SLEEPING TIGER, HIDDEN LIABILITIES:

Amid growing risk and industry movement on climate change,
ExxonMobil falls farther behind

By

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About the Author

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In 2001 he published "Climate Change – A Risk Management Challenge for Institutional Investors" (with Andrew Dlugolecki) for the Universities Superannuation Scheme (the third largest pension fund in the UK). This identified the implications of climate change for institutional investors and recommended ten action points. In 2000 he authored the reference work "Socially Responsible Investment - a guide for pension funds and institutional investors". He also acted as the lead author of the financing chapter of the IPCC special report on Technology Transfer.

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This report was sponsored by the Coalition for Environmentally Responsible Economies (CERES) and Campaign ExxonMobil.

CERES is a coalition of 85 investor and public interest groups working with major companies to increase corporate environmental responsibility worldwide. Investor members include the Interfaith Center on Corporate Responsibility, the New York City Comptroller's Office, and the Social Investment Forum, together representing more than $300 billion in assets. Since its founding in 1989, CERES has persuaded dozens of companies to endorse the CERES Principles and co-founded the Global Reporting Initiative (GRI). CERES is now launching the Sustainable Governance Project that is bringing together the sustainability and corporate governance movements to improve corporate policies on climate change and other social, environmental and governance issues. For more information, visit www.ceres.org.

Campaign ExxonMobil is a shareholder campaign to convince ExxonMobil to take a responsible position on climate change. Campaign ExxonMobil was founded by faith and environmental groups and works with institutional investors, corporate governance activists and financial analysts to highlight the financial risks to shareholders of ExxonMobil's current position. For more information, visit www.campaignexxonmobil.org.

The report is available in PDF format on the Internet at: www.ceres.org and http://www.campaignexxonmobil.org

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FOREWORD

Global warming is a complex problem with massive implications for energy companies, their shareholders and the citizenry at large. What ExxonMobil shareholders are looking for is leadership; what they are getting is confrontation.

American law limits shareholder rights to the extent that the only forum available to owners who wish to require their managers to pay attention is through SEC-approved resolutions at the Annual Meeting.

This is a difficult procedure that causes expense both for the shareholder and for the company. It is necessary only because the company either cannot or will not commit the necessary personnel to engage in a civil discussion with proponents.

As a result, ExxonMobil is faced with three resolutions stemming from its recalcitrant position on global warming. The first two seek immediate redress on the Company's failure to explain to shareholders what it is doing to protect their investments from the risks represented by global warming and the pressure to develop renewable energy.

The third aims to correct a governance failure at the company that we believe has contributed to the impasse that required the first two. It calls for separating the roles of Chairman of the Board and Chief Executive Officer.

It is a fact that only one company in America has more shareholder resolutions on its agenda than ExxonMobil. This speaks for itself.

This great company is deficient in leadership.

Robert A.G. Monks
April 30, 2003

EXECUTIVE SUMMARY

The past year has seen the risks of climate change significantly increase and ExxonMobil's competitors strengthen their strategic positions on the issue. ExxonMobil has remained largely immobile, and is now the only oil supermajor without a clear strategy to manage the risks of climate change or capitalize on the opportunities.

ExxonMobil appears to be relying on a "hope for the best" strategy, one that works as long as the risks of climate change evaporate. But should anything else occur, the company appears to be unprepared to manage the risks and protect long-term shareholder value.

Increasing Climate Risks

Climate risks became far more real for the energy industry in the past year:

Policy Risks

- Carbon caps and fines in Europe will begin in 2005.
- Canada ratified the Kyoto Protocol in late 2002 over ExxonMobil's objections.
- Russia's statement of intent to ratify the treaty means it could come into force soon.
- Renewable energy mandates are now in force in fifteen countries and thirteen states, and more appear to be on the way.
- British Prime Minister Tony Blair committed to a 60 percent reduction in UK emissions by 2050, and is asking the EU to make a similar commitment.

Competition/Market Risks

- In 2002 Renewable energy was the fastest growing energy source in the world again, with growth rates continuing to hover in the 25%-30% range.
- ExxonMobil's competitors strengthened their positions in renewables, adding to their investments and driving harder for market share.
- New investors jumped into renewables, including General Electric and Warren Buffett.

Other Risks

- Climate change litigation appears increasingly likely, with actions taken by several state Attorneys General, and the filing of the first climate-related legal case in the United States.
- ExxonMobil's reputation continues to suffer, with social responsibility and climate issues dragging on the company's brand value.

ExxonMobil's Strategy Places it Alone Among its Peers

Three of the four supermajor oil and gas companies – Shell, BP, and ChevronTexaco – have energy strategies that make it likely they will more easily adapt to carbon constraints, greenhouse gas emissions trading and new energy mandates. These strategies include incorporating "carbon pricing" into future planning scenarios and decisions, setting emissions reduction targets, developing emissions trading experience, and investing in renewable energy. ExxonMobil is not reporting the use of any of these strategies, and little that the company has done suggests it is preparing to manage the risks of climate change.

ExxonMobil has disclosed certain climate-related activities over the past year. While these are positive signs, ExxonMobil will only catch up to its peers by including clear goals, timelines and targets for the company's activities, as well as explaining how the company will manage pressure for emissions reductions, new products, or research and development.

At this point, ExxonMobil's moves do not address the fundamental concerns expressed by a growing portion of ExxonMobil's shareholders – that the company should properly disclose how it is addressing the existing and future risks and opportunities from climate change and how the company is preparing to protect long-term shareholder value from the risks.

A Governance Failure

Behind the risk management failure lies a governance failure. By essentially abdicating responsibility for reviewing the management of one of the major risks facing ExxonMobil, the board is not serving the best interests of shareholders. Furthermore, the board's Public Issues Committee, whose function is to review "ExxonMobil's policies and practices on relevant public issues, including their effects on safety, health, and the environment," appears not to be doing its job.

Recommendations for Shareholders

Because management and the board have not adequately explained the company's strategy on climate change and renewables, the onus falls on shareholders to ask the questions and raise the concerns that will prompt them to do so.

