



SUSTAINABLE EXTRACTION?

An Analysis of SEC Disclosure
by Major Oil & Gas Companies
on Climate Risk & Deepwater Drilling Risk

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FOREWORD

Disclosure of material business risk is a core underpinning of the modern global economy's health. Capital cannot be allocated wisely—or safely—to enterprises that don't adequately inform investors of the material risks they face. And companies that aren't clear about their risks skew market choices away from the global good as well as their own best interests, and ultimately their own bottom lines.

This report finds that companies making extensive capital investments related to climate change and deepwater drilling are failing to adequately disclose their substantial material risks in those areas. Investors expect more, and asked the U.S. Securities and Exchange Commission to improve climate reporting in a 2007 petition spearheaded by Ceres and the Environmental Defense Fund. The landmark 2010 SEC guidance that resulted requires corporate disclosure of material climate risks.

Investors are looking for substantial improvement in these disclosures. This report, based on annual financial filings submitted in Q1 2011 by 10 of the world's largest oil and gas companies, finds that none of them provided high-quality reporting of their climate change and deepwater drilling risks and opportunities. And the SEC's guidance for disclosure in these areas does not yet require complete, and therefore completely accurate, assessment of companies' climate or deepwater drilling performance or risks. So disclosure has a long way to go.

This is not just about currently-predominant practices, but a fast-arriving future.

Proliferating offshore drilling, including impending drilling in the sensitive Arctic region, poses wide-ranging risks—a point made clear by the vast business ripples from the Gulf of Mexico oil spill in 2010. Offshore drilling is taking off globally, and the newest hotbed is the Arctic region, where melting of sea ice has opened up previously inaccessible oil reserves. Ironically, more oil fields will likely open up as warming global temperatures accelerate the melting.

The need to improve disclosure goes beyond offshore drilling, as unconventional oil and gas production becomes the new norm for the industry. Oil sands, tight oil and shale gas production each pose significant risks to companies, investors and stakeholders. New regulations, adverse environmental impacts and water availability constraints are just a few of the wide-ranging risks companies face.

For exactly these reasons, strong disclosure of risks must be accompanied by significant improvements in environmental and safety performance. Companies must lower their greenhouse gas emissions and minimize environmental and safety risks from offshore drilling. No reasonable reading of the overwhelming scientific consensus on global climate change allows for any but the most aggressive actions—now—by the oil and gas industry to tangibly reduce its carbon and overall environmental footprint.

So the onus is on oil and gas companies to improve their performance quickly. Investors must push for better quality disclosure and performance as well, and the SEC should keep close tabs on the quality of disclosure while prodding companies that continue to fall short.

This report contains detailed recommendations for improving both disclosure and performance. Oil and gas companies, major investors and regulators must see this roadmap as an urgent call to action—and as notice that laggards cannot say they did not have the knowledge or means for improvement. The news media, individual investors and the public must also use these metrics to hold companies to account.

We cannot keep delaying and passing the buck in the face of an immense global crisis. It is past time to stop merely talking about addressing the full spectrum of climate and environmental risks of these two industries. Everyone—not least the companies themselves—has a vital stake in seeing more action now.

Mindy Lubber



EXECUTIVE SUMMARY

Investors in the U.S. and worldwide have made significant efforts to improve corporate performance and reporting on key sustainability issues. Given the financial impacts of climate change and deepwater oil drilling issues in the oil and gas sector, investors need significant improvements in disclosure about these critical risks to make informed investment decisions.

Climate change presents a complex set of business issues, from opportunities to advance low-carbon technologies to risks and opportunities posed by regulations and the changing climate. This includes the U.S. Environmental Protection Agency's measures to control climate pollution under the Clean Air Act, and impacts associated with more frequent extreme weather events, all of which have made corporate climate risk disclosure an important priority for investors.

The most significant contributor to climate change is, of course, fossil fuel combustion, meaning that those who produce and use oil and gas face greater carbon risks. Moreover, oil production itself is growing riskier as conventional oil deposits are depleted. Nowhere is this more true than in deepwater oil drilling, where some of the risks were so prominently on display in 2010 in the Macondo Well blowout in the Gulf of Mexico. The tripling of deepwater oil production capacity since 2000, the significant projected growth in deepwater projects, the Macondo blowout and resulting financial damage to BP and other oil producers, and the ensuing regulatory changes have together sparked strong investor interest in disclosure of material business risks and strategies related to deepwater drilling.

Investors rely on U.S. Securities & Exchange Commission (SEC) filings to learn how publicly traded companies evaluate and manage material risks. This report evaluates how 10 of the world's largest publicly-owned oil and gas companies disclosed material climate risks and deepwater drilling risks in their 2010 annual financial filings, which were filed in Q1 2011 with the SEC. Those companies are **Apache, BP, Chevron, ConocoPhillips, Eni, ExxonMobil, Marathon, Shell, Suncor** and **Total**.

This report rates disclosures as **Good, Fair, Poor** or **No**

Disclosure in eleven categories and provides detailed analyses of reporting. These ratings are based on specific evaluation criteria for each category, which in turn are based on the SEC's Interpretive Guidance on climate risk disclosure and on investors' statements about their expectations for disclosure on climate risk and deepwater drilling risk. A table on page 3 provides complete rankings of each company's disclosure in six climate risk and five deepwater drilling risk categories (see Appendix A for a description of the criteria).

This report does not include an *Excellent* rating for any category because no company provided reporting of this quality on its risks and opportunities. So while companies are making extensive capital investments related to climate change and deepwater drilling that carry material financial risks, they are generally failing to adequately disclose them consistent with SEC rules and growing investor expectations.

The report's key findings are:

Climate risk disclosure:

- BP, Eni and Suncor provided relatively better climate risk disclosure than other companies reviewed, while Apache and ExxonMobil provided the lowest quality disclosure.
- Of 60 climate disclosure ratings, only 5 were *good* and 34 (over 50%) were *poor* or *no disclosure*.
- While each company provided some disclosure on regulatory risks and indirect risks, the reporting ranged widely in specificity, comprehensiveness and quality of analysis.
- Physical risks got short shrift in most filings, with 6 companies providing *no disclosure* and 3 providing *poor* disclosure.
- Most companies (8 of 10) inadequately disclosed their GHG emissions in SEC filings and only two companies—BP and Eni—provided specific data.
- Six of the companies provided at least fair disclosure of efforts to manage their own greenhouse gas emissions, but 7 had *poor* or *no disclosure* of their corporate governance related to climate change.

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Deepwater drilling risk disclosure:

- BP and Total provided relatively better deepwater drilling risk disclosure than the other companies reviewed, while Suncor provided the lowest quality disclosure.
- Out of 50 deepwater drilling risk disclosure ratings, only 4 were *good*, and 29 (58%) were *poor* or *no disclosure*.
- Even after the Gulf of Mexico disaster, disclosure on drilling and safety more broadly remained weak overall, even concerning drilling risk management and spill response plans.
- Most of the companies (8 of 10) provided minimal or no information about safety or environmental statistics; similarly, 8 of 10 provided minimal or no information about investments in safety-related R&D.
- Almost all of the companies (8 of 10) provided at least *fair* disclosure of their corporate governance concerning safety and drilling risks.

It should be noted that companies that have been criticized for inadequate environmental and safety performance scored relatively well on this report. Most notably, BP provided *good* disclosure in 4 of 5 deepwater drilling categories. The company's disclosure occurred after the Macondo disaster and was improved compared to its reporting before Macondo.

BP's discrepancy between performance and disclosure—and, more broadly, other *good* ratings in the report—must be taken in context:

- BP's and several other companies' deepwater drilling disclosure improved significantly *after* Macondo. However, even the best reporting provided narrative discussions of deepwater drilling policies and actions, without providing investors sufficient metrics to evaluate the success of new policies designed to reduce the risks of accidents. Close scrutiny—by investors and the SEC—of company filings is needed to ensure that disclosure is a better guide to future performance.

- The quality of climate risk disclosure in SEC filings is generally inadequate to allow investors to conduct complete and accurate assessments of risks and future performance.
- Climate change and deepwater drilling disclosure in SEC filings are new expectations of companies and will likely become more robust over time. The SEC's climate disclosure guidance is only two years old and does not cover important material risks like emissions management, and the Commission has not weighed in on deepwater drilling disclosure. In other words, reporting expectations are not yet robust enough to ensure that disclosure completely reflects and sparks improvements in performance.

The report's findings are concerning, and demonstrate the need for oil and gas **companies** to better align their climate risk and deepwater drilling risk disclosure with SEC rules and investor expectations. Climate-related disclosure should adhere to the SEC's February 2010 Guidance and include other climate information, where material. Deepwater drilling disclosure should be equally robust, providing information required by existing SEC rules on material risk disclosure. Companies should carefully analyze their performance in these areas and then make significant improvements in the scope and specificity of their disclosures.

Investors need to push for better quality disclosure in order to accurately assess climate and deepwater drilling risks across their portfolios, both for entire industries and specific companies.

Securities regulators should review the quality of disclosure on an ongoing basis and notify companies where their reporting is inadequate. They should also consider whether additional guidance or rules are needed to improve climate risk and deepwater drilling risk reporting.

Table: Quality of Climate Risk Disclosure & Deepwater Drilling Risk Disclosure in SEC Filings

● Good Disclosure ○ Fair Disclosure □ Poor Disclosure ■ No Disclosure

CLIMATE CHANGE RISKS & OPPORTUNITIES						
	Regulatory Risks	Physical Risks	Indirect Risks & Opportunities	GHG Emissions	Emissions Management	Climate Governance
Apache	○	□	□	■	■	□
BP	○	○	●	□	○	○
Chevron	○	■	○	■	□	□
ConocoPhillips	○	□	□	■	□	□
Eni	●	■	○	●	●	■
ExxonMobil	□	■	□	■	□	□
Marathon	○	□	□	■	○	□
Shell	□	■	○	□	○	○
Suncor	●	■	○	□	○	○
Total	○	■	○	■	○	□

DEEPWATER DRILLING RISKS					
	Safety & Environmental Statistics	Drilling Risk Management	Spill Response	Safety R&D	Corporate Governance on Drilling
Apache	■	□	○	■	□
BP	●	●	○	●	●
Chevron	■	□	○	■	○
ConocoPhillips	■	□	□	■	○
Eni	□	○	○	○	■
ExxonMobil	□	□	■	■	○
Marathon	□	■	□	■	○
Shell	○	○	□	■	○
Suncor	■	□	■	■	○
Total	□	○	○	□	○

RECOMMENDATIONS FOR IMPROVING DISCLOSURE AND PERFORMANCE

This report shows that oil and gas companies' SEC disclosures on climate risk and opportunities and deepwater drilling risks leave much room for improvement. Even companies with good disclosure often fall short of providing investors with all material information needed to properly evaluate risks and opportunities. Investors require better disclosure in SEC filings in order to accurately assess the risks in their portfolios.

While companies themselves are responsible for the quality of their disclosures, securities regulators, investors, and state and federal governments also have critical roles to play in improving reporting, as described below. Improved disclosure—coupled with continued engagement by companies with investors, stakeholders and governments—can lead to significant improvements in performance.

Climate Risk

The oil and gas companies evaluated in this report provided inadequate information to allow investors to fully gauge their exposure to evolving climate risks and opportunities.

Companies need to provide more information about both risks and opportunities presented by climate change.

Corporations should more fully account for the potential business implications of physical climate impacts; for how legal, technological, political, scientific and business trends regarding climate change are affecting and could affect demand for their products; and for their past, present and projected direct and indirect GHG emissions, so that investors can get a sense of the companies' exposure to climate risks across their entire value chain. In particular, disclosure of GHG emissions reduction targets are especially helpful, because they indicate a company is managing the risks associated with an uncertain regulatory environment with regard to climate change. Companies that do not demonstrate sufficient GHG emissions reduction goals and initiatives are in effect transferring the related regulatory risk to investors. Voluntary disclosure guidance like the Global Reporting Initiative (GRI), the Carbon Disclosure Project (CDP) and the Global Framework for Climate Risk Disclosure, in conjunction with the SEC's climate disclosure guidance, can help companies determine what material issues they should include in SEC filings.

Investors should continue encouraging companies and securities regulators to improve climate risk reporting.

Investors have made great strides in the last ten years in improving corporate climate reporting by engaging companies through shareholder resolutions and dialogues, building voluntary disclosure mechanisms like the GRI and encouraging the SEC to issue Interpretive Guidance. In coming years, investors should focus on three areas to build on past progress: (1) Encourage securities regulators worldwide to follow the SEC's lead and issue guidance or rules on climate risk disclosure; (2) Monitor the quality of climate reporting in SEC filings and communicate deficiencies to SEC staff and the companies involved; and (3) Communicate with SEC staff about how investors use climate disclosure in SEC filings, and about how reporting could be improved to make it more useful.

Securities regulators including the SEC and the Canadian Securities Administrators should pay particular attention to climate reporting in the oil and gas industry. Their goals should be to discourage boilerplate reporting and encourage disclosure that fulfills SEC expectations and meets investors' needs. Staff should take advantage of tools regularly used in the filing review process, such as comment letters, to raise climate disclosure issues with oil and gas companies.

Federal and state governments should communicate scientific findings and other climate change developments to companies, investors, and securities regulators. For example, data from the EPA's new GHG reporting rule is relevant to material risks that companies disclose in SEC filings, and EPA-SEC collaboration will be invaluable for assessing the relevance of that data to investors. As state governments collect data and issue reports on the physical risks of climate change facing vulnerable regions, collaboration with investors and companies about disclosure and management of those risks is vital.

Deepwater Drilling Risk

Few companies provided good disclosure in important deepwater drilling categories including drilling risk management, statistics and spill response. Yet companies continue to expand deepwater exploration and production, posing significant risks to investors and stakeholders.

Companies should improve their deepwater drilling risk disclosure, particularly of EHS performance data, investment in spill prevention and response, spill contingency plans, contractor selection and oversight, and governance and management systems. In all these areas, companies should focus on providing data that allows investors to measure both improvements in performance and ongoing deficiencies or setbacks. In addition, investors lack basic information about the degree of companies' exposure to risky offshore environments. Companies should disclose the percentage of offshore resources compared to their overall reserves, providing separate percentages for shallow water and deepwater.¹

Investors should renew their efforts to improve corporate reporting on deepwater and offshore drilling risk disclosure. New drilling in the Arctic, increasing drilling in the Gulf of Mexico, and continued offshore incidents illustrate that the growing risks of offshore drilling include but are not limited to deep water. Shell plans to start drilling test wells off the Alaskan coast in July 2012, opening a new frontier in U.S. domestic oil exploration that faces significant challenges related to the cold environment.² Four environmental groups recently filed suit to challenge a new sale of offshore drilling leases in the Gulf of Mexico by the U.S. Bureau of Ocean Energy Management, arguing that the agency "dismissed the lessons learned during the Deepwater Horizon disaster and failed to obtain essential information about the status of species and resources still suffering from the 2010 oil spill."³ Total's recent gas leak over two miles below the seabed in the North Sea,⁴ which lasted almost

two months, is but one illustration of the daunting technical challenges companies engaged in deepwater drilling continue to face. Investors should work with companies to develop improved disclosure metrics and push for improved practices to reduce the risks inherent in offshore drilling.

The SEC should focus on drilling-related risks, applying existing material risk reporting requirements to improve oil and gas companies' disclosure. In recent years, the Commission has taken steps to improve reporting on hydraulic fracturing risks, mining safety risks and climate change risks and opportunities, which provide lessons for improving drilling risk reporting. The SEC staff should look closely at disclosure of offshore drilling risks as they review filings, and consider the development of guidance or rulemaking, if needed to improve reporting.

Federal and state governments should collaborate on offshore drilling risk management with companies, investors and securities regulators. For example, the Department of Energy's (DOE) Ultra-Deepwater Advisory Committee, which advises DOE on technology, safe operations and environmental mitigation, should consider the role that investors and securities regulators can play on improving corporate reporting and performance in this area. As state governments collect data on the impacts of offshore drilling and offshore spills on people, wildlife and ecosystems, they should collaborate with these groups to understand and encourage companies to report on the financial effects of those impacts.

BACKGROUND: SEC & INVESTOR DISCLOSURE EXPECTATIONS

United States securities laws are based upon the principle that sound investments, efficient markets and a stable national economy depend upon public disclosure of significant information on firms' financial condition.⁵ Robust corporate disclosure of qualitative and quantitative data on material risks is the foundation of a transparent and fair marketplace in which investors can make informed decisions.

