



2020 THOUGHT LEADERSHIP

ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) ASSESSMENTS AND CCS

AN ASSESSMENT OF THE SIGNIFICANCE AND THE EXTENT OF THE INFLUENCE OF ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) RATINGS IN SUPPORTING INVESTMENT IN CCUS PROJECT DEPLOYMENT

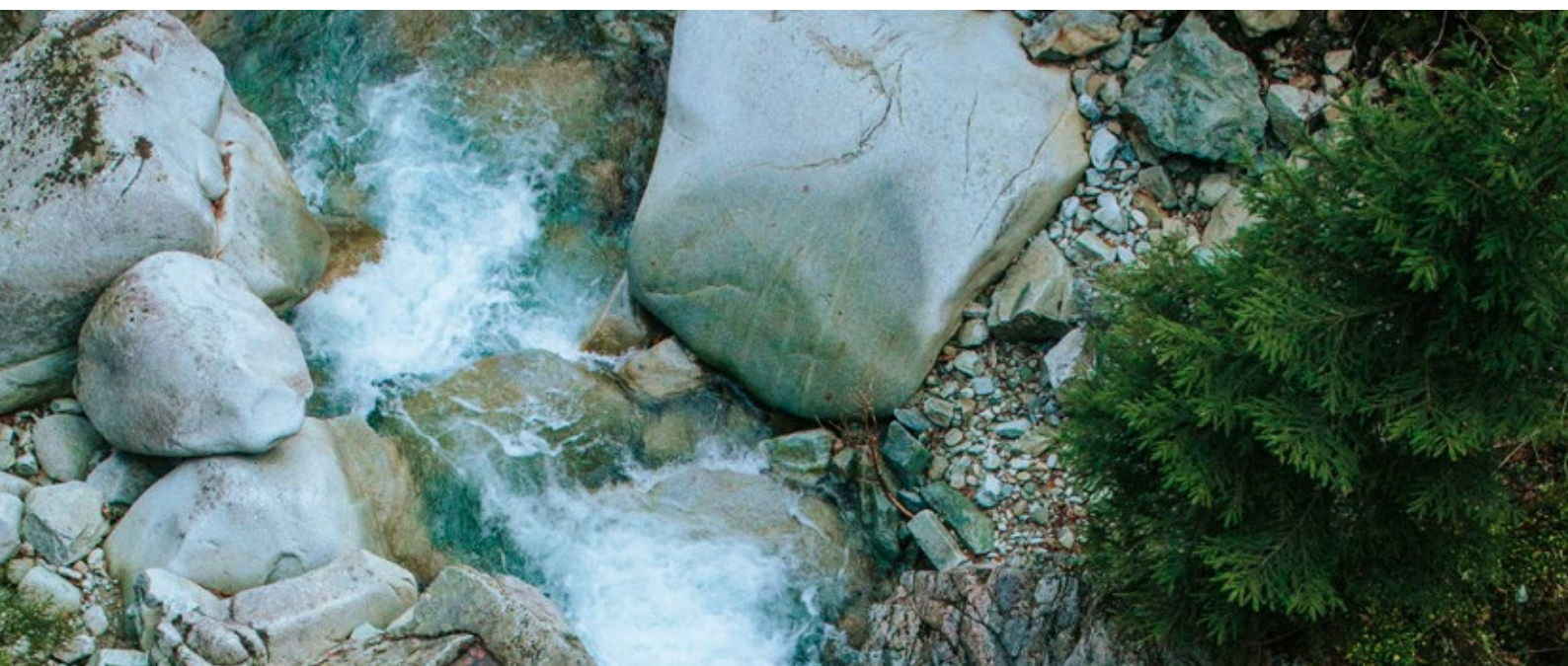


GLOBAL CCS
INSTITUTE

IAN HAVERCROFT
Senior Consultant – Legal and Regulatory

CONTENTS

KEY MESSAGES	3
1.0 PROJECT OVERVIEW	5
2.0 AIM AND SCOPE	5
PART ONE	6
3.0 THE IMPACT OF ESG RATINGS UPON A COMPANY	7
4.0 THE SIGNIFICANCE OF THE CO ₂ FOOTPRINT	14
5.0 IMPACT OF CCS OPERATIONS	17
6.0 BUSINESS CASE FOR INVESTMENT IN CCS	18
7.0 CLIMATE LITIGATION AND PUBLIC POLICY	19
PART TWO	21
8.0 THE IMPACT OF ESG RATINGS UPON A COMPANY	22
9.0 THE SIGNIFICANCE OF A COMPANY'S CO ₂ FOOTPRINT	27
10.0 THE IMPACT OF CCS UPON ESG RATINGS	29
11.0 RATINGS PERFORMANCE AND THE BUSINESS CASE FOR CCS	31
12.0 INFLUENCE OF CLIMATE LITIGATION AND WIDER PUBLIC POLICY	33
13.0 CONCLUSION	34
14.0 APPENDIX	36
15.0 REFERENCES	39



KEY MESSAGES

1. The assessment and reporting of Environmental, Social and Governance (ESG) factors has emerged as a critical aspect of commercial behaviour in recent years. Investors, shareholders, government and the wider public are increasingly focused upon organisations' performance in this space and are demanding greater levels of transparency, as they seek to determine risk exposure as well as new commercial opportunities. Corporations are similarly aware of the challenges they face, with many establishing dedicated ESG teams and employing best practice reporting schemes.
2. The imposition of more formal, regulatory obligations, requiring the disclosure of ESG information, as part of a corporation's financial reporting activities, have been introduced through changes to policy and regulation in several jurisdictions around the world. In many instances financial regulators and government that have led this change, with particularly noteworthy developments in Europe and Australia in recent years. In direct response, many large corporations in these jurisdictions are adopting an increasingly progressive model of reporting and promoting their ESG performance in order to manage their regulatory risk exposure.
3. The link between ESG ratings and improved financial performance continues to prove a topic of significant interest and debate. In recent years, several major investors, academics and market commentators have proposed a closer correlation between a company's approach to ESG and commercial performance, however, many remain cautious in drawing a definitive link. For organisations seeking to raise or access capital, however, there would appear a more decisive link between investors' decisions and a company's ESG rating. Several studies and reports, as well as wider industry experience, seemingly confirms a direct relationship between a company's ESG-related activities and the availability and quality of capital that they are able to access.
4. While investors, shareholders and the wider public are demonstrating increasing willingness to show their support for corporations with a positive approach to ESG matters, they are similarly swift to voice their disapproval, where it is perceived that companies are failing to adequately address ESG-related issues. As many corporations shift their focus beyond mere compliance and towards actively developing their position and response to ESG matters, some are now choosing to look beyond traditional shareholder-centred objectives – the 'shareholder primacy' model – and consider their impacts upon a wider body of stakeholders. Although this model is far from widespread, it is clear that what has been described by some as a 'movement', continues to gain traction and support worldwide.
5. A wide variety of voluntary and non-voluntary ESG reporting models have been developed by industry organisations, government, research bodies and market data providers in recent years. A standardised model of reporting has not, as yet, been developed and as a result, the scope and ambition of the schemes varies considerably. Although many corporations have readily adopted the more popular voluntary reporting schemes, ambiguity surrounding assessment methodologies and the number of proprietary models, continues to represent a significant challenge for some.
6. Climate change has become synonymous with the 'E' in the ESG acronym and as such, a corporation's exposure to climate-change related risks, now presents as a central aspect of many ESG assessments and ratings schemes. The Paris Agreement and subsequent commitments to achieving net-zero, are increasingly driving investor and public interest in companies' performance in response to a low-carbon future. The Institute's analysis and subsequent interviews emphasise the pressure upon corporations to examine their carbon dioxide (CO₂) footprint and climate change impacts of their operations, when reporting their ESG performance to an external audience.

7. In accordance with this wider interest, organisations will increasingly be required to reflect upon their CO₂ footprint and the materiality of climate change considerations to their operations, when reporting their ESG performance to an external audience. For those companies employing energy-intensive operations, this will prove an important factor in determining their own disclosure practices, as well as in the assessments undertaken by ratings organisations and investors.
8. The Institute's assessment and feedback from the subsequent interviews, has highlighted the significant expectation and, in some instances, obligation, for companies to report information on their greenhouse gas (GHG) emissions or mitigation activities, as part of their disclosure practices. Beyond third-party assessments of companies' ESG performance, prepared by ratings and credit agencies, several voluntary climate disclosure initiatives have also emerged in recent years. These voluntary schemes play an important role in supporting companies in identifying and reporting their emissions in a manner and format that both meets disclosure requirements and benefits investors, shareholders and wider public stakeholders.
9. Notwithstanding its potential to play an important mitigation role for companies with a large CO₂ footprint, the Institute has not identified any detailed discussion of the role of carbon capture and storage (CCS) and its impact upon ESG ratings to-date. Evidence from both the interviews and wider analysis, suggests that deployment levels and investment in CCS are currently insufficient to significantly impact ESG ratings. Despite broad awareness of the technology's potential, within the investment and ratings communities, CCS remains undervalued, both in terms of its contribution towards mitigating climate change and in its potential for improving a company's ESG performance.
10. To date, only a small number of ratings and disclosure models formally include CCS within their scope. There is potential, however, for other schemes to recognise the significant CO₂ reduction potential of the technology. The ability of many of the rankings initiatives to recognise particular emissions reduction activities, as well as companies' ability to promote these activities within their own reports, may in theory allow CCS to receive far greater recognition in the future.
11. It remains difficult at the current time to demonstrate that an improved ratings performance would justify the business case for investing in or financing CCS. While a strong correlation between an improvement in ESG ratings and a company's valuation or access to finance may be inferred from the literature, the Institute's analysis and interviews suggest that this improvement may be the result of a number of ESG-related factors and that investment decisions are unlikely to be based upon ESG factors alone.
12. Climate litigation continues to pose a serious risk to those organisations with significant CO₂ exposures. Where both opportunity and circumstances present, a challenge may be brought by interested or affected parties to the decision of a regulator or policymaker. Similarly, formal legal proceedings may be initiated by shareholders against company directors, where it is alleged that they have failed to consider or disclose the impact of a carbon constrained future upon the company's operations. A significant and growing body of case law internationally, would suggest that this will prove an ongoing concern for major carbon emitting corporations. Although only presently captured within the controversy assessments of some rating schemes, it is likely that it will play an increasingly significant role in companies' ratings assessments as these challenges progress.

1.0 PROJECT OVERVIEW

The United States Department of Energy (US DOE) requested a programme of work, as part of the Global CCS Institute's ("the Institute") Membership service offering for the 2020 financial year, which will examine the significance and the extent of the influence of Environmental, Social and Governance (ESG) ratings in supporting investment in CCS project deployment.

The review, collection of primary data and subsequent analysis, as detailed in Section 3, has been undertaken by the Institute's Commercial Team. The results of this work are presented in this report.

2.0 AIM AND SCOPE

The purpose of this study is to consider the current literature and stakeholder perspectives on CCS, the development of ESG ratings and their impact, if any, upon a company's CO₂ emissions reduction policies. The ultimate objective is to determine the significance and the extent of the influence of ESG ratings in supporting investment in CCS project deployment.

The following key questions are central to this review and are considered in turn:

- How does a company's ESG rating impact the company?
- How does a company's CO₂ footprint or exposure impact its ESG rating?
- How is CCS considered when the ESG performance of a company with a large CO₂ footprint or exposure is rated?
- Do the positive impacts of CCS (if any) on a company's ESG rating support the business case for investing in or financing CCS?
- How does climate litigation and public policy impact corporate risk and ESG ratings?

To address these questions, the Institute proposed two distinct phases to the study. The first comprises a detailed review of relevant literature, including academic publications, industry reports, government documents, conference proceedings and web-based resources. The resulting analysis, set out in Part 1 of this report, summarises the key concepts, themes and trends that may be drawn from the current literature, including those areas where there appears to be competing or divergent views. The review also afforded opportunity to identify the issues that would merit further examination during the subsequent interview phase of the study.

The second phase of the Institute's analysis sought to test the findings and assumptions of the first phase of the project, through a series of semi-structured interviews. Informed by the earlier analysis, the Institute sought to interview those organisations responsible for developing ESG ratings, banks and financiers, and representatives from companies with significant carbon dioxide exposure. Further details of the processes undertaken and the results of these interviews, are contained in Part 2 of this report.

PART ONE

The purpose of this review, described in the following sections, is to provide an overview of the literature and current analysis on ESG ratings, as well as the impact of these ratings upon companies' CO₂ emissions reduction policies. Ultimately, however, the analysis seeks to determine the significance and the extent of the influence of ESG ratings in supporting investment in CCS project deployment.

A range of source materials were reviewed in order to complete this analysis, including; academic literature, industry publications and analysis, government documents and reports, conference proceedings and wider web-based resources. The sources examined and subsequent analysis are international in their scope, however given the ultimate consumer of the report, each section contains US-specific materials and analysis.



3.0 THE IMPACT OF ESG RATINGS UPON A COMPANY

Environmental, Social and Corporate Governance (ESG) issues and a company's approach to addressing these factors, has become an increasingly significant consideration for investors, shareholders and the wider public. A review of the wide range of literature published on the topic in recent years, demonstrates how this topic has emerged from a peripheral or aspirational activity, to become a mainstream and essential aspect of commercial behaviour and one that is likely material to a business's core activities.

From a corporate perspective, ESG ratings would also now appear to present a significant opportunity, with demonstrable benefits for those organisations that seek to actively improve both their performance and reporting of these activities. Beyond obligation or simple compliance, many organisations now recognise that a progressive and practical approach to ESG matters will position them as an increasingly attractive investment proposition to both investors and shareholders (Goldman Sachs, 2020; McKinsey, 2019; Strine et al, 2020).

The rationale behind ESG assessment, the nature of the various assessment and disclosure models and the rapidly expanding audience for analytical material of this nature; has been the subject of comprehensive analysis and commentary. More recently, however, much of the focus appears to have centred upon the significance of ESG for investors and companies, highlighting the rising importance and potential opportunities of the discipline for these individual groups (LSEG, 2018; Bank of America, 2019).

