Ceres

July 21, 2016

The Honorable Mary Jo White
Chair
Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549

Re: File No. S7-06-16 – SEC Concept Release: Business and Financial Disclosure Required by Regulation S-K

Dear Chair White,

Thank you for the opportunity to provide comments on modernizing certain disclosure requirements in Regulation S–K. Our comments are focused on improving the reporting of material sustainability risks by registrants.

Ceres is a non-profit organization that works with a substantial number of the world's largest investors and companies on strategies for addressing increasing climate change, water scarcity and other global sustainability risks and related opportunities. We coordinate the Investor Network on Climate Risk (INCR), a group of 120 institutional investors managing more than $14 trillion in assets focused on the business risks and opportunities of climate change.

Since 2003, Ceres has worked with INCR members to improve disclosure of material sustainability and climate risks and opportunities in SEC filings. That has included, for example, petitioning the SEC on three occasions to issue interpretive guidance on climate risk disclosure, providing corporations guidance on improving their reporting, producing research reports, and co-founding an international collaboration to develop global standards for reporting in financial filings, the Climate Disclosure Standards Board.

We appreciate the leadership role the SEC took on improving climate risk disclosure in 2010, when the Commission issued Interpretive Guidance Regarding Disclosure Related to Climate Change. We also appreciate your support of the Investor Advisory Committee and your work to preserve the right of investors to file shareholder resolutions seeking information about significant social policy issues that transcend day-to-day business matters.

Below, we strongly encourage the Commission to build on these efforts by fully enforcing the 2010 Guidance and existing rules with respect to climate change, enforcing existing disclosure rules with respect to material sustainability risks like water scarcity and quality and human rights, and issuing new rules or guidance in specific cases.

Sustainability issues important to informed voting and investment decisions (question 216)[1]

Water quality and availability, climate change, deforestation risks, and human and workers' rights are leading examples of sustainability issues that are important to informed voting and investment decisions, pose materials risks to specific sectors and companies and merit close scrutiny by SEC staff. Below we discuss in greater detail water risks, carbon asset risks, climate risks to insurers, deforestation risks and human rights risks to provide information on key investor priorities and suggest areas of focus for the staff to consider for immediately improving reporting by registrants.

Water Disclosure

Water scarcity and quality risks often pose significant and immediate physical and financial impacts on many companies. These include physical, reputational and regulatory risks in industries with large water supply or wastewater management needs in direct operations or in supply chains, and to owners of physical assets such as commodities, real estate and infrastructure. Climate change and related droughts, floods, and supply and demand imbalances exacerbate existing water quantity and quality risks.

SEC disclosure on these issues should provide quantitative and qualitative information on the nature of water risks and their significance, and new SEC rules may be needed for investors to obtain decision-useful information. For example, many companies now provide information to investors on the volumes of water they use annually in their operations, which is meaningless on its own. More meaningful disclosure would provide information on the magnitude and materiality of water risks such as:

> The percentage of operations or revenue exposed to significant water risks and the nature of those risks. This should include a) if water risks are physical, regulatory, reputational or stakeholder in nature; b) where in the company's value chain these risks take place, such as in their supply chain, own operations, product lifecycle or wastewater discharge practices, etc.; and c) exposure to geographic regions of water risk. Meaningful quantifiable metrics that support the above information should also be provided.

Carbon Asset Risk Disclosure

Investors we work with are concerned that companies are generally not making decisions that fully consider the potential financial risks and opportunities associated with a rapid transition to a lower carbon economy. These "transition risks", which may be defined as financial risks to companies, sectors and economies resulting from failing to adapt strategic planning and capital expenditures to acknowledge the shift towards a lower carbon economy, pose material risks to investors. These risks include "carbon asset risks", which we define as the potential for wasted capital, stranded assets, or substantial impairments due to a failure to assess and manage the potential effects of changes in policy, technology, and market shifts, such as decrease in demand for fossil fuels, that can significantly affect the revenues and valuation of companies, especially in high carbon sectors.

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[1] Parentheticals reference the question numbers in the SEC Concept Release: Business and Financial Disclosure Required by Regulation S-K.

Corporate disclosures that would enable investors to assess carbon asset risks include stress testing portfolios against 2 degree scenario analysis. Specifically, investors need disclosure of how a company approaches developing 2 degree scenarios, what key assumptions and methodologies underlie the scenarios that are chosen, and how those scenarios impact various types of assets or planned capital expenditures over a timeframe that extends far enough into the future (typically 2035 to 2040) to capture any potential stranding or impairments. Additional information sought by investors includes absolute emissions reduction targets, as well as information on the resilience of the company's strategy with regard to capital expenditure (CAPEX) plans, portfolio composition and R&D. These disclosures must include details of the specific amounts of CAPEX allocations in absolute numbers and as a percentage of total CAPEX.