SEC Regulations on Material Risk Disclosure

Federal law requires that investors have access to information that allows them to meaningfully evaluate material risks. Indeed, the overriding purpose of disclosure requirements under U.S. securities law is to remedy "information asymmetries" between current or potential investors and company insiders.⁶

SEC & INVESTOR DISCLOSURE EXPECTATIONS

The SEC addresses information asymmetries by requiring companies to disclose in their filings all “material” information about their businesses, including the competitive environment, costs of complying with regulations, litigation, risk factors, and known trends, uncertainties, and other factors reasonably likely to have a material impact on a company’s financial position or results, including material environmental, health and safety issues. Materiality is determined not with reference to a bright-line quantitative benchmark, but instead by evaluating the significance of the information to the reasonable investor. Information is material if “there is a substantial likelihood that [it] would have been viewed by the reasonable investor as having significantly altered the ‘total mix’ of information made available.”⁷

Securities rules expound upon this central “materiality” requirement by identifying specific disclosures companies must make. Regulation S-K, for instance, outlines companies’ main narrative disclosure requirements. In particular:

- Item 101 requires a company to describe its business, including the sources and availability of raw materials, competitive conditions in the business, and the material effects of compliance with environmental laws;
- Item 303 requires the company to discuss its financial condition and results of operations, including “known trends or uncertainties that have had or that the registrant reasonably expects will have a material favorable or unfavorable impact on net sales or revenues or income from continuing operations”; and
- Item 503(c) requires companies to discuss the most significant factors that make an investment in the company speculative or risky.⁸

Companies domiciled outside of the U.S. are not covered by Reg. S-K, but SEC regulations for non-U.S. companies have similar disclosure requirements.⁹

Investor Expectations for Climate Risk Disclosure

Over the past ten years, investors have urged the SEC to ensure that companies provide adequate disclosure on climate-related risks and opportunities consistent with existing disclosure requirements. In February 2010, in response to an investor petition authored by Ceres and

Environmental Defense Fund, the SEC issued *Commission Guidance Regarding Disclosure Related to Climate Change*.¹⁰ It describes the potential impact of climate-related matters on public companies and outlines topics that should be disclosed where material, including the impact of carbon-reducing legislation and regulations (existing or pending), international climate accords, indirect consequences of regulation or business trends, and physical impacts.

The Guidance is an important development with great potential to improve reporting, and it should be read in conjunction with leading investor statements on climate disclosure.¹¹ While the Guidance addresses regulatory, physical, and indirect risks and opportunities, companies must also disclose other material information. For some companies, information about GHG emissions, their emissions management strategies, and their corporate governance systems with respect to climate risks are material. Investors have pressed companies to disclose such information and will continue to play an important role in defining the future of climate risk reporting.

Two leading investor statements on climate disclosure were also instrumental in developing this report. The *Global Framework for Climate Risk Disclosure* is a comprehensive statement “of investor expectations for comprehensive corporate disclosure,” and the portions of the *Framework* relating to GHG emissions and emissions management disclosure were of particular relevance to this report.¹² The *Global Climate Disclosure Framework for Oil & Gas Companies*, which covers enhanced disclosure of GHG emissions, the impact of climate policy, company investments in low-carbon technologies and integration of future carbon prices, and physical climate impacts, was also helpful.¹³

Investor Expectations for Deepwater Drilling Disclosure

In the wake of the Macondo disaster, news reports¹⁴ and discussions with corporate officials have suggested that many oil and gas companies have inadequate drilling risk management and spill response systems in place, so investors began asking companies to better disclose and manage these issues. In August 2010, 62 investors representing more than \$2.5 trillion in assets wrote to 27 companies with significant offshore oil and gas operations requesting information about their investments in spill

prevention and response, spill contingency plans, lessons learned from the Gulf disaster, contractor selection and oversight, and governance and management systems.¹⁵ In addition, in December 2010, the California and Pennsylvania state treasurers asked the National Oil Spill Commission to

recommend that the SEC develop guidance on deepwater drilling disclosure, and asked the SEC to act to improve this type of reporting.¹⁶

BACKGROUND: RISKS FROM CLIMATE CHANGE & DEEPWATER DRILLING

Oil and gas companies face significant risks and opportunities from climate change and from increased deepwater drilling worldwide.

Climate Risks & Opportunities

Climate change poses major risks and opportunities for companies whose primary focus is the extraction and production of oil and gas. Investors consider numerous climate risk issues to be material for these companies, and they require improved reporting to make informed investment decisions.

Oil and gas production causes significant GHG emissions. Environmental releases of methane, the primary component of natural gas, (e.g., fugitive emissions) also increase climate impacts, given the high global warming potential of methane compared to carbon dioxide. The bulk of the lifecycle GHG emissions generated by the oil and gas industry, however, comes from consumption and combustion of the industry's products.

Many oil and gas companies operate in countries covered by the Kyoto Protocol and have experienced carbon-reducing regulations, particularly in Europe. Many other countries, such as China and India, are also implementing or considering such policies. As regulatory oversight of greenhouse gases increases and as market pressures continue to shift to lower-carbon technologies, these companies will have to further reduce emissions in their operations and product lines. Company disclosures that

indicate effective management of this dynamic regulatory environment engender investor confidence and may diminish the perceived risk exposure of the most transparent reporters. At the same time, climate change presents new business opportunities, such as the potential for vast expansion in the use of natural gas as a bridge fuel to a low-carbon economy.

Oil and gas companies are also affected by the physical impacts of climate change. These companies often operate in locations, such as the U.S. Gulf Coast and the North Sea, that are prone to the type of extreme weather events that climate change exacerbates. Changes in weather patterns, such as warmer winters, can also significantly impact demand for the industry's products. In addition, other climate impacts—such as droughts, water scarcity, thawing permafrost, and erratic precipitation—can constrain extraction and refining and disrupt the sector's transport, distribution, and support systems.

Deepwater Drilling Risks

Deepwater drilling has become a critical part of the global oil industry, representing nearly 10 percent of global production in 2010.¹⁷ Global deepwater production capacity more than tripled between 2000 and 2009, and deepwater discoveries accounted for roughly half of new oil discoveries from 2006 to 2009.¹⁸ Yet the Gulf of Mexico disaster in 2010 clearly demonstrates that deepwater exploration and production can pose material risks. And research released

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in the wake of the BP blowout showed that many other companies face the same material risks.¹⁹ Investors require better information about whether companies are prepared to manage these risks.

Oil and gas companies with deepwater drilling exposure face a range of risks illuminated by the Macondo spill, particularly since that spill may have been reflective of a trend of declining safety in the offshore drilling industry.²⁰ One obvious risk is that a blowout or other significant event could materially impact a company's bottom line. The April 2010 Gulf spill could cost BP and its partners more than \$65 billion, and BP has already taken a \$37.2 billion charge against its earnings for costs related to the spill.²¹

In turn, events like these can have significant impacts on shareholders. For example, following the Macondo spill, BP suspended its dividend and its shares plunged up to 60%; its share price as of March 2012—almost two years after the spill—was still more than 20% below the price before the spill.²² The joint venture partners in the Macondo project were also exposed to significant financial and reputational liabilities.

The accident also led to regulatory changes that could impact deepwater drilling, including a six-month moratorium on such drilling in the U.S. Gulf of Mexico, and a ban on the use of “categorical exclusions” (i.e., waivers from requirements for detailed analyses under the National Environmental Policy Act (NEPA)) for future deepwater projects.²³

Following the Gulf of Mexico disaster, four Ohio pension funds and the New York State Common Retirement Fund sued BP; New York State Comptroller Thomas DiNapoli alleged that “BP misled investors with false and misleading statements about the safety of its drilling operations and its ability to fix events like the oil spill.”²⁴ Investors’ interest in better disclosure of offshore drilling risk is similar to their efforts to improve hydraulic fracturing, climate change and other ESG disclosure by companies: shareholder value is better preserved by preventing costly accidents compared to trying to mitigate financial impacts after an accident occurs.

EVALUATION METHODOLOGY

This report analyzes the 2010 SEC annual filings submitted in Q1 2011 by Apache, BP, Chevron, ConocoPhillips, Eni, ExxonMobil, Marathon, Shell, Suncor and Total. These are 10 of the world's largest publicly-traded oil & gas companies that have significant deepwater drilling exposure and submit annual filings to the SEC. This report assesses the quality of disclosure on eleven issues:

Climate change:

- Regulatory risks
- Physical risks
- Indirect risks & opportunities
- GHG emissions

- Emissions management
- Corporate governance of climate change

Deepwater drilling:

- General safety and environmental statistics
- Drilling risk management
- Spill response
- Safety-related research and development (R&D)
- Corporate governance on drilling and safety risk management

Evaluation criteria of **Good**, **Fair**, **Poor** and **No Disclosure** (see Appendix A) were used to rate reporting in these

11 categories. The ratings reflect the company's disclosure for each category as a whole. A *good* rating suggests that companies have met several—but not all—important informational needs of investors. **This report does not include an *Excellent* rating for any category because no company provided reporting of this quality on its risks and opportunities.**

For American companies, we evaluated 2010 10-Ks, while for non-U.S. companies, we analyzed 2010 20-Fs or 40-Fs.²⁵ The report also draws occasional comparisons to the levels of disclosure in 2009 filings, where that comparison is illuminating.²⁶ For corporate governance issues, this report also considers the elements of the companies' proxy filings that are explicitly incorporated by reference into annual filings.

Evaluation criteria are based on a combination of SEC expectations and investor expectations for disclosure: mainly the Global Framework for Climate Risk Disclosure and investor statements to oil and gas companies about the deepwater drilling reporting they require. SEC expectations comprise Commission regulations, guidance documents, and Division of Corporation Finance comment letters. These SEC documents address disclosure in different parts of annual filings—for example, Risk Factors, Management's Discussion and Analysis (MD&A), and Description of Business—and together they underscore the principle that wherever it is placed in a report, good disclosure promotes investor understanding of material events that have occurred or may occur in the future.

The SEC consistently discourages “boilerplate” disclosures that generally state obvious conditions or predict effects across the economy or across an entire sector.²⁷ The SEC has also criticized risk disclosures that, while company-specific, are too vague to promote understanding among investors.²⁸

SEC guidance suggests that good disclosure generally identifies past or future events or conditions and analyzes company-specific consequences in a detailed narrative form. Where feasible, good disclosure quantifies financial impacts from material risks or past events. For forward-

looking disclosure, the SEC has set forth a robust set of expectations, including:

- **Analysis of material issues:** “MD&A requires not only a ‘discussion’ but also an ‘analysis’ of known material trends, events, demands, commitments and uncertainties.”²⁹
- **Short and long-term analysis:** MD&A should give investors “a view of the company through the eyes of management by providing both a short and long-term analysis of the business.”³⁰
- **Historical and prospective disclosure, with emphasis on future prospects:** “[D]isclosure should provide material historical and prospective textual disclosure enabling investors to assess the financial condition and results of operations of the registrant, with particular emphasis on the registrant’s prospects for the future.”³¹
- **Material key performance indicators:** Good disclosure identifies and discusses “key performance indicators including non-financial performance indicators, that ... management uses to manage the business and that would be material to investors.”³²
- **Factors necessary for understanding the individual company:** Good disclosure discusses “those key variables and other qualitative and quantitative factors which are peculiar to and necessary for an understanding and evaluation of the individual company.”³³

Good disclosure can lead to better performance by companies, because transparency provides incentives to improve performance and reduce risks. For this reason, investors believe improved corporate disclosure on climate and deepwater drilling issues is critical. However, a rating of *good* disclosure in this report *does not measure* the quality of a company's efforts to reduce climate risks and pursue opportunities, *nor does it measure* the quality of deepwater drilling risk management efforts. **This report focuses on evaluating companies' disclosures, not the quality of companies' performance in managing these risks and opportunities.**

FINDINGS: CLIMATE RISK & DEEPWATER DRILLING RISK DISCLOSURE

This section contains one page of findings for each of the 11 disclosure categories we analyzed, which:

- Present key findings
- Rate each company's reporting as *good*, *fair*, *poor* or *no disclosure*
- Discuss key excerpts from companies' SEC filings, focusing on important elements of good and poor disclosure

Ratings in all categories are presented in the tables on page 3. For complete evaluation criteria, see Appendix A. For detailed evaluations of reporting in each of the 11 disclosure categories, see Appendix B.

REGULATORY RISK DISCLOSURE— CLIMATE CHANGE

Companies should report on their regulatory risks and opportunities from existing and proposed climate change-related laws, including analysis of potential financial impacts.



Key Findings

Company reporting of regulatory risk was better than other climate disclosure categories, as all 10 companies had some disclosure. However:

- 8 companies provided *fair* or *poor disclosure*.
- Only 2 provided *good disclosure*.
- Only 2 discussed a range of financial impacts (dollar figures) for existing regulations.

● GOOD

Eni
Suncor

○ FAIR

Apache
BP
Chevron
ConocoPhillips
Marathon
Total

□ POOR

ExxonMobil
Shell

■ NO DISCLOSURE

The SEC Guidance describes how regulation may trigger disclosure obligations. It advises companies to “consider specific risks they face as a result of climate change legislation or regulation and avoid generic risk factor disclosure. . . .” The Guidance cautions that companies should not limit their analysis of a proposed law only to negative consequences but should also include new opportunities.³⁴

Good disclosure of regulatory risks provides a detailed analysis of existing and proposed laws and their possible effects on the company, including potential financial impacts (quantified, when feasible) and how the company plans to respond. It also assesses whether these laws and regulations “will have, or are reasonably likely to have, a material impact on the company’s liquidity, capital resources or results of operations” and the basis for the company’s conclusions.³⁵ In addition, where relevant, it includes “any material estimated capital expenditures for environmental control facilities” with respect to existing laws or regulations.³⁶

Eni disclosed **a range of financial impacts from an existing regulation**, an element of **good disclosure**, stating they expect their emissions to exceed ETS allowances, with higher operating expenses in the range of €650–750 million, mostly in 2013–14.

Suncor, in some instances, also quantified the effects of existing regulations. For example, it discussed Alberta’s requirement to file compliance reports showing how each facility met emissions intensity targets, and estimated its 2010 compliance costs at between \$5 million and \$10 million.

Suncor also described a basis for its conclusions about materiality, another element of **good disclosure**. It described **assessing future regulatory risks using a carbon price** range: “Suncor assesses potential costs associated with carbon dioxide (CO₂) emissions in our evaluation of future projects, based on our current understanding of pending and possible greenhouse gas regulations” and uses “a base case price range of \$15–\$45 per tonne of CO₂ equivalent, applied against a range of regulatory policy options and price sensitivities.”³⁷

Other parts of Suncor’s regulatory risk reporting, however, were too vague to be helpful to investors: “It is not currently possible to predict either the nature of any requirements or the impact on the company and its business, financial condition, results of operations and cash flow at this time.” Instead, disclosing ranges of financial impacts prevents surprises, where investors learn of the true impact of regulations once they’re in place and only after a company’s valuation has changed. And it provides investors a view of the companies’ future through the eyes of management.

Shell and **ExxonMobil** had **poor disclosure that failed to identify specific regulations or their effects on the company**. For instance, Shell simply noted that climate regulations “may result in project delays and higher costs”; that it expects “a growing share of CO₂ emissions” to be subject to regulation over time; and that future regulations may impose a price on CO₂ that all companies will have to incorporate.³⁸ This level of disclosure leaves investors poorly positioned to understand the effects of particular regulations on the company, so they can evaluate the adequacy of the company’s response.

PHYSICAL RISKS DISCLOSURE— CLIMATE CHANGE

Companies should analyze and disclose physical risks of climate change, including in their supply chain, as well as magnitude and timeframes of anticipated impacts.



Key Findings	GOOD	FAIR	POOR	NO DISCLOSURE
<p>Company reporting of physical risks was worse than any other climate disclosure category.</p> <ul style="list-style-type: none"> 6 companies provided <i>no disclosure</i>. No company provided <i>good disclosure</i>. 1 company reported briefly on research, analysis of risk for new projects, and mitigating risks in existing projects. 		BP	Apache ConocoPhillips Marathon	Chevron Eni ExxonMobil Shell Suncor Total

The SEC Guidance provides a helpful description of key physical impacts climate change may have on companies. “[C]hanges in weather patterns, such as increases in storm intensity, sea-level rise, melting of permafrost and temperature extremes [can impact] facilities or operations. Changes in the availability or quality of water . . . or damage to facilities or decreased efficiency of equipment can have material effects on companies. . . . These effects can impact a registrant’s personnel, physical assets, supply chain and distribution chain.”