International action, in the form of the adoption of the UN's Sustainable Development Goals (UN SDGs) and the conclusion of the Paris Agreement, as well as the development and strengthening of domestic climate policies; has clearly afforded greater impetus to the promotion and consideration of ESG matters (BlackRock, 2020; Grantham Institute et al., 2020; GRI,

2020). For many companies, including those with a significant CO₂ footprint, the increased political will and rising investor scrutiny should result in greater significance being attached to ESG performance disclosures. As one ratings organisation has suggested, *"in 2020, ESG storms the CFO's office, elbowing its way onto the bottom line"*, to drive corporate action and the terms for future financing (MSCI, 2020).

3.1. A shift from voluntary to mandatory reporting

A shift in the approach adopted by many companies, towards increased levels of reporting and public ESG disclosure, is in part a response to the transparency objectives proposed by voluntary, third-party reporting or rating schemes. Globally there are, however, an increasing number of policy and regulatory obligations, which include reporting requirements or that require investors to adopt more sustainably minded investment strategies. In some instances, regulators have also sought to endorse more targeted, voluntary reporting obligations, as part of their guidance to investors and corporations (see the box below for discussion on the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD)). While many commentators have previously noted policymakers and regulators proactive stance to regulation and guidance, it would appear the pace of these developments has quickened in recent years with increasing promotion of this approach (Swiss Re, 2017; GRI, 2020).

TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

The founding of the Task Force on Climate-related Financial Disclosures (TCFD) in 2015, by the Financial Stability Board, signalled a global step-change for climate-related reporting. The TCFD's subsequent recommendations are designed to enable companies to identify and disclose relevant information, which would be useful to the wider finance and investment community when determining climate-related financial risks and opportunities.

Four thematic areas - governance, strategy, risk management and metrics and targets – form the basis of these recommendations and are supported by climate-related financial disclosures that are aimed at providing the key climate-related information for investors and others.

The recommendations have now been adopted by many organisations worldwide with nearly 800 public and private-sector organisations announcing their support for the TCFD and its work, including global financial firms responsible for assets in excess of \$118 trillion. An important signifier of the recommendations' relevance has been the regulators and government organisations in several jurisdictions that have indicated that their use is to be considered an important facet of corporate reporting best practice.

In Australia, the emerging reporting landscape for corporations offers a tangible example of these changes. Industry regulators, the Reserve Bank of Australia (RBA), the Australian Securities and Investment Commission (ASIC) and the Australia Prudential Regulation Authority (APRA) have all in recent years emphasised the inclusion of ESG matters, particularly climate change, in directors' decision-making and disclosure procedures. A recent 2019 legal opinion confirmed the magnitude of the challenge, in turn emphasising that there was an increased pressure upon company directors to remain apprised of the risks associated with climate change upon their businesses, as well as to disclose these risks through their mandatory financial reporting frameworks. The opinion noted in particular, the *"striking degree of alignment"* among financial regulatory bodies, as to the significance of climate risks and the likelihood of increased scrutiny of any climate-related disclosures (CPD, 2019).

Many other countries have seen similar developments, with financial market regulators, stock exchanges and wider government departments, issuing stricter guidance and or requirements around reporting. The European Union's (EU) Action Plan on Financing Sustainable Growth, which was released in 2018, included a host of provisions aimed at supporting sustainable investment. A new Regulation, introduced

as part of this broader Action Plan, will apply from 10 March 2021 and obliges financial market participants and financial advisors to disclose specific information on their approaches to the integration of a 'sustainability risk' into their investment decisions (EU, 2019).

In the United Kingdom (UK), the Financial Conduct Authority (FCA) and the Bank of England's Prudential Regulatory Authority (PRA) issued a joint statement on climate change, which included a commitment to work towards enhancing climate-related disclosures (FCA et al., 2019). The government's wider 'Green Finance Strategy', which was released in 2019, includes several commitments to increasing reporting obligations, including; a requirement for all listed companies and large asset owners to disclose in line with the TCFD recommendations by 2022 and the establishment of a taskforce to consider the *"most effective way to approach disclosure, including exploring the appropriateness of mandatory reporting"* (UK, 2019).

The increasing interest in ESG-related disclosure in the United States (US), was highlighted in the statement from BlackRock's CEO in 2019, where it was suggested that future support for companies and board directors would likely be contingent upon the quality of their sustainability-related disclosures. While many US corporations have embraced the reporting frameworks found in voluntary schemes, such as the TCFD or the

Global Reporting Initiative (GRI), commentators have emphasised the current limitations to the requirements for ESG-related disclosures, including climate-change related risks, within the established Securities and Exchange Commission (SEC) requirements (ICLG, 2020; CRS, 2019, Davies et al, 2019). In response to the increasing demand for clarification, a formal petition for rulemaking on ESG disclosure was submitted in 2018 to the SEC, by investors and associated organisations representing more than \$5 trillion in assets under management (SEC, 2018).

Several new bills have been introduced to Congress over the past twelve months, in an attempt to require further, more-detailed corporate disclosures. The first Congressional hearing on ESG Matters was hosted by the Subcommittee on Investor Protection, Entrepreneurship and Capital Markets in July 2019 (Committee on Financial Services, 2019). The hearing, 'Building a Sustainable and Competitive Economy: An Examination of Proposals to Improve Environmental, Social and Governance Disclosures', considered the current position for ESG disclosure and discussed the various legislative proposals, including:

- ESG Disclosure Simplification Act of 2019 (H.R. 4329)
- Climate Risk Disclosure Act of 2019 (H.R. 3623)
- Climate Risk Disclosure Act of 2019
- Corporate Human Rights Risk Assessment, Prevention, and Mitigation Act of 2019
- Shareholder Protection Act of 2019

The first two proposals have received significant coverage and have been reported upon widely by the investment community. The ESG Disclosure Simplification Act seeks to compel the SEC to introduce rules requiring public companies to disclose certain ESG metrics and describe how these metrics would impact long-term business performance. The Climate Risk Disclosure Act would require public companies to disclose several climate-related risks to the SEC, and therefore to shareholders and the wider public. While final legislation remains some way off, commentators suggest this recent activity is indicative of the wider demand for greater clarity and a general trend towards legislative intervention (Reynolds, 2019; Zaidi, 2019)

ROLE OF THE EU TAXONOMY

In March 2018, the European Commission proposed its Action Plan on Financing Sustainable Growth, which was aimed at supporting the re-orientation of capital towards sustainable investments, as well as addressing some of the sectoral challenges and financial risks posed by climate change. As part of its activities aimed at supporting the Action Plan, the Commission subsequently announced the development of a Regulation on the establishment of a framework to facilitate sustainable investment. The final taxonomy, developed under the Regulation that entered into force on 12 July 2020, will ultimately determine which economic activities can be considered environmentally sustainable for investment purposes.

A Technical Expert Group (TEG) was set up by the Commission to assist in the development of its Action Plan, including in the development of the taxonomy. The TEG was asked to develop recommendations for technical screening criteria, within the framework of the Regulation, that would assist in discerning economic activities which can substantially contribute to climate change mitigation or adaptation.

The TEG's final report, published in March 2020, contained detailed recommendations for the overarching design of the Taxonomy and screening criteria for 70 climate change mitigation and 68 climate change adaptation activities. For the purposes of this report, it should be noted that carbon capture and storage qualifies as a taxonomy-eligible sector.

The TEG's report received significant attention from industry and the finance community throughout Europe and worldwide, who recognised its potential impact upon their investment and disclosure strategies, as well as its capacity for driving public and private capital toward more sustainable investments.

The TEGs recommendations will inform the Commission in the development of the delegated acts that will ultimately support the aims of the Regulation. The Commission anticipates that the delegated act on climate change mitigation and climate change adaptation will be completed by Autumn (northern hemisphere) 2020.

To date, the SEC has rebuffed calls from a wide group of stakeholders, including industry and investors, to expand their formal ESG guidance or rules. In its recent amendments to the rules governing the Management's Discussion and Analysis (MD&A) sections of reports, filed by companies under the Securities Exchange Act, the SEC declined to include specific requirements on climate change or other environmental, social and governance (ESG) disclosure.

3.2. ESG performance and capital allocation

The link between ESG performance and the cost of raising capital, or the ability to access it, is likely to be of concern to many companies. Market analysis and wider academic commentary would appear to be crystallising around this view, with several studies and reports confirming a link between a company's ESG-related activities and the availability and quality of capital that they are able to access. Several commentators now suggest that corporate transparency around ESG matters has become a mainstream consideration for all sectors of the investment community (MSCI, 2019; Goldman Sachs, 2018; Breckinridge 2016).

Recent research also suggests that investors are now actively seeking out companies that not only address ESG issues, but also take a proactive stance to addressing matters that may not directly impact the organisation's bottom line (Eccles, 2019). Analysis from the ratings agency MSCI implies that ESG matters will increasingly impact the pricing of financial assets and the risk and return of investment in the coming years, which may ultimately lead to a large-scale re-allocation of capital (MSCI, 2019).

Analysis quantifying the impact of companies' ESG commitments and the effect they may have on access to capital, remains somewhat limited. Research undertaken by S&P in 2017, revealed that over a two-year period, there were 106 cases where environmental and climate concerns directly impacted a company's ratings (resulting in an upgrade, downgrade, outlook revision or CreditWatch placement) (S&P, 2018). More recent analysis from MSCI confirms this trend and reveals that the markets have rewarded those organisations which have received MSCI ESG Ratings upgrades in developed markets (MSCI, 2020a). In the US, Bank of America has highlighted similar findings for US companies, with those corporations perceived as "good" by investors, recording significantly lower costs of capital. (Bank of America, 2019).

POST-COVID RESPONSE

The COVID-19 crisis and the approach to be adopted to post-pandemic financing and recovery mechanisms, has introduced a further dimension to the discussions surrounding ESG issues. Several governments and industry groups have proposed that support and reconstruction initiatives include more detailed commitments to sustainability concerns or are to be made contingent upon strengthening national or global climate change ambitions – see for example the recent report from the Coalition of Finance Ministers (2020).

One example may be found in a recent measure announced by Canadian Prime Minister Justin Trudeau, which committed to linking the provision of economic aid to the requirement for more environmentally sustainable corporate decisions. Under the proposal, large businesses (with revenues above \$300 million) that apply for Government

loans, are required to publish annual climate disclosure reports as well as reports that link to wider environmental sustainability goals (Canadian Government, 2020).

In the US, there have been appeals for a similar approach to be adopted, with several major investors and corporations proposing the Federal government's post-COVID recovery package, include measures aimed at promoting a more sustainability-focused and resilient economy. The many organisations promoting the 'Lead on Climate 2020' proposal, recently urged Congress to adopt a net-zero emissions economy by 2050, as part of a climate-focused economic recovery strategy. The group also proposed greater investment in sustainable infrastructure and further consideration of longer-term strategies such as carbon-pricing (CERES, 2020).

3.3. ESG and commercial performance

The link between a company's ESG activities and its financial performance has been the subject of substantial academic and empirical analysis in recent years. While more recent commentary would appear largely positive, several studies appear cautious as to the exact nature of the relationship, citing concerns around correlation and causation, uncertainties around which element of ESG drives performance, or a perceived inability to clearly measure ESG performance (Florencio et al., 2019; Porter et al., 2019; Swiss Re, 2017; Eccles and Serafeim, 2013).

A report on the value of the ESG investment proposition, published by McKinsey (2019), points to an extensive body of evidence that suggests there is a positive correlation between a corporation's approach to addressing ESG matters and positive equity returns. Goldman Sachs' (2020) review of ESG investment strategies would similarly support this view and advises that this form of investment will ultimately generate sufficient return to cover its fees and provide investors with the necessary assurance for it to be considered a long-term investment product. Analysis by Morningstar (2020) of a substantial number of its European sustainable funds, over a one, three, five, and ten-year time horizon, revealed that many of these funds had outperformed their more traditional peers. In addition, the sustainable funds had demonstrated significant resilience during the COVID-19 sell-off in early 2019.

In the US, the more positive view of the relationship between ESG activities and commercial performance is also shared by several commentators, although some note that there remain uncertainties or conflicting views (Deloitte, 2020; Bank of America, 2019). A wide-ranging survey of US asset managers, undertaken in 2018, revealed that 82 per cent think strong ESG practices can lead to higher profitability and companies adopting these practices may be better long-term investments (Bloomberg and Morgan Stanley, 2019). The same survey also revealed 62 per cent of asset managers believed that financial returns may still be maximised while investing sustainably.

3.4. Shareholders, the public and the modern company

The commercial rationale for improving ESG performance is undoubtedly an important consideration for companies, however, there are further substantive reasons for improving a company's reporting and rating performance. Several commentators emphasise investors, shareholders and the wider public's increasing willingness to show their support, and conversely their disapproval, for companies' approach to engagement on ESG issues (McKinsey, 2020; Eccles, 2019; Nordea, 2017). Recent years have seen many examples of the increasing influence of socially conscious investment practices, the rise of the 'enlightened shareholder' and public activism where it is perceived that corporations are failing to sufficiently address ESG-related issues.

Failure to address the concerns of these wider stakeholders, has led to some companies facing very significant direct and indirect risks. Equally, shareholders and investors are increasingly willing to force change within an organisation, where it is perceived that a company's core business practices will impact ESG-related issues. A recent spate of climate-related resolutions, filed by shareholders at the annual meetings of oil and gas producers, are indicative of the scale and material nature of these risks.

AUSTRALIAN SHAREHOLDER RESOLUTIONS

Australian investors are taking an increasingly proactive stance on climate change, with several major resources and oil and gas companies facing pressure to address climate change and adopt more supportive policy approaches to mitigation.

In late 2019, two major BHP shareholders announced that they would support a resolution regarding the company's position on lobbying at the annual shareholder meeting. The two shareholders, one an institutional investor the other a pensions fund, sought to pressure the company into reconsidering its memberships of energy industry bodies that were perceived to be hindering Australian climate policy. While the resolution ultimately failed, 22 per cent of the company's shareholders voted in favour, with another 7 per cent abstaining. A similar resolution proposed at an Australian meeting a month later, also received considerable support from shareholders.