In order for these disclosures to provide decision-useful information to investors, it is important for 2 degree stress testing results to include the quantitative and qualitative impacts on project types, resource types, and total earnings as well as potential impairments or write-offs. Financial consequences should be quantified against a range of emissions scenarios (such as a well below 2 degrees scenario, a 2 degrees scenario and the Paris INDC scenario/2.7 degrees).

In the energy sector, both scenario and sensitivity analyses are important to give investors a complete picture of the vulnerabilities of exposed companies to carbon asset risks. Sensitivity analysis – which would usually test the impact of one or several variables – can be useful in understanding the impact of specific events or outcomes. A good example might be the vulnerability of proven fossil fuel reserves to a reduction in demand or an increase in the carbon price and can thus be applied to the fossil fuel industry. Usage of shadow carbon prices in making CAPEX decisions is another example of using sensitivity analysis.

Scenario analysis involves a more complex analysis against a set of internally consistent variables. It will produce a set of probable outcomes that will be more useful in informing investment decisions because they will capture the complexity of climate change better.

Climate Risk Disclosure by Insurers

Climate risk disclosure in the insurance sector is a foremost concern of investors, given the potential for impacts to policyholders through loss and damages and to insurers' investments. As institutional investors who invest trillions of dollars in many economic sectors, insurers have the potential to be highly exposed to carbon asset risk.

State insurance commissioners have been working with institutional investors for years to improve climate risk disclosure by insurance companies. First implemented in 2010 by the National Association of Insurance Commissioners (NAIC), the eight-question *Insurer Climate Risk Disclosure Survey* has since been adopted by a coalition of state regulators including California, Connecticut, Minnesota, New Mexico, New York, and Washington.

In 2015 insurance companies with direct written premiums over $100 million and doing business in one or more of these states were required to fill out the survey and submit their responses in August 2015 to their state insurance departments. The NAIC Survey encompasses all important climate change related risks to insurance companies to ascertain the degree to which an insurer has incorporated climate change risk management into its core business functions such as underwriting, pricing, modeling/analytics, investment and capital management. For example, with regard to investment management, the NAIC Survey asks insurers the following questions: *Does the insurer consider climate risks (across all asset classes) when assessing investments; does the insurer uses a shadow price for carbon in assessing carbon-intensive heavy industry investments; and does the insurer have a system for managing correlated risks between its underwriting and investments?*

Regarding carbon asset risks, a new Ceres report has analyzed fossil fuel holdings of the top 40 U.S. insurance groups, whose collective investments in coal, oil and gas and electric/gas utilities are worth $459 billion. It found that many leading U.S. insurance groups are significantly invested in oil and gas and other fossil fuel industries, even as these sectors face growing pressure from the global clean energy transition and physical impacts associated with climate change.

Many of the insurance groups analyzed had significantly higher fossil fuel fixed-income investments than the benchmark Barclays U.S. Aggregate Bond Index. The report also found wide variations in concentrations of fossil fuel holdings among the 40 insurance groups analyzed. Three insurance groups had oil and gas bond holdings of 10.9% or higher, more than double the median bond portfolio concentrations of the overall group (5.1%).

This year the state of California, the largest insurance market in the U.S. and the sixth largest in the world, where insurance companies collect $259 billion in premiums annually, announced steps to improve carbon asset risk reporting by insurers. The state insurance commissioner recently noted that many leading U.S. insurance groups are significantly invested in oil and gas and other fossil fuel industries, even as these sectors face growing pressure from the global clean energy transition and physical impacts associated with climate change.

To reduce the financial risks to these companies, a first step for insurers is to identify and evaluate their potential investment exposure to carbon asset risk, both of which are necessary before implementing strategies to reduce exposures. To address this, the California insurance commissioner announced a data call earlier this year that requires insurance companies that write $100 million or more in premiums to disclose annually their carbon-based investments including those in oil, gas and coal. These required financial disclosures will be made public and will be used by the California Department of Insurance to assess the degree of financial risk posed to insurance companies by their investments in the carbon-based economy.

Deforestation Risks Disclosure

Deforestation-related risk is also a pertinent concern to investors. Many companies in the consumer staples sector source commodities associated with large-scale deforestation and carbon-intensive burning of forests and peat land – clearing land for palm oil, beef and soy production in particular. In addition to being a major source of global carbon emissions, the land practices associated with these agricultural commodities cause material regulatory and reputational risks in some instances. For example, Malaysian palm oil producer IOI Group suffered a steep stock price decline and the loss of numerous large customers in the wake of its suspension this April from the Round Table on Sustainable Palm Oil – the organization responsible for certifying approximately 20% of global palm oil as deforestation-free.

Investors have demonstrated concern for this issue by engaging portfolio companies and supporting efforts to reduce deforestation. For example, in 2015 investors representing $5 trillion signed a letter calling for stronger standards from the Roundtable for Sustainable Palm Oil, and investors representing $22 trillion supported improved disclosure from companies on deforestation risks through the CDP reporting framework.