The Guidance also noted possible financial consequences of severe weather, three of which may apply to oil and gas companies:

1. For registrants with operations concentrated on coastlines, property damage and disruptions to operations, including manufacturing operations or the transport of manufactured products;
2. Indirect financial and operational impacts from disruptions to the operations of major customers or suppliers from severe weather, such as hurricanes or floods; and
3. Increased insurance premiums and deductibles, or a decrease in the availability of coverage, for registrants with plants or operations in areas subject to severe weather.³⁹

Good disclosure of physical risks provides a detailed analysis of the physical risks the company faces (including in its supply chain), the operational segments and/or specific company facilities that might be impacted, the magnitude and timeframes of the anticipated impacts (quantified, when feasible), and how the company plans to respond. It also includes an assessment of whether these physical risks “will have, or are reasonably likely to have, a material impact on the company’s liquidity, capital resources or results of operations” and the basis for the company’s conclusions.⁴⁰ In addition, good disclosure discusses past physical impacts, if material. No company provided good disclosure.

BP provided **fair disclosure**, but was the only company to provide brief information about its plans to respond to physical risks, including research, analysis of risks for new projects, and mitigation programs for existing projects:

For several years BP has sponsored research, including climate modeling, into the impacts of climate change on both existing operations and new projects. Introduced in 2010, [our new policy] now requires screening for potential climate change impacts in major new projects, projects in new access locations and those that could affect an internationally protected area. For larger projects where climate impacts are identified as a risk, we put a mitigation programme in place. Our current engineering practices address climate impacts in the same way as any other physical and ecological impacts. These practices are periodically reviewed and updated. For many climate-related impacts, the appropriate engineering solutions are already known, because somewhere in our operations we already have experience and design facilities to withstand weather extremes, such as hurricanes, monsoons and Arctic conditions.⁴¹

This disclosure could have been improved with an explanation of whether this new screening process has resulted in practical changes in existing projects.

Companies with **poor disclosure** generally acknowledged physical risks but offered few details about the nature of those risks, their magnitude, or how they may impact the company. For example, **Apache** noted only that “[w]eather and climate may have a significant adverse impact on our revenues and productivity”, that “our planning for normal climatic variation, insurance programs, and emergency recovery plans may inadequately mitigate the effects” of severe weather affecting the company’s exploration and development activities and equipment, that the company does not expect any impacts if “predictions for rising temperatures and sea levels” come to pass, and that “any increase in severe weather could have a material adverse effect on our assets and operations.”⁴²

INDIRECT RISKS & OPPORTUNITIES DISCLOSURE—CLIMATE CHANGE

Companies should report on indirect risks & opportunities from legal, technological, political and scientific climate change developments, including changed demand for new or existing products and services.



Key Findings

Company reporting provided investors little of the information they require:

- Only 1 company provided *good disclosure*.
- 9 companies had *fair or poor disclosure*.
- Quantification and discussion of financial impacts were rare.

● GOOD

BP

○ FAIR

**Chevron
Eni
Shell
Suncor
Total**

□ POOR

**Apache
ConocoPhillips
ExxonMobil
Marathon**

■ NO DISCLOSURE

According to the SEC Guidance, indirect risks and opportunities include financial impacts to a company arising from the effects of “[l]egal, technological, political and scientific developments regarding climate change” on entities other than the company, such as competitors, suppliers, and customers. Indirect consequences or opportunities may include:

1. Decreased demand for goods that produce significant greenhouse gas emissions;
2. Increased demand for goods that result in lower emissions than competing products;
3. Increased competition to develop innovative new products;
4. Increased demand for generation and transmission of energy from alternative energy sources; and
5. Decreased demand for services related to carbon based energy sources, such as drilling services or equipment maintenance services.⁴³

Good disclosure of indirect risks provides a detailed analysis of how the company’s financial condition or operations may be affected by climate-related developments in the marketplace, such as impacts on suppliers and customers (e.g., changes in demand for new and existing products and services due to their emissions profiles), and by impacts on the company’s reputation. It includes the magnitude of the anticipated risks and opportunities (quantified, when feasible), an assessment of materiality, and the basis for the company’s conclusions.

BP provided **good disclosure** that **included a detailed analysis of effects on the company of indirect risks/opportunities**. For example, BP disclosed that its “low-carbon businesses and future growth options outside oil and gas... have the potential to be a material source of low-carbon energy and are aligned with BP’s core capabilities” and that “[l]ower-carbon resources are the

fastest-growing sector in the energy market, and BP intends to develop its portfolio in step with this growth.”

BP also provided concrete figures on the size of its investments since 2005 in its Alternative Energy business, the growth in megawatts of its wind and solar businesses, and the size of its investment to expand its biofuels business.⁴⁴

Eni provided **fair disclosure**, but it did tie its long-term business to changing consumer preferences, as did BP and Shell. Eni disclosed that its estimates for long-term gas demand growth in Europe and Italy have been revised down in response to several trends including “growing adoption of consumption patterns and life-style characterized by wider sensitivity to energy efficiency; and EU policies intended to reduce GHG emissions and promoting renewable energy sources.”⁴⁵

Companies that provided **poor disclosure** broadly mentioned shifting consumer demand or regulatory developments potentially affecting market share or competition in the sector without providing company-specific impacts. Such disclosure does not allow investors to understand how the company’s positioning on indirect risks and opportunities compares to others in its sector.

For example, **ConocoPhillips’** disclosure included generic statements about how GHG regulations can “reduce demand for fossil energy derived products”, “increase demand for less carbon intensive energy sources, including natural gas”, and “impact the cost and availability of capital and increase our exposure to litigation”, and briefly mentioned clean energy efforts it is pursuing.⁴⁶ **Marathon** disclosed even less: only that proposed federal, regional, and state actions to reduce GHGs “could increase our costs, reduce the demand for the products we sell, reduce the supply of crude oils which can be used and create delays in our obtaining air pollution permits for new or modified facilities.”⁴⁷

GREENHOUSE GAS EMISSIONS DISCLOSURE

Companies should report total historical, current, and projected greenhouse gas emissions, which investors can use to analyze risk companies face from current and future climate-related regulations.



Key Findings	GOOD Eni	FAIR BP	POOR Shell Suncor	NO DISCLOSURE Apache Chevron ConocoPhillips ExxonMobil Marathon Total
<p>Companies provided less information on GHG emissions than any other category except physical risks.</p> <ul style="list-style-type: none"> 8 companies had <i>poor</i> or <i>no disclosure</i>. Only 2 companies provided emissions data. 				

The *Global Framework for Climate Risk Disclosure* presents investor expectations for corporate reporting of total historical, current, and projected direct and indirect greenhouse gas emissions – data investors can use to analyze risks from current and future regulations, and to assess company emissions trends and reduction plans.⁴⁸ **Good disclosure of GHG emissions**, therefore, includes past, present and projected future greenhouse gas emissions data, as well as the methodology used to calculate emissions.

Eni provided **good disclosure**. The strongest parts of the company’s reporting concerned **future emissions and GHG accounting**. Eni disclosed:

- Actual emissions in 2010
- Anticipated company emissions trends for 2010-2013
- Information about its internal GHG accounting and reporting protocol, which “ensure[s] comprehensive, transparent and accurate reporting for GHG emissions”, as well as the regulations and best practice guides the protocol meets, but not what the actual protocol contains.⁴⁹

Eni’s reporting could be improved by including more information about its internal GHG accounting protocol, and how it compares to similar tools many companies use, like the WRI/WBCSD GHG Protocol.

The companies with **poor disclosure** provided limited information and did not inform investors of the magnitude and trend of the company’s emissions (for example, discussing the company’s

emission trends but not emissions data, or including data only for the past year). For example, **Shell** did not provide emissions data, but it disclosed that it expects “the CO₂ intensity of our production, as well as our absolute Upstream CO₂ emissions” to grow, due in part to “the expansion of oil sands activities in Canada.”⁵⁰ **Suncor** provided even less information, disclosing only that “[w]hile it appears fairly certain that GHG regulations and targets will continue to become more stringent, and while Suncor will continue efforts to reduce the CO₂ unit intensity of our operations, the absolute CO₂ emissions of our company will continue to rise as we pursue a prudent and planned growth strategy.”⁵¹

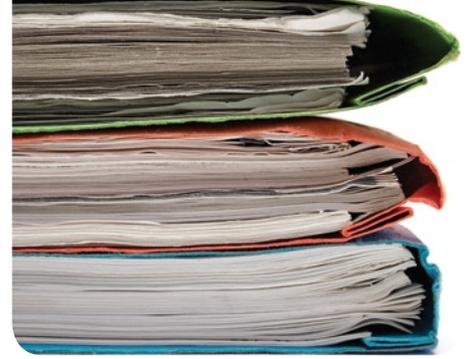
Emissions trajectory discussions are less helpful for investors than emissions data over multiple years, which provide investors a clearer picture of the companies’ challenges and opportunities related to reducing emissions.

Six companies provided **no disclosure**, including **Apache, Chevron, ConocoPhillips, ExxonMobil, Marathon, and Total**. Apache and Marathon discussed emissions in their SEC filings, but did not include emissions data. Marathon disclosed that, as part of the company’s commitment to environmental stewardship, “we estimate and publicly report greenhouse gas emissions from our operations”⁵², but emissions figures are not included in its 10-K.

In 2009, Apache briefly mentioned emissions disclosure in its 10-K, directing investors to its CDP response rather than providing emissions data in its SEC filing.⁵³ In 2010, Apache did not mention emissions reporting at all in its 10-K.

EMISSIONS MANAGEMENT DISCLOSURE

Companies should report significant actions they are taking to reduce, offset, or limit their own greenhouse gas emissions, including timelines and estimated emissions reductions.



Key Findings

The best reporting discussed specific projects without key context like opportunities for replication on a larger scale. In addition:

- 8 companies had *fair* or *poor disclosure*.
- Only 2 companies specified targets for reducing emissions from facilities or production sites.

● GOOD

Eni

○ FAIR

BP
Marathon
Shell
Suncor
Total

□ POOR

Chevron
ConocoPhillips
ExxonMobil

■ NO DISCLOSURE

Apache

Good disclosure of emissions management provides timelines and estimated emission reductions resulting from the significant actions the company is taking to reduce, offset, or limit its own greenhouse gas emissions. In addition, it specifies whether the company has identified any opportunities to benefit financially from actions to reduce emissions, and when individual projects are discussed, it provides context about larger impacts on the company, such as whether the results are replicable on a larger scale.

The Global Framework for Climate Risk Disclosure forms the basis for this definition. In addition, it mentions that actions to reduce emissions “could include establishment of emissions reduction targets, participation in emissions trading schemes, investment in clean energy technologies, and development and design of new products.”⁵⁴

Eni provided **good disclosure** by mentioning specific emissions reductions for its combined cycle co-generation work, and referencing replicability with respect to flaring and carbon capture and storage (CCS). It reported “projects designed to reduce emissions”:

- For its Power Generation business, “the start-up of high efficiency combined cycles for the cogeneration of electricity and steam” that reduce CO₂ emissions “by approximately 5 mtonnes, on an energy production of 26.5 TWh” compared to conventional power generation technology.
- Plans to achieve reductions by reducing gas flaring and gas releases in targeted countries (investing approximately €1.1 billion over the next four years). More such projects “are being assessed or implemented in Libya, Congo, Nigeria, Angola and Algeria.”

- CCS work “in the medium-term” as “a part of the CO₂ Capture Project, an international R&D program carried out in conjunction with other oil companies”⁵⁵

Three companies with **fair disclosure** discussed gas flaring, but each provided inadequate reporting. **Total** provided a target and timeline for emissions reductions, but only for flaring and not for other significant actions to reduce emissions. The company mentioned a goal of “reducing gas flaring at its Exploration & Production sites ... by 50% by 2014 compared to 2005.” **Shell** simply noted that in 2010 it started work on \$2 billion worth of projects to reduce flaring in Nigeria.⁵⁶ **BP** only stated that it aims to manage GHG emissions “through a focus on operational energy efficiency and reductions in flaring and venting.”⁵⁷

Companies with **poor disclosure** mentioned emissions management but provided no details about their actions in this area.

For example, **ExxonMobil** briefly mentioned its project “to monitor and reduce ... greenhouse gas emissions” and stated that the company “includes estimates of potential costs related to possible public policies covering energy-related greenhouse gas emissions in its long-term Energy Outlook, which is used for assessing the business environment and in its investment evaluations.”⁵⁸

ConocoPhillips’ reporting was similarly cursory, noting that it is “working to continuously improve operational and energy efficiency” and that “[i]nternally, we are continuing to evaluate wind, solar and geothermal investment opportunities” – though it is unclear if that evaluation refers to investments in business opportunities or in internal emission reductions.⁵⁹

These companies provide investors very little information they can use to evaluate the steps these companies are taking to reduce their own emissions and their financial implications.

CORPORATE GOVERNANCE ON CLIMATE CHANGE DISCLOSURE

Companies should report how senior management and the board monitor the effectiveness of climate change goals, as well as how executive compensation is tied to meeting climate change objectives.



Key Findings

None of the 10 companies provided *good disclosure*. In addition:

- Companies failed to discuss their Board's effectiveness at monitoring climate change policies.
- Companies mentioned climate change as a factor in executive compensation but provided few details.

● GOOD

○ FAIR

□ POOR

■ NO DISCLOSURE

BP
Shell
Suncor

Apache
Chevron
ConocoPhillips
ExxonMobil
Marathon
Total

Eni

Good disclosure of corporate governance on climate change, which is based on the Global Framework for Climate Risk Disclosure, provides detailed information related to climate change governance, including Board engagement on climate risks and opportunities, which executives are in charge of addressing them, and whether and how executive compensation is tied to meeting corporate climate objectives. It also describes how senior management and the Board monitor and gauge the effectiveness of the company's climate change strategies and goals. No company provided good disclosure.

Shell, Suncor, and **BP** provided **fair disclosure**, describing some details about corporate governance related to emissions management and climate risks and opportunities. None of these companies adequately addressed the critical issue of Board monitoring of the effectiveness of climate change strategies. Nor did they adequately describe how executive compensation is tied to climate change or sustainability concerns.

Suncor, for example, described Board engagement without discussing the effectiveness of that oversight: "The Environment, Health, Safety and Sustainable Development Committee of the Board . . . reviews Suncor's effectiveness in meeting its obligations pertaining to environment, health and safety. The committee also reviews the effectiveness with which Suncor establishes appropriate environment, health and safety policies, including GHG performance and emission reduction plans given legal, industry and community standards."⁶⁰

Shell disclosed that energy efficiency performance will be one of the factors that affects executive compensation, as part of 10% of the annual bonus based on "sustainable development," but provided no further detail.⁶¹

BP reported that the Board's Safety Ethics and Environment Assurance Committee considered "the quarterly reports prepared for executive management" on the group's health, safety, and environmental performance.⁶² While this is a helpful detail, it does not explain Board actions, if any, in response to the reports.

Companies with **poor disclosure** generally described their environmental governance without specifically discussing climate change governance. The information disclosed was inadequate for understanding how important a factor climate change is in Board and executive decisions, and in executive compensation.

For example, **Marathon** mentioned that a "significant consideration" in compensation is "the named executive officer's adherence to Marathon's core values."⁶³ While "environmental stewardship" is one of five of the company's core values,⁶⁴ this reporting does not explain in any detail how significant a factor the environment or climate change is in compensation.

ExxonMobil disclosed only that environmental performance is a factor in compensation, and that the Board receives reports on safety, health, and environmental results, but it did not disclose the executives responsible for environmental risks or other details about governance.⁶⁵

Apache identified its Vice President of Environmental, Health and Safety. It did not disclose the Board's engagement on environmental risks. It mentioned that its Board "published a Greenhouse Gas Public Statement, and updated and posted its Sustainability Report as a living forum on the Company's website."⁶⁶

SAFETY AND ENVIRONMENTAL STATISTICS DISCLOSURE— DEEPWATER DRILLING

Companies should provide both personal and process safety statistics for particular divisions of the company. They should also discuss key performance indicators that explain performance variations over time.



Key Findings

Eight companies provided *poor* or *no disclosure*. In addition:

- Only 1 company reported companywide personal and process safety & environmental statistics for 2008, 2009 and 2010.
- The same company disclosed similar statistics for its exploration and production division.

● GOOD

BP

○ FAIR

Shell

□ POOR

**Eni
ExxonMobil
Marathon
Total**

■ NO DISCLOSURE

**Apache
Chevron
ConocoPhillips
Suncor**

Investors wish to better understand companies' safety and environmental performance and cultures, in order to evaluate risks from smaller deepwater drilling incidents, as well as the risk of catastrophic accidents.⁶⁷ Reporting of safety and environmental performance statistics provides investors with insights into these material issues.