This year two resolutions appear on the proxy statement that are intended to elicit the basic information necessary to understand how ExxonMobil is planning to meet the challenges of climate change. This report recommends that shareholders vote:

- FOR the resolution calling for a report on the risks presented by climate change and how ExxonMobil will mitigate those risks (Item 14 on the Proxy Card); and
- FOR the resolution calling for a report on how the company will respond to the regulatory, competitive, and public pressure to develop renewable energy (Item 15 on the Proxy Card).

Shareholders should also consider supporting two additional items on this year's proxy statement:

- FOR the resolution calling for the Board to create greater balance on the board by separating the roles of Chairman and Chief Executive Officer (Item 9 on the Proxy Card).
- AGAINST the re-appointment of the Chair of the Public Issues Committee, Philip Lippincott, in view of the committee's failure to manage the climate change issue (Item 1 on the Proxy Card).

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I. Introduction

Investors are increasingly recognizing that climate change poses a business risk[1] because it is altering the competitive landscape for the companies they invest in. When companies are faced with new risks, investors expect to see companies assessing the risks in an objective way, developing and implementing risk management systems to address the risks, and communicating these developments effectively with shareholders. So just how is ExxonMobil dealing with the risks of climate change, and do investors have cause for concern?

This report builds on the report we published last year: *Risking Long-term Shareholder Value? ExxonMobil and Climate Change – An Investigation of Unnecessary Risks and Missed Opportunities*.[2]

This report examines how some of the risks and issues identified in the previous report have evolved from theoretical risks to tangible ones in the past year. It also looks at what steps ExxonMobil has taken to address these risks since the report's release. We then consider the paramount question for investors: whether ExxonMobil's activities amount to appropriate risk management of this key issue. Finally we look at what ExxonMobil should be doing to provide investors with a benchmark by which to assess the company's future performance against competitors.

The 2002 Analysis

Last year's report analyzed the impact of climate change on ExxonMobil and concluded that the company was facing a range of unnecessary risks and missed opportunities, including

- **Risks from sudden policy changes**. By declining precautionary action, ExxonMobil is increasing its risks from sudden changes in policy on fossil fuel use.
- **Reputation risks**. By allowing itself to be singled out as the chief climate change villain – such risks are likely to be particularly significant outside the US, where a significant percentage of the company's revenue is derived.
- **Litigation risks**. As the most prominent public skeptic on climate change, ExxonMobil has exposed itself as an obvious potential defendant in climate change-related litigation.
- **Several opportunities** could come from supporting a mandatory framework to reduce greenhouse gas emissions including boosting the value of ExxonMobil's huge gas reserves, generating revenues from emissions trading mechanisms and from diversification into clean energy (increasing global market share in the process).
- The greatest **missed opportunities** come from the potential for "win-win" climate change policies that create a mandatory framework to reduce emissions while actually enhancing long-term shareholder value.

II. Increasing Risks and Opportunities: A Changing Business Environment for the Energy Industry

In the past year alone there have been a number of developments in climate science, litigation, technology and policy that have significant implications for the future of the energy industry. A clear risk management strategy for players in this industry would include responding to this changing business environment.

Climate Change Policy Risks Develop

Regulatory pressure to reduce greenhouse gas emissions and boost non-fossil fuel sources of energy has evolved from theory to fact. Worldwide concern about climate change has begun to reshape the business landscape in real terms, with governmental policies now solidly in place or in progress, including renewable energy targets, emissions reductions targets, emissions trading and carbon fines.[3] There is also acceptance that generally the most economically efficient way to address the issue is through market mechanisms – which creates opportunities for businesses, but also threatens the bottom line of those companies that fail to prepare.

Even in a turbulent year with major events occurring around other issues, climate change continued to be an area of scientific advance, policy attention and discussion, emphasizing the growing reality of climate policy risks. Events in the last year included:

Policies to Regulate Carbon Gained Momentum Worldwide, including in the US

- Several countries ratified the Kyoto Protocol, including Canada.[4] It is worth noting that Canadian ratification occurred despite strong arguments from the ExxonMobil subsidiary, Imperial Oil, to reject the treaty[5] – demonstrating that if ExxonMobil's strategy to protect shareholder risk is based on political action, it appears not to be working. Russia's stated intention to ratify the treaty in 2003 means Kyoto could soon come into force.[6]
- In Europe, action to address climate change is increasingly seen as non-controversial and inevitable. Starting in 2005, a European emissions trading scheme will require many European-based companies to comply with carbon limits and pay penalties if they exceed them, thus putting a price on carbon emissions for much economic activity.[7]
- In the United Kingdom, the government has endorsed action to implement a 60% cut in emissions in its Energy White Paper,[8] while Prime Minister Blair continues to press President Bush to take action on climate change.[9]
- Substantial political debate continues in the US on climate change, despite the reluctance of the Bush Administration. Many members of Congress continue to press for action; in the 107th Congress (2001-2002), over 75 bills, resolutions, and amendments addressing climate change in some way have been introduced.[10] There is momentum to control greenhouse gas emissions at the state level, with three states (CA, NH and MA) moving to cap carbon emissions, and many others considering legislation.[11]
- Several state Attorneys General declared their intention to sue the EPA for failing to regulate carbon dioxide.[12]

Policies to Encourage the Use of Renewables Continue to Gain Momentum

- Three years ago, no national governments mandated the use of renewable energy. Today, fifteen governments do and thirteen of the United States do.[13] Given that concern about climate change is a key driver for these mandates, there is no reason to expect them to

decline – and every reason to expect such policies to increase.