Human Rights Risks Disclosure

Ineffective management of human rights issues can lead to reputational, legal, and operational risks that materially affect a company's license to operate, financial performance, and investor and stakeholder relations. As such, many investors are seeking disclosure of those human rights issues most likely to pose material risks to the company given the strong convergence between the most severe potential impacts on human rights and the risk to the business. One internationally accepted and authoritative global standard companies can use to report on human rights is the UN Guiding Principles Reporting Framework. This Framework, most recently endorsed by 83 investors representing $4.8 trillion assets under management, provides a mechanism for companies to demonstrate if and how human rights risks are being actively and effectively managed, both in direct operations and across a company's supply chain.

Approach to sustainability disclosure (question 216)

Generally, SEC staff should approach sustainability disclosure as they would approach disclosure of any other financially material risk or opportunity. Several elements need to be in place to ensure robust reporting that remains flexible as risks evolve due to regulatory, scientific, technology, climate and other developments. Meaningful disclosure can be elicited if appropriate disclosure rules and/or guidance is in place, staff are trained to understand the material business risks presented by sustainability issues, staff issue comment letters to issuers with inadequate or questionable disclosure, staff open investigation or pursue administrative enforcement proceedings where appropriate, and staff have regular dialogues with issuers and investors about their mutual disclosure concerns. Also, to respond to developments in the field and investor and issuer concerns, the SEC should utilize tools such as investor and issuer education, supplemental staff or interpretive guidance, speeches, public roundtables, conferences and other means to engage with key market participants on potentially material ESG issues.

Voluntary corporate reporting of sustainability matters (question 218)

Registrants provide sustainability information outside of SEC filings for a variety of reasons, such as an understanding that sustainability issues affect short and long term financial results, and measuring and managing the impact of these issues and the company's response thereto can improve their financial and sustainability performance. Such information is also provided in response to investor, stakeholder, and data provider requests, and in response to government and market regulators' guidance or rules related to sustainability disclosure. Finally, some companies that are leaders in sustainability performance and reporting believe that superior management of sustainability risks and opportunities and reporting on the same to investors, customers and other stakeholders provides a competitive advantage.

The information provided on company websites is not sufficient to address investor needs because of a lack of comparability and consistency in the data reported. There is also the potential that such information is provided at least in part from a marketing perspective—presenting the company's sustainability performance in the most favorable light rather than providing a balanced account of the true ESG risks and opportunities facing the company and the company's response thereto. The cause of these deficits is largely the absence of rules or generally accepted standards governing voluntary sustainability reporting, resulting in companies selectively deciding what issues to report and how to report them, or whether to report at all.

Integrated reporting (question 218)

Integrated reporting—as opposed to separate financial and sustainability reporting—is critical to investors because sustainability issues can pose material financial and governance risks like other financial, business and competitive issues, and should be evaluated alongside those issues. It is very helpful to investors when companies disclose in a comprehensive yet succinct manner what issues of all types matter most to the company's success. Understanding of the financial effects of sustainability issues is enhanced when they are reported in an integrated fashion rather than solely in a separate sustainability or CSR report.

At present, the lack of integrated reporting in SEC filings has significantly impeded investor and corporate understanding of the financial risks of sustainability matters, because it has slowed the consideration and integration of these matters into decision-making processes by investors, analysts, rating agencies and other critical market participants. We believe making integrated reporting a reality should be a priority for the Commission because the SEC disclosure system currently does a poor job of capturing material sustainability risks and disclosing their financial impact on the company's performance.

We strongly oppose allowing registrants to use sustainability (ESG) information on their websites to satisfy any SEC disclosure requirements. This would negatively affect the comparability and consistency of data that is reported, would prevent corporate accountability for what is reported, and would limit the ability of SEC Corporation Finance staff to scrutinize sustainability risk disclosure, as well as the Commission's ability to enforce material risk disclosure requirements and to take enforcement action against incomplete or misleading disclosures.

Sustainability reporting frameworks (question 219)

Each of the leading voluntary sustainability disclosure frameworks include useful elements that SEC staff should consider when enforcing existing rules and guidance, issuing interpretive guidance or proposing new line-item disclosure requirements. We recommend that SEC staff review the sustainability and climate-related reporting frameworks developed by the Global Reporting Initiative (GRI), CDP, and the UN Guiding Principles Reporting Framework for reporting on human rights issues, and the sector-specific climate risk management and disclosure guides developed by members of the Global Investor Coalition on Climate Change (Ceres/INCR, IIGCC and IGCC), which cover oil and gas and mining companies' reporting on carbon asset risks, and electric power and automotive companies' climate risk disclosure. We also recommend staff review the frameworks focused on financial reporting developed by the Climate Disclosure Standards Board (CDSB), the Sustainability Accounting Standards Board (SASB), and the International Integrated Reporting Coalition (IIRC).