Based on the range of offshore incidents that have occurred in the oil and gas sector over the past several years, investors require improved disclosure of personal safety statistics (e.g., worker injuries and deaths), process safety statistics (e.g., loss of primary containment) and environmental statistics (e.g., spills).

Good disclosure of safety and environmental statistics provides disaggregated safety or environmental statistics that differentiate between personal and process safety for particular divisions of the company. It also identifies and discusses "key performance indicators [KPIs], including non-financial performance indicators, that their management uses to manage the business ... that would be material to investors"⁶⁸ and that would help investors evaluate the meaning of changes from year to year.

Only **BP** had **good disclosure** that included personal and process safety and environmental statistics that mentioned KPIs, and which help investors evaluate the meaning of changes from year to year. Highlights of BP's reporting included:

- Companywide information for 2008, 2009 and 2010 on personal safety and environmental issues, including recordable injury frequency for contractors and employees; and hydrocarbon spills of one or more barrels, plus the volume spilled and volume unrecovered.
- Similar statistics for the Exploration and Production division, including fatalities (not counting the Gulf of Mexico spill).

- Discussion of changing its key indicators for process safety: BP is "progressively moving towards [loss of primary containment] as one of the key indicators for process safety, as we believe it provides a more comprehensive and better performance indicator of the safety and integrity of our facilities than oil spills alone."
- Information that helps investors evaluate the meaning of changes in statistics, such as explaining which aspects of the statistics are due to the Gulf spill.⁶⁹

BP's reporting could be improved by differentiating statistics into deepwater and non-deepwater categories. This would help investors better understand whether deepwater drilling is posing greater safety and environmental risks than other offshore operations.

Companies with **poor disclosure** generally mentioned only one or two company-wide safety or environmental statistics or made general claims about safety and environmental performance.

For example, **ExxonMobil** mentioned two items without providing statistics to document the claims: "[b]est-ever lost-time incident rate for combined employee and contractor workforce," and "a track record of being among the best in industry in ensuring safety and operations integrity."⁷⁰

Others companies disclosed statistics without providing context that reveals their meaning. For example, **Marathon** noted that it did not meet its safety metric in 2010, with an OSHA Recordable Incident Rate of 0.60 as compared to its goal of 0.48.⁷¹ **Eni** reported that "results of efforts to achieve ... better safety in all activities has brought an improvement of Eni injury frequency rate to 0.91 and of the injury severity rate to 0.03."⁷²

DEEPWATER DRILLING RISK MANAGEMENT DISCLOSURE

Companies should report on contractor oversight, management systems for spill prevention, and EHS performance, providing quantitative targets and progress reports.



Key Findings	GOOD BP	FAIR Eni Shell Total	POOR Apache Chevron ConocoPhillip ExxonMobil Suncor	NO DISCLOSURE Marathon
<p>Quality of disclosure covered the full range of ratings, from <i>good</i> to <i>no disclosure</i>. In addition:</p> <ul style="list-style-type: none"> 9 of 10 companies reported on these issues, but no company provided enough information so investors could evaluate how policies worked in practice. 9 companies had <i>fair</i>, <i>poor</i> or <i>no disclosure</i>. Only 1 company had <i>good disclosure</i>, covering a new safety risk function, contractor oversight, safety monitoring and spill prevention. 				

Of all the offshore oil issues of concern to investors, deepwater drilling risk management is the most important for minimizing the chances of catastrophic incidents. Investors are particularly interested in reporting on contractor oversight; policies, practices, and management systems for spill prevention; environmental, health, and safety (EHS) performance and safeguards; and specific, quantitative targets for managing offshore oil and gas-related EHS risks.⁷³

Good disclosure of deepwater drilling risk management provides detailed analysis of risk management policies and practices that enables investors to assess the company’s prospects for the future. It promotes investor understanding of how prepared the company is to prevent a deepwater spill, how well the company’s policies work in practice, how the company oversees contractors engaged in offshore operations, and relevant key performance indicators used to manage the business.

BP provided **good disclosure** regarding its **new offshore safety/operational risk function**, by **discussing new policies and practices that enable investors to assess future prospects**. The safety/operational risk function has “its own expert staff embedded in BP’s operating units, including exploration projects and refineries, with defined intervention rights with respect to BP’s technical and operational activities.” The company further mentioned that its group-wide framework on safety, risk management, and operational integrity “formalizes standards and

recommended practices for selecting and working with contractors” including “assessing the contractor’s safety performance as part of the selection process, and defining safety requirements in contracts”, as well as that “[a]s a result of the Gulf of Mexico accident, ... we are reviewing how best to provide consistent and effective contractor oversight focusing on the way we work with contractors for all onshore and offshore rig activities, particularly in regard to safety and operational risk.”⁷⁴

While it is outside the scope of this report to evaluate the success of this new risk function, this is a promising development as part of the company’s response to the Macondo spill. Since the risk function was scheduled to go live at the end of Q1 2011⁷⁵, future SEC filings should have additional information on this team’s success in reducing BP’s deepwater drilling risks.

Five companies provided **poor disclosure**. For example, **ConocoPhillips** had a **brief, generalized discussion of EHS issues**: business units annually “measure their performance and compliance with our HSE Management System requirements, identify gaps, and develop improvement plans. . . . [A]ssessments are conducted annually to capture progress and set new targets.”

Apache had similarly brief, generalized disclosure, reporting only that the company has “established operating procedures and training programs designed to limit the environmental impact of our field facilities and identify and comply with changes in existing laws and regulations.”⁷⁶

SPILL RESPONSE DISCLOSURE

Companies should describe their spill response plans, the type and size spill they are prepared to manage, and the basis for these conclusions.



Key Findings

Disclosure on spill response plans improved in 2010 after the Gulf disaster, but was still inadequate to meet investors' needs.

- Eight companies had *fair* or *poor disclosure*.
- No company provided *good disclosure*.
- The better reporting discussed pre-existing spill response plans, initiatives in response to the Macondo spill, or quantified company actions.

● GOOD

○ FAIR

Apache
BP
Chevron
Eni
Total

□ POOR

ConocoPhillips
Marathon
Shell

■ NO DISCLOSURE

ExxonMobil
Suncor

News analyses and official reports after the Macondo spill indicated that companies throughout the offshore drilling industry—not just BP—were unprepared to contain a significant deepwater blowout. As a result, investors are seeking greater disclosure about spill response, including:

- Plans to manage deepwater blowouts;
- Frequency of plan updates;
- Cleanup technology in place;
- Collaboration with other companies and government on response plans and equipment; and
- Quantitative targets for measuring preparedness.⁷⁷

Good disclosure regarding spill response provides a detailed narrative of policies or practices that enables investors to understand: the company's preparedness and ability to respond to spills in a manner that will limit loss of life and material financial harm to the company, the nature and magnitude of spills the company is prepared to manage, the basis for the company's conclusions, and relevant key performance indicators used to manage spill response preparedness.

No company provided good disclosure, but companies with **fair disclosure** provided some helpful information, including:

- **Collaboration:** A number of companies mentioned the new Marine Well Containment Company, a collaboration between several companies which will use containment equipment from the Deepwater Horizon response to "preserve existing capability for use by the oil and gas industry in the US Gulf of Mexico while the MWCC member companies build a system that exceeds current response capabilities."⁷⁸

- **Responses to Macondo spill:** At least two companies mentioned the creation of internal task forces in response to the spill. **BP** noted that the 26 recommendations "made by BP's internal investigation team ... will be tracked in the quarterly HSE and operations integrity report supplied to the executive team."
- **Quantification:** **Chevron** noted that the MWCC response system "will be engineered to be used in water depths up to 10,000 feet and designed to have capacity to contain 100,000 barrels per day, with potential for expansion."⁷⁹ **Apache** mentioned specific resources available to the company, from various sources, to contain spills: e.g., "13 shallow water skimmers, 19 oil spill response barges with storage capacities between 12,000 and 68,000 barrels."

Companies with **poor disclosure** provided vague information about policies and practices to respond to spills.

For example, **Shell** briefly mentioned the MWCC partnership it co-created. Its disclosure mentioned some important issues but provided little detail: "Our major installations have plans to respond to a spill. . . . We conduct regular response exercises to ensure these plans remain effective. . . . We are also involved in work with members of the International Association of Oil and Gas Producers on a global spill containment system."⁸⁰

ConocoPhillips disclosed little, mentioning MWCC and its plans "to build and deploy a rapid response system that will be available to capture and contain oil in the event of a potential future underwater well blowout in the deepwater GOM."⁸¹

Marathon only mentioned three items: continued updating of its spill response plan; emergency response plans for certain components and facilities covered by the Oil Pollution Act of 1990; and Spill Prevention, Control and Countermeasures plans for facilities subject to Clean Water Act's SPCC requirements.⁸²

SAFETY-RELATED R&D DISCLOSURE

Companies should disclose research and development on safer offshore drilling, rig safety, accident prevention and spill response technologies. This includes technologies in development and the amount of R&D investments.



Key Findings

Company reporting on safety-related R&D was worse than any other deepwater drilling category.

- 7 companies provided *no disclosure*.
- Only 1 company provided disclosure on the amount of safety-related R&D investments.

● GOOD
BP

○ FAIR
Eni

□ POOR
Total

■ NO DISCLOSURE
Apache
Chevron
ConocoPhillips
ExxonMobil
Marathon
Shell
Suncor

Investors are looking for more information about company investments in research and development (R&D) on safer offshore drilling technologies, accident prevention and spill response technologies.⁸³

Good disclosure on safety-related research and development provides detailed information about the company's safety-related R&D initiatives, including technologies under development and the amount of R&D investments.

BP provided **good disclosure**, reporting:

- It is “leading the design and procurement of a capping stack” for use in potential deepwater incidents in the UK, which was due for completion in mid-2011.
- Some information regarding its “rapid innovation of new technologies” following the Gulf disaster.

It also reported details about R&D related to the Gulf spill, but it was unclear how much of this research is focused on safety-related R&D as compared to Gulf restoration.

Eni provided **fair disclosure**, although it provided more detail than BP about technologies under development. Citing the “vital role” of technological R&D given the “greater attention to operations safety in the aftermath of the recent accident in the Gulf of Mexico”, it described a “portfolio of projects for increasing drilling

safety” that includes special surface valves, a downhole blow-out isolation packer, a top kill system, new risers for use in ultradeep or intermediate depth waters, technologies for thermal isolation and anticorrosion solutions for underwater operations, a device for the collection and separation of gas from water and oil near the wellhead on the seabed, and a project in conjunction with MIT that “derives from the discovery of an innovative material with great selective capacity for the absorption of oil dispersed in water.”⁸⁴

Total provided **poor disclosure**, reporting that the company invests in safety-related R&D but providing no detailed information. After disclosing its total R&D budget, it noted that one of the six major R&D focuses of the company is “understanding and measuring the impacts of the Group’s operations and products on ecosystems (water, soil, air, biodiversity) to improve environmental safety” and that another is “developing, industrializing and improving conversion processes of oil, coal and biomass to adapt to changes in resources and markets, improve reliability and safety, achieve better energy efficiency, reduce the environmental footprint, and maintain the Group’s economic margins in the long-term.”⁸⁵

Since a large majority of companies—seven—provided no disclosure on this topic, this is an area where greater clarity from investors about the information they require would help companies improve their reporting.

CORPORATE GOVERNANCE ON DRILLING RISK MANAGEMENT DISCLOSURE

Companies should report how senior management and the board monitor the effectiveness of drilling risk management, as well as how executive compensation is tied to meeting safety objectives.



Key Findings

The quality of reporting on corporate governance on drilling was inadequate.

- 9 companies had *fair*, *poor* or *no disclosure*.
- As with climate governance, investors could not assess the effectiveness of Board and senior management oversight without improved reporting.

● GOOD

BP

○ FAIR

**Chevron
ConocoPhillips
ExxonMobil
Marathon
Shell
Suncor
Total**

□ POOR

Apache

■ NO DISCLOSURE

Eni

Investors are looking for improved reporting on corporate governance and management systems related to offshore drilling. For example, 62 investors wrote to oil and gas companies about deepwater drilling in 2010, asking whether oversight of drilling risks is assigned to a specific committee of the board and whether any board members have “specific expertise in management of these EHS risks.” Similarly, the National Oil Spill Commission, discussing the need for a new industry-run safety organization, emphasized that company boards should “provide leadership for the new organization, . . . be engaged in system safety improvement”, and receive company audit scores created by the organization.

Good disclosure of corporate governance on drilling describes Board engagement on drilling and safety risks, which executives are in charge of these issues, and whether and how executive compensation is tied to meeting corporate safety objectives. It also describes how senior management and the Board monitor and gauge the effectiveness of the company’s safety culture and implementation of its safety policies, including policies related to whistleblower complaints.

Only **BP** provided **good disclosure**, discussing:

- A board committee that receives quarterly updates monitoring “major incidents, near-misses and performance in both process and personal safety.”
- Executives in charge of safety, listed by name and general function.
- The role that safety issues play in the vesting of deferred and matched shares, including that Q4 2010 “individual performance bonuses were based solely on the achievement of safety targets”
- A fundamental review it is conducting of “how the group incentivizes business performance, including reward strategy, with the aim of encouraging excellence in safety, compliance and operational risk management.”⁸⁶

Companies with **fair disclosure** provided limited detail on governance, but a few highlights stood out:

- **Shell** reported that safety performance will be a factor in executive compensation, accounting for 10% of the annual bonus.⁸⁷
- **Marathon** disclosed that its annual bonus is based on metrics including “operational and corporate safety metrics”, that “officer performance goals” include “personal and process safety” issues, and that one of the company’s key performance indicators for compensation was “Corporate Safety – OSHA Recordable Incident Rate.”⁸⁸

Other companies with fair disclosure provided inadequate reporting of some important governance issues. For example, **ExxonMobil** included a brief description of its whistleblower procedures in its 2009 10-K but not its 2010 filing, despite improvements in the company’s safety culture—including empowering “everyone, even contractors, to speak up about safety problems”—following the 1989 Exxon Valdez disaster.⁸⁹

Apache had **poor disclosure**, providing information on one subject, executive responsibility, with minimal detail. It simply identified the executive in charge of safety issues: its Vice President of Environmental, Health and Safety. It briefly described the role of the Board’s Audit Committee in “assess[ing] and manag[ing] the Company’s exposure to risk”, but did not make clear whether safety risks are part of this consideration.⁹⁰

As on climate governance, **Eni** provided **no disclosure** about its drilling risk management governance. It described the elements of CEO and General Manager compensation without clarifying if safety is a factor in pay. It mentioned the Board’s Oil-Gas Energy Committee without describing its role. Finally, it mentioned a board committee with some oversight over “the outcomes of preliminary inquiries” following anonymous whistleblower complaints, but did not make clear whether those reports concern safety issues or not.⁹¹

APPENDIX A: EVALUATION CRITERIA

CLIMATE RISK DISCLOSURE

Regulatory Risk

Regulatory risk refers to the impact on the company of current and anticipated laws and regulations relating to climate change.⁹² It can include both positive opportunities that may arise from a changing regulatory environment and costs associated with complying with existing or proposed requirements. The SEC has emphasized that registrants should consider the specific regulatory climate change risks they face and should avoid generic risk factor disclosure that could apply to any company.⁹³

GOOD – Provides a detailed analysis of existing and proposed laws and regulations relating to climate change and their possible effects on the company, including potential financial impacts (quantified, when feasible) and how the company will respond. Includes an assessment of whether these laws and regulations “will have, or are reasonably likely to have, a material impact on the company’s liquidity, capital resources or results of operations” and the basis for the company’s conclusions.⁹⁴ Includes “any material estimated capital expenditures for environmental control facilities” with respect to existing laws or regulations relating to greenhouse gas emissions.⁹⁵

FAIR – Identifies specific existing or proposed laws or regulations relating to climate change that may affect the particular company, but describes the effects of those laws or regulations at only a general or vague level of detail.

POOR – Merely mentions the general existence of risk associated with existing or proposed laws relating to climate change, without identifying specific laws or regulations and without identifying effects particular to that company (as opposed to effects that could apply to the sector as a whole).

Physical Risks

Physical risk refers to the existing or future impacts of climate change such as changing weather patterns, more extreme weather events, rising sea levels, and water supply changes. Financial impact can arise, for example, from effects on a company’s personnel, physical assets, supply chain, and distribution chain.⁹⁶

GOOD – Provides a detailed analysis of the physical climate risks the company faces (including in its supply chain), the operational segments and/or specific company facilities that might be impacted, the magnitude and timeframes of the anticipated impacts (quantified, when feasible), and how the company plans to respond. Includes an assessment of whether these physical risks “will have, or are reasonably likely to have, a material impact on the company’s liquidity, capital resources or results of operations” and the basis for the company’s conclusions.⁹⁷ Discusses past physical impacts, if material.