- Renewables policies are in development in several states – Colorado, Illinois, and Vermont. New York State's Governor Pataki announced a 25% renewable energy goal during his state of the state address in January of 2003.
- Sixteen developing countries also have renewable energy programs that involve goals, financing and other mechanisms.[14]
- Energy security is also a driver for renewable energy policy as governments seek to protect themselves from risks of oil supply disruptions.[15]

Growing Scientific Certainty

- Evidence continues to mount in support of the worldwide scientific consensus that climate change is a real threat. Even the Bush Administration's own scientists, in a review of the administration's climate change policy organized by the National Academy of Sciences at the president's request, expressed deep concern. Their report concluded that the president's strategy "lacks most of the basic elements of a strategic plan: a guiding vision, executable goals, clear timetables and criteria for measuring progress." In a number of areas scientists criticized the plan as exaggerating the need for more research, and overemphasizing uncertainty.[16]

Reputation Risks Continue to Grow

Reputation risks are continuing to grow. The "Stop Esso" campaign is continuing in Europe, and according to the organizers in the UK, an estimated one million people are boycotting Esso.[17] On February 24, 2003 Greenpeace activists blockaded the company's British headquarters, forcing 1,000 employees home, while other teams shut down over 100 Esso stations.[18]

The boycott is active in other parts of Europe – in one October 2002[19] demonstration, activists shut down every Esso station in Luxembourg for a day.

That protest prompted ExxonMobil's second trip to court to try to fight back against the boycotts. In January 2003, the company filed suit against Greenpeace for lost income due to the Luxembourg protest.[20] That suit followed legal attempts by ExxonMobil to stop Greenpeace in France using their "E$$O" logo. ExxonMobil lost that suit when it was rejected by the appeals court.[21] While the boycott may not yet be having a documentable impact on sales (aside from StopEsso's claims) it is creating a distraction for management and wasting company resources.

The impact may get worse. The boycott has taken a nascent step on U.S. shores, with demonstrations shutting down ExxonMobil gas stations in New York City and Los Angeles in 2002.[22] In January 2003 Greenpeace activists locked themselves to an ExxonMobil oil tanker in an effort to interfere with operations.[23]

Notable too has been the way other oil companies have been emphasizing their more progressive attitudes toward climate change in an attempt to distinguish themselves from ExxonMobil. BP has launched an advertising campaign in the US which showcases its "green" credentials, highlighting its recognition of the risks of global climate change, its targets to reduce facility greenhouse gas emissions and its solar energy business.[24]

Shell also has been emphasizing its responsible approach to climate change. In March 2003, Sir Philip Watts, Chairman of the Committee of Managing Directors, spoke out at the inaugural conference of the Shell Center for Sustainability at Rice University in Houston, saying "taking action now to respond to the threat from climate change is essential."[25]

ExxonMobil's position on climate may even be affecting its reputation among its peers. ExxonMobil's ranking in Fortune Magazine's peer-based "Global Most Admired List," was downgraded in 2003.[26] Respondents placed BP and Shell ahead of ExxonMobil, which was outpaced in the areas of innovativeness, social responsibility and product/service quality – areas that are reflective of a company's ability to meet environmental challenges like global warming. ExxonMobil now lags behind the two major competitors that are demonstrating proactive climate change strategies.

Litigation Risks Emerging

2002 may well mark the start of climate change litigation. Peter Lehner, chief of the New York attorney general's Environmental Protection Bureau, announced that his office was studying the issue of climate change and might sue polluters along the lines of the successful tobacco litigation by states in the 1990s.[27]

In January 2003, the states of Massachusetts, Maine, and Connecticut announced they intended to sue the U.S. EPA for violating clean air laws and imperiling the health of citizens by failing to regulate carbon dioxide emissions. They argue that CO_2 emissions from burning fossil fuels should be regulated under the Clean Air Act because such emissions are the leading cause of global climate change, which "will likely cause or contribute to wide-ranging, adverse changes to just about every aspect of the environment, public health, and welfare throughout the Northeast."[28]

> "Imagine GE, Exxon or Georgia-Pacific being forced to pay out of their pockets for beach erosion in Florida or the destruction of Inuit fishing grounds off the coast of Alaska. Soon you may not have to imagine, and every corporation should consider the role that it plays in global warming and its overall effect on the environment.
>
> Shareholder suits against negligent directors and officers could also be on the horizon. If executives do not take the proper steps to at least examine the environmental effects of their organizations, lawsuits may emerge from anywhere."
>
> *Risk Management, August 1, 2002*
>
> "Climate control; insurance rate increases caused by increasing losses from natural disasters caused by global warming"

The first lawsuit seeking action to address climate change was filed in 2002: In August 2002 the City of Boulder, Colorado, along with Friends of the Earth (FoE), and Greenpeace, filed a lawsuit in the U.S. District Court in San Francisco against two U.S. government agencies - the Export Import Bank and the Overseas Private Investment Corporation. The plaintiffs allege the organizations have supplied funding for greenhouse gas emitting projects without assessing their contribution to global warming and their impact on the U.S. environment as required under key provisions of the National Environmental Policy Act.[29] In December 2002 the City of Oakland voted to join the lawsuit.[30]

While these cases are at early stages, they mark the first time that the climate change debate has moved out of the scientific and political debate into the courtroom. They certainly demonstrate that the risks in this area have become a step more concrete.

III. Managing Climate Change Risk: Contrasts Between ExxonMobil and its Competitors

The reasons for concern over ExxonMobil's apparent lack of movement on climate change become startlingly clear when the company is compared to its competitors. The risks that have become the most pressing in the oil industry are renewable energy mandates, emissions trading and carbon limits. We look at four responses that most directly address these risks.

Comparing the Oil Majors

A climate strategy should reflect that growing risks from climate change and policies to address it will impact the bottom line in a number of ways. Clearly, industry leaders BP and Shell, and more recently ChevronTexaco have embedded their strategic response into their planning process. This is the most fundamental step – ensuring that decisions made now reflect the risk potential they are expected to face over their long lifetimes.

Shell, BP and ChevronTexaco assume carbon will be constrained in the future and are investing in a diverse array of energy and risk management options to limit their exposure and maximize their opportunities. ExxonMobil has declined to engage in most of these strategies.

Renewable energy: Of the four, only ExxonMobil declines to invest in this rapidly growing energy source. Shell and BP are the furthest along in investing, although it appears that ChevronTexaco is gradually deepening its commitment in this area.