SEC interpretive release on climate risk disclosure (question 223)

Existing disclosure requirements may be adequate to permit investors to evaluate material climate change risks, if fully enforced by SEC staff with expertise in the materiality of climate risks. Current rules have not, as applied by the Commission to date, produced sufficient information for investors to evaluate climate risks. While we appreciate the SEC's 2010 interpretive guidance on climate change-related disclosure, its potential has been left largely untapped. Staff have issued very few comment letters regarding the inadequacy of current disclosures and have not pursued enforcement actions for failure to meet disclosure requirements, despite a very active financial risk and disclosure enforcement agenda. Such actions would ensure that companies were updating their disclosures to reflect the evolving material risks associated with climate change. To illustrate the extent of institutional investor interest in improved enforcement, we have included as appendices two Ceres letters to the SEC, in which members of our Investor Network on Climate Risk (INCR) and other asset owners and managers emphasized the importance of better enforcing existing rules with respect to carbon asset risk and climate risk disclosure.

In some cases, line item disclosure rules that apply to a range of industries may be appropriate. Many INCR members are long-term shareholders in companies that represent broad swaths of the economy. To reduce climate risks in their portfolios, they require disclosure that allows them to evaluate climate issues throughout industries facing significant risks. For example, rules regarding disclosure of targets and progress against targets for greenhouse gas emissions reduction, energy efficiency of operations and products and climate-related initiatives may be useful.

In some cases, industry specific rules may be appropriate. Many investors we work with are concerned that the business plans of oil and gas, electric power, and coal companies pose financial risks in the short and long term because they do not sufficiently factor in the risks and opportunities of a more rapid transition to a low carbon global economy. While we believe that the current laws and regulations, properly applied, require this analysis because it addresses material risks, if the SEC does not intend to initiate enforcement of those rules to bring about such disclosures, then rules or line-item disclosure requirements could be developed to ensure the disclosure of 2 degree scenario planning results and methodologies, and other factors discussed on pages 2-3 of this letter.

Thank you very much for your consideration of these comments.

Sincerely,

Mindy S. Lubber
President, Ceres
Director, Investor Network on Climate Risk

cc: Commissioner Kara Stein
Commissioner Michael Piwowar
Brent Fields, Secretary
Keith Higgins, Director, Division of Corporation Finance
Rick Fleming, Director, Office of the Investor Advocate

Appendix I

Ceres
Mobilizing Business Leadership for a Sustainable World

April 17, 2015

The Honorable Mary Jo White
Chair
Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549

Re: Inadequate Carbon Asset Risk Disclosure by Oil and Gas Companies

Dear Chair White:

As institutional investors representing over $1.9 trillion in assets under management, we are concerned that oil and gas companies are not disclosing sufficient information about several converging factors that, together, will profoundly affect the economics of the industry. They include capital expenditures on increasingly high cost, carbon intensive oil and gas exploration projects, government efforts to limit carbon emissions, and the possibility of reduced global demand for oil as early as 2020 (collectively "carbon asset risks").

We have found an absence of disclosure in SEC filings regarding these material risks, which constitute "known trends" under SEC rules, and respectfully ask the Commission to address this issue in comment letters to issuers.

Carbon asset risks to oil and gas companies: A growing number of investors are working to integrate climate risk into their investment strategies,[1] and obtaining more information from fossil fuel companies about their capital expenditures and related risks is a critical part of this process. Some investors have increased their allocation to lower-carbon assets. Others have signed the Montreal Pledge, committing to measure and publicly disclose the carbon footprint of their investment portfolios annually, or have joined the Portfolio Decarbonization Coalition, agreeing to implement portfolio strategies towards climate-related objectives.

We are concerned that some carbon assets—current and future hydrocarbon reserves and resources of oil and gas companies—may become stranded assets, which are "fuel energy and generation resources which, at some time prior to the end of their economic life (as assumed at the investment decision point), are no longer able to earn an economic return (i.e. meet the company's internal rate of return), as a result of changes in the market and regulatory environment associated with the transition to a low-carbon economy."[2]

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[1] See, for example, World Bank Group, *Investors shift into low-carbon and climate-resilient assets*, September 12, 2014.

[2] http://www.carbontracker.org/resources/. See also http://www.smithschool.ox.ac.uk/research-programmes/stranded-assets/.

The economics of the oil and gas industry are changing rapidly as exploration and production costs increase. As conventional oil and gas reserves decline, companies have been forced to increase investments in high cost, carbon intensive "unconventional" exploration projects. Kepler Cheuvreux has called this a "capex crisis" driven by the need for more costly investments in unconventional crude development projects to stem decline rates in conventional oil fields.[3] Since 2005, annual upstream investment for oil has increased by 100%, from $220 billion in 2005 to $440 billion in 2012, while crude oil supply has only increased 3%. In 2014, the global oil industry spent $650 billion on exploration and development of new reserves, which is producing diminishing marginal returns in terms of new reserves being added.[4] Thus, the industry is investing more money to produce less oil and has become less profitable in recent years.