FAIR – Provides some discussion of the physical climate risks the company faces, with some specific details (e.g., the operational segments that might be impacted, the magnitude of the anticipated impact, how the company plans to respond).

POOR – Generally acknowledges physical risks associated with climate change, but with no or few details about the nature of those risks, their magnitude, or how they may impact the specific company.

Indirect Risks

Indirect risks and opportunities include financial impacts to a company arising from the effects of “[l]egal, technological, political and scientific developments regarding climate change” on entities other than the company, such as competitors, suppliers, and customers; for example, such developments could “create demand for new products or services, or decrease demand for existing products or services.”⁹⁸ Indirect risks also include the risks such developments pose to a company’s reputation.

GOOD – Provides a detailed analysis of how the company’s financial condition or operations may be affected by climate-related developments in the marketplace, such as impacts on suppliers and customers (e.g., changes in demand for new and existing products and services due to their emissions profiles), and by impacts on the company’s reputation. Includes the magnitude of the anticipated risks and opportunities (quantified, when feasible), an assessment of whether these indirect risks and opportunities “will have, or are reasonably likely to have, a material impact on the company’s liquidity, capital resources or results of operations”, the basis for

the company's conclusions, and "those key variables and other qualitative and quantitative factors which are peculiar to and necessary for an understanding and evaluation of the individual company."⁹⁹

FAIR – Provides some details or examples of how the company may be affected by indirect risks and opportunities from climate change, while still omitting key information on potential financial impacts.

POOR – Broadly mentions shifting consumer demand or regulatory developments potentially affecting competition or market share in the sector without providing any company-specific impacts.

GHG Emissions

Disclosure of a company's historical, current, and projected direct and indirect greenhouse gas emissions allows investors to assess the potential financial impact of current and future climate-related regulations on the company.

GOOD – Includes past, present and projected future greenhouse gas emissions data and the methodology used to calculate emissions.

FAIR – Provides current year and past emissions data but does not calculate projected future emissions.

POOR – Provides only scattered data insufficient to inform investors of the magnitude and trend of the company's greenhouse gas emissions (e.g., discusses the company's emissions trends but does not provide actual emissions data, includes emissions data only for the past year).

Emissions Management

Emissions management includes all significant actions the company is taking to reduce, offset, or limit its own greenhouse gas emissions.

GOOD – Provides timelines and estimated emissions reductions resulting from the significant actions the company is taking to reduce, offset, or limit its own greenhouse gas emissions. Specifies whether the company has identified any opportunities to benefit financially from actions to reduce emissions. When individual projects are discussed, provides context about larger impacts on the company, such as whether the results are replicable on a larger scale.

FAIR – Provides a detailed description of significant actions the company is taking to reduce, offset, or limit its own greenhouse gas emissions.

POOR – Mentions or makes generic claims about emissions management, but does not provide details or descriptions of activities the company is taking to reduce, offset, or limit its own greenhouse gas emissions.

Climate Governance

Climate governance is the internal structure the company has in place for managing greenhouse gas emissions and climate risks and opportunities – who is responsible for these areas, who they report to, and whether their compensation includes climate-related factors. It also includes the Board's oversight of climate issues.

GOOD – Provides detailed information related to climate change governance including Board engagement on climate risks and opportunities, which executives are in charge of addressing them, and whether and how executive compensation is tied to meeting corporate climate objectives. Describes how senior management and the Board monitor and gauge the effectiveness of the company's climate change strategies and goals.

FAIR – Describes some details on corporate governance on GHG emissions management and climate risks and opportunities, but does not yet meet the requirements for good disclosure.

POOR – Mentions or makes generic claims about environmental governance (e.g., Board engagement on environmental risks, which executives are in charge of addressing them, whether and how executive compensation is tied to meeting corporate environmental objectives) without specifically describing climate change governance.

DEEPWATER DRILLING RISK DISCLOSURE

Safety & Environmental Statistics

Safety and environmental statistics provide investors with a sense of companies' performance and culture. With respect to deepwater drilling, relevant safety and environmental statistics include personal safety statistics (e.g., worker

APPENDIX A: EVALUATION CRITERIA

injuries and deaths), process safety statistics (e.g., loss of primary containment, averted spills) and environmental statistics (e.g., spills).

GOOD – Provides disaggregated safety or environmental statistics that differentiate between personal and process safety for particular divisions of the company. Identifies and discusses “key performance indicators, including non-financial performance indicators, that their management uses to manage the business[,] ... that would be material to investors,”¹⁰⁰ and that would help investors evaluate the meaning of changes from year to year.

FAIR – Provides a range of company-wide safety or environmental statistics but does not yet meet the requirements for good disclosure.

POOR – Provides one or two basic company-wide safety or environmental statistics and general claims about safety and environmental performance.

Drilling Risk Management

Drilling risk management includes the company's infrastructure for managing material risks associated with deepwater drilling, including risk management policies and procedures, oversight of contractors engaged in offshore operations, and key performance indicators it uses to track and assess its risk management goals.

GOOD – Provides detailed analysis of deepwater drilling risk management practices and policies that enables investors to assess the company's prospects for the future by promoting investor understanding of: how prepared the company is to prevent a deepwater spill, how well the company's policies work in practice, how the company oversees contractors engaged in offshore operations, and relevant key performance indicators used to manage the business.

FAIR – Provides a brief generalized discussion of deepwater drilling risk management practices or policies. Or, provides detailed disclosure about broader environmental, health, and safety (EHS) risk management companywide.

POOR – Provides a brief generalized discussion about EHS risk management companywide.

Spill Response

Spill response refers to the company's plans to respond to an actual spill or a threatened spill, including how often it updates its response plans, equipment and personnel it will deploy, and coordination with contractors, government agencies, and other responders.

GOOD – Provides a detailed narrative of policies or practices to respond to spills that enables investors to assess the company's prospects for the future by promoting investor understanding of: the company's preparedness and ability to respond to spills and threatened spills in a manner that will limit loss of life and material financial harm to the company, the nature and magnitude of spills the company is prepared to manage, the basis for the company's conclusions, and relevant key performance indicators used to manage the business.

FAIR – Provides some detailed information about policies or practices to respond to spills but does not yet meet the requirements for good disclosure.

POOR – Provides vague claims or information about policies and practices to respond to spills.

Safety-related R&D

Safety-related research and development (R&D) refers to the company's investment in the development of safer offshore drilling technologies, technologies related to rig safety and accident prevention, and spill response technologies. This includes in-house research as well as research funded by the company.

GOOD – Provides detailed information about the company's safety-related R&D initiatives, including technologies under development and the amount of R&D investments.

FAIR – Provides some information about the company's safety-related R&D initiatives, such as technologies under development or the amount of R&D investments.

POOR – Discloses that the company invests in safety-related R&D but provides no detailed information.

Corporate Governance on Drilling and Safety Risk Management

Corporate governance on drilling and safety risk management includes the structure the company has in place for identifying and managing these risks — who is responsible for these areas, who they report to (i.e., the Board’s engagement), and how are they compensated, as well as whistleblower policies.

GOOD – Describes Board engagement on drilling and safety risks, which executives are in charge of these issues, and whether and how executive compensation is tied to meeting corporate safety objectives, including key performance indicators used in compensation and

whether they are effective in meeting safety objectives. Describes how senior management and the Board monitor and gauge the effectiveness of the company’s safety culture and implementation of its safety policies, including policies related to whistleblower complaints.

FAIR – Describes some details on corporate governance on drilling and safety risk management but does not yet meet the requirements for good disclosure.

POOR – Describes Board engagement on general safety risks, which executives are in charge of these issues, or whether executive compensation is tied to meeting corporate safety objectives.

APPENDIX B: DETAILED EXCERPTS OF DISCLOSURE

For each of the 11 categories of disclosure analyzed, this section of the report:

- Includes extensive excerpts from and descriptions of companies’ SEC filings,
- Rates each company’s reporting as *good*, *fair*, *poor* or *no disclosure*, and
- Discusses areas where companies could improve their reporting.

Ratings are summarized on page 3. For complete evaluation criteria, see Appendix A.

REGULATORY RISKS/OPPORTUNITIES OF CLIMATE CHANGE

Good disclosure

Two companies provided good disclosure of regulatory risks or opportunities of climate change.

Eni provided details about existing regulations, quantifies the financial impacts (and assessed the scale of those impacts), and described how the company plans to respond:

- Described the specific EU and Italian environmental policies that impact its activities, including the EU directives to implement the European climate and renewable energy package of policies (e.g., a commitment to reduce GHG emissions 20% below 1990 levels by 2020), Italy’s GHG reduction commitment under the Kyoto Protocol, and Italy’s involvement in the EU Emissions Trading Scheme (EU ETS).
- Disclosed steps it took and will take to comply with Kyoto, including future investment of about €1.1 billion to reduce emissions from gas flaring.
- Disclosed it expects its emissions to exceed ETS allowances “resulting in the incurrence of higher operating expenses in the range of €650-750 million”, mostly to be incurred in 2013-14.¹⁰¹

Eni’s disclosure would be stronger if it provided similar analyses for regulations outside of the EU and Italy that affect it.

APPENDIX B: DETAILED EXCERPTS OF DISCLOSURE

Suncor provided good disclosure by describing regulations, their impacts (sometimes quantified), their plans to respond, materiality issues, and compliance expenditures:

- Described specific international treaties, the EU ETS, the status of Canadian federal GHG regulations, Canadian provincial regulations and U.S. regulations.
- While much of its regulatory risk reporting is too vague to be helpful to investors (“It is not currently possible to predict either the nature of any requirements or the impact on the company and its business, financial condition, results of operations and cash flow at this time.”), in some instances it quantified the effects of existing regulations (Suncor notes that under Alberta’s law, it will file compliance reports showing how each facility met emissions intensity targets, estimated its 2010 compliance costs at between \$5 million and \$10 million.
- Additional helpful disclosure identified specific refineries subject to EPA’s GHG reporting rule.
- The company discussed the materiality of regulatory risks: “[T]he cost of meeting new environmental and climate change regulations is not expected to be so high as to cause a material disadvantage, or damage to our competitive positioning.”
- It described how the company assesses future regulatory risks using a carbon price range: “Suncor assesses potential costs associated with carbon dioxide (CO₂) emissions in our evaluation of future projects, based on our current understanding of pending and possible greenhouse gas regulations” and uses “a base case price range of \$15–\$45 per tonne of CO₂ equivalent, applied against a range of regulatory policy options and price sensitivities.”¹⁰²

Suncor’s disclosure would be stronger if it avoided the vague, short explanations of some regulatory impacts and provided further detail about the range and nature of possible impacts on the company.

Fair disclosure

Six companies identified specific existing or proposed laws or regulations, and describing their effects at a general or vague level of detail.

Chevron:

- Mentioned several Clean Air Act regulations and California’s Global Warming Solutions Act as relevant, Congressional consideration of climate measures, and existing GHG regulations in the EU and New Zealand.
- Failed to mention specific regulatory impacts on the company, instead explaining why impacts were unclear or providing general language on regulations’ effects. For example, Chevron noted the California Air Resources Board has yet to develop detailed regulations to implement portions of the state’s law, and notes how regulations could increase its “operational costs” or “result in substantial capital, compliance, operating and maintenance costs.” Discussion of impacts was limited to some factors that will affect the company, such as the extent to which Chevron would be entitled to receive free emissions allowances.
- The most specific impact Chevron mentioned is that the California law may cause it to incur costs for reducing emissions and purchasing allowances, and may lead Chevron’s electricity bills to go up starting in January 2012.¹⁰³

ConocoPhillips, like Chevron, mentioned specific regulations, cited uncertainties about impacts, listed factors that could affect impacts, and offered vague discussions of those impacts on the company.¹⁰⁴

Marathon noted that in 2010, its EU facilities complied with EU ETS “using the allocated free allowances”, suggesting there was no cost for compliance, but offers a very vague discussion of effects.¹⁰⁵

BP provided an extensive list of climate measures and developments that affect it, mentioned potential business opportunities from regulations, and offered a generic discussion of the effects of regulation on the company.¹⁰⁶

Total offered detailed description of regulations but little analysis, as its discussion of the effects of regulations is entirely generic.¹⁰⁷

Apache did not cite regulations by name, but it specified by geography the jurisdictions in which it has operations that have enacted GHG regulations. Its reporting was vague on the effects of regulation.¹⁰⁸

Poor disclosure

Two companies simply mentioned the existence of regulatory risk without identifying specific regulations or effects particular to the company.

Shell mentioned that potential climate regulations “may result in project delays and higher costs”, that it expects “a growing share of our CO₂ emissions” to be subject to regulation over time, and that future regulations may impose a price on CO₂ that all companies will have to incorporate.¹⁰⁹

ExxonMobil similarly noted that climate regulations could make the company’s products more expensive, increase compliance costs, and negatively impact refining. It also “includes estimates of potential costs related to possible public policies covering energy-related greenhouse gas emissions in its long-term Energy Outlook.”¹¹⁰

PHYSICAL RISKS OF CLIMATE CHANGE

Good disclosure

None of the ten companies provided good disclosure.

Fair disclosure

BP provided some specific details of the physical risks it faces, compared to its 2009 filing, which had no disclosure. It is the only company that provided brief information about its plans to respond to physical risks, including research, analysis of risks for new projects, and mitigation programs for existing projects:

For several years BP has sponsored research, including climate modelling, into the impacts of climate change on both existing operations and new projects. Introduced in 2010, [our new policy] now requires screening for potential climate change impacts in major new projects, projects in new access locations and those that could affect an internationally protected area. For larger projects where climate impacts are identified as a risk, we put a mitigation programme in place. Our current engineering practices address climate impacts in the same way as any other physical and ecological impacts. These practices are periodically reviewed and updated. For many climate-related impacts, the appropriate engineering solutions are already known, because somewhere in our operations we already have experience and design facilities to withstand

weather extremes, such as hurricanes, monsoons and Arctic conditions.¹¹¹

Poor disclosure

Three companies generally acknowledged physical risks but offered few details about the nature of those risks, their magnitude, or how they may impact the company.

Apache noted only that “[w]eather and climate may have a significant adverse impact on our revenues and productivity”, that “our planning for normal climatic variation, insurance programs, and emergency recovery plans may inadequately mitigate the effects” of severe weather affecting the company’s exploration and development activities and equipment, that the company does not expect any impacts if “predictions for rising temperatures and sea levels” come to pass, and that “any increase in severe weather could have a material adverse effect on our assets and operations.”¹¹²

ConocoPhillips similarly disclosed that “significant changes in the Earth’s climate, such as more severe or frequent weather conditions in the markets we serve or the areas where our assets reside” could lead to “increased expenses”, “materially impacted” operations, and reduced product demand, as well as affecting the impact of compliance with GHG regulations.¹¹³

Marathon offered even less, simply listing “changes in weather patterns and climate” among the many “factors influencing prices of liquid hydrocarbons and natural gas and refining and wholesale marketing gross margins.”¹¹⁴

No disclosure

Six companies—**Chevron, Eni, ExxonMobil, Shell, Suncor,** and **Total**—provided no disclosure about physical risks.

INDIRECT RISKS & OPPORTUNITIES OF CLIMATE CHANGE

Good disclosure

BP disclosed:

- Relatively detailed analysis of how its alternative energy business can help meet “growing demand for lower-carbon energy”

APPENDIX B: DETAILED EXCERPTS OF DISCLOSURE

- GHG regulations may “increase demand for competing energy alternatives or products with lower-carbon intensity” but “may also offer opportunities in the development of low-carbon technologies and businesses.”
- “BP’s low-carbon businesses and future growth options outside oil and gas... have the potential to be a material source of low-carbon energy and are aligned with BP’s core capabilities” and that “[l]ower-carbon resources are the fastest-growing sector in the energy market, and BP intends to develop its portfolio in step with this growth.”
- Concrete figures on predicted increases in global energy demand and clean energy generation, the size of BP’s investments since 2005 in its Alternative Energy business, the growth in megawatts (MW) of its wind and solar businesses, and the size of its investment to expand its biofuels business, as well as an update on its carbon capture and storage (CCS) business.
- Acknowledged the reputational risks related to its “commitment to the transition to a lower-carbon economy ... and the level of participation in alternative energies”.¹¹⁵

Fair disclosure

Five of the companies provided some details about indirect risks and opportunities while omitting key information on potential financial impacts.