Emissions trading: BP and Shell have actively traded emissions since 1999 and 2000, respectively. Both are involved in current emissions trading markets and report vast improvements in internal efficiencies due to the experience gained. ChevronTexaco reports it supports emissions trading but does not appear to engage in any currently. ExxonMobil has stated it does not believe emissions trading to be effective, and reports no greenhouse gas emissions trading activities.

Carbon pricing: Shell and ChevronTexaco report use of carbon pricing as a way to hedge the risks associated with current investment decisions. BP and ExxonMobil do not report use of carbon pricing.

Emissions reductions targets: Shell and BP both have set public emissions reduction goals, met them, and reset new ones for the future. ChevronTexaco does not report any emissions reductions targets, and ExxonMobil has stated it does not set them.

How Do the Oil Majors Stack Up

On Preparing for Immediate Climate Risks and Opportunities?

	Shell	BP	ChevronTexaco	ExxonMobil
Renewable Energy Fifteen countries and 13 states have renewable energy mandates. The World Energy Council reports that the global market for renewable energy is likely to be in the range of $234 to $625 billion by 2010 and $1,900 billion by 2020[31].	✔ $1 billion investment in renewable energy[32] Established renewable energy division with wind, solar, bio-fuel assets and active in over 90 countries.[33] • Developed wind power: 240 MW • Shell Solar expands to 13% market share • bought 22.5% stake in company developing bio-fuels technology.	✔ BP has pledged $500M for investment in photovoltaics for 2000-2003.[34] BP is spending $100 million to make its Spain solar manufacturing plant one of the world's largest.[35] BP reports a 17% world market share in solar power.[36] Jointly owns 22.5 MW wind farm with ChevronTexaco.	✔ From 2002-2003, CVX will invest $80 million in wind power and gasification technologies.[37] Jointly owns 22.5 MW wind farm with BP. In 2001, Texaco installed solar panels on service-station canopies in the United Kingdom. "ChevronTexaco will continue to develop and implement such new energy technologies."[38]	✕ No current investments.
Emissions Trading The UK opened its trading market in April 2002, the Chicago Climate Exchange opened in the US in 2002, and the EU is due to open theirs in 2005 (with $ penalties). Initial EU rules will affect cogeneration facilities, found at many refineries. Trading markets are expected to continue expanding. The US Council on Foreign Relations estimates emissions trading will be a $2.3 trillion carbon trading market by 2012.[39]	✔ Established separate trading unit for multiple pollutants including greenhouse gases. Trading greenhouse gases in UK and Denmark. Stated intention to join EU trading system in 2005.[40] First greenhouse gas trading activities started in 1999.[41]	✔ BP piloted its own emissions trading system in 1999 and operated it across the whole company in 2000 and 2001.[42] BP joined the GHG trading system in the UK in April 2002.[43]	✕ Chevron states that it supports emissions trading.[44] The company has no reported activities in the area at this time.	✕ ExxonMobil does not support emissions trading and has no reported activities in the area at this time. "Emission- trading schemes . . . are unlikely to make a worldwide difference."[45]

How Do the Oil Majors Stack Up

On Preparing for Immediate Climate Risks and Opportunities?

(continued)

	Shell	BP	ChevronTexaco	ExxonMobil
Carbon Pricing Carbon pricing is a tool for hedging against the risk of future limits and costs on greenhouse gas emissions. Future scenario planning incorporates an assumed price on carbon as part of the fundamental analysis of project profitability.	✔ Shell has been incorporating carbon costs in all its major projects since 2000. Today, most new investment projects, irrespective of size, must be designed for optimal profitability in a carbon-constrained world.[46] Shell is reported to be using a $5 - $20 per ton future price on carbon.[47]	✘ No evidence of carbon pricing.	✔ "We are incorporating greenhouse gas emission assessments into our capital project evaluations."[48] The company assumes a carbon cost of $5-$20/ton, depending on location, when evaluating potential investment opportunities.[49]	✘ No evidence of carbon pricing.
Internal Emissions Reductions Targets Targets are used as a tool to respond to trading and pricing. Without this tool, there is no way to know if the company is ahead, behind or on par with where it is trying – or required - to go.	✔ Current target: By 2010, keep GHG emissions to 5% or more below 1990 baseline. Previous Target (met in 2002): Reduce emissions to 10% below 1990 baseline in 2002.[50]	✔ Current target: Maintain net emissions at or below 2001 levels through 2012. [51] Previous target (met in 2001): Reduce emissions to 10% below 1990 baseline levels.	✘ No known targets.	✘ No targets.

External Analyses Draw Similar Conclusions

The Carbon Disclosure Project and Trillium Asset Management each compared ExxonMobil to its competitors on a range of indicators of readiness for climate change. Although the studies were conducted separately, and each used its own "key indicators" for the analyses, both also find ExxonMobil to be lagging.

Carbon Disclosure Project

The Carbon Disclosure Project[52], sponsored by thirty-five institutional investors with more than $4.5 trillion in assets (including Credit Suisse Group, Merrill Lynch, UBS Global Asset Management, and the State of Connecticut Pension Funds) surveyed the world's 500 largest companies by market capitalization. Companies were assessed by industry type on key indicators of readiness for climate risks and opportunities. According to this assessment, ExxonMobil lags behind most of its competitors.

Company	Superior Awareness of Climate Change Risk and Opportunity	Early Attempts to Quantify Financial Implications of Mitigation	Emission Reduction Programs in Place	Targets Set for GHG Reductions (including energy efficiency)	Quantified GHG Reporting	Early Experimentation with Emissions Trading	Development of Renewable Energy Technology	Development of Clean Fuels
BP	■	■	■	■	■	■	■	■
Norsk Hydro	■	■	■	■	■	■	■	■
RD/Shell	■	■	■	■	■	■	■	■
Statoil	■	■	■	■	■	■	■	■
Imperial			■	■	■			■
Occidental			■	■	■			
ExxonMobil							■	■

The Renewable Energy Technology column reflects renewable energy, fuel cell and hydrogen investments. Like its competitors, ExxonMobil invests in fuel cells; but it has no renewable energy investments.

