, plus 50 million metric tons of CO2 equivalent of emissions avoided for its clients for the period spanning from 2015 to 2020.

Spanish Company 3

Spanish Company 3 is a global leader in renewable energy and a pioneer in corporate climate governance. The company began transforming over 20 years ago to create a sustainable, safe and competitive energy transition model. It has closed all its coal and fuel oil capacity worldwide and has reached a 73% reduction in emissions compared to 2000. Spanish Company 3 has integrated its commitment to climate action and the SDGs into a remarkable level of governance, in its by-laws, and has established a robust framework of policies, plans, and targets to guide its strategy and operations. The company has adopted science-based targets to reduce its emissions in line with a net-zero future and has been the first company to share its Climate Transition Plan with the UN, detailing its roadmap and actions to achieve net-zero emissions across all scopes before 2040. Its corporate climate governance has enabled the company to seize the opportunities and manage the risks of the energy transition, creating value for its stakeholders. The company has become the largest European utility, and one of the ten largest in the world by market capitalization, and has contributed to the re-industrialization and development of the regions where it operates.



SECTION 3

Conclusions and *recommendations*

7. Towards a real commitment: *Strengthening Corporate Climate Governance as a driver for climate action*

Throughout this study, we have examined the effectiveness and consistency of corporate climate governance in practice as a driver for climate action, digging into the structures, policies, and practices that companies put in place to address and manage their climate-related impacts and risks, but also to seize new business opportunities.

Corporate climate governance is a good compass of climate-related performance in companies, as well as a key factor for reducing ESG risk and enhancing ESG ratings. Companies with robust corporate climate governance systems tend to have more ambitious and specific emission reduction targets, more comprehensive and transparent reporting, more effective risk management and stakeholder engagement, and more alignment with the goals of the Paris Agreement and the SDGs.

However, corporate climate governance is strongly influenced by the legal and regulatory frameworks in which companies operate, as well as by the expectations and demands of investors and other stakeholders. Companies operating in jurisdictions with stricter and more proactive climate regulations tend to adopt better climate governance practices and have lower ESG risk ratings than those in jurisdictions with weaker or less consistent regulations. Likewise, companies that face more pressure and scrutiny from their shareholders, customers, employees, or civil society tend to be more responsive and accountable on climate issues. Enhancing the coherence and effectiveness of the legal and regulatory frameworks, as well as fostering dialogue and collaboration between companies and their stakeholders, is essential for creating an enabling environment for corporate climate governance.

Furthermore, it is imperative for corporations to assess and understand the importance of their corporate governance systems and internal measures in the design and execution of their net-zero goals. A genuine dedication to sustainability should be manifested not only in the strategic planning but also in the financial architecture of the organization. This commitment necessitates a substantial allocation of corporate resources, which encompasses capital expenditures and financial outlays. The integration of sustainability into corporate governance is essential for ensuring that environmental objectives are not merely peripheral concerns but are central to the company's operational and financial decision-making processes. By doing so, companies can demonstrate to stakeholders that their pursuit of sustainability is both strategic and economically grounded, thereby reinforcing the credibility of their environmental initiatives.

In any case, corporate climate governance cannot be reduced to a one-size-fits-all approach, but is rather a context-specific and dynamic process that requires continuous improvement and adaptation. Companies have various levels of exposure and vulnerability to climate risks and opportunities, depending on their sector, size, location, and business model. While also following some common principles and standards that ensure comparability and credibility, corporate climate governance compliance and measurement, in particular by ESG data providers, should consider the specific nuances that affect each company to deliver a real and accurate picture of the progress of any company's genuine commitment to climate action.

Based on these conclusions, the report makes the following **recommendations** that include proposals (i) at the level of public policies and regulations for governments and supervisors and (ii) at the company level.

It is imperative for corporations to assess and understand the importance of their corporate governance systems and internal measures in the design and execution of their net-zero goals. A genuine dedication to sustainability should be manifested not only in the strategic planning but also in the financial architecture of the organization.

7.1 At the level of public policy

(a) **Promote cooperation and the creation of multi-stakeholder partnerships for harmonizing and coordinating policies on climate action and governance**. Multi-stakeholder forums would allow different governments, intergovernmental organizations, civil society and companies to design, implement and evaluate governance initiatives and policies, and should be encouraged to share efforts and experiences, and harmonize and coordinate policies, regulations and incentives to raise standards. These partnerships, with close alignment to the SDGs, will be drivers to boost climate action, with proposed solutions across all sectors of the economy.