Shell:

- Noted the “potential business opportunities” it sees in developing carbon dioxide management systems.
- Identified its “main contributions” to emissions reductions as “supplying more natural gas; supplying more biofuels; [and] progressing carbon capture and storage.”
- Mentioned its FuelSave gasoline and FuelSave Partner system “to meet customer demands to help them conserve energy and reduce their CO₂ emissions.”
- Acknowledged that regulations that impose a price on CO₂ “may result in higher energy ... costs.”¹¹⁶

While this reporting provided a brief overview of the company’s opportunities, it offered little detailed analysis and did not tell investors much about the magnitude of these issues or their materiality.

Eni, like BP and Shell, indicated opportunities from consumer trends (i.e. “the growing adoption of natural gas to fuel thermoelectric production via combined cycles and the higher environmental compatibility of natural gas than other fossil fuels to produce energy”) and mentioned reputational risk. In addition, Eni:

- Disclosed that its estimates for long-term gas demand growth in Europe and Italy have been revised down in response to several trends including “growing adoption of consumption patterns and life-style characterized by wider sensitivity to energy efficiency; and EU policies intended to reduce GHG emissions and promoting renewable energy sources.”
- Stated that it intends to enhance its “long-term options to contribute to sustainable development by progressing our capabilities in renewable sources of energy, particularly in the field of solar and photovoltaic energy, carbon capture and sequestration, [and] clean fuels”.¹¹⁷

Again, this disclosure provided little detailed analysis or information about the magnitude and materiality of the indirect risks and opportunities the company faces.

Total disclosed that its three main focus areas for providing lower-emitting energy are “the upstream/downstream integration of the solar photovoltaic channel”, “thermochemical and biochemical conversion of feedstock into fuels or chemicals”, and “nuclear power generation with the long-term objective of becoming a power plant operator.” The company also provides MW figures for some of its renewable energy projects.¹¹⁸

Suncor, in addition to reporting its investments in some wind farms, disclosed a reputational risk: that “[t]he public perception of oil companies and their operations, including GHG emissions related to current and planned projects in the oil sands area of Alberta, may pose issues related to development and operating approvals or market access for products, which may directly or indirectly impair profitability.”¹¹⁹

Chevron mentioned that its electricity costs “may increase starting in January 2012, when generators are required to purchase allowances or credits for electricity sold in California” and briefly noted its Energy Solutions subsidiary “that develops and builds sustainable energy projects to ... help customers reduce their energy costs and environmental impact” and its Global Power Company’s interests in waste heat recovery and wind.¹²⁰

APPENDIX B: DETAILED EXCERPTS OF DISCLOSURE

Poor disclosure

Four companies broadly mentioned shifting consumer demand or regulatory developments potentially affecting the sector without providing company-specific impacts.

ConocoPhillips' disclosure included generic statements about how GHG regulations can “reduce demand for fossil energy derived products”, “increase demand for less carbon intensive energy sources, including natural gas”, and “impact the cost and availability of capital and increase our exposure to litigation”, and briefly mentioned clean energy efforts it is pursuing.¹²¹

ExxonMobil's disclosure was similar, though with even less information about its efforts to respond to low-carbon energy demand.¹²² These companies both go beyond acknowledging shifting demands, but they do not provide details of those changes or examples of their responses.

Marathon disclosed only that proposed federal, regional, and state actions to reduce GHGs “could increase our costs, reduce the demand for the products we sell, reduce the supply of crude oils which can be used and create delays in our obtaining air pollution permits for new or modified facilities.”¹²³

Apache noted that “[s]everal indirect consequences of regulation and business trends have potential to impact us. Taxes or fees on carbon emissions could lead to decreased demand for fossil fuels. Consumers may prefer alternative products and unknown technological innovations may make oil and gas less significant energy sources.”¹²⁴

GREENHOUSE GAS EMISSIONS

Good disclosure

Eni provided good disclosure: although it did not disclose complete past, present and projected emissions data, its disclosure allowed investors to calculate estimates of that data. The company also reported information about the methodology used to calculate emissions. Eni's disclosure is rooted in its participation in the EU Emissions Trading Scheme. It disclosed that it “participates in the ETS scheme with 55 plants in Italy and 4 outside Italy—which collectively represent about a third of all greenhouse gas emissions generated by Eni's plants worldwide” —thereby making it possible to extrapolate from EU ETS figures to global figures.

Eni disclosed:

- Actual emissions in 2010
- Anticipated company emissions trends for 2010–2013
- Its internal GHG accounting and reporting protocol, which “ensure[s] comprehensive, transparent and accurate reporting for GHG emissions”, as well as the regulations and best practice guides the protocol meets, but not what the actual protocol contains.¹²⁵
- The existence of a dedicated database for reporting

While Eni only provided actual emissions figures for 2010 and it offers few details about its methodology, its disclosure of EU ETS allowance allocations and expected trends allows investors to calculate at least rough estimates of its past, present, and future GHG emissions.

Fair disclosure

BP reported current and past emissions data but did not disclose projected future emissions. Its reporting included:

- 2008, 2009, and 2010 GHG emissions, representing all consolidated entities and BP's share of equity-accounted entities except TNK-BP
- A note that figures did not include any emissions from the Gulf of Mexico spill and the response effort, due to that data having a high degree of uncertainty.

BP referred readers to its BP Sustainability Review 2010 for more information on its GHG emissions performance.¹²⁶

Poor disclosure

Two companies provided limited information on emissions, and did not inform investors of the magnitude and trend of the company's emissions (for example, discussing the company's emissions trends but not emissions data, or including data only for the past year).

Shell did not provide emissions data, but it disclosed that it expects “the CO₂ intensity of our production, as well as our absolute Upstream CO₂ emissions” to grow, due in part to “the expansion of oil sands activities in Canada” and the company's gas-to-liquids project in Qatar. The company noted that in 2010 it “met the voluntary target that we set in 1998 for the direct GHG emissions from the facilities we operate to be at least 5% lower than our comparable 1990 level”, and it mentioned that “[d]etailed data and information on our 2010 environmental and social performance will

APPENDIX B: DETAILED EXCERPTS OF DISCLOSURE

be published in April 2011 in the Shell Sustainability Report.”¹²⁷

Suncor provided even less information, disclosing only that “[w]hile it appears fairly certain that GHG regulations and targets will continue to become more stringent, and while Suncor will continue efforts to reduce the CO₂ unit intensity of our operations, the absolute CO₂ emissions of our company will continue to rise as we pursue a prudent and planned growth strategy.”¹²⁸ Emissions trajectories are minimally helpful for investors, but emissions data over multiple years provide investors a clearer picture of the companies challenges and opportunities related to climate change.

No disclosure

Six companies provided no disclosure: **Apache**, **Chevron**, **ConocoPhillips**, **ExxonMobil**, **Marathon** and **Total**. Apache and Marathon are particularly interesting examples of non-disclosure. In 2009, Apache briefly mentioned emissions disclosure in its 10-K, directing investors to its CDP response rather than providing emissions data in its SEC filing.¹²⁹ In 2010, Apache did not mention emissions reporting at all in its 10-K. Marathon disclosed that, as part of the company’s commitment to environmental stewardship, “we estimate and publicly report greenhouse gas emissions from our operations”¹³⁰, but emissions figures are not included in its 10-K.

EMISSIONS MANAGEMENT

Good disclosure

Eni disclosed that it believes that “the best solutions for complying with the Kyoto Protocol are use of low emissions energy sources and adoption of highly efficient technologies.” It continued by describing:

- It “performed a detailed analysis for defining its strategy to respond to climate change and to participate in the European emissions trading system, identifying a number of projects for energy saving and emission reductions from its plants.”
- “Projects designed to reduce emissions”:
 - ◆ For its Power Generation business, “the start-up of high efficiency combined cycles for the cogeneration

of electricity and steam” that reduce CO₂ emissions “by approximately 5 mmt tonnes, on an energy production of 26.5 TWh” compared to conventional power generation technology.

- ◆ It plans to achieve reductions by reducing gas flaring and gas releases in targeted countries (investing approximately €1.1 billion over the next four years); more such projects “are being assessed or implemented in Libya, Congo, Nigeria, Angola and Algeria”; and that registering these projects under the Kyoto Protocol’s flexible mechanisms (CDM and JI) “will provide emission credits and support the Company in achieving its GHG reduction targets in Italy.”
- ◆ CCS work “in the medium-term” as “a part of the CO₂ Capture Project, an international R&D program carried out in conjunction with other oil companies”¹³¹

Eni’s disclosure did not provide timelines for emissions reductions, but offered specific emissions reductions for its combined cycle co-generation, and referenced replicability with respect to flaring and CCS.

Fair disclosure

Five companies provided some description of significant actions that help reduce, offset, or limit greenhouse gas emissions, without providing detailed descriptions or describing the actions as emissions management efforts. Shell, Suncor, and Total provided more detail than BP and Marathon.

Shell noted that “we already assess potential costs associated with CO₂ emissions when evaluating projects” and one of its focus areas for “cost-effective ways to manage CO₂” is “implementing energy efficiency measures in our operations.” It noted that it met its voluntary 5% target for reducing GHG emissions from its facilities, discussed gas flaring, noting that in 2010 it started work on \$2 billion worth of projects to reduce flaring in Nigeria.¹³²

Suncor similarly disclosed performance goals on energy efficiency and “air emissions”—without specifying which “air emissions”—and mentioned that it factors a “base case price range of \$15–\$45 per tonne of CO₂ equivalent” into its evaluation of future projects. The company also stated it is “taking action to reduce GHG emissions, investing in renewable forms of energy such as wind power and biofuels, ... and pursuing other opportunities such as carbon

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capture and sequestration”, explaining that it complied with the Alberta carbon regulations in 2010 “through reduced emissions per unit of production, purchase and retirement of offsets, and payments into the Technology Fund”. Finally, it noted that it “will continue efforts to reduce the CO₂ unit intensity of our operations”, and that its 1997 climate action plan calls on it to manage its own GHG emissions, develop renewable sources of energy, and use offsets.¹³³

Total mentioned its “quantified objectives to reduce ... greenhouse gas emissions ... and to improve energy efficiency”, but the only quantified target it discloses related to reducing GHGs is “to reducing gas flaring at its Exploration & Production sites ... by 50% by 2014 compared to 2005.” The company also noted its involvement with CCS technologies “to reduce the environmental footprint of the Group’s industrial projects based on fossil energy” and mentioned that it is investing in improving energy efficiency in its refining system.¹³⁴

Marathon and BP provide fewer details.

Marathon noted that “we continuously strive to improve operational and energy efficiencies through resource and energy conservation where practicable and cost effective”, described its compliance with the EU ETS (using free and purchased allowances), and mentioned a CCS project at the Athabasca Oil Sands Project (AOSP) (in which Marathon holds a 20% stake) that “would store approximately 1.1 million tons of carbon dioxide annually and should allow the AOSP to meet Canadian and Alberta emission reduction requirements for the foreseeable future.”¹³⁵

BP stated that it aims to manage GHG emissions “through a focus on operational energy efficiency and reductions in flaring and venting” and that its actions include “greenhouse gas (GHG) emissions (including energy efficiency and flaring)”, but it provided no further details on its efficiency or flaring efforts. It also explained, like Shell and Suncor, that it incorporates “a carbon cost into our investment appraisals and the engineering design of new projects”, which in industrialized countries “is currently \$40 per tonne of CO₂.”¹³⁶

Poor disclosure

Three companies mentioned emissions management but provided no details about specific activities.

ExxonMobil’s disclosure, for instance, was limited to a statement about its project “to monitor and reduce ...

greenhouse gas emissions”, and a statement that the company “includes estimates of potential costs related to possible public policies covering energy-related greenhouse gas emissions in its long-term Energy Outlook, which is used for assessing the business environment and in its investment evaluations.”¹³⁷

ConocoPhillips’ reporting was similarly cursory, noting that it is “working to continuously improve operational and energy efficiency” and that “[i]nternally, we are continuing to evaluate wind, solar and geothermal investment opportunities” – though it is unclear if that evaluation refers to investments in business opportunities or in internal emissions reductions.¹³⁸

Chevron’s disclosure had a brief reference to continuing investment “in profitable renewable energy and energy efficiency solutions”, and it mentioned several solar installations and technologies it is using, investigating, or testing, though it is unclear if these efforts are focused on reducing Chevron’s own emissions.¹³⁹

These companies provide investors very little information they can use to evaluate the steps these companies are taking to reduce their own emissions, and their financial implications.

No disclosure

Apache is the only one of the 10 companies to provide no disclosure on its emissions management strategies and activities.

CORPORATE GOVERNANCE ON CLIMATE CHANGE ISSUES

Good disclosure

None of the ten companies provided good disclosure of corporate governance on climate change.

Fair disclosure

Three companies described some details about corporate governance related to emissions management and climate risks and opportunities.

Suncor, for example, had good information on Board engagement and executive responsibility for climate issues:

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Suncor believes that the responsibility for managing climate change related issues should be a shared responsibility across the company. A comprehensive roles and responsibilities matrix has been developed as part of Suncor's GHG management program. The Environment, Health, Safety and Sustainable Development Committee of the Board of Directors reviews Suncor's effectiveness in meeting its obligations pertaining to environment, health and safety (EHS). The committee also reviews the effectiveness with which Suncor establishes appropriate environment, health and safety policies, including GHG performance and emission reduction plans given legal, industry and community standards. Management systems are maintained by the committee to implement such policies and ensure compliance with them. Suncor's Chief Operating Officer holds top executive responsibility for sustainability issues. Together with the Vice President, Sustainable Development, the business units' EHS managers and selected internal technical representatives are responsible for the stewardship of the GHG management system. The GHG strategy team is responsible for developing company-wide strategies and operational goals and assessing sustainability progress, including GHG intensity reduction, across all areas of our business.¹⁴⁰

Suncor provided generic information on executive compensation, compared to its disclosure on Board and executive engagement. It mentioned only that the company's Annual Incentive Plan accounts for "environment" as part of "corporate wide and business unit performance in key areas important to achieving operational excellence and delivering shareholder value."¹⁴¹

Shell also provided some detail, though its reporting of climate governance—vs. broader environmental governance disclosure—is vague. It mentioned that the "Shell CO₂" program—which is not explained—is responsible for coordinating and driving CO₂ management activities across all businesses" and that "CO₂ management" is part of its Downstream business segment. It disclosed that energy efficiency performance will be one of the factors that affect executive compensation, as part of a 10% of the annual bonus based on "sustainable development." With respect to Board engagement, Shell identified the members of the Corporate and Social Responsibility Committee of its Board and explained the responsibilities of the committee

with respect to sustainable development and social and environmental issues.¹⁴²

BP's governance disclosure addressed climate change more clearly than Shell but is otherwise limited. The company reported that the Board's Safety Ethics and Environment Assurance Committee (SEEAC) considered "[d]evelopments in the measurement of greenhouse gas emissions ... in the context of regulatory compliance and as part of the company's tracking and disclosure processes" and receives "the quarterly reports prepared for executive management" on the group's health, safety, and environmental performance. It also stated that environmental metrics, which are not identified, are factored into executive compensation.¹⁴³

Poor disclosure

Six companies briefly described environmental governance without specifically discussing climate change governance.

Chevron stood out for providing information on all three areas—Board, executives, and compensation—with respect to environmental governance. It mentioned that its Public Policy Committee keeps track of "environmental trends and issues that affect Chevron's activities and performance", identified the executive vice presidents in charge of health, environment, and safety, and described how its Incentive Plan awards to executive officers who consider "nonfinancial items, such as ... environmental performance" on both an absolute basis and relative to "the performance of our top competitors in the Oil Industry Peer Group".¹⁴⁴

Other companies provided information, with little detail, about a limited number of environmental governance issues.

Marathon mentioned its Board committee with oversight of environmental matters, but with respect to executives only disclosed that its "Corporate Health, Environment, Safety and Security organization" ensures maintenance of "environmental compliance systems" and that "[c]ommittees comprised of certain of our officers review our overall performance associated with various environmental compliance programs." It also reported that a "significant consideration" in compensation is "the named executive officer's adherence to Marathon's core values."¹⁴⁵ While "environmental stewardship" is one of five of the company's core values,¹⁴⁶ this reporting does not explain in any detail how significant a factor the environment is in compensation.

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ExxonMobil disclosed only that environmental performance is a factor in compensation, and the Board receives reports on safety, health, and environmental results, but it did not disclose executives responsible for environmental risks or other details about governance.¹⁴⁷

ConocoPhillips' disclosure was similar.¹⁴⁸

Total's disclosure was largely limited to a statement that its CEO's compensation partly considers "health, safety and environment (HSE) performance" and a description of a Management Committee that mentioned the Executive Vice President for Sustainable Development and the Environment.¹⁴⁹

Apache identified its Vice President of Environmental, Health and Safety. It did not disclose the Board's engagement on environmental risks, simply mentioned that its Board "published a Greenhouse Gas Public Statement, and updated and posted its Sustainability Report as a living forum on the Company's website." Apache's disclosure on executive compensation did not provide enough information for investors to assess whether environmental considerations are included or not.¹⁵⁰

No disclosure

Eni is the only one of the ten companies to provide no disclosure on this topic.