In early 2020, two of Australia's largest oil and gas producers, Woodside and Santos, were the subject of major shareholder resolutions aimed at compelling the adoption of firm emissions reduction targets. The resolutions were led by the ethical investment group the Australasian Centre for Corporate Responsibility (ACCR) and sought action which would reduce emissions in-line with the goals of the Paris climate agreement, including specific targets for the mitigation of Scope 3 emissions.

In the case of Woodside, over 50 per cent of shareholders supported the resolution on emissions reduction targets, despite opposition from the company's board. The result has been championed by many as a significant milestone in shareholder activism, with the largest shareholder response to a resolution calling for direct and indirect emissions targets.

A recent consumer sentiment survey, undertaken in the US, confirmed that consumers are increasingly demanding more ESG-positive practices from the companies they engage (Allianz, 2020). Not only are corporations expected to disclose the ESG risks they face, consumers are also demanding businesses proactively adopt greater socially responsible practices. Commentators also note that this pressure will only intensify, when considering the host of different actors - including NGOs, governments, consumers, employees, communities and wider membership networks - likely to have an interest in their activities (CERES, 2019; BCG, 2020).

A further driver in the shift towards greater disclosure and ESG performance, may be found within companies themselves. While not totally eschewing the aim of corporate returns, some corporates have discussed the need to look beyond shareholder-centred objectives – the 'shareholder primacy' model – and consider their impacts upon a wider body of stakeholders

(Lipton et al., 2019). These views are supported by Dr Klaus Schwab of the World Economic Forum, who recently stated that a company in the 'fourth industrial revolution', *"not only serves all those stakeholders who are directly engaged, but acts itself as a stakeholder – together with governments and civil society – of our global future"* (Schwab, 2019).

In the US, the US Business Roundtable released a statement in August 2019 to promote a redefinition of the purpose of a corporation. The statement, signed by 181 CEOs, proposed a shift away from the shareholder primacy model, to one that affirms business's commitment to a broad range of stakeholders, including customers, employees, suppliers, communities, and shareholders (US Business Roundtable, 2019). It should be noted, however, that this approach has not been universally accepted (Sustainalytics, 2020).

3.5. Diversity of ratings schemes and methodologies

The rise in awareness of ESG issues and the significant growth in the use of ESG reporting schemes, has seen the emergence of a wide range of voluntary and non-voluntary ESG standards initiatives and ESG ratings models. For a company keen to determine the impact of these ratings and rankings, it will be important to consider which schemes may offer ratings based upon its disclosures and operations and those which it may use to volunteer its own information on ESG performance.

To-date, a wide range of models have been developed and promoted by industry organisations, government, research bodies and market data providers. Detailed proprietary offerings, aimed at providing rankings and ratings of companies and investment funds' ESG performance, have been developed by a host of specialist providers. Well-known market analysts and research organisations including ISS, S&P, Sustainalytics, MSCI and FTSE Russell, are just a few examples of those offering these products.

Wider non-commercial ESG ratings, developed by non-governmental organisations and found in national reporting regulations and stock exchange listing requirements, are also an important feature of the reporting landscape. Examples such as the ESG standards initiatives, developed by the Principles for Responsible Investment (PRI), the Sustainability Accounting Standards Board (SASB), the Global Reporting Initiative (GRI), and Integrated Reporting (IR); have received considerable support from industry and investors in recent years. For those organisations seeking to adopt a widely recognised 'benchmark' for their climate-related disclosures, the model proposed in the recommendations of the Taskforce on Climate Related Financial Disclosures (TCFD), discussed in the box above, offers perhaps the most comprehensive and feted example.

Companies may also find themselves voluntarily or involuntarily covered by several ratings models, notably where they are required to comply with reporting obligations and have also adopted voluntary international ESG reporting standards. In several jurisdictions, financial regulators are actively promoting the use of voluntary standards to promote disclosure and address critical ESG issues relating to climate change and human rights. In some jurisdictions, shareholder-proposed resolutions have also led to companies adopting specific reporting models to support their ESG-related disclosures, which has led to the rapid adoption of particular models such as the TCFD framework (EY, 2020; ACSI, 2019).

The proprietary nature and the absence of a standardised approach has resulted in the broad scope and objectives of the various ratings and disclosure models, currently employed around the world (LSEG, 2018; Bank of America, 2019; ICLG, 2019). Several commentators note that these variations make the various ratings difficult to compare and as such, remain hard to rely upon exclusively when undertaking assessments of a company's performance (Poh, 2019; Berg et al., 2019). A recent study from MIT's Sloan business school, highlighted the current issue of the same company receiving different ratings from different rating agencies and the consequential effect, that a company's efforts to improve scores with one rating provider may not necessarily result in improvement in other models. The net result of these differing requirements and definitions, is that companies themselves are unable to target a single, homogeneous standard (Berg et al, 2019).

4.0 THE SIGNIFICANCE OF THE CO₂ FOOTPRINT

4.1. Role in determining ESG rating

Notwithstanding the increased focus upon ESG issues more generally, it is the ‘environmental’ aspect of the acronym that has proven increasingly significant for both companies and investors in recent years. In many instances, it is climate change that has become synonymous with the ‘E’ in ESG and is now driving a steady increase in reporting and assessment activities. The conclusion of the Paris Agreement, the drive towards net-zero targets and global movements aimed at mobilising commitments to sustainable finance, are among the reasons proposed for investors’ and the wider public’s heightened focus upon companies’ climate-related performance (GRI, 2020; CDP, 2019; UN PRI, 2018).

The risks posed by climate change to companies’ operations is the subject of considerable discussion within ESG literature and wider commentary. A 2018 study from the Global Sustainable Investment Alliance reported that money managers in the US had described climate change as the most significant ESG-related issue for them in asset-weighted terms (GSIA, 2018). Several assessments of the scale of this risk are proposed, including a recent study from CERES that suggests the risks posed by climate change-related impacts, to 500 of the largest global companies, may be set at just under a trillion US dollars (CERES).

The result of this challenge is that companies will increasingly be required to examine their CO₂ footprint and in particular, the ‘materiality’ of climate change considerations to their operations, when reporting their ESG performance to an external audience. Heightened levels of public and investor scrutiny will also require companies to consider how their operations are perceived, particularly where they are subject of ESG ratings compiled by third-party agencies. Many of the

world’s largest corporations have already taken steps to address these challenges, with almost 90 per cent of S&P500 companies now reporting on ESG issues and/or climate-related financial risk (ERM, 2020).

4.2. GHG emissions are increasingly material

The significance of ‘materiality’ has been the subject of considerable analysis, and recent commentary confirms that investors are increasingly seeking out those companies which proactively address material ESG risks that are relevant to their financial performance (CERES, 2019; Eccles and Klimenko, 2019). Analysis also suggests that those companies which have proven successful at addressing material sustainability issues, have outperformed those which have failed to do so (Khan et al., 2015).

An increased focus upon climate change within many assessment methodologies and ratings schemes, would suggest that an organisation’s GHG emissions and CO₂ footprint will undoubtedly prove a material ESG consideration for many companies. Determining how ‘material’ to the operations of a company these particular items are, will therefore be a critical aspect of the assessment process, particularly for those companies employing energy-intensive operations.

An example of how companies may determine likely material sustainability issues, on an industry-by-industry basis, is found in the work of the SASB in the US (SASB, 2020). The SASB’s ‘Materiality Map’, is designed to assist organisations in identifying and prioritising ESG issues in accordance with their industry sector. The tool is aimed at identifying those issues that are likely to impact the company’s financial condition or operating performance and therefore important to investors. GHG emissions are a critical consideration across many industry sectors within this Map. Similar

guidance is provided in the work of the Task Force on Climate-related Financial Disclosures (TCFD, 2017), the International Integrated Reporting Council (IIRC, 2013), and Climate Change Reporting Framework (CDSB, 2019), voluntary reporting models that seek to assist companies in reporting climate change related information of value to investors and the wider finance and insurance community.

4.3. Growing expectations and obligations to disclose climate change risks

Any formal obligation to disclose material sources of GHG emissions, or detail of the extent of an organisation's CO₂ footprint, will be an important consideration for companies. As discussed in the previous section, there would now appear to be a more general trend towards more detailed disclosure of this information in both financial and non-financial reporting obligations. Commentary and analysis reveal both the breadth and scope of these ESG reporting requirements, with several statistics emphasising both the number of reporting instruments and jurisdictions introducing these obligations (GRI, 2020; LSEG, 2018; Goldman Sachs, 2018). Recent years have also seen the rise of supplementary guidance, developed by regulators and aimed at supporting existing regulatory obligations for disclosure. While guidance of this nature has addressed a host of ESG-related factors, there have been several instances where this has advised organisations how to report on climate change (GRI, 2020).

Recent regulatory developments in the EU and at Member State-level, as well as proposals in New Zealand and Canada; suggest that in some jurisdictions, regulators are increasingly willing to introduce obligations to disclose information on climate change-related issues. In the US, there remains a conspicuous absence of mandatory disclosure obligations, despite the increasing demand from investors and the wider public, a position that some commentators have suggested leaves the US financial system lamentably exposed to future financial stress (CAP, 2020). While voluntary models are increasingly employed by US corporations, there is concern that the lack of a standardised approach, will lead to the disclosure to investors of irrelevant or incomplete information (CRD, 2019; Davies et al., 2019). In the absence of specific guidance from the SEC, it remains to be seen whether the proposed bills requiring greater disclosure (discussed in section 4.1) will gain traction. The recent

'Recommendation of the SEC Investor Advisory Committee Relating to ESG Disclosure', however, acknowledges the critical nature of the issue and may represent further pressure upon the SEC to act (SEC, 2020).

The investment community also has a critical role determining a company's response to climate change, with investors now expecting companies to have clear disclosure practices that detail their strategies to address their GHG emissions or exposure to the impacts of climate change (CDP, 2019; S&P, 2019; LSEG, 2018). In the US, some shareholders also continue to push for more formal disclosure of climate-related risk and have promoted the more widespread adoption of voluntary reporting standards such as those found in the TCFD recommendations (BlackRock, 2020; ICLG, 2019). As noted previously, these expectations with regard to climate change disclosure are not reflected in the current SEC guidance. For those critical of the current status quo, the lack of transparency has resulted in a high degree of uncertainty and financial risk for potential investors. To address this, some are now calling for far greater intervention, including financial regulation and mandatory disclosure requirements (Steele, 2020). Global policy imperatives with regard to emission reductions, in light of the Paris Agreement, the drive towards net-zero and a low-carbon economy, will only serve to intensify the calls for a consistent approach.

4.4. Influence upon commercial ESG ratings

A review of several of the ESG ratings methodologies, developed by professional services organisations to date, reveals that a company's CO₂ footprint or exposure will undoubtedly prove significant in determining its ESG rating. Although the methods used, as well as the scope of climate and energy related information contemplated in each of these ratings methodologies, are highly subjective, some common themes can be identified. Information considered by some of these commercial rating schemes (in the models which are publicly available), includes; a company's GHG emissions, the value of their low-carbon assets, the organisation's risk profile and proposed strategies for managing these risks.

The divergence between the various methodologies employed and the ratings they produce, has been the subject of considerable discussion within academic literature and wider ESG commentary. In a perhaps



more extreme example, ESG ratings have been described by an SEC commissioner as *“labeling based on incomplete information, public shaming, and shunning wrapped in moral rhetoric”* (Peirce, 2019); however, many others have pointed to the

inconsistencies and opacity that the absence of a standardised approach has created. The approach that ratings organisations have taken to climate change risks within these rankings, must be considered accordingly.

5.0 IMPACT OF CCS OPERATIONS

CCS may positively contribute to the ESG performance of a company with a large CO₂ footprint in several ways. The means through which improvements in ESG performance are realised would differ by company depending on where they fall on the CCS supply chain. For example, for a company that uses fossil fuels to generate power, investment in CCS demonstrates an understanding of the market and policy risks they face and would directly contribute to emissions reductions. For an energy intensive manufacturer, purchasing electricity from a power plant with CCS could significantly reduce their embedded emissions and contribute to an improvement in their ESG rating. Similarly, investors and financial organisations could improve their own ESG ratings by investing in CCS projects.

Ultimately, however, the question of whether investing in CCS improves a company's ESG rating, is entirely reliant upon whether CCS is directly or indirectly incorporated into the methodologies and guidance used to assess ESG performance.

The Appendix to this report includes an assessment of the methodologies and guidance documents for a range of selected international ESG reporting and rating frameworks. The assessment considered the voluntary and non-governmental reporting and ratings schemes, commercial or third-party ESG and credit ratings, regulatory requirements and stock exchange listing requirements. The Appendix provides a brief description of each scheme, its coverage, energy and climate information it requires and any detail of its coverage of CCS.

Although limited to only 27 initiatives, it is clear from the Institute's assessment that CCS is not widely recognised as a specific factor in determining an organisation's ESG performance. Only a slim number of these frameworks include explicit reference to the technology, however, CCS activities may still contribute to ESG performance through their inclusion in other elements of an organisation's reporting activities.

Several of the ratings methodologies included in the Institute's assessment, include consideration of an organisation's GHG emissions. It is conceivable therefore, that the reporting of emissions reductions, achieved through a company's investment in and deployment of CCS, may indirectly improve its ESG performance. A similar pathway for highlighting and recognising the contribution of CCS, may be afforded under reporting schemes that enable companies to report their own efforts to reduce their CO₂ footprint and reduce emissions.

6.0 BUSINESS CASE FOR INVESTMENT IN CCS

Several major investors, financial institutions and asset managers, including JP Morgan, the Asian Development Bank and Black Rock, have made clear in recent years, their intention to limit their investment in fossil energy. In addition, there would now appear to be near industry wide agreement, as to the significance of climate change within future investment strategies. Commentary and analysis, examined in the preparation of this report, also suggests that the CO₂ footprint of an organisation's operations will undoubtedly prove a material consideration for a range of stakeholders; including those seeking to invest in a company, who will be keen to understand the company's exposure to climate risk, and companies themselves who will be keen to determine the impact this may have upon the future cost of raising or accessing capital.

