Insights
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Climate-Related Disclosures in Oil and Gas, Mining, and Utilities

The Current State and Opportunities for Improvement

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Preparing for and addressing the threat posed by climate change requires that companies across all sectors take a strategic, long-term approach — and provide robust disclosure to investors about these efforts. This is especially true for companies in high-impact sectors, such as oil and gas, mining and utilities, which collectively account for more than one quarter of annual greenhouse gas (GHG) emissions.[1]

Before investors can determine what constitutes an appropriate response to climate change, investors must first understand the current state of these practices. To help inform the debate about the most effective way to be engaging with and evaluating companies, we analyzed climate-related disclosure at 40 of the biggest companies in the oil and gas, mining, and utilities sectors, asking two main questions:

1. Are companies disclosing the information that investors need to make informed decisions about the appropriateness of the company's climate-related practices in terms of governance, strategy, risk management and metrics and targets?

2. What can we learn from the disclosures about the current state of climate-related practices in these four areas and how should that inform our engagement activities going forward?

Based on this analysis, we found that:

- Across all regions, the vast majority of companies are taking a short-term, tactical approach to climate risk; they are failing to identify the long-term threats and opportunities created by a shift to a low-carbon economy and to incorporate this thinking into their boards' strategic planning.
  - A majority of companies (55%) are using one- to three-year time horizons for their GHG emissions-reduction goals, rather than the longer-term time horizons that are needed to drive meaningful strategic change and effectively address the climate challenge.
  - Only two companies in their committee charters explicitly identify the review of strategic opportunities related to sustainability. In doing so, they set clear expectations that the committee should view the eventual shift to a low-carbon economy as an opportunity to shape their long-term corporate strategy.
- US-based companies generally lag their peers in Europe (including the UK), Australia and Canada in identifying and disclosing two of the most important tools for mitigating climate risk: carbon pricing and GHG emissions-reduction goals.

This paper provides an overview of our analysis of the oil and gas, mining, and utilities sectors' current responses to climate risk. It also identifies the highest-priority areas where investors and companies can work together to determine the appropriate response to this monumental threat.

Background on State Street's Climate-Related Stewardship Efforts

We believe that boards should regard climate change as they would any other significant risk to the business and ensure that their company's assets and long-term business strategy are resilient to the impacts of climate change. This belief, along with our fiduciary duty to act on behalf of our clients' long-term interests, has guided our asset stewardship efforts.

In August 2017, we published our "Perspectives on Effective Climate-Related Disclosure," providing guidance on how companies in high-impact sectors — specifically oil and gas, mining and utilities — can provide meaningful climate-disclosure information for investors. The report identified four main areas of necessary disclosures, each of which correlates with a pillar of the recommendations subsequently published by the Task Force on Climate-related Financial Disclosures (TCFD):

TCFD Pillar	State Street's Disclosure Expectations
Governance	Governance and board oversight of climate risk
Strategy	Discussing impacts of scenario-planning on long-term capital allocation decisions
Risk Management	Disclosing the average and range of carbon price assumptions
Metrics & Targets	Establishing and disclosing long-term GHG emissions goals

Starting in 2018, we began analyzing the climate-related disclosures of various high-impact sectors and assessing how they aligned with our minimum expectations as a proxy for quality of disclosure related to each TCFD pillar. We analyzed the disclosures of 40 of the biggest and most high-profile companies in our portfolio (see Appendix) that span across four markets, most of whom have received requests from shareholders and other groups to assess the impacts on the company of limiting GHG emissions to conform with a 2-degree scenario.[2] Given their size and prominence in their industries, we use their climate disclosure as a window into the quality and efficacy of current disclosure and practice related to climate change. Our analysis centered on two main questions.

Question 1: Are Companies Disclosing the Information Investors Need to Make Informed Decisions?