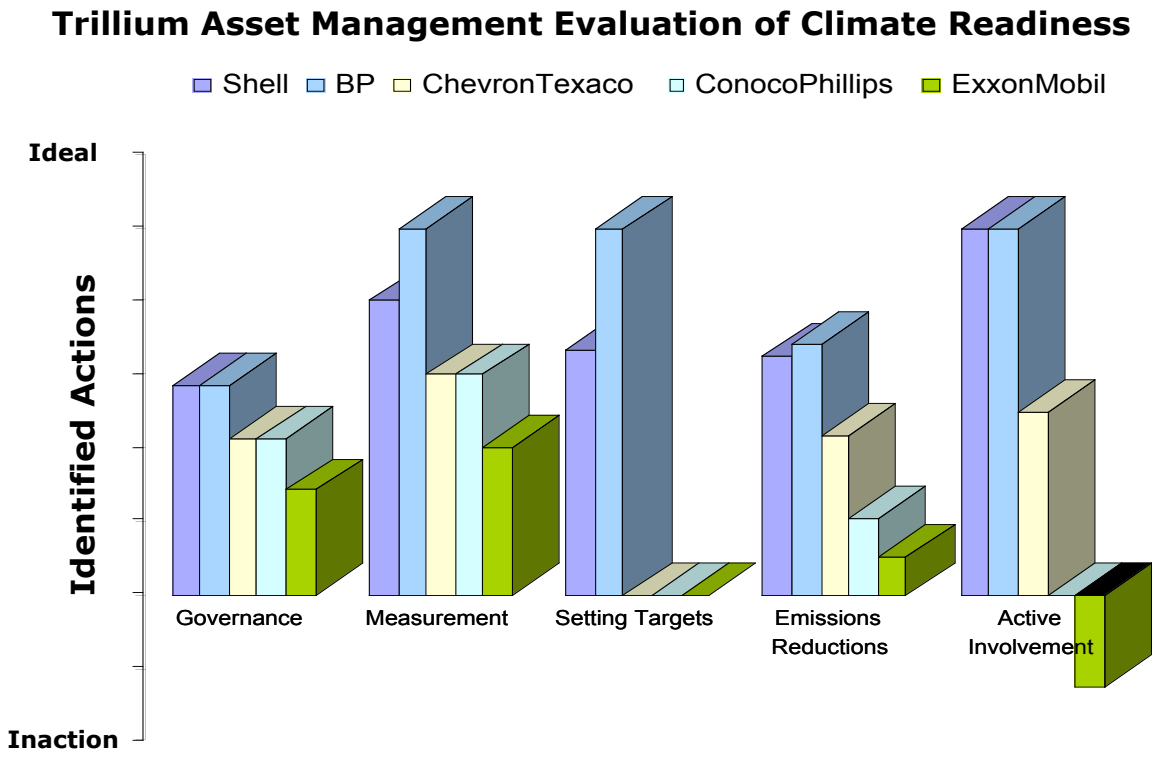
Source: Carbon Disclosure Project, "Carbon Finance & the Global Equity Markets," February 2002.
Condensed from CDP's full chart on page 54 of their report. For the full report see www.cdproject.net.

Trillium Asset Management Sector Analysis

In early 2003, Trillium Asset Management examined activities of oil majors in order to compare the thoroughness of disclosure and corporate readiness for climate change related developments.

Trillium analyzed and ranked companies for quality of governance, measurement of greenhouse gas emissions, targets for emissions reductions, emissions reduction activity, and active involvement in constructive policy discussion[53]. Companies were scored based on the presence or absence of a set of activities under each heading.

According to this analysis, ExxonMobil lags behind the other oil majors.



Findings on Positioning and Risk Management

A comprehensive risk assessment of climate change would consider factors such as the impact of a price being placed on carbon emissions–which will be the case for ExxonMobil's European operations from 2005–or the risks from litigation or reputation damage. It should start from an objective assessment of the science and economics, rather than a subjective "best-case" viewpoint.

It is important to recognize that this process is not fundamentally different from other risk analysis and disclosures. Indeed the framework is already there. In its official disclosures, ExxonMobil states that it "tests the viability of all of its assets based on long-term price projections" and that it assumes "prices over the long term will continue to be driven by market supply and demand fundamentals." Yet such analysis is dangerously incomplete if it ignores the key market risk of climate change, which could materially impact both the demand for, and the price of, its products.

It is critical that any risk management process must be built on two solid foundations. First, proper governance and control of the risk management process, including adequate oversight by the Board, and second, an objective assessment of the underlying risks. In a post-Enron world these two factors are clearly essential. The fact that the company appears to be failing in these two key areas may explain their failure to conduct such analyses and should be of fundamental concern to investors. We start by looking at an objective assessment in the areas of climate change science and policy, and the potential of renewable energy.

These findings are confirmed by those of other organizations. Several analyses have examined players in the oil and gas sector to compare companies on the basis of their readiness to manage risk and seize opportunities associated with climate change. Consistently, ExxonMobil ranks poorly compared to the market leaders, and generally is found at the back of the pack.

Objective Assessment 1: Climate Science and Policy

For businesses, the appropriate starting place for understanding climate change science and policies must be the assessment reports of the Intergovernmental Panel on Climate Change (IPCC).[54] These are balanced, objective and thorough, and have been endorsed by the National Academy of Sciences (NAS)[55] among others. The IPCC and NAS reports do not dismiss the uncertainties in the science – they openly acknowledge them – yet the uncertainties are not significant enough in scope to alter the final conclusion. As the 2001 NAS report begins, "Greenhouse gases are accumulating in Earth's atmosphere as a result of human activities, causing surface air temperatures and subsurface ocean temperatures to rise."[56]

ExxonMobil continues to question many of the conclusions of the IPCC assessments, [57] and maintains that the scientific evidence does not support the conclusion that fossil fuels are contributing to climate change.[58]

Perhaps as a result of its perspective on the science, the company fails to recognize the widespread support for actions to address climate change in many countries and jurisdictions, and the likelihood of mandatory measures to control carbon emissions, such as taxes and trading systems. Without this recognition, it is clearly impossible to integrate emissions costs into risk

management systems. This is not to ignore that there is uncertainty over the size, extent and timing of such costs – consideration of such factors is clearly an integral part of the risk management process.