(b) **Focus on regulation effectiveness and purpose to achieve desired results**. Companies operating in jurisdictions with stronger and more proactive climate regulations tend to adopt better climate governance practices and have lower ESG risk ratings than those in jurisdictions with weaker or less consistent regulations. This suggests that regulation can significantly influence corporate action and disclosure on climate issues, as well as the environmental performance and risk exposure of companies as perceived by investors and stakeholders. Indeed, the most successful countries in climate action are those in which governments have approved clear policies known to all of society and reflected in the corresponding national planning, and have implemented regulations that include actual obligations and incentives.

However, regulatory overload may hamper progress. Market flexibility is essential, and striking the balance between robust market safeguards and allowing innovation is going to be critical. Such fragmentation undermines the credibility and effectiveness of the sustainability agenda, creating as it does confusion in the market and arbitrage and regulatory gaps.

(c) **Promote uniform legal standards to best comparative practice**. As this report evidences, one of the main challenges is the lack of global consensus and coordination on the criteria, indicators and thresholds for defining and measuring sustainability. Better international alignment around key concepts, principles and definitions would be of great benefit, and greater consistency between frameworks in relation to sustainability reporting standards must be expected.

(d) **Provide guidance and support for companies to implement and report on their corporate climate governance systems, as well as to comply with the relevant standards and frameworks**. The creation of specific corporate climate governance codes or guidelines, either as a standalone document or as part of existing good governance codes, would help boards and senior management to address with a higher level of certainty the climate-related aspects of their internal organization, aligned with stakeholder engagement and expectations. Such a code or guidance would also enhance the comparability and credibility of corporate climate governance practices and facilitate the monitoring and evaluation of corporate performance and progress towards climate goals.

(e) **Strengthen corporate climate governance indicators within ESG ratings**.[54] Together with efforts to introduce a higher degree of transparency and comparability and reliability of ESG ratings and data providers, we call for a more detailed inclusion of corporate climate governance KPIs. As this report shows, good climate governance should be reflected in lower climate risk. However, there are nuances in the definitions and in the practices that result in companies with solid climate governance systems not achieving an equivalent good climate rating. Despite its relevance for corporate action on climate change, corporate climate governance is often diluted among several indicators, having a low weight in final ratings and scores.

In addition, the energy sector deserves specific attention in the methodologies, and clearer and more exigent KPIs should be streamed out, reflecting also a more positive impact for those companies operating in this sector that are ahead in and have more mature, and hence stronger, climate corporate governance systems.

7.2 At the company level

(a) **Be clear on the transition strategy and ensure they give sufficient resource and oversight to its implementation**. There is a positive relationship between ESG performance and financial performance.[55] Stakeholders are demanding that businesses review their commercial strategies (such as through the development of transition plans) and look at regulatory change and implementation in a way never seen before in relation to environmental and climate matters. The need to better integrate sustainability into day-to-day decision-making is clear and will require governance models to adapt.

(b) **Be specific on climate-related goals and the related plans for their achievement**. All the highest rated companies have committed to achieving net-zero emissions by 2050, covering all three scopes, and have science-based validated targets. Furthermore, companies with the best ratings have adopted a robust commitment towards those goals through a clear and ambitious roadmap for reaching these goals (i.e., including interim targets, and aligning them with their business plans, capex (e.g., 20% capex allocated to low carbon electricity by one of the French companies) or corporate investments (e.g., 35% investment in low carbon business by one of the Spanish oil & gas companies).

(c) **Design a solid, transparent and detailed climate governance framework**. Companies will need to review and update their governance frameworks to reflect sustainability strategies and priorities and build these into their internal structures. A corporate climate governance system helps with risk-rate assessment when the measures included within the governance system are specific and have a financial or business impact on the company. A proposal for the elements of such framework is presented in this study in Chapter 1, Box 1.