Wider commentary and analysis, as discussed elsewhere in this report, does suggest that a company's CO₂ footprint or exposure will undoubtedly prove significant in determining its ESG rating. Taking these considerations into account, it is perhaps not unreasonable to suggest that companies with a significant CO₂ footprint, which have taken steps to adopt a comprehensive decarbonization strategy or a pro-active approach to disclosure of climate risk, may see this reflected in an improved ESG-rating performance.

To date, however, there has been little consideration of CCS within ESG ratings, or of its subsequent impact upon a company's ESG performance. As such, whether a specific investment in CCS may have a significant impact upon ESG ratings and consequently supports the business case for investment in the technology, has yet to be determined.

7.0 CLIMATE LITIGATION AND PUBLIC POLICY

Climate litigation, in its various forms, has become more widespread in recent years, with an increasing number of cases being brought globally against governments and high-emitting companies. Several, high-profile cases have succeeded before national courts and many companies and investors are taking greater notice of the risks posed by this form of litigation. Legal commentators suggest that over a 1000 climate-related challenges have now been filed in the US alone, and a further 300 in other jurisdictions (Setzer and Byrnes, 2019).

A review of climate litigation suggests that cases to-date, may be loosely attributed to one of two distinct categories, termed by some as either 'strategic' or 'routine' cases (Ganguly et al., 2018). The former are those cases which seek to set the agenda and influence the policy debate on climate change, while the latter represent more conventional proceedings that result in consequential impacts. In either instance, the now overwhelming scientific consensus on the impacts of climate change would appear to present significant opportunity for litigation, particularly where corporate decisions would not appear to reflect this consensus. Frequently cited examples of litigation include proceedings to hold major GHG emitters accountable for their contributions to climate change, or cases brought against company directors that have failed to consider or disclose the impact of climate change upon a business.

In Australia, the recent Hutley opinion concluded it was 'entirely foreseeable' that an allegation in negligence may be brought against a director in the future, where climate risks had not been adequately considered by a company's directors (CPD, 2019). The introduction of legislation requiring more detailed ESG reporting in many jurisdictions, particularly with regard to the disclosure of climate change risk, will undoubtedly place a greater onus upon company executives and directors to ensure that they discharge their duties fully. For executives and directors in the US, where there

are currently no mandatory disclosure obligations in relation to climate change risk, litigation may still be brought in instances where voluntary disclosures are demonstrated to be misleading or false (ICLG, 2020; Lipton et al. 2019).

Litigation targeting specific organisations and aimed at restricting or prohibiting emissions intensive activities, may also increasingly pose a risk to the operations or core business of some organisations. While early litigation of this nature proved unsuccessful, largely due to an inability to demonstrate a causal link between an organisation's activities and climate change, more recent examples of litigation in some jurisdictions would appear to suggest a far greater number of cases will succeed in the courts. In the US, several cases have now been brought against fossil fuel companies in recent years, many of which have sought to hold corporations accountable for environmental damage or future threats to the emissions targets.

Although many of these actions have ultimately proven unsuccessful, the direct and indirect costs of litigation have proven harmful to some corporations, with commentators highlighting both the reputational damage and the likely impact to the market valuation of a listed company (Setzer, 2020, Wilder and Coutts, 2019). Notwithstanding these impacts, there has been little or no discussion within the academic and industry literature, as to whether litigation of this nature has directly impacted the ESG ratings of the companies involved.

Commercial ratings and risk agencies' consideration of 'controversies' may be one area where the impacts of litigation may impact a company's scores and ratings. Several agencies, including Sustainalytics and MSCI, offer products aimed at informing investors and shareholders, of past or ongoing situations where a company's activities negatively impact stakeholders. Within these 'controversies' assessments, companies may be awarded lower scores or ranked lower, where

there is reputational risk to the organisation, or where potential or actual impacts are observed against several ESG categories. While the exact nature of these

assessments is largely proprietary, the threat of or ongoing litigation and actual/or perceived breaches of legislation, are highlighted in some agencies' literature.

KEY CLIMATE CASES IN THE US

The following cases are demonstrative of climate litigation being brought against private corporations in the US.

State of Rhode Island v Chevron Corp. et al.

The State of Rhode Island brought a claim against 21 fossil fuel majors, to hold them accountable for the impacts of climate change and the State's consequential loss and damage. The State is bringing actions in public nuisance, strict liability for failure to warn, strict liability for design defect, negligent design defect, negligent failure to warn, trespass, impairment of public trust resources, and violations of the State Environmental Rights Act. Rhode Island is seeking to ensure that the costs associated with climate change are borne by those that have profited from the activities which are demonstrated to have caused temperature rise. The case is currently before the courts.

The People of the State of New York v Exxon Mobil Corporation

The case is one of several brought against Exxon and its leadership, for failing to disclose the true extent of climate risks within its corporate disclosures. The Attorney General alleged that Exxon had breached the State's Martin Act and had misled shareholders and investors by using two separate standards in its internal and external assessments of projected climate change costs. Although the case ultimately failed, the court distinguished the case as a securities fraud case and not one which ultimately considered climate change. To this end, Exxon was not to be absolved of responsibility for contributing to climate change.

Commonwealth of Massachusetts v Exxon Mobil Corporation

In a later case, which is currently before the courts, the Massachusetts Attorney General has brought a claim against Exxon that is in part similar to the earlier New York case. In addition to the claims concerning the disparities in the company's assessments of project climate change costs, the Massachusetts' case also alleges that Exxon has intentionally misled Massachusetts consumers through its advertising campaigns and greenwashing activities. The additional factors to be considered in this case, are being keenly monitored by all parties.

PART TWO

Part Two of this report provides an overview of the second phase of the Institute's analysis, which sought to test the findings and assumptions of the first phase of the project, through a series of semi-structured interviews. The interview questions were developed to explore each of the key themes identified in the Institute's examination and analysis of the topic, with the prior research providing a framework to guide the discussion between the interviewer and the interviewee.

In total, nine interviews were conducted during August 2020. The Institute identified nine individuals with relevant expert knowledge to be interviewed, comprising; two individuals from ratings agencies, three from the banking and investment sector, three from companies with a large carbon dioxide exposure and one expert from the ESG consulting sector. These organisations, which are all leaders in their sectors, are referred to throughout this report as either; The Ratings Agency, The Bank/Financier, The ESG Consultant or The Company.

Each interviewee provided their consent, either by email or verbally, to allow the Institute to interview them. Accordingly, the Institute committed not to identify the individual interviewed or the organisation that they represent. The interviews were conducted using online meeting platforms and ran for between 30 and 60 minutes.

The following sections provide a summary of the responses received to the study's overarching research questions:

- How does a company's ESG rating impact the company?
- How does a company's CO₂ footprint or exposure impact its ESG rating?
- How is CCS considered when the ESG performance of a company with a large CO₂ footprint or exposure is rated?
- Do the positive impacts of CCS (if any) on a company's ESG rating support the business case for investing in or financing CCS?
- How does climate litigation and public policy impact corporate risk and ESG ratings?

8.0 THE IMPACT OF ESG RATINGS UPON A COMPANY

8.1. Increasing demand for ESG-related information

The interview responses support the Institute's earlier conclusion, that ESG ratings and assessments are of increasing and significant interest to a wide variety of stakeholders. Companies would appear more frequently faced with demands for wider disclosure of ESG-related information, while many in the investment and finance community are readily adopting a more proactive stance to including ESG considerations in their investment strategies. The result, as highlighted in Part One of this report, has been an exponential rise in the number and scope of ratings schemes, reporting frameworks and voluntary standards.

The banks and financiers interviewed, emphasised the rapid growth in the ratings space and the impact they had upon both companies, investors and the wider public. Interviewees reaffirmed that ESG reporting of some type was now to be viewed as a part of a company's mainstream activities, with one emphasising it as now *"very significant for companies around the world"*. For the banks themselves, one respondent suggested that there was increasing pressure to ensure that their own reporting practises were *"on par"* with those jurisdictions where reporting standards are more advanced. As such, there was increasing pressure to ensure that global best practices were observed, irrespective of where the bank was located or headquartered. One of the interviewees in this sector noted, that clients were *"interested to know if the bank was aligned with positions observed in the UK, EU and Australia"*:

The banks and financiers similarly emphasised the relationship between ESG performance and investment risk, with all the interviewees suggesting that investors and shareholders were increasingly focusing upon ESG matters when considering their strategies. One

interviewee from this sector suggested that ESG in particular, has become *"a very strong signal for the investment community"*, with investors increasingly *"chasing those organisations with a strong ESG performance"*. As one respondent summarised:

"The minimum ESG hygiene level, that is acceptable to investors and banks, is certainly becoming higher".

For those companies with a large carbon dioxide exposure, the growing demand for ESG-specific information is an issue of which they are acutely aware. All three companies confirmed this exponential demand, with interviewees suggesting *"the space is very dynamic"* and reported instances of being *"bombarDED"* by solicitations for ESG-related outputs. One company observed:

"It would seem that almost weekly there are new methodologies being released and people engaging us"

All the companies interviewed recognised investors and shareholders desire for more-detailed information and increased transparency in reporting ESG performance and risks. The role of investors was highlighted as particularly significant, with one company observing that *"investors are driving ESG reporting and greater disclosure, not regulation"* and another remarking that *"clearly minimal levels of exposure are required by investors"*.

These views were echoed by another company, who noted that investors also appeared to be *"using ratings performance to justify their ongoing investments"*, particularly in those companies with significant CO₂ exposure. In the company's opinion, efforts to improve their own performance within ESG ratings, may help to rationalise continued investment in a sector reliant upon fossil fuels.

For some companies, ESG ratings also offer an opportunity for the organisation to proactively engage with critical topics and demonstrate wider efforts to address them. One company interviewed, suggested that ratings allowed the organisation to *“identify gaps where we could potentially improve our disclosure”*. Another company highlighted its efforts to engage with credit risk and ESG ratings agencies, to establish a *“feedback loop”* and ensure that they are *“staying minimally apprised of compliance requirements and methodologies”*.

The organisations providing these ratings and ESG assessments also, perhaps unsurprisingly, emphasised the ever-widening share of investors and companies that were looking into the impact of ESG ratings upon their business and investments. Once again, the role of the investment community was raised, with one ratings agency suggesting that ESG-focused investments were increasingly attractive *“particularly for those investors looking for long-term growth and diversity in their investments”*.

One ratings company also highlighted the relationship between ESG ratings and financial performance as a further reason for the rise in ESG-related information. The interviewee suggested that many ESG-focused funds have demonstrated low-volatility and high quality and in some instances have *“outperformed during the downturn”*. Other interviewees from the sector were more hesitant in drawing this conclusion, with one suggesting that there *“are favourable patterns to investment, but it is not conclusive”*. The Institute’s own review of the ESG landscape earlier in this report, similarly, emphasised the range of perspectives and conflicting views on this issue.

8.2. A wide range of rating and disclosure options

Part One of this report highlighted the substantial number and variety of approaches adopted in the reporting and ratings schemes that had been developed and now widely employed by companies and investors around the world. The interviews clearly reflect this, with many of the interviewees emphasising the sheer number of schemes and the perceived benefits and challenges associated with their adoption.

The perceived value of individual ratings schemes and ESG disclosure frameworks, was a strong theme amongst interviewees from the banking and finance sectors. When faced with a plethora of schemes to

choose from, these sectors recognised the value in individual ratings schemes and the value of the information they produced. The more voluntary of the disclosure schemes, specifically those produced by SASB, PRI, TCFD and GRI, were hailed as leading examples of ESG frameworks. The banks and financiers praised their widespread adoption and noted that they offered, what one bank described as, *“well-regarded examples of the open source ESG frameworks”*. The TCFD framework was singled out as a particularly important model, *“widely used in industry, around the world”* and offering a *“standardised approach to reporting that is becoming increasingly significant”*.

The more proprietary, commercial models offered by ratings agencies were also raised by interviewees from these sectors. The ratings provided by MSCI and Sustainalytics were highlighted by one interviewee as *“leaders in the ESG space”*. The scope and coverage of individual ratings schemes was also emphasised as an influence in determining their use. One respondent noted that in some instances there was also a regional preference for the approach adopted under a specific ratings model and that *“each had their own benefits”*.

Notwithstanding their recognition of ratings’ increased relevance, wider caution was urged by interviewees from this sector. Banks and financiers emphasised the rapidly growing number of schemes was proving a challenge, with one bank noting, there was *“difficulty in staying apprised of all the schemes and their requirements and criteria”*. A further and perhaps more significant challenge, however, was the *“considerable variation in the metrics used in assessments”*. To this end, it was suggested that some in the sector were now *“actively seeking standardisation, to ensure that they are advising their clients correctly”*.

In the case of the voluntary schemes, it was noted by one financier that they allow *“for high levels of flexibility and for companies to tailor their disclosures”*. A consequence of this approach, however, was that, in their opinion, *“it also allows for the bare minimum to be disclosed by companies”*.

Ultimately, however, interviewees noted that while there was clear value to be derived from ratings and disclosure frameworks, the information they provided was only one aspect used in their decision-making processes. Although these schemes *“all served a purpose”*, one bank interviewee noted:

“Banks consider a dashboard of ratings and assessments, as part of their activities. ESG ratings are but a part of that dashboard”.

The companies interviewed, shared very similar views regarding the variety and scope of the various ratings schemes and disclosure models. The three organisations all regularly engaged with agencies and had employed some of the voluntary models as part of their disclosure and reporting processes. Similar to the responses received from banks and financiers, particular schemes and models appeared to be favoured, with strong support for the voluntary disclosure standards found in the TCFD and SASB frameworks, as well as industry-led examples such as the IPIECA guidance.

One company noted that it had actively engaged the leading commercial ratings companies, Sustainalytics and MSCI, who they viewed as having “risen to the top” as key providers. The company was “actively looking to improve our score” and to “fill-in the gaps where we may have not performed so well”. Other companies, however, noted that it was challenging trying to influence and stay appraised of their performance under all the commercial ESG ratings schemes.