SAFETY & ENVIRONMENTAL STATISTICS

Good disclosure

BP included personal and process safety and environmental statistics, mentions KPIs, and helps investors evaluate the meaning of changes from year to year. BP provided:

- Companywide information for each of the following years—2008, 2009 and 2010—on:
 - ◆ **Personal safety:** Recordable injury frequency (for contractors and for employees); Day away from work case frequency
 - ◆ **Process safety:** Loss of primary containment incidents (the number of unplanned or uncontrolled releases of material, excluding non-hazardous releases)

- ◆ **Environmental statistics:** Hydrocarbon spills greater than or equal to one barrel; Volume of oil spilled and volume unrecovered
- Similar statistics for Exploration and Production division: Fatalities (not counting the Gulf of Mexico spill), Recordable injury frequency, Day away from work case frequency, Loss of primary containment incidents, and Number of oil spills of 1 barrel or more.
- Discussion of KPIs: BP reported that "[s]afety performance is monitored by a suite of input and output metrics which focus on personal and process safety including operational integrity, health and all aspects of compliance" and explained it "is progressively moving towards [loss of primary containment] as one of the key indicators for process safety, as we believe it provides a more comprehensive and better performance indicator of the safety and integrity of our facilities than oil spills alone."
- Information that helps investors evaluate the meaning of changes in statistics, such as explaining which aspects of the statistics are due to the Gulf spill.¹⁵¹

BP's reporting could be improved by differentiating statistics into deepwater and non-deepwater categories. This would help investors better understand whether deepwater drilling is posing greater risks to company operations than other offshore operations.

Fair disclosure

Shell provided a range of company-wide safety or environmental statistics. Shell disclosed its total recordable case frequency (a measure of occupational safety) for 2009 and 2010, its operational spills over 100 kg for those years, and the number of work-related fatalities in 2010. Shell also noted that "detailed data and information on our 2010 environmental and social performance will be published in April 2011 in the Shell Sustainability Report."¹⁵² While potentially helpful to investors, this voluntary form of disclosure lacks the materiality filter in securities reporting that allows investors to focus on the most important information to their decisions.

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Poor disclosure

Four companies mentioned one or two basic company-wide safety or environmental statistics, or making general claims about safety and environmental performance

ExxonMobil mentioned a safety statistic without disclosing it, reporting in its proxy statement the “best-ever lost-time incident rate for combined employee and contractor workforce and leading the industry.” The company also claimed that it “has a track record of being among the best in industry in ensuring safety and operations integrity” and referred readers to its annual Corporate Citizenship Report for more information on safety and environmental performance.¹⁵³

Total provided a little more information, noting that efforts to reduce the frequency and severity of work-related accidents have resulted in “a significant decrease in the rate of accidents (with or without time-loss) per million hours worked by nearly 80% between the end of 2001 and the end of 2010.”¹⁵⁴

Marathon disclosed one safety statistic, noting in its proxy statement that it did not meet its safety metric in 2010, with an OSHA Recordable Incident Rate of 0.60 instead of the goal of 0.48.¹⁵⁵

Eni also disclosed one safety statistic, reporting that “[r]exults of efforts to achieve ... better safety in all activities has brought an improvement of Eni injury frequency rate to 0.91 and of the injury severity rate to 0.03, both decreasing from 2009 and representing the best results ever.”¹⁵⁶

No disclosure

Four companies – **Apache**, **Chevron**, **ConocoPhillips**, and **Suncor** – provided no disclosure concerning safety or environmental statistics in their annual filings.¹⁵⁷

DRILLING RISK MANAGEMENT

Good disclosure

BP provided good disclosure on drilling risk management, and its disclosure improved notably after the Gulf of Mexico disaster.

BP disclosed that it:

- Is implementing the recommendations of its internal report on the Gulf of Mexico disaster
- Has restructured its upstream business to enhance risk management
- Has established a new “powerful safety and operational risk function” that:
 - ◆ “Has its own expert staff embedded in BP’s operating units, including exploration projects and refineries, with defined intervention rights with respect to BP’s technical and operational activities”; and
 - ◆ Has “core responsibilities” to, among other things, “[s]trengthen mandatory safety-related standards and processes, including operational risk management”; and reports directly to the chief executive.¹⁵⁸
- Its OMS (the group-wide framework on safety, risk management, and operational integrity) “formalizes standards and recommended practices for selecting and working with contractors” including “assessing the contractor’s safety performance as part of the selection process, and defining safety requirements in contracts”
- “As a result of the Gulf of Mexico accident, ... we are reviewing how best to provide consistent and effective contractor oversight focusing on the way we work with contractors for all onshore and offshore rig activities, particularly in regard to safety and operational risk.”¹⁵⁹
- “We strive to prevent future oil spills by weaving process safety into every stage of the design, operation and management of our operations. We monitor the integrity of all our operations, vessels and pipelines used to produce, process and transport oil and other hydrocarbons – with the aim of preventing any loss of hydrocarbons from their primary containment.
- Accordingly, we record all losses of containment, losses of hydrocarbons from our assets (which we monitor as an enduring indicator of process safety), and losses or spills that reach land or water” and, as noted earlier, it provides the loss of primary containment and oil spill statistics for 2008–2010.¹⁶⁰

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With respect to how well BP's policies work in practice, it is too early to draw a firm conclusion. The company did provide some relevant statistics in its 20-F, discussing fewer reported "Loss of Primary Containment" incidents in Exploration and Production, but more oil spills, in 2010 compared to 2009.¹⁶¹ However, the 20-F was filed in early March 2011, so most of the new policies and procedures BP disclosed were still being put into practice as of the filing. Still, BP provided a good deal of information that helps investors understand how it is managing deepwater drilling risks.

In future filings, for BP to maintain a good level of disclosure, investors should expect reporting of concrete performance data, so they can understand whether the company's risk management *policies work in practice*.

Fair disclosure

Three companies provided (i) a brief generalized discussion of deepwater drilling risk management practices or policies, or (ii) detailed disclosure about broader environmental, health, and safety (EHS) risk management companywide.

Shell's disclosure was more focused on offshore drilling. It noted that its safety procedures "already conform to many of the recommendations" in the U.S. National Commission report on the Gulf of Mexico disaster and that "[d]rilling responsibilities at our rigs are clear, and we assure both ourselves and regulators that all necessary safety measures have been put in place." It reported that its "offshore wells are designed with at least two independent barriers to minimize the risk of uncontrolled release of hydrocarbons" and that it regularly inspects, tests, and maintains those barriers.

In addition, Shell provided some relevant statistics and discussed recent reductions in spill frequency. It noted that it "has clear requirements and procedures to prevent spills, and multi-billion dollar programmes are underway to maintain or improve our facilities and pipelines. These efforts have helped reduce the number of operational spills in recent years." And it included total recordable case frequency on its list of key performance indicators and operational spills over 100kg on its list of additional performance indicators.¹⁶²

Shell also reported generally on safety risk management, noting that it manages this risk companywide "through rigorous controls and compliance systems combined with a safety-focused culture", that its "global standards and operating procedures define the controls and physical barriers we require to prevent incidents", and that it works to build a "safety culture among our employees and contractors" through efforts like "an annual global safety day to give workers time to reflect on how to prevent accidents" and distribution of "12 mandatory Life-Saving Rules" that employees and contractors must follow at risk of disciplinary action, removal from the worksite, and termination of employment.

Total provided less information than Shell on offshore drilling, disclosing that following the Gulf disaster, it created a task force within its Exploration & Production division to review "the safety aspects of deep offshore drilling operations (architecture of wells, design of blow-out preventers, training of personnel based on lessons learned from the serious accidents that occurred recently in the industry)."¹⁶³

Total had more detailed reporting on its EHS systems. It described how it performs "Process Hazard Analyses" on all new processes at sites "with significant technological risks", reevaluates those analyses every 5 years, and has sites drafting safety management plans and emergency plans in the event of accidents. It mentioned that its U.S. petrochemical business is implementing a Process Safety Management Improvement Plan. Finally, it noted that its "[r]isk management measures involve the design of equipment and structures to be built, the reinforcement of safety devices, and the protection against the consequences of environmental events", that it "has developed efficient organizations as well as quality, safety and environmental management systems" to minimize industrial and environmental risks, and that it "conducts detailed inspections and audits, trains appropriate personnel, heightens awareness of all the parties involved and implements an active investment policy."

Eni provided less detailed disclosure about its EHS risk management companywide. It stated that it "has implemented and maintains a system of policies, procedures and compliance mechanisms to manage safety, health,

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environmental, reliability and efficiency risks; to verify compliance with applicable laws and policies; and to respond to and learn from unexpected incidents.” It described the “improvement and dissemination of safety awareness through all levels of the Company’s organization” as “one of the foundations of Eni’s safety strategy” and discussed a safety communication campaign targeting 35,000 workers and 25,000 contractors, including “a number of safety seminars involving the top and middle management of various Business Units ... with the aim of sharing the experiences coming from the implementation of process safety audits in the downstream sector and asset integrity verification tools in the upstream sector”, as well as “courses targeted at specific areas like functional safety and alarms management.”¹⁶⁴ Interestingly, Eni’s 2009 20-F filing had a much more robust discussion of its overall health, safety, and environment (HSE) system than its 2010 filings. In the earlier filing, the company discussed its approach of identifying, evaluating, and managing risks in a continuous improvement cycle, and using regular internal and external audits to ensure the quality of those evaluations.¹⁶⁵

Poor disclosure

Five companies provided a brief generalized discussion about environmental, health, and safety (EHS) risk management companywide.

ExxonMobil disclosed that it applies “rigorous management systems and continuous focus to workplace safety and to avoiding spills or other adverse environmental events. For example, we work to minimize spills through a combined program of effective operations integrity management, ongoing upgrades, key equipment replacements, and comprehensive inspection and surveillance. ... We also maintain a disciplined framework of internal controls and apply a controls management system for monitoring compliance with this framework.” It stated that its “success in managing risk is achieved through emphasis on flawless execution of our Operations Integrity Management System (OIMS)”, which “establishes common worldwide expectations for addressing risks inherent in our business and takes priority over other business and financial objectives.” It claimed that “ExxonMobil has a track record of being among the best in industry in ensuring safety and operations integrity.”¹⁶⁶

ConocoPhillips provided a brief general statement about how its health, safety, and environment (HSE) organization supports its business units, and how the company has created an HSE “excellence program” to enable business units annually “to measure their performance and compliance with our HSE Management System requirements, identify gaps, and develop improvement plans.” It also noted that “assessments are conducted annually to capture progress and set new targets”, and stated the company is “committed to continuously improving process safety and preventing releases of hazardous materials.”¹⁶⁷

Suncor, whose 40-F lacked a single reference to the Gulf of Mexico disaster, noted only that, “Suncor has advanced strategies focused on operational excellence aimed at further improving process safety and reliability, which in turn will impact our environmental impact. Suncor has adopted a clear set of process safety management standards and has implemented the same at all of our facilities.” It also noted the existence of “the Operations Integrity Audit department, which is specifically within the mandate of the Environment, Health & Safety Committee”, but provided no further information.¹⁶⁸

Apache mentioned only that the company has “established operating procedures and training programs designed to limit the environmental impact of our field facilities and identify and comply with changes in existing laws and regulations.”¹⁶⁹

Chevron stated only that it “has implemented and maintains a system of policies, behaviors and compliance mechanisms to manage safety, health, environmental, reliability and efficiency risks; to verify compliance with applicable laws and policies; and to respond to and learn from unexpected incidents.”¹⁷⁰

Neither Apache nor Chevron disclosed this much information in 2009; while this improvement may represent a response to the Gulf of Mexico disaster, these disclosures tell investors little about the quality of the risk management systems and policies in place.

No disclosure

Marathon was the only company to provide no disclosure on drilling risk management.

SPILL RESPONSE

Good disclosure

None of the companies analyzed in this report provided good disclosure.

Fair disclosure

Five companies provided some detailed information about policies or practices to respond to spills.

BP provided investors with some information on preparedness, the magnitude or nature of spill it can handle, and the basis for its conclusions. The company disclosed:

- Advancements in spill response technology R&D, such as “leading the design and procurement of a capping stack for use in the deepwater” of the UK.
- Involvement in the Oil Spill Prevention and Response Advisory Group in the UK, and that the company “immediately undertook a variety of activities¹⁷¹ to further strengthen its oil spill prevention, containment and response capability” following the Gulf spill.
- Joining the new Marine Well Containment Company (MWCC), which is “designed to quickly deploy effective equipment in case of another underwater blowout in the US Gulf of Mexico. ... The well containment equipment used in the Deepwater Horizon response will preserve existing capability for use by the oil and gas industry in the US Gulf of Mexico while the MWCC member companies build a system that exceeds current response capabilities.”
- The “26 recommendations made by BP’s internal investigation team ... will be tracked in the quarterly HSE and operations integrity report supplied to the executive team.”
- Its mapping of environmentally sensitive areas that could be affected by spills, its response plans, the actions that could be taken to respond to an offshore spill, its experience in “combating and mitigating a major oil release”, and what would happen in the event of “multiple concurrent spills ... of the same magnitude and complexity as occurred in the Gulf of Mexico.”¹⁷²

However, the absence of true key performance indicators means it is extremely challenging for investors to understand

whether improved spill response systems are being tested regularly and are working in practice.

Chevron provided some basic information on its preparedness for a spill, as well as on the nature and magnitude of spills it is prepared for. It reported:

- In July 2010, it and “several other companies announced plans to build and deploy a rapid response system that will be available to capture and contain crude oil in the unlikely event of a future well blowout in the deepwater Gulf of Mexico.” This response system, to be operated and run by the new MWCC, “will be engineered to be used in water depths up to 10,000 feet and designed to have capacity to contain 100,000 barrels per day, with potential for expansion.”
- The founding companies “committed to equally fund the initial \$1 billion investment in the system”, that there has been “an initial agreement to secure containment equipment”, and that “other equipment is expected to be secured and available in the coming months, with the new system targeted for completion in early 2012.”
- It “participated in a number of industry efforts to identify opportunities to improve industry standards in prevention, intervention and spill response” during the deepwater drilling moratorium following the Gulf spill and “is a member of many oil-spill-response cooperatives in areas in which it operates around the world.”¹⁷³

Eni reported a range of spill response technology R&D efforts, which provided investors a sense of improvement in this area, but little to evaluate the company’s preparedness for a spill. It disclosed:

- R&D on a top kill system, a device for the collection and separation of gas from water and oil near the wellhead on the seabed.
- A project with MIT to develop “an innovative material with great selective capacity for the absorption of oil dispersed in water” (discussed more in the Safety R&D section below). It noted that this gas separation technology was tested in-house up to a flow of 10,000 BBL/d.
- It developed an emergency plan for the Goliat offshore oil field in the Barents Sea, including standards for testing dispersants and beach cleaners.

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- It entered into the Helix Fast Response System for the company's Gulf of Mexico operations for "activities associated with underwater containment of erupting wells, evacuation of hydrocarbon on the sea surface, storage and transport to the coastline."¹⁷⁴

Apache provided information on its spill response policies and practices, but not on the nature or magnitude of spill it can handle, or key performance indicators. It disclosed:

- It has a Regional Spill Response Plan for its Gulf of Mexico operations
- It conducts periodic drills on the plan, with contractors and government agencies, to measure and maintain its effectiveness.
- Extensive details about its membership in Clean Gulf Associates (CGA), which was created to provide a means of effectively staging response equipment and providing immediate spill response for member producing and pipeline companies' operations in the Gulf of Mexico.
- Other resources available to the company should CGA's resources be unavailable, including Oil Spill Response Limited, MSRC, National Response Corporation, MWCC, and the equipment capabilities of those entities (e.g., 13 shallow water skimmers, 19 oil spill response barges with storage capacities between 12,000 and 68,000 barrels).
- Participation in industry task forces such as the Subsea Well Control and Containment Task Force and the Offshore Operating Procedures Task Force.¹⁷⁵

Total reported some information on spill response, but did not provide information on the nature or magnitude of spill it can handle or key performance indicators. It described:

- Two internal task forces it created after the Gulf blowout, including one coordinated with the Global Industry Response Group created by the International Association of Oil and Gas Producers that is responsible for studying deep-offshore oil capture and containment operations in case a pollution event occurs in deep waters. The other related to plans to fight spills in order to strengthen the company's ability to respond to a major accidental pollution event, such as a blowout or a total loss of containment.