The Carbon Tracker Initiative (CTI) estimates oil and gas companies are likely to spend approximately $1.1 trillion in capex from 2014-2025 on high cost, carbon-intensive exploration projects that require at least an $80 break-even price.[5] Due to recent low oil prices, we have seen oil majors cancel or delay billions of dollars worth of projects, and nearly $1 trillion of projects face the risk of cancellation.

Many of these projects face operational challenges and increasing costs due to the nature of the projects, including Arctic, deepwater, ultra-deepwater, and unconventional production of oil sands, heavy oil, shale oil, extra heavy oil and tight liquids projects. For major oil and gas companies, these higher risk capital expenditures represent 18-28% of total projected capex through 2025.[6]

The increase in high risk, carbon intensive capital expenditures comes at a time when governments are focusing on reducing carbon emissions to prevent catastrophic climate change. Last October, EU leaders agreed to a binding target for reducing domestic greenhouse gas emissions by at least 40% compared to 1990. In November, President Obama and Chinese President Xi Jinping announced an agreement to ambitiously reduce both nations' carbon emissions. These agreements support the need for reducing dependence on fossil fuels and increases risks associated with expensive, carbon intensive exploration projects.

While discussions continue at the international level, an increasing range of climate-related actions are being taken or are already required by national and subnational governments across the world, including actions to increase energy efficiency (for instance increased fuel economy standards) and to substitute cleaner sources of energy, such as renewables. As more of these measures are implemented, demand for fossil fuel based energy could plateau, which decreases the likelihood that high cost, carbon intensive reserves will be cost-effective to develop and produce.

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[3] Mark Lewis, Kepler Cheuvreux, *Toil for oil spells danger for majors: Unsustainable dynamics mean oil majors need to become "energy majors"* (September 15, 2014)
[4] Rineesh Bansal, Stuart Kirk, *Peak carbon before peak oil*, in Deutsche Bank, Konzept, Issue No. 2 (January 20, 2015)
[5] Carbon Tracker Initiative, *Carbon supply cost curves: Evaluating financial risk to oil capital expenditures* at 16, (May 2014)
[6] *Id.* at 19.

Investor efforts to improve voluntary disclosure: Institutional investors have and continue to raise these concerns with oil and gas companies through letters,[7] dialogues and shareholder resolutions.[8] Starting in 2013, a coalition of 70 investors managing assets of $3 trillion began collaborating with Ceres, Carbon Tracker, the European Institutional Investors Group on Climate Change (IIGCC) and the Australia/New Zealand Investor Group on Climate Change (IGCC) to engage with the world's largest oil and gas, coal and electric power companies, asking them to assess risks under climate action and 'business as usual' scenarios. In January 2015, fifty institutional investors representing over £160 billion filed resolutions with BP and Shell calling for routine annual reporting beginning in 2016 to include information about asset portfolio resilience to the International Energy Agency's (IEA's) scenarios, low-carbon energy research and development (R&D) and investment strategies, and related items.[9] In an important development, the boards of both Shell and BP advised shareholders to support the resolutions.[10]

Organizations working with investors have issued carbon asset risk disclosure guidelines, expectations and requests, including the Global Investor Coalition on Climate Change[11], CDP[12], the Climate Disclosure Standards Board[13] and the Sustainability Accounting Standards Board.[14] As discussed in these guidelines, investors are seeking low carbon scenario assessments; capital expenditure plans for new reserves, including rates of return, payback periods, and alternative uses of capital; potential greenhouse gas emissions of unproduced reserves by resource type and by country; average breakeven oil price for their portfolio, including how breakeven prices are calculated for both planned and existing projects, and a further breakdown of breakeven prices by project or hydrocarbon type; and a discussion of the risks to unproduced reserves from pricing, standards, reduced subsidies or reduced demand.

However, there has been a lack of meaningful, substantive carbon asset risk disclosures in response to these investor requests. A recent report analyzing voluntary climate risk reporting by 49 oil and gas companies found low levels of assessment of these risks and application of the findings to current and future exploration projects.[15] Ten of these companies acknowledged running scenario analyses of different global temperature increases, eight ran internal carbon price stress tests for prospective investments, and five ran stress tests regarding the resilience of their capital expenditures under a scenario consistent with limiting the average global temperature increase to 2°C. However, no companies disclosed their stress testing parameters, leaving investors unable to objectively assess the adequacy of these resilience tests.