(d) **Prioritize climate risks, as critical factors, assessing their materiality with recognized methods and against a clearly defined timeframe**. The best rated companies use specific scenarios, for example, IPCC or the IEA to evaluate the impacts and opportunities of climate change for their businesses. They also address risk management with specific measures that affect the financials of the company (e.g., investments, R&D, etc.) and the corporate operations (e.g., procurement). However, it is important to recognize the absence of proven methodologies to assess the financial impact of long-term climate scenarios, which can lead to unrealistic estimations of financial impact or, in some cases, to companies opting for less ambitious targets.

(e) **Disclose the assessment of the accrual of directors' remuneration related to the achievement of climate goals**. The best rated companies disclose the methodology to calculate and validate the performance of their directors for remuneration purposes, providing details of the quantification method and following up on the effective achievement.

(f) **Be transparent in every aspect of climate governance disclosure**, providing investors, regulators and other stakeholders with **detailed information on existing structures, responsibilities, stakeholders' relation, processes, methodologies and practices** in place to deliver on good climate performance and low climate risk. Our research indicates that companies with a consistent climate strategy are transparent about their goals and real impact, which also results in less exposure to the risk of greenwashing claims.

Glossary

AMF	Autorité des Marchés Financiers (France)
CCUS	Carbon capture, utilization and storage
CDP	Established as the "Carbon Disclosure Project" in 2000, it is a not-for-profit charity that runs the global disclosure system for investors, companies, cities, states and regions to manage their environmental impacts.
CDSB	Climate Disclosure Standards Board, an international consortium of business and environmental NGOs hosted by CDP. It issues the CDSB Framework that sets out an approach to reporting environmental and social information in mainstream reports.
CGI	Climate Governance Initiative, a non-profit organization that aims to mobilize boards to accelerate the transition to net zero and build climate resilience.
CNMV	Comisión Nacional del Mercado de Valores (Spain)
CSDDD	Corporate Sustainable Due Diligence Directive (proposal)
CSR	Corporate and social responsibility
CSRD	Corporate Sustainability Reporting Directive, Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting.
EFRAG	European Financial Reporting Advisory Group, a private association established in 2001 with the encouragement of the European Commission that provides technical advice to the European Commission in the form of fully prepared draft European Sustainability Reporting Standards and/or draft amendments to these Standards.
ESAs	European Supervisory Authorities, that is ESMA, EBA and EIOPA
ESG	Environmental, Social and Governance
ESMA	European Securities Market Authority
ESRS	European Sustainability Reporting Standards
EU Taxonomy	Classification system that helps companies and investors identify "environmentally sustainable" economic activities to make sustainable investment decisions based on the Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment.
FCA	Financial Conduct Authority (UK)
German CDD Act	Act on Corporate Due Diligence Obligation in Supply Change (Germany)
GHG	Greenhouse Gas
GHG Protocol	Greenhouse Gas Protocol, comprehensive global standardized frameworks to measure and manage GHG emissions from private and public sector operations, value chains and mitigation actions. It built on a 20-year partnership between World Resources Institute and the World Business Council for Sustainable Development.
GRI	Global Reporting Initiative, an independent, international organization that issues the GRI Standards (globally accepted sustainability reporting standards) for sustainability impact, a modular system of interconnected standards that allow organizations to publicly report the impacts of their activities and contributions towards sustainable development.
GSSB	Global Sustainability Standards Board, an independent operating entity under the auspices of GRI. It has the sole responsibility for setting the GRI Standards, according to a formally defined due process, exclusively in the public interest.
ICMA	International Capital Markets Association
IEA	International Energy Agency
IFRS Foundation	A not-for-profit, public interest organization founded in 2001, and established to develop high-quality, understandable, enforceable and globally accepted accounting and sustainability disclosure standards. The standards are developed by two standard-setting boards, the International Accounting Standards Board and the International Sustainability Standards Board.
IPCC	Intergovernmental Panel on Climate Change (UN)