While all three companies interviewed agreed that there was increasing demand for this type of information, some were more circumspect as to the value or approach adopted in many of the rating

schemes and reporting frameworks. Several issues in particular were identified, these included; the absence of a standardised approach in the schemes, the methodologies employed in determining a company’s rating and the ultimate audience for these ratings.

The lack of a harmonised approach in the various models, particularly the commercial ratings schemes, was emphasised by two of the interviewees. One company noted that they “hope[d] that there is eventual consolidation of schemes”, while another suggested that:

“A level of homogeneity is emerging in the various models, but we are not sure how well industry good practice is recognised”.

One company, however, expressed concern around the push for the standardisation of models, in this company’s view, such an approach would appear to “run counter to the commercial appeal of a model to a third party”.

Concern was also expressed by one company, as to the nature of the assessment model and the transparency of the methodologies employed by the various rating agencies. The interviewee suggested that, in their



experience, many commercial ratings were “*inherently backwards looking*” and may not accurately reflect the current position or the more recent approach adopted by a company. The company described a “*lag*”, that resulted from the methodology employed and reporting style and which meant that positive actions and activities were not necessarily reported for 18-20 months. The company also described some of the schemes as a “*black box*”, where the “*the lack of transparency means it is impossible to determine how ratings are assigned and improved*”. These conclusions would appear to be borne out in the Institute’s own experiences of reviewing some of the more proprietary, commercial ratings schemes developed by credit risk and ESG ratings agencies.

The ultimate value of particular schemes was also raised by some companies. One organisation noted that in their experience “*investors are not so concerned about the ratings; it is the information being disclosed*”. These views were shared by another company, who had observed that:

“Investors are increasingly developing and using internal ESG teams, which means that there is less of a reliance upon external ratings schemes”.

The company suggested this shift had ultimately allowed for “*a franker discussion and engagement with investors*”.

The ratings organisations interviewed were understandably more positive as to the approach adopted in the development of ratings. The ESG consultant noted that while there was a broad range of ESG-related schemes, only some of them had been accepted as the norm. A company’s high-performance or use of a particular scheme had become “*a sought-after prize*”.

The criticisms levelled against some schemes, regarding their retrospective approach and the industry’s lack of standardised methodologies, were also addressed by ratings organisations interviewed. One interviewee emphasised the significant scale of their operations, in particular the size of the team charged with developing ratings. The company highlighted its willingness to engage and enable conversation with companies to potentially improve their ratings, where new information came to light.

Similar to the observations made by interviewees from the banking and finance sector, one of the ratings companies and the ESG consultant, also emphasised that commercial ratings are just a baseline in many

instances, with investors considering a range of industry-focused factors and metrics as part of their investment decisions. The ratings company suggested that “*ratings are undoubtedly a starting point*” for investors and that in addition to their assessments, they were then choosing to “*dig down into the metrics behind them*”.

8.3. Acknowledgement of the shift to more widespread disclosure

The Institute’s analysis in Part One of this report, emphasised the pronounced shift from voluntary to mandatory reporting. While in part this may be a response to the transparency objectives proposed by voluntary, third-party reporting or rating schemes; wider policy and regulatory requirements are increasingly driving disclosure in many jurisdictions worldwide. The results of the interviews would appear to support this conclusion, with interviewees from all three sectors commenting on recent developments and the likely impact of these changes.

All three companies interviewed acknowledged the increasing pressures upon them to disclose information and anticipated the introduction of further regulatory obligations requiring such practises. One company described the move towards such forms of reporting as an “*inevitable shift*” and noted that “*globally we can already see the change occurring*”. Substantive changes were already evident in some jurisdictions, with interviewees noting the recent developments in France, the UK and Europe in particular; however, one interviewee suggested these developments were heavily climate focused and “*relatively high-level*” in their scope. In the US, interviewees highlighted the SEC’s current position, as well as the increased pressure from many parties to increase disclosure requirements; as one interviewee noted:

“We are very unlikely to see a change to filing requirements under the current Administration, but the forthcoming election may change that”.

Pressure to move towards mandatory reporting was being driven by a range of organisations and groups, with one interviewee suggesting “*the FSB, central banks, TCFD movement are driving changes*”. Another company, however, thought that the “*movement is being led by an active investor network, many of whom are looking to the EU model*”. Increased pressure upon companies from investors and shareholders, as well as

a wider public, however, may already have resulted in a new normal. One company suggested that for itself and other companies, voluntary non-financial reporting has become ‘*expected*’ and a new business as usual had ostensibly translated into a mandatory reporting obligation for those companies.

While all three companies appeared to have tacitly accepted the inevitability of more mandatory forms of reporting and disclosure, the full impact of this upon the organisations was less certain. For some, it presented an opportunity and one company suggested that:

“A shift to mandatory reporting requirements should technically mean that those companies which are ahead of the game should be placed at an advantage”.

Another noted that the move to more mandatory requirements was *“not really on our radar - as a company we are market driven, not compliance driven”*. However, the same organisation noted that any impacts were likely to be offset by the fact that *“we are already providing the information required”*.

A note of caution, however, was offered by a couple of the interviewees, both of whom noted that careful attention should be paid as to the type of information that is required to be disclosed. One company suggested that there was *“a question as to the liabilities that will attach to these disclosure obligations”*, while another emphasised the need to ensure:

“any mandatory requirements must include flexibility to reflect the nuances of individual companies and be comparable to other schemes”.

Interviewees from the banking and finance sector also highlighted the increase in more mandatory forms of reporting in recent years, with one noting there was *“clearly a greater trend internationally”*. The interviewees highlighted Europe and Australia in particular, as jurisdictions which have taken significant steps to promote greater disclosure. While the US was highlighted as some way behind this approach, one bank suggested:

“a change in the political weather, could result in change in the US”

The shift towards timely and proactive disclosure of ESG-related information, which one of the companies interviewed had suggested was a potential opportunity for businesses, would also appear to be supported by one of the financiers interviewed. One interviewee from the sector suggested, that from their perspective:

“voluntary reporting is not so voluntary, if you want to be seen as a responsible company”.

This conclusion would again appear to support the view that while they are technically voluntary, many of the voluntary disclosure standards have now become mandatory reporting obligations for those companies seeking investment.

8.4. Looking beyond shareholder returns

A transition from the traditional shareholder-oriented approach, towards the paradigm of a more socially focused modern company, has also proven a significant aspect of the corporate response to ESG issues in recent years. While the concept has not been universally adopted, the boards and directors of several organisations globally, have expressed their commitment to look beyond the interests of shareholders and consider the interests of a wider body of stakeholders when promoting the best interests of their company.

One of the companies interviewed in this study, strongly emphasised their interest in this approach and stated that the discussions surrounding the ‘modern company’ represented some important strategic considerations for their business. Based upon the organisation’s *“genuine belief that the private sector is resourced to drive positive change”*, the company suggested it had already started developing its strategy to *“address issues of equity, climate change and education”*.

The company dismissed suggestions that such commitments and strategies represented mere ‘lip service’ and countered that it was a *“movement with real legs”* and that they believed there was *“a major opportunity beyond shareholder value”*.

The ESG consultant also recognised the significance of the discussions surrounding ‘*shareholder versus stakeholder capitalism*’ and suggested that this did represent *“a genuine movement”* within the corporate sphere. The interviewee, however, sounded a note of caution and questioned whether the scale of its *“impact had been overestimated”*. One example proposed, was the US Business Roundtable statement, which was released in August 2019 and signed by 181 CEOs, but had not as yet resulted in many further commitments or deliverables.

9.0 THE SIGNIFICANCE OF A COMPANY'S CO₂ FOOTPRINT

9.1. Climate risk impacts ESG ratings

The Institute's analysis in Part One revealed the substantial influence that the environmental aspect of the ESG acronym continues to exert within ESG ratings and assessments. More noticeable, however, is the role that climate change plays within ratings assessments, with several commentators suggesting that it has become synonymous with the 'E' in the ESG acronym. The development of climate-focused disclosure frameworks, greater levels of corporate climate change-related reporting and the wider integration of climate considerations into investment decisions, were all highlighted as indicative of this progression. The parties interviewed for this study, have also emphasised this increased focus upon climate change within assessment and reporting frameworks, as well as the likely extent to which it will influence performance in ESG ratings.

The organisations responsible for developing ESG ratings confirmed the influence of climate change in their own assessment models. One of the ratings organisations suggested that from their perspective *"E' is now represented by climate change"*, while the ESG consultant suggested that, together with biodiversity, equity and governance issues, *"climate change is one of the most dominant issues for investors and companies"*. The same interviewee also thought it likely that the current global pandemic would further strengthen the emphasis placed upon climate change considerations, as the world continued to realise *"the inter-dependency between human health and environmental health"*.

One ratings agency explained the nature and scope of their ratings assessment in this space, with its ratings methodology considering a range of metrics based around a *"company's climate exposure, as well as its performance on climate-related issues"*. Both ratings agencies also highlighted their consideration and use of 'controversy factors' in assessments, which sought to factor-in a company's exposure risk where there were instances of negative environmental and/or social effects upon stakeholders.

Amongst the responses from the banking and investment community, there was similar recognition of the heightened role for climate change risk and exposure within ESG ratings and disclosures. Once more it was suggested that climate change was *"front and foremost in many of the E ratings"* and had *"risen as a critical consideration within ESG ratings"*. The conclusion of the Paris Agreement and *"greater consideration of the steps to be taken to align activities with a two degree scenario"*, were proposed by interviewees as a basis for more detailed examination of organisational performance in this space.

For the banking and investment sector in particular, there was an increased focus upon climate change and its associated risks. One interviewee noted the policy prohibition initiatives to be found in the financing terms of several major banks, which had been introduced in response to fossil fuel-related activities recent years. In some instances, this closer scrutiny had resulted in changes to institutional perspectives; with one interviewee suggesting that:

"Climate risk has moved from the prerogative of the bank's ESG department, to the heart of the risk function".

The companies interviewed also emphasised the greater shift towards climate change reporting and the perceived emphasis placed upon climate risks within ESG assessments. Interviewees agreed with the suggestion that climate change was a significant aspect of ESG assessments and noted that *“Climate is the E in ESG, especially for a company with significant exposure”* and *“the E in the ESG acronym is now synonymous with climate change”*. One company suggested that *“in many instances we talk about ESG, but we mean climate change”* and that for those organisations with significant fossil fuel exposures, conversations with investors are *“focused about 90 per cent of the time upon climate issues”*.

9.2. Greater emphasis upon disclosure

In addition to the substantial weight afforded to climate change within ratings schemes and disclosure frameworks, the Institute also concluded there is now a far stronger emphasis placed upon companies' disclosure of climate-related risks and their performance in addressing their GHG emissions. In addition to the mandatory disclosure requirements that are emerging in several jurisdictions worldwide, there would also appear to be a wider expectation for companies to disclose this type of information as part of their corporate activities.

Evidence of this broader expectation was also raised by several of the interviewees, with one company suggesting that *“climate change disclosures are now expected by investors as a minimum”*. While some highlighted that many large emitters, particularly in fossil-fuel intensive sectors, have always undertaken some environmental disclosure as part of their monitoring and reporting obligations, it was felt that a greater depth and specific type of information was now being sought. The type of the information required had proven problematic for some and as one company noted:

“The demand for Scope 3 and growth trajectory information is challenging”.

While several of the interviewees highlighted pressure from investors, shareholders and the wider public, as reason for the increased pressure to disclose climate change related information; others also highlighted the role of voluntary reporting schemes in catalysing change. The ESG consultant emphasised the part that the TCFD had played in particular and described both its launch and approach as the ‘game changer’ for disclosure.

9.3. The significance of materiality

The issue of ‘materiality’ was highlighted in the Institute’s analysis, as a key factor in determining the impact of climate risk upon an organisation’s ESG ratings. The need to determine the key factors and ESG issues that will materially impact operations and consequently shareholder returns and investor value, is an important consideration for an organisation. For those corporations employing energy and fossil-fuel intensive operations, the organisation’s CO₂ footprint will likely prove increasingly material in a policy environment where there are increased commitments to GHG emissions reduction.

The ratings agencies interviewed in this study, confirmed the significance of materiality within their assessments; emphasising *“a company’s CO₂ footprint was a material and key aspect of company ratings”*. One ratings agency also suggested that the onus to report this materiality, now lay with companies themselves:

“There is little or no excuse for companies not to track and report – there are now so many models available to guide the disclosure of climate change information”.

While materiality was clearly an essential aspect of the ratings process, there was recognition that it provided only one aspect of the assessment. In addition, one agency highlighted the need to look closely at the contrasting position of different companies and noted that *“clearly those undertaking ratings will consider the impact upon different sectors”*.

The companies interviewed were acutely aware of the need to examine and disclose the materiality of their CO₂ footprint, but were also cautious as to the approach adopted by some of the ratings agencies. One company stressed that in some instances *“the materiality of GHG emissions and CO₂ footprint depends upon the rating scheme”*. The company once again highlighted the opaque nature of some ratings models and noted therefore, it was difficult to ascertain how material emissions were under individual schemes. While it was clear that climate considerations were a critical factor under some of the voluntary standards, such as CDP disclosure system, it was less clear within commercial schemes where climate is just one of many considerations.

10.0 THE IMPACT OF CCS UPON ESG RATINGS

10.1. A positive outlook, despite high levels of uncertainty

In Part One of this report the Institute considered how CCS had been included and addressed within the wide variety of ratings and disclosure schemes around the world. The aim of this review was to determine whether CCS operations could positively contribute towards a company's ESG ratings performance, particularly for those organisations with a significant CO₂ footprint.

The review concluded that there are few examples of ratings schemes, ESG initiatives or disclosure standards, that explicitly recognise the technology within their scope. In instances, however, where GHG emissions and mitigation activities are aspects of a ratings methodology, it is likely that CCS activities could indirectly contribute to a company's ratings performance by reducing its overall emissions and CO₂ footprint. While the interview responses demonstrated a high degree of uncertainty, they would appear to support the view that CCS investments may positively influence ESG ratings in certain circumstances.