The key findings from our analysis of current disclosure practices in the oil and gas, mining, and utilities sectors include:

- **Governance approaches are disclosed by nearly all companies.** Only two companies, both of which are US-based, do not disclose how they oversee climate-related issues at the board level.
- **Strategy is the area in need of greatest improvement.** Globally, less than one quarter of companies do an adequate job of disclosing their climate strategy — or communicating to shareholders about how various carbon-reduction scenarios affect long-term capital-allocation decisions.
- **Risk management presents significant room for progress.** Only half of the companies worldwide disclose their carbon-pricing assumptions, an essential measure that allows companies to account financially for the externalities imposed on society by GHG emissions from their activities/operations. Disclosure of this information is significantly lower in the US (36%) than outside the US (67%).
- **Metrics and targets disclosure is significantly lower in the US.** Only 60% of US companies disclose the goals they have set for reducing the company's GHG emissions; only one non-US company fails to disclose this vital information.

In addition to evaluating the disclosures according to each of the four main areas, we also divided the companies by geographic region to see if there were any regional differences (see table below).

	Number of Companies	% of Oil and Gas, Mining and Utilities Companies that Comply with State Street's Disclosure Expectations			
		Governance	Strategy	Risk Management	Metrics & Target
Globally	40	95%	23%	50%	73%
US	25	92%	24%	36%	60%
Non-US	15	100%	20%	67%	93%
Europe (including UK)	*6*	*100%*	*33%*	*67%*	*100%*
Australia	*5*	*100%*	*20%*	*60%*	*100%*
Canada	*4*	*100%*	*0%*	*75%*	*75%*

Question 2: What Can We Learn From Disclosures About the Current State of Climate Action?

After identifying whether information was disclosed in the oil and gas, mining, and utilities sectors, we then looked at the substance of what was disclosed. More specifically, we analyzed companies' practices in each of the four TCFD pillars to provide a snapshot of the broad range of actions that companies are taking in response to climate risk.

One of the biggest takeaways is that US-based companies lag other regions in disclosing their carbon-price assumptions and GHG-emissions goals — two of the most important tools for mitigating and managing climate risk. We also found that across all regions, companies are doing a poor job of assessing and disclosing the impacts of scenario-planning on long-term capital allocation decisions — a process that is essential to helping companies understand how a shift to a low-carbon economy could create long-term risks and opportunities and adapt their strategy accordingly.

Key findings in each of the four TCFD pillars include:

Governance

- Outside the US, all of the companies we examined assign environmental- and climate-related responsibilities to a dedicated sustainability committee at the board level.
- In the US, however, only 40% of companies have a dedicated sustainability committee charged with overseeing the company's response to climate or environmental risks; the remaining 60% assign this responsibility to a public policy, audit, or nominating and/or governance committee.
- We found that companies with a dedicated sustainability committee had more robust descriptions of duties and responsibilities for directors serving on those committees.
- However, during engagement we found that even at companies that did not have dedicated sustainability committees, director oversight and involvement in climate/ environmental risks often extended beyond what was described in the committee charter.
- We caution investors from solely relying on the committee charter and name to serve as a proxy for the quality of board oversight on sustainability issues.

Strategy

- Conducting scenario analysis to understand the risks and opportunities presented by climate change and the shift to a low-carbon economy — and disclosing to investors how this thinking shapes long-term strategic planning — is an area in need of significant improvement for companies across all regions.
- Only 23% of companies provide some information on this topic, which tended to be high-level and of limited value to investors. Only two companies, *Occidental Petroleum Corporation* and *Equinor ASA*, provide meaningful disclosure on how capital-allocation decisions are influenced by climate-risk scenario analysis.
- Furthermore, only two companies, *Occidental Petroleum Corporation* and *Anglo-American plc*, explicitly identify 'the review of strategic opportunities related to sustainability' in their committee charters.

Risk Management

- Only half of the companies disclose either an average carbon-price assumption or a range of carbon prices; no company discloses both.
- Among the half that do disclose their carbon-price assumptions, these figures range from US$0 to US$140 per ton of carbon dioxide equivalent (tCO2e); the average is US$46/tCO2e.
- This broad range of assumptions for such a critically important measure highlights the need for consensus about how companies should account for the externalities of their carbon emissions.