- That it is reviewing issues with subsea dispersants, describes how it has response procedures, oil spill contingency plans, and blowout contingency plans in place (which it "periodically reviews and regularly tests") specific to each affiliate in the event of a spill, describes what those plans cover (e.g., the interfaces and liaisons required for the specific situation under consideration).
- Its companywide PARAPOL (Plan to mobilize Resources Against Pollution) alert scheme "to facilitate crisis management and assist with mobilizing resources in case of pollution", and mentions that the company and its affiliates are registered with external spill cooperatives.¹⁷⁶

Poor disclosure

Three companies had poor disclosure, providing vague information about policies and practices to respond to spills.

Shell, for instance, briefly mentioned the MWCC partnership it co-created. Its disclosure consisted solely of the following: "In the event that a spill occurs, we have in place a number of recovery measures to minimise the impact. Our major installations have plans to respond to a spill. We are able to call upon significant resources such as containment booms, collection vessels and aircraft. We conduct regular response exercises to ensure these plans remain effective. Shell is part of an industry consortium to build and maintain new subsea containment equipment that can be used in the Gulf of Mexico. We are also involved in work with members of the International Association of Oil and Gas Producers on a global spill containment system."¹⁷⁷

ConocoPhillips disclosed even less, noting only that it formed MWCC with Exxon, Chevron, and Shell "to develop a new oil spill containment system and improve industry spill response in the GOM" and that it "plans to build and deploy a rapid response system that will be available to capture and contain oil in the event of a potential future underwater well blowout in the deepwater GOM."¹⁷⁸

Marathon only disclosed that it continues to update its Oil Spill Response Plan as new requirements come from the federal government, and that it has emergency response plans for components and facilities covered by the Oil Pollution Act of 1990 and Spill Prevention, Control and Countermeasures (SPCC) plans for facilities subject to Clean Water Act's SPCC requirements.¹⁷⁹

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No disclosure

Suncor provided no disclosure on spill response. Neither did ExxonMobil, despite being one of four major oil and gas companies which co-founded MWCC.

SAFETY-RELATED R&D

Good disclosure

BP provided detailed information about the company's safety-related R&D initiatives, including technologies under development and the amount of R&D investments. It reported:

- It is “leading the design and procurement of a capping stack for use in the deepwater” of the UK, which was due for completion in mid-2011.
- Some information regarding its “rapid innovation of new technologies” following the Gulf disaster.

It also reported R&D related to the Gulf spill; it was unclear how much of this research is focused on safety-related R&D, as compared to Gulf restoration. BP's disclosure mentioned \$211 million of R&D expenditure related to the Gulf spill, out of \$780 million total spent on R&D. It also mentioned that it established the Gulf of Mexico Research Initiative, a 10-year, \$500-million open-research program into the long-term effects of the spill on the environment and local public health (e.g., the spread and fate of the oil and other contaminants, the degree of biodegradation, effects of the spill on local ecosystems, and detection, clean-up and mitigation technology); BP awarded \$40 million of short-term contracts in 2010 for immediate research into the effects of the spill.¹⁸⁰

Fair disclosure

Eni provided some information about the company's safety-related R&D initiatives, such as technologies under development or the amount of R&D investments. It provided more detail than BP about technologies under development, but it did not include information on the amount of safety-related R&D investments. Citing the “vital role” of technological R&D given the “greater attention to operations

safety in the aftermath of the recent accident in the Gulf of Mexico”, it described a “portfolio of projects for increasing drilling safety” that includes special surface valves, a downhole blow-out isolation packer, a top kill system, new risers for use in ultradeep or intermediate depth waters, technologies for thermal isolation and anticorrosion solutions for underwater operations, a device for the collection and separation of gas from water and oil near the wellhead on the seabed, and a project in conjunction with MIT that “derives from the discovery of an innovative material with great selective capacity for the absorption of oil dispersed in water.”¹⁸¹

Poor disclosure

Total reported that the company invests in safety-related R&D but providing no detailed information. After disclosing its total R&D budget, it noted that one of the six major R&D focuses of the company is “understanding and measuring the impacts of the Group's operations and products on ecosystems (water, soil, air, biodiversity) to improve environmental safety” and that another is “developing, industrializing and improving conversion processes of oil, coal and biomass to adapt to changes in resources and markets, improve reliability and safety, achieve better energy efficiency, reduce the environmental footprint, and maintain the Group's economic margins in the long-term.”¹⁸²

No disclosure

Seven companies—**Apache**, **ConocoPhillips**, **ExxonMobil**, **Marathon**, **Suncor**, **Chevron**, and **Shell**—provided no disclosure on safety-related R&D. Chevron and Shell only noted that they have technology divisions that provide support to upstream and downstream businesses, including in the areas of health, safety, and environment. Shell further noted that its “core” technology developments are intended in part “to provide better ways to conduct operations in deep water.” However, neither company made clear whether or not they conduct safety-related R&D.¹⁸³

APPENDIX B: DETAILED EXCERPTS OF DISCLOSURE

CORPORATE GOVERNANCE ON DRILLING RISK MANAGEMENT

Good disclosure

BP provided good disclosure on drilling-related governance. The company reported:

- Board issues:
 - ◆ Described Board engagement on drilling and safety risks.
 - ◆ Mentioned the addition to the Board of a member of the panel that reviewed safety at BP's U.S. refineries.
 - ◆ Noted how the Board's Safety, Ethics and Environment Assurance Committee (SEEAC) receives quarterly updates "monitoring major incidents, near-misses and performance in both process and personal safety across the group" from the executive team's group operations risk committee, which is chaired by the group chief executive.
 - ◆ Reported that the chief executive and head of Safety and Operational Risk "attend SEEAC meetings and report on the group's safety performance" as measured "through developing leading and lagging safety indicators" and that in 2010, "the SEEAC utilized 42% of its agenda on safety and operational risk matters including process safety", excluding meeting time specifically addressing the Gulf of Mexico incident.
 - ◆ Disclosed the Board's role and activities during the Gulf spill.
- Executive responsibility and compensation issues:
 - ◆ Described executives in charge by name and general function.
 - ◆ Discussed how both the Board and management monitor safety in the company.
 - ◆ Noted the role that safety issues play in the vesting of deferred and matched shares, disclosing that Q4 2010 "individual performance bonuses were based solely on the achievement of safety targets"
 - ◆ Mentioned that no bonuses were paid on group-level results due to the Gulf incident

- ◆ Stated that it is "conducting a fundamental review of how the group incentivizes business performance, including reward strategy, with the aim of encouraging excellence in safety, compliance and operational risk management."
- ◆ Identified "[s]afety and operational risk metrics – including full implementation of the S&OR functional model" as one of the measures that would be considered for executive director bonuses in 2011
- ◆ Explained that vesting of shares would be based 30% "on a set of strategic imperatives for rebuilding trust" that includes "reinforcing safety and risk management culture", and noted that for each strategic imperative in that set, "specific metrics derived from externally tabulated surveys will be used to track progress", with results to "be explained in the subsequent directors' remuneration report."¹⁸⁴
- Whistleblower protections:
 - ◆ Discussed the OpenTalk employee concerns program, which "enables employees to raise questions, receive guidance on the code of conduct and report suspected breaches of compliance or other concerns",¹⁸⁵ though this was of limited utility on the Deepwater Horizon rig, where workers apparently feared reprisals for reporting safety problems.¹⁸⁶

The 2010 filings are too early to assess that progress, and, as was the case when considering drilling risk management, BP's statistics provide part of the story of how well its performance indicators work in achieving safety objectives, as does the fact that BP's 20-F focuses so much on the Gulf disaster.

Fair disclosure

Seven companies provided some details on governance of drilling and safety risk management.

Chevron mentioned the relevant Board committees, identified the executive vice presidents in charge of health, environment, and safety, and described how incentive plan awards to executive officers consider "nonfinancial items, such as safety [and] ... reliability of facilities and operations" on both an absolute basis and relative to "the performance of our top competitors in the Oil Industry Peer Group." It disclosed that the Compensation Committee recognized that

APPENDIX B: DETAILED EXCERPTS OF DISCLOSURE

the company “realized its best-ever safety performance and spill frequency”.¹⁸⁷

Shell disclosed Board engagement on safety risks, identifying the members, purpose, and actions of the Corporate and Social Responsibility Committee. It also reported that safety performance will be a factor in executive compensation (accounting for 10% of the annual bonus) and that it has a Global Helpline through which employees, contractors, and third parties with whom Shell has a business relationship may raise ethics and compliance concerns.¹⁸⁸

ConocoPhillips disclosed that safety and the company’s “[p]articipation as a founding member of the Marine Well Containment Company” are among the aspects of the company’s performance considered by the compensation committee. It also provided a general description of its health, safety, and environmental process and mentioned that the Board receives reports on HSE results.¹⁸⁹

Marathon reported the relevant Board committee with oversight of safety matters. On compensation, Marathon disclosed that its annual bonus program is based on a set of metrics that includes “operational and corporate safety metrics”, that “officer performance goals” include “personal and process safety” issues, and identified “Corporate Safety – OSHA Recordable Incident Rate” as a specific key performance indicator. The company disclosed the existence of a “Corporate Health, Environment, Safety and Security organization” but never reported which executives have responsibility in this area.¹⁹⁰

ExxonMobil similarly provided little detail. The company disclosed that the Board receives reports on safety, health, and environmental results. It also disclosed that “[e]xecutives understand that their compensation will reflect how effectively they implement” the Operations Integrity Management System Framework, that the design of the compensation program is meant to ensure that executives have a strong incentive to promote safety, that the company “has a track record of being among the best in industry in ensuring safety and operations integrity.” It noted that in 2010, the compensation committee considered “[s]trong results in the areas of safety, security, health, and environment” and “best-ever lost-time incident rate for combined employee and contractor workforce and leading the industry.”¹⁹¹ Interestingly, ExxonMobil included a brief description of its whistleblower procedures in its 2009 10-K

but not its 2010 filing, despite the company having improved its safety culture—including empowering “everyone, even contractors, to speak up about safety problems”—following the 1989 Exxon Valdez disaster.¹⁹²

Suncor mentioned Board engagement on safety issues, including “monitoring the adequacy of Suncor’s internal controls as they relate to operational risks of its physical assets and matters of environment, health, safety and sustainable development.” With respect to compensation, it referenced “safety” performance as a factor in incentive-based pay and disclosed that part of the CEO’s compensation evaluation took note of “strong full-year performance in the company’s international, offshore and refining operations” in terms of operational reliability. Unlike its climate governance disclosure, it did not describe the executives in charge of safety risks.¹⁹³

Total’s covered executive management and compensation issues with minimal detail. It identified its Executive Vice President for Sustainable Development and the Environment and the Senior Vice President for Industrial Safety on a list of members of the Management Committee, and stated that “health, safety and environment (HSE) performance” criteria are factored into the Chairman and CEO’s compensation.

Poor disclosure

Apache provided information only on executive responsibility, with minimal detail. It simply identified the executive in charge of safety issues: its Vice President of Environmental, Health and Safety. It briefly described the role of the Board’s Audit Committee in “assess[ing] and manag[ing] the Company’s exposure to risk”, but did not make clear whether safety risks are part of this consideration.¹⁹⁴

No disclosure

Eni provided no disclosure about its drilling and safety risk governance. It described the elements of CEO and General Manager compensation without clarifying if safety is a factor in pay. It mentioned the Board’s has an Oil-Gas Energy Committee without describing its role. Finally, it mentioned that the Internal Control Committee has some oversight over “the outcomes of preliminary inquiries conducted by the Internal Audit Department following reports received also in anonymous form (whistleblowing)” but did not make clear whether those reports concern safety issues or not.¹⁹⁵

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6. See Joel Seligman, *The Transformation of Wall Street* (2003), p.604 (“At its core, the primary policy of the federal securities laws today involves the remediation of information asymmetries.”)
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10. SEC, *Commission Guidance Regarding Disclosure Related to Climate Change*, 17 CFR Parts 211, 231 and 241, Release Nos. 33-9106, 34-61469, FR-82, 2010, <http://www.sec.gov/rules/interp/2010/33-9106.pdf>, hereinafter “2010 SEC Climate Risk Disclosure Guidance”
11. These include the Global Framework for Climate Risk Disclosure and the Carbon Disclosure Project’s 2012 Investor Information Request. Additional useful statements on climate disclosure in financial filings include the CDSB’s Climate Change Reporting Framework and ASTM’s E2718-10 Standard Guide for Financial Disclosures Attributed to Climate Change.
12. Ceres, *Global Framework for Climate Risk Disclosure*, 2006, <http://www.ceres.org/resources/reports/global-framework-for-climate-risk-disclosure-2006/view>
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 26. Many of these companies filed their 2011 disclosures while this analysis was underway; the report does not address the 2011 filings.
 27. SEC guidance calls for a company to disclose both those factors that affect its entire industry or sector and those factors that uniquely affect the individual company. For instance, the 2003 SEC MD&A Guidance states that a good introduction or overview to an MD&A would "include economic or industry-wide factors relevant to the company." SEC, *Commission Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations*, 17 CFR Parts 211, 231 and 241, Release Nos. 33-8350, 34-48960, FR-72, Part III.A, 2003, <http://www.sec.gov/rules/interp/33-8350.htm>, hereinafter "*2003 SEC MD&A Guidance*". Yet that guidance further states that it is important to "identify and address those key variables and other qualitative and quantitative factors which are peculiar to and necessary for an understanding and evaluation of the individual company." *2003 SEC MD&A Guidance*, Part III.B (citing 1989 Release, Part III.A). Similarly, the 2010 SEC Climate Risk Disclosure Guidance states, "Registrants should consider specific risks they face as a result of climate change legislation or regulation and avoid generic risk factor disclosure that could apply to any company." *2010 SEC Climate Risk Disclosure Guidance* at p.22.
 28. For example, in 2011, the Division of Corporation Finance criticized as "too vague to be meaningful to investors" the risk factor disclosure by Wells Fargo & Co. that referred generically to market disruptions and difficult economic conditions but did not identify any specific situations that made the company particularly vulnerable to the identified risks or regulatory changes and did not provide a specific discussion of the potential consequences. *Comment Letter from SEC Division of Corporation Finance to Wells Fargo & Co.*, May 11, 2011, <http://www.sec.gov/Archives/edgar/data/72971/000000000011029641/FILENAME1.pdf>
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 52. Marathon 2010 10-K, p.20
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 58. ExxonMobil 2010 10-K, pp.1, 49
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 62. BP 2010 20-F, pp.99-100, 113-15
 63. Marathon 2010 10-K, p.20; Marathon Proxy Statement, p.49 (incorporated by reference into the 2010 10-K, p.122)
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87. Shell 2010 20-F, pp.61-62, 65, 78, 80
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93. *2010 SEC Climate Risk Disclosure Guidance* at p.22 ("Registrants should consider specific risks they face as a result of climate change legislation or regulation and avoid generic risk factor disclosure that could apply to any company. For example, registrants that are particularly sensitive to greenhouse gas legislation or regulation, such as registrants in the energy sector, may face significantly different risks from climate change legislation or regulation compared to registrants that currently are reliant on products that emit greenhouse gases, such as registrants in the transportation sector.")
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188. Shell 2010 20-F, pp.61-62, 65, 78, 80
189. ConocoPhillips 2010 10-K, p.23; ConocoPhillips Proxy Statement, pp.9, 24-26, 37 (incorporated by reference into the 2010 10-K, p.173)
190. Marathon 2010 10-K, p.20; Marathon Proxy Statement, pp.45-49 (incorporated by reference into the 2010 10-K, p.122)
191. ExxonMobil Proxy Statement, pp.28-29, 35-37 (portions incorporated by reference into the 2010 10-K, pp.38-40). The company discloses more about the specific Board committee that oversees safety risks, but it does so in a part of its Proxy Statement that is not technically incorporated by reference into its 10-K.
192. ExxonMobil 2009 10-K, p.110; Jad Mouawad, *New Culture of Caution at Exxon after Valdez*, New York Times, July 12, 2010, <http://www.nytimes.com/2010/07/13/business/13bpside.html?emc=eta1>
193. Suncor 2010 40-F, p.68; Suncor Proxy Statement, pp.21, 24, 26, 27-28, 51-52 (referenced in the 2010 40-F, p.79)
194. Apache Proxy Statement, pp.14, 26, 35 (incorporated by reference into the 2010 10-K)
195. Eni 2010 20-F, pp.139, 141, 147-48

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