IRA	2022 Inflation Reduction Act (US)
ISO	The International Organization for Standardization
ISSB	International Sustainability Standards Board, an independent standard-setting body within the IFRS Foundation that develops standards that will result in a high-quality, comprehensive global baseline of sustainability disclosures focused on the needs of investors and the financial markets. The ISSB builds on the work of market-led investor-focused reporting initiatives—including the Climate Disclosure Standards Board (CDSB), TCFD, the Value Reporting Foundation's Integrated Reporting Framework and industry-based SASB Standards, as well as the World Economic Forum's Stakeholder Capitalism Metrics.
KSG	2019 Federal Climate Protection Act (Bundes-Klimaschutzgesetz) (Germany)
LSE	London School of Economics
LTIP	Long-term incentive plans
NFRD	Non-Financial Reporting Directive, Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups
NGOs	Non-governmental organizations
OECD	Organization for Economic Co-operation and Development
PNIEC	National Integrated Energy and Climate Plan (Spain)
SASB Standards	Standards designed to identify and standardize disclosure for the sustainability issues most relevant to investor decision-making in each of 77 industries. As of August 2022, the ISSB of the IFRS Foundation assumed responsibility for the SASB® Standards and has committed to maintain, enhance and evolve them. The SASB® Standards are important guidance in fulfilling the requirements of IFRS Sustainability Disclosure Standards.
SBTi	Science-Based Targets Initiative, a corporate climate-action organization incorporated as a charity, with a subsidiary which will host our target validation services. It develops standards, tools and guidance which allow companies to set GHG emissions reductions targets in line with what is needed to keep global heating below catastrophic levels and reach net-zero by 2050 at latest. SBTi partners are CDP, the UNGC, the We Mean Business Coalition, the World Resources Institute, and the World Wide Fund for Nature.
SEC	Securities and Exchange Commission (US)
SDGs	Sustainable Development Goals
STIP	Short-term incentive plans corresponding to variable annual remuneration
TCFD	Task Force on Climate-related Financial Disclosures. Created by the Financial Stability Board to develop recommendations on the types of information that companies should disclose to support investors, lenders and insurance underwriters in appropriately assessing and pricing a specific set of risks—risks related to climate change. Concurrent with the release of its 2023 status report on October 12, 2023, the TCFD has fulfilled its remit and disbanded. The Financial Stability Board has asked the IFRS Foundation to take over the monitoring of the progress of companies' climate-related disclosures.
UK Code	Corporate Governance Code (UK)
UK Companies Act	Companies Act 2006 (UK)
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
UNGC	United Nations Global Compact, the world largest voluntary initiative, based on CEO commitments to implement universal sustainability principles and to take steps to support UN goals
UNGP	UN Guiding Principles Reporting Framework is the first comprehensive guidance for companies to report on human rights issues in line with their responsibility to respect human rights. The Reporting Framework has been developed through the Human Rights Reporting and Assurance Frameworks Initiative (RAFI).
URD	Universal Registration Document
US LTP	Long-Term Strategy of the United States: Pathways to Net-Zero Greenhouse Gas Emissions by 2050

Methodology

We would like to acknowledge the A&O Shearman experts across various jurisdictions for their contribution to this report, which has been essential in facilitating the cross-jurisdictional comparison and analysis that underpins this work. In particular:

Matthew Townsend
Co-Head of Environmental & Sanctions
Partner, London

Ken Rivlin
Co-Head of Environmental & Sanctions
Partner, New York

Udo Olgemoeller
Partner, Frankfurt

Romaric Lazerges
Partner, Paris

Arthur Sauzay
Partner, Paris

Jonathan Benson
Counsel, London

Stephanie Guenther
Senior Associate, Frankfurt

Ying-Peng Chin
Senior Knowledge Lawyer, London

Marta Villar
Associate, Madrid

Juan Gómez-Carús
Associate, Madrid

Victor Bárcena
Associate, Madrid

Clara Iglesias
Associate, Madrid

Catherine Maison-Blanche
Peerpoint Consultant, Paris

Samantha Greer
Peerpoint Consultant, London

Constantin Louven
Wissenschaftl, Munich

The study adopts a multifaceted methodology to provide a thorough examination of corporate climate governance frameworks. The qualitative component of our research is pivotal, focusing on the dissection of international and national legal frameworks that underpin corporate climate governance. This involves a detailed review of legislation, regulations, and guidelines that shape corporate behavior in relation to climate change. Chapters 3 and 5 of the report are dedicated to this analysis, ensuring a robust understanding of the legal context within which corporations operate.

In Chapter 6, the study progresses to a benchmark analysis, which serves as a quantitative counterpart to the qualitative legal review. This analysis leverages data from esteemed ESG data providers. We have used data sourced through publicly available data sets, such as the SBTi dashboard, as well. Additionally, the study incorporates assessment frameworks that offer detailed insights on corporate climate governance, such as the Climate 100+ published The Net Zero Company Benchmark and the CDP Climate Change Score.