ExxonMobil seems to base its assessment on what the company believes should happen, rather than what is likely or already happening. The company has made clear its view that it disagrees with the Kyoto Protocol and mandatory emissions restrictions, preferring a voluntary approach and development of technology.[59]

However this is not an appropriate basis for risk management, particularly in view of clear signs that climate policy in many areas is developing differently from the way the company advocates. We also note that if ExxonMobil's strategy to address climate risk is essentially a political one, it should disclose this to shareholders and discuss its effectiveness.

Objective Assessment 2: Renewable Energy

A second key concern is ExxonMobil's attitude to renewable energy. This is significant because renewable energy is potentially a direct threat (or an opportunity) for existing energy businesses, and is a key focus for activists.

ExxonMobil's assessments of renewable energy are cause for a number of concerns:

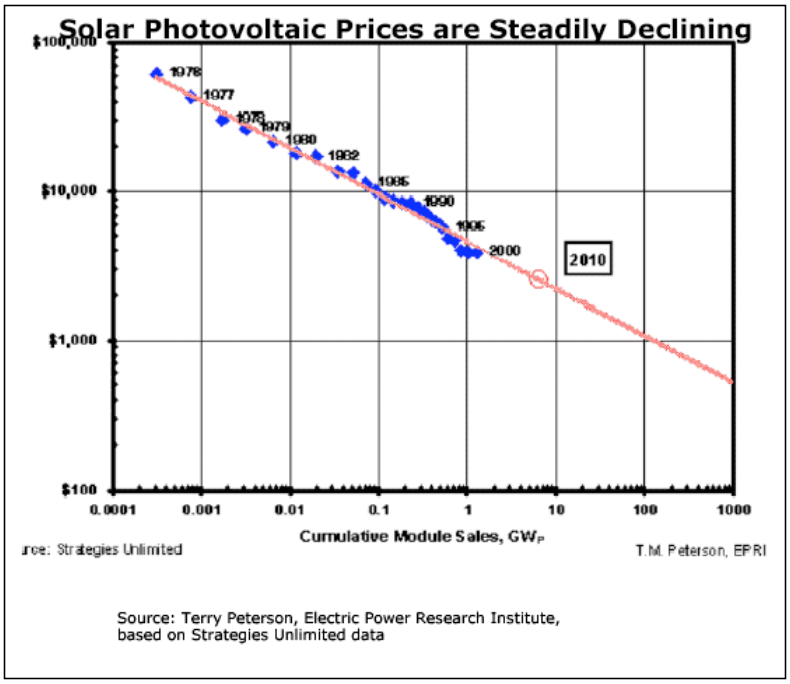
- In its publications, ExxonMobil makes much of the problems of renewables, without mentioning any of their advantages, such as energy security, price stability, and minimal environmental impacts.
- The company appears to reject renewables by saying that they invested in renewables in the 1970s and 80s and decided that they were not in the best interest of shareholders. Clearly the renewables market has changed dramatically since then and an investment experience from 30 years ago is hardly relevant.
- Processes and structures are lacking. For example, despite claims that the company tracks renewable energy development, leaders of ExxonMobil's corporate planning[60] department were unable to identify a specific individual in the company who is responsible for tracking renewable energy technology.
- The company's rejection of renewables appears virtually unconditional – no indication is given of under what circumstances the company might invest in renewable energy. Note that it would be easy to justify some investment in renewables on diversification and learning grounds alone.
- ExxonMobil is isolated among oil majors in its rejection of renewable energy – and among other companies involved in the energy business, such as GE.

A proper assessment would focus on factors such as return prospects and interactions with existing businesses, currently missing from ExxonMobil's statements on the subject.

As an example of the potential for renewables, it is worth considering the prospects in one key area, wind energy. The market for wind energy is continuing to grow strongly, with estimated growth of around 29%[61] in both installed and new capacity. Significantly, this is because wind has broken through key price barriers and is now broadly competitive with other forms of power generation, depending on situation. Total capacity could exceed 100GW by 2007. While this

would represent only 3% of global installed capacity, wind energy could represent some 24% of new capacity that year. GE's wind division has projected that wind turbine sales could exceed those of gas turbines within five years.[62]

These prospects explain why a corporate giant like GE Corp. has decided to invest in wind energy and recently acquired a major business in the area. And Mid-American Energy Co, backed by billionaire investor Warren Buffett, recently announced plans to build the world's largest wind-power generation plant.[63]



Cost reductions for photovoltaics have behaved according to classical experience curve theory, with an approximately 20% cost reduction for every doubling of worldwide cumulative production. Consideration of trends for Dynamic Random Access Memory (DRAM), a type of memory used in most personal computers chips show that cost reduction can continue over several orders of magnitude. There is no reason to anticipate the same trend will not be true for photovoltaics.

If $1 trillion were invested in photovoltaics and cost reductions continued according to the historically-observed experience curve for silicon-based PV modules, PV modules would cost less than $350 per kW (comparable to the lowest cost natural gas peaking power plants in the U.S. today) and produce electricity for a retail price of about 4 cents/kWh. Moreover, the cumulative cost of electricity from this hypothetical build out, starting from 2003 vintage PV system prices, would average approximately 6 cents/kWh – less than the average retail cost of electricity in the U.S. today. Volume of production is the most important limit on solar energy's price, not the need for technological breakthrough.

It is difficult to reconcile these data and the trends toward renewable energy mentioned earlier in this report with ExxonMobil's statement that "*we believe it will take at least 30–40 years before a renewable energy infrastructure could be built up from its current level and start contributing significantly to our energy supplies*."[64] If this is an accurate reflection of ExxonMobil's assessment, the risk to long-term shareholder value is significant in view of the very different reality expressed above.