Metrics & Targets

- Nearly three quarters of companies globally have established and disclosed goals for managing GHG emissions from operations, but the time horizon of most of these goals is either one to three years or a 2020 target date — a period that is too short to drive meaningful change; only 45% of companies established emissions targets beyond 2020.
- In terms of the nature of these targets, 43% of companies established absolute GHG reduction goals, 28% focused on intensity or efficiency targets and 10% set both absolute and intensity targets.
- Several utilities have established goals related to phasing out coal or goals to increase renewable energy generation across their operations.

R-Factor™ Score Analysis In April 2019, we rolled out R-Factor™, our ESG scoring system that uses commonly accepted transparent financial materiality frameworks to generate a unique score for listed companies. This proprietary tool allows us to compare the ESG performance of a company against its peers.

Analyzing R-Factor™ scores of companies in the oil and gas, mining, and utilities sectors, we found that US companies lag their European, Australian and Canadian counterparts.

For more information about R-Factor™ and its scoring methodology, see "R-Factor™: Reinventing ESG Investing Through a Transparent Scoring System."

	US	Europe (including UK)	Australia	Canada
Average R-Factor™ Score (as of May 2019)	60	71	70	69

Spurring the Discussion about Climate Risk

Our analysis of the current state of climate-related disclosures in the oil and gas, mining, and utilities sectors highlight the need for investors and companies to engage in urgent, robust discussions about this important topic.

While there are numerous regulatory, scientific, and economic factors to consider, at State Street Global Advisors we believe that the following desired outcomes should guide these discussions:

- **Uniform carbon pricing is an urgent need.** Currently, companies are required to determine on their own, how — or even whether — they will assign a price to the costs that their GHG emissions impose on society. This approach has resulted in companies using vastly different assumptions for their carbon pricing, and many companies fail to disclose this information to investors altogether. Market participants, including investors, companies, and academics, need to engage to identify baseline carbon prices at the industry and global levels to drive meaningful change in a systematic manner.

- **GHG emissions targets should be long-term and meaningful.** Climate change is not a short-term risk that can be effectively addressed by setting one to three year emissions-reduction targets, which only result in tactical decision-making. Instead, it is a major, long-term force that threatens to radically reshape global economies and living conditions around the world. As such, companies need to establish emissions-reduction goals that span multiple decades to align with the time horizon over which these risks are projected to manifest. Short-term reduction targets can then be established to help track progress against the long-term goals. We applaud the 15 May, 2019 announcement by the *CEO Climate Dialogue* that called on government to put a price on GHG emissions with a goal of achieving at least an 80% reduction in emissions by 2050 in the US.[3] Many of these companies can take direct action by embracing more ambitious GHG-reduction goals.

- **Boards must focus on adapting, not just mitigating.** Corporate boards have a responsibility to identify and mitigate the risks to their company posed by climate change. But this thinking doesn't go far enough. Boards also need to think about how climate change could fundamentally reshape the global opportunities amid the transition to a low-carbon economy. For high-impact sectors, this scenario planning should be incorporated into the board's governance oversight structure and, long-term strategic planning and be communicated to investors.

- **Investor engagement should be more holistic.** Investors need to broaden their approach to how they engage with and evaluate companies regarding climate change. While shareholder proposals have been an effective tool for getting a company's attention and achieving certain goals, our analysis shows that the targeted efforts have been slow in creating a much-needed sense of urgency among boards and managements. Many companies are still responding to the climate challenge in a tactical manner rather than approaching it more strategically. Here again, investors need to engage with market participants to drive meaningful change on this issue. For example, having agreed-upon base-line scenarios and industry-level assumptions would better inform company-level engagement.

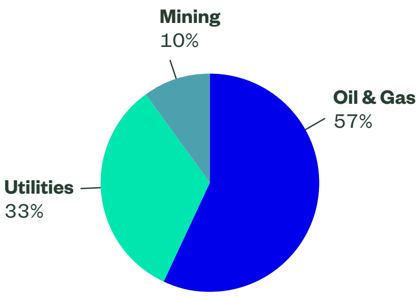
Conclusion

There is growing momentum among companies and investors across sectors about the need to take meaningful action on climate change. The current state of climate-related disclosures in the oil and gas, mining, and utilities sectors, however, shows that we need to do better. At State Street Global Advisors, we hope that shining a light on current disclosure practices will spur much-needed discussion and action among investors and companies on climate change.