The ratings agencies and ESG consultant interviewed all agreed that CCS was not explicitly addressed within their ratings schemes. There were, however, instances where they conceived that the technology would be considered by the ratings, when assessing a company with a large CO₂ footprint or exposure. One ratings agency suggested that CCS was *"likely to be considered as part of a company's GHG management activities"* and in particular, *"where there was a specific project aimed at reducing emissions"*.

The interviewees suggested that delays to more widespread deployment, had perhaps resulted in less of a focus upon the technology. One of the ratings agencies observed that while broad support for the

technology had been pledged by several companies worldwide, *"many of these commitments remained high-level"*. The ESG consultant noted:

"CCS may be included positively in ESG disclosure ratings, where there is both a clear strategy and discernible action – at present, this is not happening"

Support for this view was shared by another agency, who concluded that in their opinion it was:

"Conceivable a company could disclose CCS within its approach to mitigation, where it had a cogent case – but presently there is a lack of commercial, large-scale projects".

The agencies did, however, offer a more positive outlook for the technology and its subsequent recognition within future assessment. One agency noted their commitment to focus forthcoming assessments upon *"a company's approach to the future and carbon neutrality"*. The agency proposed that a consequence of their more dynamic approach to ratings assessments, particularly in relation to organisation's net-zero targets, *"may see CCS come into consideration"*. Similar views were shared by another agency, who thought that companies' promotion of the technology, as part of their underlying commitments to net-zero, would likely result in CCS being considered in greater detail in the future.

Interviewees from the banking and finance sectors were less positive and acknowledged that CCS was simply not considered within current ratings schemes. One financier questioned whether this was a deliberate decision by the ratings agencies, or merely reflected the fact that it was *"because no-one is doing it"*. Other interviewees, while acknowledging the technology's absence in current assessments, noted that they *"would assume that any attempt by a company to improve its climate impact would be a positive"*.



The companies interviewed also recognised the challenges faced in reporting CCS activities under current reporting methods and how it was addressed within external ratings schemes. As one company noted it was *“keen to articulate its strategy in a way that highlights storage, but CCS is not really recognised”*.

Interviewees suggested the reasons for the technology’s exclusion from these schemes, stemmed from what was perceived by investors as a lack of action, or the nascent state of the technology’s deployment. One company noted it remained *“difficult to assess how to measure progress achieved in this space”*, while another suggested that there were:

“Many questioning whether CCS will ever be deployed at scale and whether emissions reductions will be bankable”.

Notwithstanding the current status quo, companies also recognised that CCS could theoretically improve rankings performance, where it reduced an organisation’s emissions. One company emphasised the prevalent changes to the industry, noted by the ratings agencies and investors themselves, and suggested:

“As companies transition towards net-zero and 2050 commitments and CCS is expected to play a role, ratings agencies must start to consider companies plans”.

11.0 RATINGS PERFORMANCE AND THE BUSINESS CASE FOR CCS

The Institute's analysis was unable to demonstrate or conclude whether any improvement in an organisation's ESG rating, which was a result of its support for CCS, would create a business case for investment in the technology. As discussed in the preceding section and elsewhere in this report, the relationship between CCS and ESG ratings or disclosure schemes remains at a formative stage and as such, any link between CCS, ESG ratings and financial performance or shareholder value has yet to be explored. The interview responses also support this conclusion, with broad acknowledgement from all parties that it is perhaps too early to determine or assume a relationship.

The ratings agencies and the ESG consultant emphasised the role of ESG ratings and disclosure models, particularly for investors and companies. It was stressed that ratings were to be viewed as part of a far-broader set of considerations and as one agency stressed, *"ESG ratings alone are not the business case for investment"*. Another agency noted that *"investment will depend upon the investor's strategy alone"* and that a company's performance in an ESG ratings assessment would therefore be unlikely to justify the necessary investment.

The interviewees from the banking and finance sectors were similarly reticent, at the current time, about drawing a direct link between ESG performance and an improved case for investment. As one interviewee noted, *"the question was moot where the ratings schemes do not address it"*. Another interviewee from the finance sector noted that while it was *"positive that it indicates a decarbonisation strategy"*, *the focus will inevitably shift to "who will bear the cost of the activity"*.

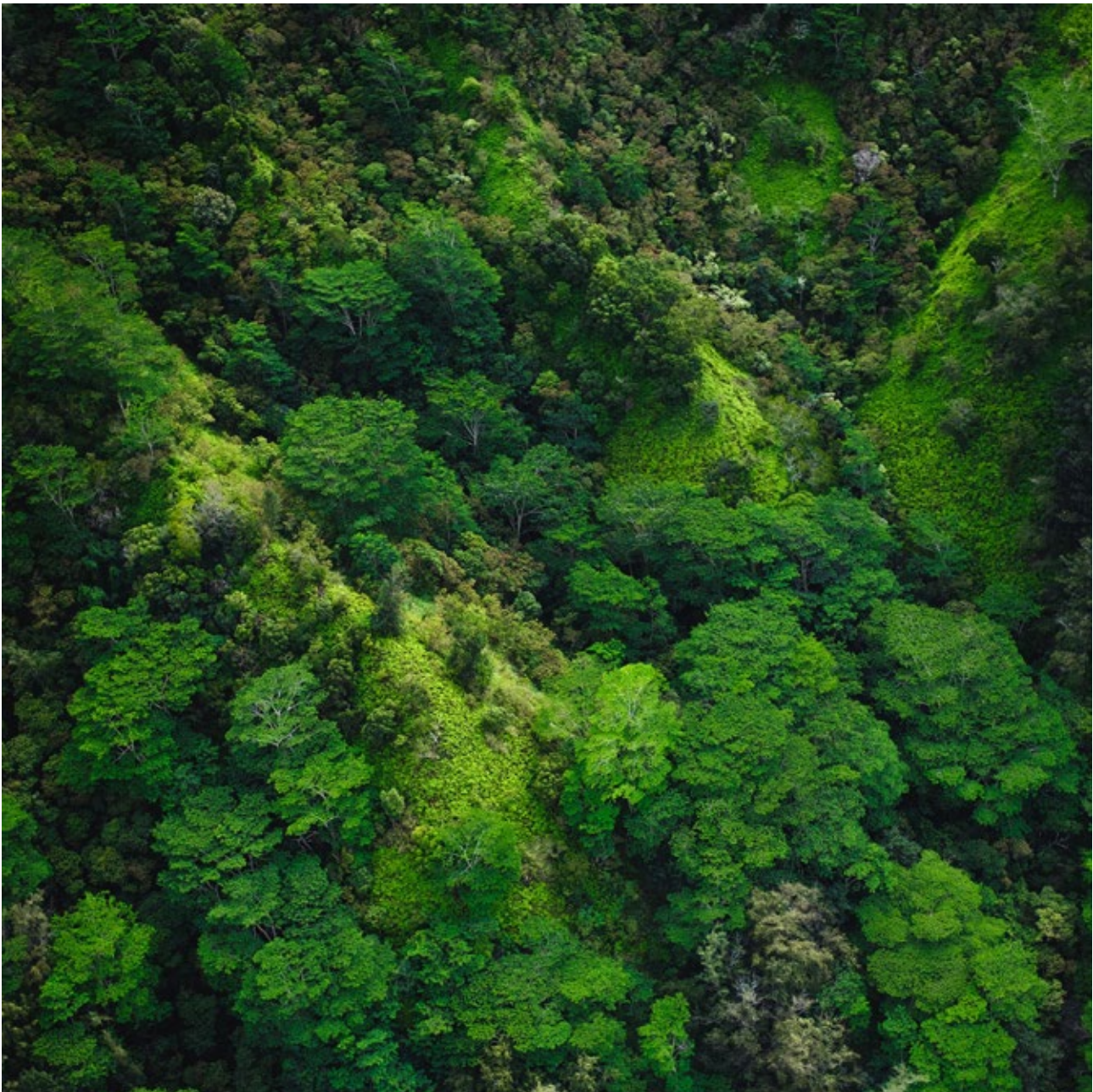
Interviewees from these sectors were, however, more sanguine as to the wider case for future investment in CCS. One interviewee suggested, it is *"likely that banks and investors would look favourably upon any activity that reduces a carbon footprint"*. The same interviewee also noted:

"Investment in CCS will likely be particularly significant for those industries that are unable to decarbonise their activities by other means – e.g. the cement sector".

Another interviewee agreed with this view and suggested that banks may decide to on-board companies with high a CO₂ footprints/fossil fuel exposure as clients, *"where CCS is an option and as part of their commitment to reducing their emissions/transitioning their operations"*.

A bank also proposed a scenario where a bank may make an investment in CCS, as part of its efforts to improve its own ESG performance, through *"investing in low-carbon technologies and supporting transition"*. While noting that this suggestion was speculative at the current time, the interviewee highlighted banks' establishment of sustainable finance funds, aimed at supporting the deployment of sustainable development goals including the technology and infrastructure that meets those objectives.

The companies interviewed were generally sceptical as to whether any ratings improvements, would merit new or further investment in the technology. One interviewee suggested that it remained hard to make an assessment because, *"the weight afforded to an investment in CCS will ultimately be up to the investor"*. Another interviewee suggested that investors were simply not focused upon this:



“Investors will ask how does this fit with your decarbonisation strategy, not your ratings performance”.

One company observed that *“if CCS surfaces, it will be because of what it may add, not its impact upon ratings”.* In the case of their own investment in the

technology, the company noted that it had little to do with their ESG ratings performance and emphasised that:

“Any investments we make, will be because of our business plans - ESG ratings improvements will not be a driver”.

12.0 INFLUENCE OF CLIMATE LITIGATION AND WIDER PUBLIC POLICY

The examination of the influence of climate litigation and public policy upon corporate risk and ESG ratings in Part One of this report, concluded that this was a highly dynamic and relatively unexplored topic. While there were several high-profile examples of litigation in jurisdictions worldwide, the Institute concluded that any subsequent impact upon the ratings assessments of the parties involved has yet to be widely discussed with much of the commentary focused upon the perceptions of shareholders, investors and the wider public. One area where it may be reported, however, is in the ‘controversies’ assessments undertaken by commercial ratings and risk agencies.

Several of the interviewees shared the Institutes’ conclusions, noting that in many instances it remained difficult to ascertain the full impact of litigation upon ratings performance. Amongst the companies interviewed, the responses highlighted the likely importance of climate litigation, but expressed uncertainty as to how this would subsequently be reflected in a company’s ratings assessment. One interviewee suggested the issue was *“not shaping or influencing our ESG strategy at present”*, while another noted:

“Aside from fines and costs of litigation, it remains hard to quantify the exact dollar cost to this risk - not entirely sure how material it is to a risk rating currently”

Two of the companies interviewed highlighted agencies use of controversy factors, when developing ratings. One company suggested that a:

“Proposed threat or ongoing litigation would likely weigh upon a particular company’s scoring”,

While another noted that they would:

“Expect it to have negative connotations for a company’s rating”.

The opacity of these ratings schemes was again emphasised by one company, with concern expressed as to how litigation was to be accounted for within these controversy factors.

Interviewees from the banking and finance sector emphasised that discussions within the sector surrounding climate litigation remained in the *“formative and superficial stages”*, but it was *“likely to be very significant going forward”*. While it was not possible to determine the topic’s impact upon ESG ratings performance at present, one interviewee from the banking sector, suggested that it was an issue *“bubbling under the surface”* and that they anticipated a generational shift in attitudes would likely drive both litigation and greater consideration of this issue.

The ratings agencies offered further insight into how the issue would be considered, with both ratings companies highlighting agencies’ use of controversy factors. One agency noted, that while they were uncertain about climate litigation specifically, legislation or public policy that directly impacts a company’s performance, will have an impact upon their performance in their rating.

One agency noted their own use of controversy factors and suggested that the negative impacts of climate litigation are reflected in the controversies ratings subsequently afforded to companies. The company noted that there was presently *“low levels”* in the space, which were *“unlikely to impact the overall performance score of individual companies”*. Going forward, however, the agency acknowledged the situation was likely to change and that they anticipated *“oil, coal and gas companies and the aviation sector”* to be particularly at risk.

13.0 CONCLUSION

The objectives of this study were to consider the following five questions:

- How does a company's ESG rating impact the company?
- How does a company's CO₂ footprint or exposure impact its ESG rating?
- How is CCS considered when the ESG performance of a company with a large CO₂ footprint or exposure is rated?
- Do the positive impacts of CCS (if any) on a company's ESG rating support the business case for investing in or financing CCS?
- How does climate litigation and public policy impact corporate risk and ESG ratings?

The resulting assessment has successfully addressed each of these questions, to provide a clearer picture of the complex relationship between the development and scope of ESG ratings, the impacts of a company's ESG performance and ultimately, whether this will influence future investment in CCS.

The Institute's analysis, together with the findings from the interviews, clearly demonstrates the growing awareness and significant impact of ESG ratings globally. The strengthening of international commitments to addressing climate change and sustainability issues, as well as the more widespread adoption of mandatory reporting commitments in many jurisdictions worldwide, have driven this recognition amongst stakeholders. The result, as revealed by this study, has been both investors and shareholders' increasing desire for this type of information, as well as many companies' willingness to strengthen their reporting and disclosure practices in-line with this demand.