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[7] Ceres, Investors ask fossil fuel companies to assess how business plans fare in low-carbon future: Coalition of 70 investors worth $3 trillion call on world's largest oil & gas, coal and electric power companies to assess risks under climate action and 'business as usual' scenarios (Oct. 24, 2013)
[8] *See, for example,* http://www.nytimes.com/2014/03/21/business/in-a-shift-exxon-agrees-to-report-on-carbon-asset-risk.html..
[9] http://www.ccla.co.uk/ccla/press/Aiming for A 21st January Press Release_FINAL.pdf
[10] http://www.ipe.com/news/esg/bp-follows-shell-to-back-climate-change-resolution/10006577.fullarticle
[11] On December 9, 2014, the Global Investor Coalition released *Investor Expectations: Oil and Gas Company Strategy—Supporting investor engagement on carbon asset risk.*
[12] Carbon asset risk questions have been incorporated into the 2014 and 2015 CDP climate change questionnaires.
[13] CDSB, Proposals for reporting Carbon Asset Stranding Risks.
[14] SASB Oil & Gas Exploration & Production sustainability accounting standard, reserves valuation and capital expenditures accounting metrics.
[15] Carbon Tracker Initiative, *Recognising Risk, Perpetuating Uncertainty: A baseline survey of climate disclosures by fossil fuel companies* at 21-22 (October 2014).

Carbon asset risks are material under SEC rules: According to the SEC, "Registrants must identify and disclose known trends, events, demands, commitments, and uncertainties that are reasonably likely to have a material effect on financial condition or operating performance." The SEC also notes, "Disclosure of a trend, demand, commitment, event or uncertainty is required unless a company is able to conclude either that it is not reasonably likely that the trend, uncertainty or other event will occur or come to fruition, or that a material effect on the company's liquidity, capital resources or results of operations is not reasonably likely to occur."

The 2010 SEC interpretive guidance on climate change disclosure provides additional guidance, noting, "Legal, technological, political and scientific developments regarding climate change may create new opportunities or risks for registrants. These developments may create demand for new products or services, or decrease demand for existing products or services." Specifically, the guidance suggests disclosing potential "decreased demand for goods that produce significant greenhouse gas emissions."

Carbon asset risks have undoubtedly become "known trends" within the meaning of the Commission's regulatory standards and therefore must be discussed in SEC filings. The risk of reduced demand for oil, uneconomic projects and stranded assets due to the factors discussed above is material to the companies and their investors, as it directly affects the profitability and valuation of the companies.

Investors and other groups have asked the SEC and other regulators to improve reporting on carbon asset risks. In February 2015, the Carbon Tracker Initiative wrote to the Commission asking for improved MD&A disclosure by fossil fuel companies of the effects of low carbon scenarios on commodity demand and price and subsequent effects of those shifts on future capital expenditure plans, liquidity and reserves valuations. The letter also suggested changes to regulations, including uniform requirements for future capital expenditure disclosure and standards for reporting the carbon content of reserves and resources. In 2013, Carbon Tracker, former SEC Commissioner Bevis Longstreth and former Deputy Chief Accountant Jane Adams petitioned FASB, asking that disclosure of carbon content of reserves should be required for companies with significant fossil fuel reserves.

In 2008, a group of investors and other groups wrote to the SEC regarding the *Modernization of Oil and Gas Reporting Requirements*, concerned that climate change and policies adopted to combat greenhouse gas emissions could render certain assets—particularly those with high carbon intensity—uneconomic. The letter asked that the revised rule ensure that companies disclose material risks posed by the extraction and development of additional reserves as well as reported reserves that have higher than average full lifecycle greenhouse gas emissions associated with their extraction, production and combustion.

Examples of carbon asset risk disclosure: ExxonMobil, Chevron and Canadian Natural Resources: As a result of the investor letters, dialogues and resolutions mentioned earlier, oil and gas companies have provided limited voluntary disclosure relating to carbon asset risks, but they have provided no or poor reporting in their SEC filings.

While the three companies discussed below provided little carbon asset risk disclosure in their annual SEC filings, we emphasize that other oil and gas companies likewise reported little or nothing about the range of risks from existing and future laws and trends, such as those related to carbon pricing, pollution and efficiency standards, removal of subsidies, fuel switching and other factors that may reduce demand for oil and gas.

In response to investor requests, ExxonMobil released two reports in March 2014 concerning carbon asset risk and climate change.[16] The company stated it is confident its hydrocarbon reserves are not and will not become stranded through 2040. However, it did not provide a well-supported analysis, instead including only a brief discussion of a "low carbon scenario" through 2040 and failing to discuss current and anticipated laws and trends that are likely to affect demand for its products. The company did not consider the financial risks it could face from a reduction in demand for oil within 10-15 years, nor the implications for its business model of a scenario in which carbon dioxide is kept under 450 parts per million (ppm).[17] While the company stated that it tests investment opportunities against low price scenarios that could be representative of a carbon-constrained environment, it did not discuss how those tests are performed or the scenarios it analyzed, let alone the results.

In its latest 10-K filing, ExxonMobil provided virtually no information about carbon asset risks. The company mentioned that government regulations could "reduce demand for hydrocarbons", shift demand "toward relatively lower-carbon sources such as natural gas" and increase costs in other ways, without providing any further discussion. It stated that it expects oil to remain the largest source of the world's energy—about one-third—in 2040, without discussing other possible scenarios for the world's energy mix. It discussed its capital and exploration expenditures in 2013 and 2014 and mentioned they should average about $34 billion per year "for the next few years."