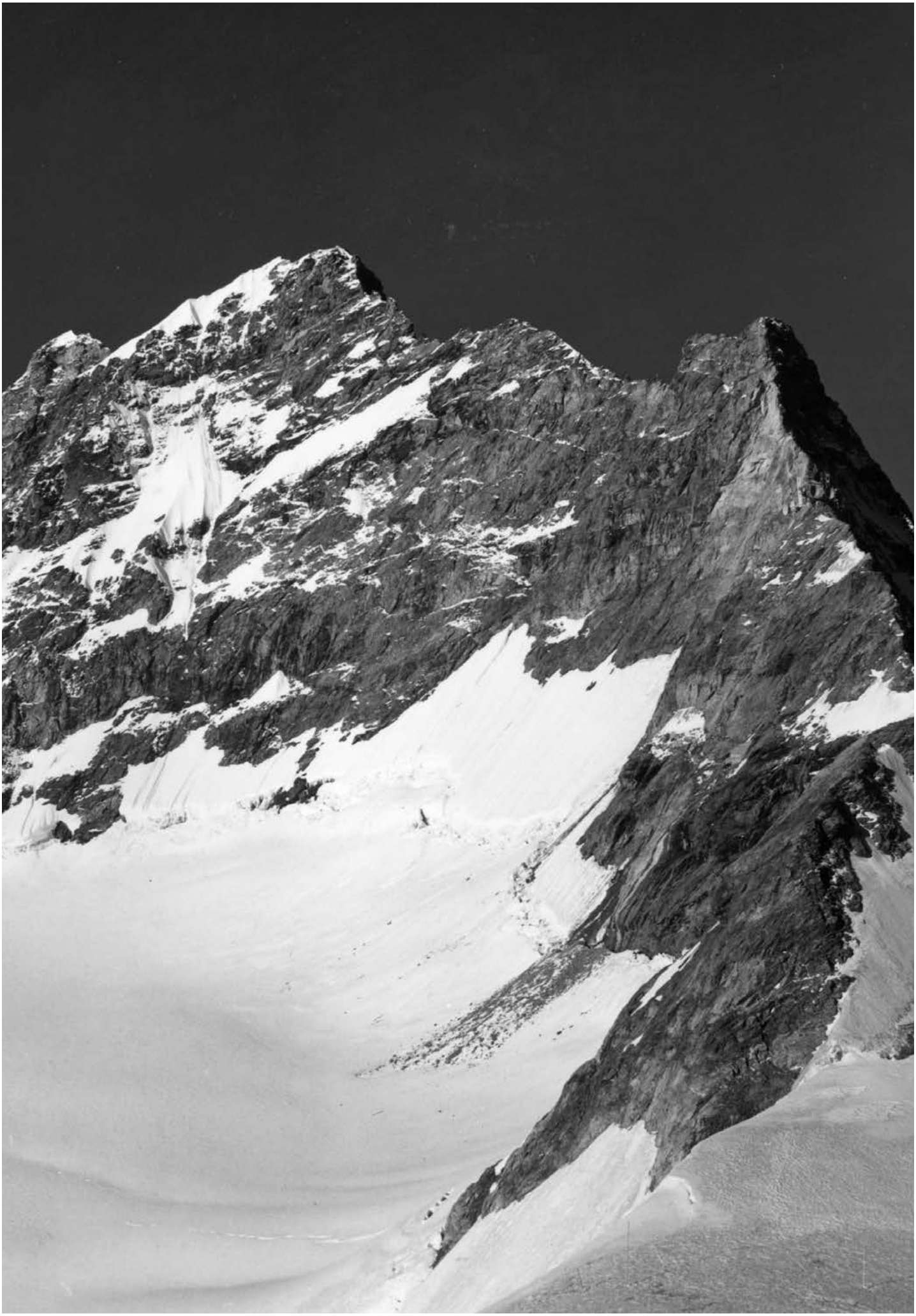
The benchmarking process is meticulous and is tailored to capture the influential players in the energy sector. The study zeroes in on the top five listed companies, including relevant representatives within the utilities, oil & gas and related components industries across the five jurisdictions in scope (the United States, the United Kingdom, Germany, France, and Spain). The companies have been chosen based on their market capitalization or trading volume (both parameters are taken into account to determine the weighted position of each company in the corresponding index). The companies are constituents of the main stock indexes (S&P 500 for NYSE, FTSE 100, Ibex 35, CAC 40 and DAX) of the leading stock exchanges within the jurisdictions under review.