III. ExxonMobil's Response to Emerging Risks

ExxonMobil took some limited action on climate change in 2002 and early 2003. These are positive steps but they do not go far enough to alleviate concerns about the company's governance failures and lack of disclosure on climate change. In this section we discuss each of these actions and assess the extent to which they address the risks facing the company.

It is worth noting at the outset that according to ExxonMobil's own statements, it is not taking any actions that are specifically responsive to the challenge of global warming. ExxonMobil states "Steps should be taken to reduce greenhouse emissions if they are economically attractive in their own right."[65] While this sounds at first like a proactive approach, it may well mean that the company's actions would be the same whether the risks of climate change existed or not. If the company is making decisions with only today's economics in mind, then it cannot really be preparing itself for tomorrow's challenge of climate change or even emerging public concern about climate change.

The Global Climate and Energy Project at Stanford University

In November 2002 ExxonMobil announced a pledge to provide $100 million over ten years in support of an energy research project to be led by Stanford University – the Global Climate and Energy Project (GCEP). According to news releases, the project will be researching new options for commercially viable technological systems for energy supply and use that have the capability to substantially reduce greenhouse emissions. [66] The project also has backing from General Electric, Schlumberger, and potentially the German utility company E.ON.

This ten-year program of support for climate change and energy technology is one of the largest corporate-sponsored research programs ever. It fits with the rest of ExxonMobil's views of climate change with its emphasis on technology.

But whether it can be viewed as an effective response to climate change risks is another matter. Though GCEP is intended to be a ten-year project, ExxonMobil only has a three-year contract signed at this time.[67]

The company's annual commitment is only $10 million per year, dwarfed by the company's $600 million per year internal budget for research on oil exploration activities. Even if ExxonMobil participates the full ten years, it will only be spending 1/10th of 1% of what the company plans to spend on new oil and gas exploration over the same period (announced in October 2002 as $100 billion[68]).

The investments at Stanford are also substantially less than the sums that competitors are spending on low carbon energy technologies. For example, Shell announced in 2001 that it plans to spend $500 million on renewable energy over next five years (in addition to its spending of some $500 million from 1998 until 2003).[69] Just one of BP's recent renewable energy investments, in a solar plant in Spain, alone exceeds $100 million.[70]

There is also the question of ExxonMobil ruling out energy sources before they have been studied. The Associated Press reported that ExxonMobil Vice President for Health, Safety and Environment Frank Sprow said the company had ruled out some energy sources already.

Paraphrasing Sprow, AP wrote "today's cleanest energy sources - wind, solar and fuel cells - would never be economic enough or reliable enough to meet future global energy demand. As a result, ExxonMobil has requested that Stanford scientists focus on finding cleaner ways to use fossil fuels as well creating other 'breakthrough, inexpensive technologies.'"[71]

ExxonMobil's support for GCEP has also stirred significant controversy, reflecting the extent to which ExxonMobil has become a lightning rod on the issue of climate change. Some concern has been expressed within Stanford that ExxonMobil is seeking to influence the scientific community in the same way that it has the political debate,[72] and the controversy has become a prime focus in general academic discussions of corporate sponsorship of university research programs – with ExxonMobil held up as an example that causes problems.[73]

Bottom Line on Sponsorship of Stanford's GCEP:
The impact of this project on long-term shareholder value and on climate risks looks marginal. The project may lead to some opportunities in new technologies. For the first five years of the project the sponsors have an exclusive right to license any technology developed.

However, the intellectual property will remain with Stanford and after five years other organizations will be able to license the technologies. Indeed, while long-term research projects could be an important part of a strategic response to climate change, the relatively low level of funding and exclusion of certain energy sources before the project has begun mitigates the value of the project as a realistic response.

In terms of the risks identified earlier, the project is unlikely to have any significant impact on potential for liability as it will not affect ExxonMobil's emissions or other activities in the near term. It may have some limited reputation benefits, but the project does not seem to have substantially changed attitudes at environmental organizations or elsewhere.[74]. And it is sufficiently long term, and without any degree of certainty of results, that it does not appear likely to be relevant to managing any of the near-term policy risks or protecting long-term value.

Fuel Cell Investments

Fuel cells are widely viewed as a technology with some potential to replace the internal combustion engine over the next 20-30 years.[75] As a result, all the major car manufacturers and most of the large players in the oil and gas sector are making some type of fuel cell investment.

One of the biggest debates in fuel cell technology has been whether fuel cell cars will fill up on hydrogen, gasoline or another fossil fuel like natural gas or methanol. ExxonMobil is placing its bets on one technological approach–on-board gasoline reformation technology–that involves converting gasoline to hydrogen within the vehicle. On-board reformation technology has one substantial advantage: it would not need a new infrastructure. However, this approach faces substantial technical challenges and does not have the benefits of other technologies.

The concern is that ExxonMobil only appears to have one practical effort to develop a product that would provide some protection from climate change and fuel policy risks; but that product is very far from a sure bet, as we discuss.

Technical challenges

- The technical challenge inherent in gasoline reformation is high. Put simply, it requires finding a way to take a piece of equipment that is found at refineries and currently five stories high and fit it into a trunk and a reasonable budget. Much of industry is skeptical about the prospects for this. For example, the California Fuel Cell Partnership, a broad-based organization of which ExxonMobil is a member has stated, "It should be acknowledged that this reformer's development to market readiness is particularly difficult and may occur later than that for other liquid fuels."[76]
- The California Fuel Cells Partnership also points out that supplying gasoline for the reformer could be a challenge, as gasoline reforming fuel cells may require gasoline with sulfur contents lower than refineries can currently produce.[77] This would undermine its potential to work with existing infrastructure.