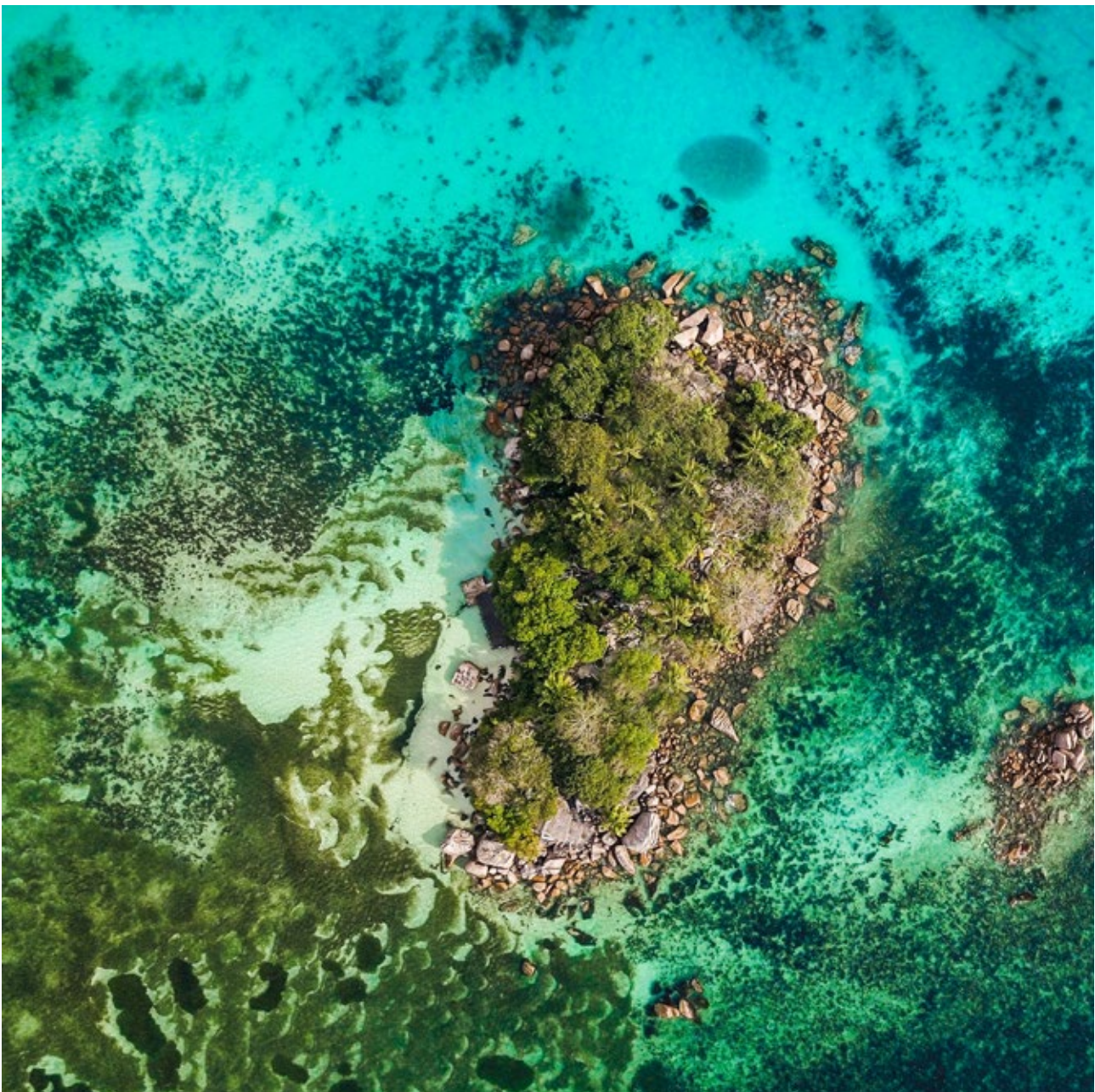
Companies' performance on climate change related matters, continues to drive much of the environmental discussion within the ESG space. In recent years it has emerged as a critical issue, with companies increasingly expected to report a broader range of information, as well as details of any activities aimed at mitigating their impact and emissions. While in some jurisdictions, climate-related information has become part of mandatory disclosure practices, there is a widening expectation globally that socially responsible and high-performing companies will report this information voluntarily.

For companies proactively embracing ESG considerations and reporting practices, there would appear broad agreement that they may subsequently benefit from lower costs and access to capital. Less certain, however, is the relationship between an organisation's ESG activity and its financial performance. While many commentators have proposed that strong ESG performance is associated with a strengthened financial situation, the Institute's review has revealed a lack of consensus, with many distinctly contrasting views on the topic.

Notwithstanding the rise of commercial ESG ratings, their prevalence alone has not prevented ratings agencies, financiers and investors from continuing to use well established processes of directly assessing ESG-related risks alongside other risks, when determining credit ratings or making investment decisions. The Institute's analysis and interviews confirmed this view, with organisations referencing existing practices, as well as their use of information produced through many of the voluntary disclosure standards that have emerged in recent years.

A significant aspect of this study was the examination of how investments in CCS are to be considered when the ESG performance of a company or investment is assessed, and how this ultimately flows into the business case for investment in CCS. Evidence from both the interviews and wider analysis, suggests that deployment levels and investment in CCS are currently insufficient to significantly impact ESG ratings. Although there is broad awareness of the technology's potential, within the investment and ratings communities, there remains considerable uncertainty regarding its more widespread deployment. Consequently, CCS remains undervalued, both in terms of its contribution towards mitigating climate change and in its potential for improving a company's ESG performance.

An increasing trend towards the adoption and realisation of net-zero commitments may, however, reverse this position. Challenging post-Paris policy timeframes and recognition of the limited options available to several hard-to abate industry sectors, may ultimately lead to more widespread investment and deployment. Furthermore, the expectation is that as investment in CCS grows and becomes material to a wider number of organisations, its impact will deliver a more positive impact upon ESG ratings. Ultimately, however, while it is likely that this development would enhance the ESG standing of those adopting and deploying projects, it is less certain at the present time that this factor alone would in-turn generate a business case for greater levels of investment in the technology.



14.0 APPENDIX

CCS in selected international ESG reporting and rating frameworks

INITIATIVE & REGION	DESCRIPTION	COVERAGE	ENERGY & CLIMATE INFORMATION REQUIRED	INCLUSION OF CCS
VOLUNTARY OR NON-GOVERNMENTAL ORGANISATIONS RATING AND REPORTING SCHEMES				
CDP Global	A global disclosure system that enables companies, cities, states and regions to measure and manage their environmental impacts. CDP uses data submitted to provide an A-D rating based on the level of disclosure, the awareness of climate issues, management methods and progress on acting on climate change	6,300+ companies and 500+ cities disclose information to CDP, and investor signatories with \$87trn in assets use the data	Energy use, renewable energy consumption (not defined), GHG emissions (Scope 1-3) and other information on risk management on climate change risks and opportunities	CCS not specifically mentioned in scoring methodology but may contribute to scores related to renewable and GHG emissions targets.
RE100 Global	A public commitment made by companies to source 100% of their global electricity consumption from renewable sources by a specified year. Companies disclose their electricity data annually and RE100 reports on their progress	242 companies	Renewable electricity produced and purchased as a proportion of total electricity consumption	CCS excluded (except with biomass). Renewable sources include biomass, geothermal, solar, water and wind.
Asset Owners Disclosure Project Global	The Asset Owners Disclosure Project rates and ranks the world's largest institutional investors on their response to climate-related risks and opportunities. The project publishes investment grade-type ratings and league tables for the largest pension funds, insurers and asset managers based on public data and responses to questionnaires	Ratings are provided for the 100 largest pension funds, 80 largest insurance companies and 50 largest asset managers (as of 2018)	Value of investment in low-carbon assets, portfolio emissions intensity account for circa 25% of score	CCS not specifically mentioned in scoring methodology, but could contribute to scores related to low carbon and emissions intensity metrics
Climate Bonds Initiative (CBI)	Provides a "Fair Trade" type labelling scheme for the issue of bonds for schemes that contribute to climate change mitigation and adaptation. The Climate Bonds Standard and Certification Scheme covers the following sectors; solar energy, geothermal energy, marine renewable energy, bioenergy, low carbon buildings, low carbon transport, water infrastructure, forests, land conservation and waste management. Approach is aligned to the Green Bond Principles.	\$12bn of \$129bn Green Bonds issued in 2018 (as of Sept 2018) have been certified by CBI – of the remainder, \$89bn aligned to CBI and \$29bn not aligned	Projects and \$ invested that support climate change adaptation and mitigation	The first volume (of two) of the new Bioenergy sector-specific eligibility Criteria, references Bioenergy with Carbon Capture and Storage (BECCS) and notes it is to be considered as a negative emissions technology to achieve 2- degree or below global warming target.
IPIECA Oil and gas industry guidance on voluntary sustainability reporting Global	A reference tool for organisations in the oil and gas industry to develop corporate reporting on sustainability for internal and external stakeholder audiences. The guidance supports improved reporting and management of climate-related risks, but does not generate any ESG-type scores directly	Not reported	Energy use, GHG emissions (Scope 1-3) and indicators related to 'alternative' energy sources	CCS referred to in guidance and could contribute to GHG emissions and alternative energy sources metrics
CDSB Climate Change Reporting Framework Global	A voluntary reporting framework designed to elicit climate-change related information of value to investors in mainstream financial reports	374 companies, across 10 sectors, are currently using the Frameworks	Absolute and change in GHG emissions (Scope 1 and 2 required, Scope 3 optional as per GHG Protocol)	CCS not specifically mentioned, but could contribute to GHG emission reductions
PRI Reporting Framework (PRI) Global	The PRI works to understand the investment implications of ESG factors and to support its international network of investor signatories in incorporating these factors into their investment and ownership decisions	Investor signatories represent \$60 trillion in assets under management	Publish a range of guidance modules	Reference to CCS not found in search completed

INITIATIVE & REGION	DESCRIPTION	COVERAGE	ENERGY & CLIMATE INFORMATION REQUIRED	INCLUSION OF CCS
Sustainability Accounting Standards Board (SASB) Global	SASB is a non-profit organisation that assists companies manage their sustainability reporting, in a manner that is material to investors. The 'Materiality Map' helps an organisation to identify the relevant industry-specific standards, of which there are 77, in order to identify the minimal set of financially material sustainability topics and their associated metrics for the typical company in an industry.	SASB highlights 'interest' from companies in 170+ countries, with 500,000+ standards downloaded.	A set of 77 industry-specific sustainability accounting standards, which include disclosure requirements for emissions and air quality	Reference to CCS within long-term and short-term strategies to address air emissions in the standards relating to oil and gas.
Global Reporting Initiative (GRI) Global	GRI helps business and governments worldwide to understand and communicate their impact on critical sustainability issues such as climate change. Organisations can become "GOLD" members to demonstrate active support for GRI	Not specified	Publish a range of guidance	Reference to CCS not found in search completed
Task Force on Climate-related Financial Disclosures (TCFD) Global	The TCFD was created by the Financial Stability Board, to enable companies to identify and disclose relevant information, which would be useful to the wider finance and investment community.	1,027 organisations, representing a market capitalisation of over \$12 trillion (February 2020)	Proposes the disclosure of Scope 1, Scope 2, and, if appropriate, Scope 3 GHG emissions, and the related risks. More broadly, the organisation's approach to governance, strategy and risk management for climate change.	CCS is referenced in two instances within the TCFD Final Report, as part of the discussion surrounding Climate-Related Risks and Climate-Related Opportunities
COMMERCIAL RATINGS SCHEMES				
MSCI ESG ratings Global	Investment grade-type ratings on companies to help investors understand ESG risks and opportunities and integrate these factors into their portfolio construction and management process. Ratings are provided relative to industry peers	Available for over 6,800 companies	Carbon emissions, product carbon footprint and opportunities in clean tech are 3 of the 37 ESG key issues	CCS not specifically mentioned in scoring methodology, but could contribute to scores related to emissions and clean tech opportunities
S&P Global Ratings Global	S&P provides credit ratings across a broad spectrum of organisations, including corporates, financial institutions, sovereigns and insurance companies. ESG risks are considered within these ratings	Over 1 million credit ratings outstanding	Specific energy and climate metrics not listed but likely to cut across a number of risk drivers considered	CCS not specifically mentioned, but could feature in ratings related to industry and policy risk
Sustainalytics Global	Sustainalytics is an independent ratings agency specialising in ESG ratings. Morningstar uses Sustainalytics as a source for ESG ratings.	More than 12,000 companies	ESG ratings framework is focused upon 20 material ESG issues that are underpinned by more than 250 indicators. A specific Carbon Risk Rating is provided.	CCS is not referenced in published materials; however, it may be considered in a company's management of carbon risk exposure.
ISS Global	ISS offers a range of ESG products to support institutional investors. Offers ESG ratings on companies and countries, as well as carbon risk ratings. The carbon risk rating provides a detailed assessment of climate-related performance and risks.	Companies that have a market capitalisation in excess of \$2B	The Corporate ESG rating includes climate change strategy as part of the cross-sectoral indicators. The carbon risk rating examines a 100+ climate-related indicators.	CCS is not explicitly referenced in the publicly-available materials. May be considered as part of a company's mitigation effort under the carbon risk rating.
Corporate Knights Global 100 Global	Released each January, the Global 100 is an annual index of the 100 most sustainable corporations in the world, published by Corporate Knights magazine.	Companies that have a market capitalisation in excess of \$2B	Companies are compared against their Corporate Knights Industry Group (CKIG) peers. Assessments are based upon the priority KPIs for each CKIG, as well as 8 universal KPIs. There are 21 KPIs in total, which cover resource, employee and financial management, clean revenue and supplier performance.	The financing of CCS, as a low carbon technology, is included as an example within the taxonomy developed under the Clean Revenue KPI.
RepRisk Global	A Swiss provider of ESG analysis and reports. The company's flagship product the RepRisk ESG Risk Platform is described as the world's largest database on ESG and business conduct risks.	150,000+ public and private companies	Examination of 95 ESG factors, which are mapped to the UN Global Compact, SASB, and the Sustainable Development Goals.	No publicly available information regarding the scope of assessment.