ExxonMobil also discussed projections for total renewable energy growth (15% of total energy by 2040) and the International Energy Agency's (IEA) fossil fuel energy investment projection from 2014-2040 (about $28 trillion). The company did not mention IEA research that examined other realistic scenarios. A 2013 IEA report[18] found that a world in which atmospheric CO2 is kept below 450 ppm "requires . . . reduced investment in fossil-fuel supply [$4.0 trillion lower than in the "New Policies Scenario" through to 2035]. However, this saving is more than offset by a $16.0 trillion increase in investment in low-carbon technologies, efficiency measures and other forms of intervention." The report also found, "In the case of oil and gas fields that have yet to start production, or have yet to be found, the lower level of demand in the 450 Scenario means that fewer of them justify the investment to bring them into production (or to find them) before 2035. . . ."

Chevron has provided some limited voluntary reporting related to carbon asset risks. For example, in its response to the CDP climate change survey, the company said it does not conduct scenario analyses based on a 450ppm goal because, it argued, the risk exposure to current assets

[16] ExxonMobil, *Energy and Carbon – Managing the Risks* (March 2014) and *Energy and Climate* (March 2014).
[17] Carbon Tracker Initiative, *Responding to Exxon – A Strategic Perspective* (September 2014)
[18] International Energy Agency, Redrawing the Energy-Climate Map: World Energy Outlook Special Report, June 10, 2013.

and capital is minimal in view of the continuing global demand for oil and gas, the future investment required to meet that demand, and other factors. The company discussed how it may fare under the IEA's global energy demand and 450ppm scenarios, and the embedded carbon within different types of fossil fuel reserves. It did not provide most of the information investors require, such as capex plans for new reserves including payback periods and alternative uses of capital, potential GHG emissions of unproduced reserves by resource type and a discussion of existing and long term risks to unproduced reserves.

In its latest 10-K filing, Chevron provided almost no information about carbon asset risks. The company briefly mentioned that "incentives to conserve or use alternative energy sources" could reduce demand for its products and affect sales volumes, revenues and margins. It discussed regulatory and physical risks related to climate change, renewables projects, a range of environmental issues, oil and gas reserves and related matters. It discussed its oil sands and heavy crude oil projects and the differential in crude oil prices between high-quality and lower quality crudes. It discussed its capital and exploration expenditures in 2012-2014, and it estimated $35 billion in expenditures in 2015: a "planned reduction" compared to 2014, "in large part a response to current market conditions." However, it did not disclose the trend towards increasingly high cost, carbon intensive oil and gas exploration projects nor other information investors require about carbon asset risks.

Canadian Natural Resources is included here as an example of a company with more than 50% of its capex exposed to high risk, carbon intensive projects, according to the Carbon Tracker Initiative. The company provided almost no voluntary disclosure of carbon asset risks. In its CDP response, the company said it does not conduct scenario analyses based on a 450ppm goal but instead completes scenario planning exercises to identify "various risks" to the business. The company mentioned its six core principles for GHG emissions management, which do not include consideration of carbon asset risks. While the company discussed the four techniques it uses to extract bitumen from oil sands, it did not disclose information about the relative energy intensity of each method or breakeven costs for such projects.

In its form 40-F filed on March 24, 2014, Canadian Natural Resources discussed climate-related and oil sands regulations, its emissions reduction efforts and related issues. It did not discuss carbon asset risks, apart from briefly mentioning differing market prices for heavy crude oil and bitumen vs. light and medium crude, and possible U.S. regulation to limit purchases of oil in favor of less energy intensive sources.

Request to the Commission: We believe it is crucial that SEC staff closely scrutinize oil and gas companies' reporting on carbon asset risks under existing SEC rules. We appreciate the attention you already pay to carefully examining disclosures in all industries. A recent report[19] found that the SEC issued 1,528 comments to energy and mining companies[20] from October 2013 to September 2014. However, while the Upstream subsector received the most comments

[19] PwC, Stay informed: SEC comment letter trends—Energy and Mining (December 10, 2014).
[20] The report analyzed the following energy subsectors and Standard Industry Classification codes: Downstream (2911, 5171), Midstream (4610, 4922), Oilfield services (1381, 1382, 1389, 3533), Upstream (1311, 5172, 6792) and Mining (1000, 1040, 1090, 1220, 1221, 1400).

in this group, and the primary areas of focus for comments were proven undeveloped reserves, third party reports and proven reserves, the comment letters did not address carbon asset risks.

Specifically, we ask that staff scrutinize disclosures in annual filings by ExxonMobil, Chevron, Canadian Natural Resources and other oil and gas companies regarding carbon asset risks, and provide comments to these issuers that address reduced demand scenarios, risks associated with capital expenditures on high cost unconventional resource projects and associated stranded asset risks.

Jim Coburn at Ceres will follow up on our behalf with a request for a meeting to discuss our concerns. Thank you very much for your consideration of these issues.