The benchmarking exercise is grounded in the most current and publicly available information on corporate governance,[56] specifically the data made accessible to investors and stakeholders as of June 1, 2023. The information encompasses various aspects of corporate climate governance, including policies, strategies, and performance metrics, as reported by the companies themselves. The information was gathered through standardized questionnaires for all the companies and jurisdictions so the responses might allow comparability.

References

1. According to the Global Risks Report 2024 by the World Economic Forum, risks related to climate change are among the top 4 most relevant ones for the next ten years.
2. Edelman is a global communications firm that partners with businesses and organizations to evolve, promote and protect their brands and reputations.
3. Source: Bloomberg https://www.bloomberg.com/professional/blog/esg-assets-may-hit-53-trillion-by-2025-a-third-of-global-aum/
4. Source: https://www.deloitte.com/content/dam/assets-shared/legacy/docs/insights/2022/2021-Resilience-Report.pdf?icid=learn_more_content_click
5. As an illustrative example, the US auto sector, which regulatory framework for electric vehicles is fragmented, is taking the initiative in a bid to reduce political risk. Several leading automakers have agreed bilateral framework deals with the Californian government that incentivize faster emissions reductions than current laws require.
6. Source: authors' own elaboration.
7. With regard to the impact of the 17 SDGs and their 169 targets on companies, we can highlight the complexity of adopting reliable metrics to assess the degree of compliance of the SDGs and their targets beyond the decarbonization objectives, which is easier to quantify.
8. The Global Reporting Initiative (**GRI**) has developed guidance on how to integrate the SDGs into corporate reporting, linking the goals, targets and indicators with the GRI standard, at https://www.globalreporting.org/public-policy-partnerships/sustainable-development/integrating-sdgs-into-sustainability-reporting/.
9. Integrity Matters: Net Zero Commitments By Businesses, Financial Institutions, Cities And Regions. Report from the United Nations' High Level Expert Group on the Net Zero Emissions Commitments of Non-State Entities, at https://www.un.org/sites/un2.un.org/files/high-level_expert_group_n7b.pdf.
10. China is the number one country, with the highest energy consumption in the world. However, due to the limitation in the available data and sources, it has not been considered for the purposes of this study.
11. Source: World Energy Balances, International Energy Agency (IEA), https://www.iea.org/reports/world-energy-balances-overview#.
12. Law 7/2021, of May 20, on climate change and energy transition.
13. https://www.miteco.gob.es/es/cambio-climatico/temas/el-proceso-internacional-de-lucha-contra-el-cambio-climatico/naciones-unidas/protocolo-kioto.html
14. https://www.eea.europa.eu/publications/annual-european-union-greenhouse-gas-2
15. Law 2019-1147, of 8 November 2019.
16. Law 2021-1104, of 22 August 2021.
17. https://www.eea.europa.eu/publications/annual-european-union-greenhouse-gas-2.
18. https://www.eea.europa.eu/publications/annual-european-union-greenhouse-gas-2.
19. https://www.gov.uk/government/statistics/provisional-uk-greenhouse-gas-emissions-national-statistics-2019.
20. https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2020.
21. Source: Big Shift, Small Steps – Survey of Sustainability Reporting 2022, KPMG.
22. The OECD guiding principles for effective climate governance on corporate boards are climate accountability, subject command, board structure, materiality assessment, strategic integration, incentivization, reporting and disclosure and exchange. Source: https://www3.weforum.org/docs/WEF_Creating_effective_climate_governance_on_corporate_boards.pdf.
23. Material topics are topics that represent an organization's most significant impact on the economy, environment, and people, including impacts on human rights. The process to identify these topics is often called materiality assessment, and usually involves a survey with key company stakeholders on what the sustainability themes that they deem to be relevant in their relationship with the business in question.
24. Guidelines 2019/C 209/01. The guidelines were prepared in accordance with art. 2 of the Directive 2014/95/EU of the European Parliament and of the Council as regards disclosure of non-financial and diversity information by certain large undertakings and groups (**NFRD**), in order to assist companies concerned to disclose non-financial information in a relevant, useful, consistent and more comparable manner.
25. According to the Green Technical Advisory Group, there are 47 "taxonomies" in effect or under development.
26. Proposal for a Regulation of the European Parliament and of the Council on the transparency and integrity of Environmental, Social and Governance rating activities. It provides, among other things, to clarify under what circumstances ESG ratings fall within the scope of the standard and what activities are excluded, establish the obligation for EU suppliers to be authorized by ESMA or in which cases the different ESG factors will have to be weighed.
27. "Code of Conduct for ESG Ratings and Data Products Providers", see at https://www.icmagroup.org/assets/DRWG-Code-of-Conduct-for-ESG-Ratings-and-Data-Products-Providers-v3.pdf.
28. It refers to the Directive EU) 2024/825 of the European Parliament and of the Council of 28 February 2024 amending Directives 2005/29/EC and 2011/83/EU as regards empowering consumers for the green transition through better protection against unfair practices and through better information, entered into force on March 26, 2024. EU member states shall adopt and publish the measures in the Directive by March 27, 2026 and apply them from September 27, 2026. Some jurisdictions have already contemplated the implementation of this Directive, as it is the case for Spain with the proposal of Draft Bill on Sustainable Consume Practices.
29. "Global trends in climate change litigation: 2022 snapshot", Setzer, J., and Higham, C., June 2022, see at https://www.lse.ac.uk/granthaminstitute/publication/global-trends-in-climate-change-litigation-2022/.
30. ESMA TRV Risk Analysis, "The financial impact of greenwashing controversies", December 19, 2023, ESMA50-524821-3072.
31. Proposal for a Directive of the European Parliament and of the Council on substantiation and communication of explicit environmental claims (Green Claims Directive), COM (2023) 166 final.
32. OECD (2023), G20/OECD Principles of Corporate Governance 2023, OECD Publishing, Paris, https://doi.org/10.1787/ed750b30-en.