INITIATIVE & REGION	DESCRIPTION	COVERAGE	ENERGY & CLIMATE INFORMATION REQUIRED	INCLUSION OF CCS
REGULATORY REQUIREMENTS FOR DISCLOSURE				
Companies Act 2006 (Strategic Report and Directors Report) Regulations 2013 UK	Regulation that came into force in 2013 requiring companies to disclose additional information in financial reports to help shareholders assess the performance of the company.	All quoted companies as defined by the Companies Act 2006	GHG emissions for which the company is responsible	CCS not specifically mentioned in legislation, but could contribute to GHG emissions trends
Clarifying and strengthening trustees' investment duties UK	Requires pension schemes to explain how members funds are invested, with a particular onus on explaining investment risks associated with climate change. Requirement comes into force in October 2019 and thereafter funds must report annually on what actions they have taken to address ESG risk factors.	All trust-based pension schemes in the UK	None specified	CCS not specifically mentioned in legislation, but could contribute to management of ESG factors as defined by the pension fund
National Greenhouse and Energy Reporting Act (2007) Australia	A single national framework for reporting and disseminating company information about various energy and climate change metrics	All companies above a certain GHG emissions, energy consumption or energy production threshold	GHG emissions, energy consumption and energy production	CCS specifically mentioned in regulation as a project designed to remove or reduce GHG emissions
EU Directive 2014/95 – 'Non-financial Reporting Directive' EU	Transposition of the Directive requires companies to disclose non-financial information to investors on a range of issues, including environmental matters.	All companies with more than 500 employees	Reporting GHG emissions a minimum requirement	CCS not specifically mentioned in legislation, but could contribute to GHG emission reductions
Article 173, Energy Transition Law (2015) France	Set new disclosure requirements requiring investors to include in their annual reports how they manage sustainability factors and their contribution to the international goal of limiting climate change	Estimated to cover over 840 asset owners	GHG emissions	CCS not specifically mentioned in legislation, but could contribute to GHG emission reductions
Mandatory Reporting of Greenhouse Gas Emissions United States	Places a requirement on organisations that emit 25,000 tCO _{2e} or more per year to report their GHG emissions to the Environmental Protection Agency	Covers approximately 8,000 facilities across the US	Direct GHG emissions	Organisations only required to provide total GHG emissions data – no scope to explain source and trends
National Voluntary Guidelines on Social, Environment and Economic Responsibilities of Business (2011) India	Voluntary guidelines on the reporting of social, environmental and economic indicators to measure and demonstrate business non-financial performance	Applies to all businesses, regardless of size, sector or location but is voluntary	Suggested indicators include GHG emissions and efforts made to reduce them	CCS not specifically mentioned in legislation, but could contribute to GHG emission reductions

INITIATIVE & REGION	DESCRIPTION	COVERAGE	ENERGY & CLIMATE INFORMATION REQUIRED	INCLUSION OF CCS
STOCK EXCHANGE LISTING REQUIREMENTS				
Australia Securities Exchange: Listing Requirement 4.10.3 Australia	Mandatory requirement on listed firms to provide a corporate governance statement or website link in their annual report explaining material environmental risks	All listed companies	GHG emissions, energy consumption and energy production	Requirement does not specify reporting on GHG emissions or CCS related activity – only material ESG factors
Shenzen Stock Exchange: Social Responsibility Instructions to Listed Companies (2006) China	Requirement on listed firms to provide information on social and environmental information, including methodology used, to investors	All listed companies	General disclosure of information of resource consumption and pollutants	Requirement does not specify reporting on GHG emissions or CCS related activity – only material ESG factors
Singapore Stock Exchange: Listing Rules 711A & 711B and Sustainability Reporting Guide (2016) Singapore	Requirement on listed firms to provide information on material environmental, social and governance factors as part of annual or standalone report. Companies are required to report on targets and performance as well	All listed companies	General disclosure of environmental risks. Metrics not specified	Requirement does not specify reporting on GHG emissions or CCS related activity – only material ESG factors
United States, NASDAQ ESG Reporting Guide 2.0 (2019) United States	ESG reporting is not required as a listing rule, however, the NASDAQ has developed written guidance for public and private companies on ESG reporting.	All companies	Promotes disclosure, on a “respond or explain’ basis, of 30 metrics including GHG emissions, emissions intensity, energy usage, mix and intensity.	CCS is not mentioned; however, investment in the technology may be reported under the climate change investment and management metric.

15.0 REFERENCES

1. ACSI (2019), Australian Council of Superannuation Investors, ESG Reporting by the ASX200
2. Allianz (2020), ESG Ethics and investing: How environmental, social and governance issues impact investor behaviour, Findings from the Allianz ESG Investor Sentiment Study
3. Bank of America (2019), ESG from A to Z: A global primer
4. BCG (2020), Boston Consulting Group, A Decarbonization Roadmap for Upstream Oil and Gas
5. Berg et al. (2019), Florian Berg, Julian F. Koelbel, and Roberto Rigobon, Aggregate Confusion: The Divergence of ESG Ratings, MIT Sloan School Working Paper 5822-19, MIT Sloan School of Management
6. BlackRock (2020), Towards a Common Language for Sustainable Investing
7. Bloomberg and Morgan Stanley (2019), Sustainable Signals: Growth and Opportunity in Asset Management
8. Breckinridge (2016), Breckinridge Capital Advisers and MIT Management Sloan School, Evaluating the Relationship Between ESG and Corporate Fixed Income
9. Canadian Government (2020), News Release, Prime Minister announces additional support for businesses to help save Canadian jobs
10. CAP (2020), Centre for American Progress, Financial Markets and Regulators Are Still in the Dark on Climate Change
11. CDP (2019), Major Risk or Rosy Opportunity: Are companies ready for climate change?
12. CDSB (2019), Climate Disclosure Standards Board, CDSB Framework for reporting environmental and climate change information - Advancing and aligning disclosure of environmental information in mainstream reports
13. CERES (2019), Ceres, Environmental Defense Fund, and KKS Advisors, The role of investors in supporting better corporate ESG performance: Influence strategies for sustainable and long-term value creation, Meridian Institute
14. CERES (2020), LEAD on Climate 2020: Business Call to Action: Build Back Better
15. Coalition of Finance Ministers (2020), The Coalition of Finance Ministers for Climate Action, Better Recovery, Better World: Resetting Climate Action in the Aftermath of the COVID-19 Pandemic
16. Committee on Financial Services (2019), United States House of Representatives, Committee on Financial Services, Committee Memorandum, Building a Sustainable and Competitive Economy: An Examination of Proposals to Improve Environmental, Social and Governance Disclosures
17. CPD (2019), Centre for Policy Development, Climate Change and Directors' Duties: Supplementary Memorandum of Opinion, N. Hutley SC and S. Hartford-Davies
18. CRD, (2019), Corporate Reporting Dialogue, Driving Alignment in Climate-related Reporting: Year One of the Better Alignment Project
19. CRS (2019), Congressional Research Service, Climate-Related Risk Disclosure Under U.S. Securities Laws
20. Davies et al. (2019), Paul A. Davies, Paul M. Dudek and Kristina S. Wyatt, Environmental, Social and Governance Matters: The Rapidly Evolving ESG Reporting Landscape – Part 1, Securities and Federal Corporate Law Report, July 2019, Volume 41, Issue 7
21. Deloitte (2020), Advancing environmental, social, and governance investing: A holistic approach for investment management firms
22. Eccles and Klimenko (2019), Robert G. Eccles and Svetlana Klimenko, The Investor Revolution, Harvard Business Review
23. Eccles and Serafeim (2013), The Performance Frontier: Innovating for a Sustainable Strategy, Harvard Business Review, May 2013
24. ERM (2020), ERM/IIPECA, Investors Demand ESG Reporting from the Oil and Gas Industry
25. EU (2019), Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability related disclosures in the financial services sector
26. EY (2020), EY Global Climate Change and Sustainability Services, How can climate change disclosures protect reputation and value?
27. FCA et al. (2019), Financial Conduct Authority (FCA), Prudential Regulation Authority (PRA), The Pensions Regulator (TPR) and Financial Reporting Council (FRC), Joint statement on climate change
28. Florencio et al. (2019), Florencio Lopez-de-Silanes, Joseph A. McCahery, and Paul C. Pudschedl, ESG Performance and Disclosure: A Cross-Country Analysis, ECGI Working Paper Series in Law, Working Paper N° 481/2019, December 2019
29. Ganguly et al (2018), Geetanjali Ganguly, Joana Setzer and Veerle Heyvaert, If at First You Don't Succeed: Suing Corporations for Climate Change, Oxford Journal of Legal Studies, Vol. 38, No.4 (2018), pp. 841-868
30. Goldman Sachs (2018), A Revolution Rising – From Loud Chatter to Loud Roar
31. Goldman Sachs (2020), Sustainable ESG Investing: Turning Promises into Performance
32. Grantham Institute et al. (2020), Grantham Institute, LSE and University of Leeds, Financing climate action with positive social impact: How banking can support a just transition in the UK
33. GRI (2020), Global Reporting Initiative (GRI) and the University of Stellenbosch Business School (USB), Carrots & Sticks 2020 - Sustainability reporting policy: Global trends in disclosure as the ESG agenda goes mainstream
34. GSIA (2018), Global Sustainable Investment Alliance, 2018 Global Sustainable Investment Review
35. ICLG (2019), International Comparative Legal Guide, ESG in the US: Current State of Play and Key Considerations for Issuers, Corporate Governance 2019
36. ICLG (2020), International Comparative Legal Guide, Legal Liability for ESG Disclosures – Investor Pressure, State of Play and Practical Recommendations, Corporate Governance Laws and Regulations 2020
37. IIRC (2013), International Integrated Reporting Council, The international IR Framework
38. Khan et al. (2015), Khan, Mozaffar N., George Serafeim, and Aaron Yoon, Corporate Sustainability: First Evidence on Materiality, Harvard Business School Working Paper, No. 15-073, March 2015.
39. Lipton et al. (2019), Martin Lipton and William Savitt, Directors' Duties in an Evolving Risk and Governance Landscape, Harvard Law School Forum on Corporate Governance

40. LSEG (2018), London Stock Exchange Group, Revealing the full picture – Your guide to ESG reporting
41. McKinsey (2019), McKinsey Quarterly, Five ways that ESG creates value
42. Morningstar (2020), How Does European Sustainable Funds' Performance Measure Up?
43. MSCI (2019), The MSCI Principles of Sustainable Investing
44. MSCI (2020), 2020 ESG Trends to Watch
45. MSCI (2020a), ESG and the cost of capital
46. Nordea (2017), Cracking the ESG code: Strategy and Quant
47. Peirce (2019), Hester M. Peirce, Scarlet Letters: Remarks before the American Enterprise Institute, US Securities and Exchange Commission
48. Poh (2019), Jacqueline Poh, Conflicting ESG Ratings Are Confusing Sustainable Investors, Bloomberg
49. Porter et al. (2019), Michael E. Porter, George Serafeim, Mark Kramer, Where ESG Fails, Institutional Investor
50. Reynolds (2019), Fiona Reynolds, Will America lead or fall behind on responsible investing?, The Hill, 07/21/19
51. S&P (2019), Accounting for Climate: The Next Frontier in ESG
52. S&P (2018), How Environmental and Climate Risks and Opportunities Factor Into Global Corporate Ratings – An Update
53. SASB (2020), Sustainability Accounting and Standards Board, Materiality Map
54. Schwab (2019), Klaus Schwab, Davos Manifesto 2020: The Universal Purpose of a Company in the Fourth Industrial Revolution, World Economic Forum
55. SEC (2020), Recommendation of the SEC Investor Advisory Committee Relating to ESG Disclosure, May 21, 2020
56. SEC (2018), U.S. Securities and Exchange Commission, Request for rulemaking on environmental, social, and governance (ESG) disclosure
57. Setzer (2020), Joana Setzer, Climate litigation against “Carbon Majors”: economic impacts, Open Global Rights
58. Setzer and Byrnes (2019), Joana Setzer and Rebecca Byrnes, Global trends in climate change litigation: 2019 snapshot, Policy Report, LSE Grantham Institute on Climate Change and the Environment, Columbia Law School, University of Leeds, Centre for Climate Change Economics and Policy
59. Steele (2020), Graham Steele, Confronting the ‘Climate Lehman Moment’: The Case for Macroprudential Climate Regulation, Cornell Journal of Law and Public Policy (Forthcoming)
60. Strine et al. (2020), The Age of ESG, Harvard Law School Forum on Corporate Governance
61. Sustainalytics (2020), Redefining the purpose of a corporation – theory or practice?
62. Swiss Re (2017), Responsible investments – Shaping the future of investing
63. UN PRI (2018), PRI Climate Thought Leadership, The inevitable policy response: Act now – forcing the climate transition
64. US Business Roundtable (2019), Statement on the Purpose of a Corporation
65. UK (2019), HM Government, Green Finance Strategy: Transforming Finance for a Greener Future
66. Wilder and Coutts (2019), Martijn Wilder and Sharon a Coutts, The mainstreaming of climate litigation, Asian Jurist, April 2019
67. Zaidi (2019), Ali Zaidi, INSIGHT: Pending Federal ESG Legislation Could Yield Significant and Step-wise Change, Bloomberg Law, Oct. 11, 2019

GET IN TOUCH

To find out more about the Global CCS Institute including Membership and our Consultancy services, visit globalccsinstitute.com or contact us.

AMERICAS

Washington DC, United States
americasoffice@globalccsinstitute.com

EUROPE & MIDDLE EAST

Brussels, Belgium
europaoffice@globalccsinstitute.com

AUSTRALIA

Melbourne, Australia
info@globalccsinstitute.com

UNITED KINGDOM

London, United Kingdom
ukoffice@globalccsinstitute.com

CHINA

Beijing, China
chinaoffice@globalccsinstitute.com

JAPAN

Tokyo, Japan
japanoffice@globalccsinstitute.com

Copyright © 2020 Global CCS Institute

The Global CCS Institute has tried to make information in this publication as accurate as possible. However, it does not guarantee that the information in this publication is totally reliable, accurate or complete. Therefore, the information in this publication should not be relied upon solely when making investment or commercial decisions. The Global CCS Institute has no responsibility for the persistence or accuracy of URLs to any external or third-party internet websites referred to in this publication and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.

To the maximum extent permitted, the Global CCS Institute, its employees and advisers accept no liability (including for negligence) for any use or reliance on the information in this publication, including any commercial or investment decisions made on the basis of information provided in this publication.