Sincerely,

Lura Mack
Director
Portfolio Advisory Board, Adrian Dominican Sisters

Natasha Lamb
Director of Equity Research & Shareholder Engagement
Arjuna Capital

Danielle Fugere
President
As You Sow

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Legal & General Investment Management

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Head of Sustainability
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Managing Partner
Macroclimate LLC

Deborah B. Goldberg
Massachusetts State Treasurer and Receiver General

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The McKnight Foundation

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VP, Investments and Cash Management
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Trillium Asset Management, LLC

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Treasurer & CFO
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Theresa Whitmarsh
Executive Director
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James L. McIntire
Washington State Treasurer

Marc Robert
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Water Asset Management

Sonia Kowal
President
Zevin Asset Management, LLC

cc:
Commissioner Luis A. Aguilar
Commissioner Daniel M. Gallagher
Commissioner Kara M. Stein
Commissioner Michael S. Piwowar
Director Keith F. Higgins, Division of Corporation Finance
James Schnurr, Chief Accountant
Disclosure Effectiveness Review

Appendix II

Ceres

Mobilizing Business Leadership for a Sustainable World

June 22, 2016

The Honorable Mary Jo White
Chair
Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549

Re: Investor Concern About Poor Climate Risk Disclosure and Request for SEC Action

Dear Chair White:

The Paris Climate Agreement, expanding policy action on climate change, the accelerating global transition to clean energy, and increasing extreme weather impacts have all increased the materiality of climate change as a risk to listed companies across multiple industries, especially the energy and electric power sectors. Yet corporate disclosure of material climate risks, financial impacts and opportunities remains limited and generally unhelpful to investors seeking to understand how these issues affect the companies they invest in.

We commend the Commission for issuing helpful guidance to issuers in 2010 on preparing climate-related disclosures required by Regulation S-K. And we further commend you for the recent Concept Release that seeks input on climate and sustainability related disclosures, on which we intend to provide comments.

However, we remain concerned about the Commission's lack of action to improve climate risk disclosure in recent years. Despite the increasing importance of climate change to businesses and investors, in the last three years the Commission has taken little action addressing this growing risk, excepting actions related to shareholder proposals and proxy voting. The Division of Corporation Finance has issued very few comment letters to companies facing material risks from climate change, the ongoing shift to clean energy and policy responses.

The undersigned investors, as long-term owners of listed companies in the energy, utility, insurance and other sectors affected by climate change, and members of the Ceres Investor Network on Climate Risk and the other international investor groups comprising the Global Investor Coalition on Climate Change, request that the Commission focus on climate change and carbon asset risk as material issues, and take steps to improve disclosure by registrants on how these issues are impacting their businesses. We believe it would be helpful for the SEC to develop and provide guidance to issuers on assessing qualitative factors surrounding climate change and carbon asset risk. In addition, we ask that the Division of Corporation Finance closely scrutinize filings by oil and gas, electric power and insurance companies, and issue comment letters when annual, quarterly or other filings fail to discuss with meaningful specificity the material risks and impacts of climate change and related matters to their businesses.

We further request a meeting with you and key staff to discuss this issue and how it can best be addressed. We understand that Ceres has reached out to your staff to schedule this meeting in the coming weeks. Thank you for your attention to this important issue.

Sincerely,

Lura Mack
Director
Portfolio Advisory Board, Adrian Dominican Sisters

Kevin C. Weinman
Chief Financial and Administrative Officer
Amherst College

Natasha Lamb
Partner
Arjuna Capital

Danielle Fugere
President
As You Sow

Phil Vernon
Managing Director
Australian Ethical Investment

Betty Yee
California State Controller

Jack Ehnes
Chief Executive Officer
California State Teachers' Retirement System

David Atkin
Chief Executive Officer
Cbus Super

Stephen Viederman
Chair, Finance Committee
Christopher Reynolds Foundation

Denise Nappier
Connecticut State Treasurer

Sister Louise Gallahue, D.C.
Provincial
Daughters of Charity, Province of St. Louise

Steven J. Schueth
President
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Jeffery W. Perkins
Executive Director
Friends Fiduciary Corporation

David T. Abbott
Executive Director
George Gund Foundation

Leslie Samuelrich
President
Green Century Capital Management

Katie Briggs
Managing Director
Laird Norton Family Foundation

Mark Kriss
Managing Partner
Macroclimate

Molly Murphy
Chief Investment Officer
Mercy Health

Mary Minette
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The Nathan Cummings Foundation

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Larisa Ruoff
Director of Shareholder Advocacy and
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Richard Blakney
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Chief Investment Officer
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Treasurer and Chief Financial Officer
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Aaron Ziulkowski, CFA
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Walden Asset Management

Theresa Whitmarsh
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Marc H. Robert
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Seb Beloe
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cc:
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Commissioner Michael S. Piwowar
Director Keith F. Higgins, Division of
Corporation Finance
James Schnurr, Chief Accountant