33. There are currently 31 active countries with CGI's network presence (Chapters Zero), spread across all continents. There are chapters-zero in the UK, France, Germany and the US. In Spain, for example, there is an emerging chapter hosted by the University of Navarra and sponsored by a group of non-executive directors of relevant corporations.
34. Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022, amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting.
35. Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020, on the establishment of a framework to facilitate sustainable investment.
36. Article 2 point 13 establishes that 'public-interest entities' means: (a) Entities governed by the law of a Member State whose transferable securities are admitted to trading on a regulated market of any Member State within the meaning of point 14 of Article 4(1) of Directive 2004/39/EC; (b) Credit institutions as defined in point 1 of Article 4(1) of Directive 2006/48/CE of the European Parliament and of the Council, other than those referred to in Article 2 of that Directive; (c) Insurance undertakings within the meaning of Article 2(1) of Directive 91/674/EEC; or (d) Designated by Member States as public-interest entities, for instance, undertakings that are of significant public relevance because of the nature of their business, their size or the number of their employees.
37. Proposal for a Directive of the European Parliament and of the Council on corporate sustainability due diligence.
38. The legislation will apply to EU companies and parent companies with over 1,000 employees and a worldwide turnover higher than €450 million. But it will also be applicable to non-EU companies and parent companies with equivalent turnover in the EU.
39. French Law No. 2010-788 of July 12, 2010, as last amended by French Law No. 2019-1147 of November 8, 2019.
40. French Law No. 2019-486 of May 22, 2019.
41. For more detail on the German CDD Act see Are you ready for the German Supply Chain Due Diligence Act?.
42. Royal Decree-law 18/2017, of 24 November, on Non–Financial–Information and Diversity.
43. Law 11/2018, of 28 December, which modifies the Commercial Code, the consolidated text of the Spanish Companies Law approved by Royal Legislative Decree 1/2010, of 2 July, and Law 22/2015, of 20 July, on Audit of Accounts, in terms of non-financial information and diversity.
44. Law 5/2021 of 12 April, which modifies the consolidated text of the Capital Companies Act and other financial regulations, regarding the promotion of shareholders' long-term involvement in listed companies.
45. Consolidated text of the Spanish Companies Law approved by Royal Legislative Decree 1/2010, of 2 July.
46. Law 22/2015, of 20 July, on Audit of Accounts, in terms of non-financial information and diversity.
47. Report on director remuneration of listed companies for the year 2022, https://www.cnmv.es/DocPortal/Publicaciones/Informes/IARC_2022.pdf.
48. The URD is a public document that contains information on the company's activities, risks, governance, financial and non-financial performance, and outlook. The URD is subject to the verification of an independent third party, appointed as one of the statutory auditors, and the approval of the board of directors. The URD must be fair and accurate, and the company could be exposed to sanctions if it is based on misleading or false information.
49. In 2021, an activist hedge fund launched and won a proxy battle against incumbent directors of US Company 4 and was able to successfully nominate and have elected three of its own climate-friendly candidates to the board. The outcome of this process was legally binding and leveraged shareholders' statutory rights to nominate and elect their own directors. Of course, unless a majority of directors are replaced with climate-friendly candidates, this is not a guaranteed means of ensuring the company's compliance with its ESG obligations; however, it is a good example of one of several indirect legal mechanisms available to shareholders to try to procure compliance.
50. This includes the directors that were nominated following a proxy battle by an activist hedge fund.
51. See Climate 100+ Net Zero Company Benchmark assessments for Corporate Climate Governance. Note that for the Climate 100+ Net Zero Company Benchmark, those without a score are not part of the initiative's focus group, while US Company 3 is the only one targeted, but not yet scored.
52. ISS Insights "*Corporate Climate Governance: A Subject of Growing Investor Scrutiny*", September 26, 2023 at https://insights.issgovernance.com/posts/corporate-climate-governance-a-subject-of-growing-investor-scrutiny/
53. Taking into account ratings from MSCI, Sustainalytics and S&P ESG, the second top performing company among the utilities is mostly a Spanish gas producer, so it has been disregarded for this analysis for the sake of comparability.
54. This resembles the case of proxy advisors, who became very influential in the analysis of the governance systems of listed companies. At first, issues such as their methodology and the possible conflicts of interest they faced were tackled by various self-regulation proposals. However, in the end, legislation was enacted that establishes their operating and transparency obligations.
55. A 2021 Paper – ESG and Financial Performance by Tensie Whelan, Ulrich Atz, Tracy Van Holt and Casey Clark – reviewed more than 1,000 studies published between 2015 and 2020 and found that there was a positive relationship between ESG and financial performance in 58% of the corporate studies and 43% of investor-focused studies, which tend to look at a direct relationship between ESG and performance based on benchmarks and a portfolio-level view of themes such as materiality or governance structure.
56. One of the French companies has been delisted after June 1, 2023, but all the data in the report in respect of that company refers to the regulated and public information made available to investors and the market at the time the company was still admitted to trading.