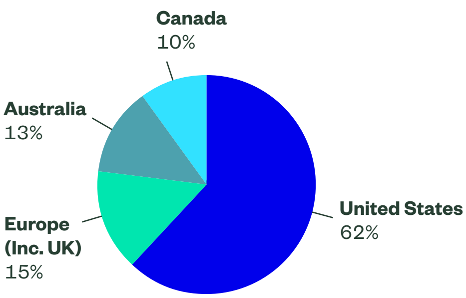
Appendix

Overview of Companies Included in State Street's Climate-Related Disclosure Analysis

Companies Analyzed by Sector



Companies Analyzed by Market



State Street's 2018 Voting on Shareholder Proposals Related to *Assess Portfolio Impacts of Policies to Meet 2 Degree Scenario*

Company Name	Meeting Date	Vote Result	State Street's Vote	Sector
Noble Energy, Inc.	24-Apr-18	45.6	For	Oil & Gas
Kinder Morgan, Inc.	09-May-18	59.7	For	Oil & Gas
Anadarko Petroleum Corporation	15-May-18	52.5	For	Oil & Gas
PNM Resources, Inc.	22-May-18	13.1	Against	Utilities

Companies Reviewed by Region

Company Name	Region
Ameren Corporation	US
Anadarko Petroleum Corporation	US
Anglo-American plc*	Europe
BHP Billiton Limited*	Australia
BP plc	Europe
Cenovus Energy Inc.	Canada
Chesapeake Energy Corporation	US
Chevron Corporation	US
CMS Energy Corporation	US
ConocoPhillips	US
Devon Energy Corporation	US
Dominion Resources, Inc.	US
DTE Energy Company	US
Duke Energy Corporation	US
Equinor ASA	Europe
Exxon Mobil Corporation	US
FirstEnergy Corp.	US
Hess Corporation	US
Kinder Morgan, Inc.	US
Marathon Petroleum Corporation	US
Noble Energy, Inc.	US
Occidental Petroleum Corporation	US
Oil Search Ltd.	Australia
Origin Energy Ltd.	Australia
Pioneer Natural Resources Company	US
PNM Resources, Inc.	US
PPL Corporation	US
Rio Tinto Ltd.*	Australia
Royal Dutch Shell plc	Europe
Southwestern Energy Company	US
SSE plc	Europe
Suncor Energy Inc.	Canada
Teck Resources Limited	Canada
The AES Corp.	US
The Southern Company	US
Total SA	Europe
TransCanada Corporation	Canada
Valero Energy Corporation	US
WEC Energy Group, Inc.	US
Woodside Petroleum Ltd.	Australia

*Dual listed companies

Endnotes

01 United States Environmental Protection Agency. "Global Greenhouse Gas Emissions Data."

02 The 2-degree scenario refers to an effort to limit the global average temperature increase to less than 2 degrees Celsius above pre-industrial levels.

03 New CEO push on climate policy, Axios https://www.axios.com/new-ceo-push-climate-change-policy-0fe0e915-5e83-4978-a62f-19458add8d1e.html

About State Street Global Advisors

Our clients are the world's governments, institutions and financial advisors. To help them achieve their financial goals we live our guiding principles each and every day:

- Start with rigor
- Build from breadth
- Invest as stewards
- Invent the future

For four decades, these principles have helped us be the quiet power in a tumultuous investing world. Helping millions of people secure their financial futures. This takes each of our employees in 27 offices around the world, and a firm-wide conviction that we can always do it better. As a result, we are the world's third-largest asset manager with US $2.8 trillion* under our care.

* AUM reflects approximately $32.7 billion (as of March 31, 2019), with respect to which State Street Global Advisors Funds Distributors, LLC (SSGA FD) serves as marketing agent; SSGA FD and State Street Global Advisors are affiliated.