A&O Shearman is an international legal practice with nearly 4,000 lawyers, including some 800 partners, working in 29 countries worldwide. A current list of A&O Shearman offices is available at aoshearman.com/en/global-coverage.

A&O Shearman means Allen Overy Shearman Sterling LLP and/or its affiliated undertakings. Allen Overy Shearman Sterling LLP is a limited liability partnership registered in England and Wales with registered number OC306763. Allen Overy Shearman Sterling (Holdings) Limited is a limited company registered in England and Wales with registered number 07462870. Allen Overy Shearman Sterling LLP (SRA number 401323) and Allen Overy Shearman Sterling (Holdings) Limited (SRA number 557139) are authorised and regulated by the Solicitors Regulation Authority of England and Wales.

The term partner is used to refer to a member of Allen Overy Shearman Sterling LLP or a director of Allen Overy Shearman Sterling (Holdings) Limited or, in either case, an employee or consultant with equivalent standing and qualifications or an individual with equivalent status in one of Allen Overy Shearman Sterling LLP's affiliated undertakings. A list of the members of Allen Overy Shearman Sterling LLP and of the non-members who are designated as partners, and a list of the directors of Allen Overy Shearman Sterling (Holdings) Limited, is open to inspection at our registered office at One Bishops Square, London E1 6AD.

A&O Shearman was formed on 1 May, 2024 by the combination of Shearman & Sterling LLP and Allen & Overy LLP and their respective affiliates (the legacy firms). This content may include material generated and matters undertaken by one or more of the legacy firms rather than A&O Shearman.

aoshearman.com

GB

CS2406_CDD-77950_ADD-114577 (english)