Missing Benefits

- A major advantage of hydrogen fuel cells is that their only waste product is water. In contrast, on board reformation is unlikely to be completely clean, and there may be new waste problems. Impurities and toxins may be created that must be stored on the vehicle and periodically changed out. Thus they may face problems with acceptability and environmental regulation.
- The value of gasoline reforming fuel cells as a climate strategy is also questionable. According to an article published in Science Magazine on November 1, 2002, "Per unit of heat generated, more CO_2 is produced by making H_2 directly from fossil fuel than by burning the fossil fuel directly."[78]

The challenges of gasoline reformation may explain why auto companies such as GM, Toyota (with whom ExxonMobil has partnerships on the gas reformation), Daimler Chrysler and Honda are putting hydrogen fuel cell cars – not gasoline reforming ones - on the road (see box at right).

Momentum favoring pure hydrogen fuel cells rather than gasoline fuel cells is reflected in the May 7, 2003 announcement that General Motors and Dow Chemical have teamed up in the largest deal ever to develop hydrogen-based fuel cells.[79]

What's on the Road Today:

- A GM fuel cell car prototype features a 10,000 psi tank to store hydrogen, an important technological breakthrough. FedEx is using an earlier version of the vehicle in regular routes in Japan (December 2002).
- Honda is leasing hydrogen fuel cell cars to Los Angeles and the Japanese government
- Toyota is leasing hydrogen fuel cell vehicles to several Japanese government agencies and one each to UC Irvine and Davis.
- Shell announced in early 2003 plans for the nation's first hydrogen fuel-pump at a gas station, in Washington, D.C. The pump will provide fuel for six experimental General Motors fuel-cell minivans that will be loaned out for test-driving.

Source: Fuel Cells 2000, "Auto Companies on Fuel Cells," http://www.fuelcells.org/AutoCompaniesonFuelCells.pdf

Bottom Line on Fuel Cells:

The real concern for shareholders is that gasoline-reforming fuel cells are the only alternative technology that ExxonMobil is investing in at present–and may not be a very good alternative. ExxonMobil does not appear to be prepared for the possibility that a technology other than theirs will succeed, and does not seem willing to discuss what the success of the

hydrogen fuel cell might mean for the company. Its position contrasts markedly with Shell, which is seriously exploring hydrogen and is clearly in a position both to map out a hydrogen future,[80] and to seize any opportunities for the company.

Emissions Reporting

In late 2002 ExxonMobil announced that it supports mandatory emissions reporting.[81] This is a welcome step forward but since then, little more has happened. The next step must be to provide greater detail on the types and sources of the company's greenhouse gas emissions, and how the company is managing them. Greater historical disclosure than just the previous year would also be helpful.

ExxonMobil's figures are only available in the form of a graph–there are not detailed accounts of the company's emissions, broken down geographically or by business unit. In this respect ExxonMobil is behind its competitors, notably BP, whose web site carries a high level of detail on the company's emissions.[82]

It is worth noting that there has already been substantial work on guidelines and protocols for measuring and reporting greenhouse gas emissions, developed by organizations such as the United Nations Environment Programme and the World Business Council for Sustainable Development.[83] Given that ExxonMobil calls for the "development of procedures" and says it is "working … to develop common techniques to allow benchmarking of emissions …", an important indicator of the Company's commitment in this area will be its willingness to work with, and implement, these initiatives.

Bottom Line on Emissions Reporting:

Supporting emissions reporting is a positive step, but we await proper disclosure by the company to established standards. More significantly, reporting of emissions is only one small part of the appropriate disclosure investors need on climate change risks. Information is also needed on how the company will manage the risks those emissions carry with them, and on the other climate-related factors such as risks to markets, impacts of climate policies, renewable energy opportunities, reputation impacts and litigation risks.

Energy Efficiency

ExxonMobil states that since the early 1970s, it has improved energy efficiency in its refineries and chemical plants by 35%.[84]

This is a positive step, but it is not particularly noteworthy. For comparison:

- Over roughly the same period, the US economy's efficiency increased by 45%.[85]
- The U.S. chemical industry's energy use per unit of output has declined by roughly 40% in the past 25 years.[86]
- The U.S. iron and steel industry has made significant improvements in energy efficiency over the last decades, reducing energy use per unit of output by over 45% since 1975.[87]
- From 1974 to 1988 the US petroleum refining industry reduced its energy consumption by 30 percent. These savings resulted from conservation measures, downsizing and consolidation of capacity, shutdowns of older, smaller inefficient facilities, and continuing improvements in technology.[88] Note – this figure does not include efficiency

improvements made by the sector in the last five years, so it is not directly comparable to ExxonMobil's improvement claim of 35%.

- From 1970 to 2000, the energy intensity of primary aluminum production (not including the massive amounts of aluminum recycling) reduced from approximately 20 kWh/kg of product to 14 kWh/kg of product-- a 30% reduction.[89]
- The energy intensity of the paper and pulp industry has also dropped significantly in the past 30 years. Since 1972 the paper and pulp industry reduced the average use of fossil fuels and purchased energy per ton of output from 19.1 million Btu to 11.5 million Btu in 1997-- a 40% decrease. [90]

Forward-looking statements on future energy efficiency measures are vague. ExxonMobil does not set goals for their efficiency gains, saying only, "We expect to see an additional 15 percent improvement."[91] No timeframe is given for this expected improvement.

This makes it difficult for shareholders to assess where ExxonMobil will be in the future – a critical element for those wishing to do highly in-depth projections of climate policy impact on the company.

It also differs from their competitors. BP, for instance, widely promoted its 1998 goal of reducing emissions to 10% below 1990 levels by 2010. That goal was met years early, and the company announced a new goal of holding emissions flat through 2010.[92]

Shell, too has set clear goals. Their first was to reduce emissions by 10% over 1990 levels, and once they achieved that goal on time in 2002, they set a new goal to reduce emissions by 5% by 2010 – even against increasing production.[93]

Bottom Line on Energy Efficiency:

ExxonMobil's efficiency improvements do lessen its exposure to emissions policies to some extent. However as they are generally in line with the rest of the industry they do not offer a significant competitive advantage. In addition, lack of a clear statement of goals and timelines for future improvements makes it difficult to assess ExxonMobil's future risks on this compared to its competitors. Finally, improving efficiency is an important component for a climate strategy, but it is not a strategy in and of itself.

IV. A Governance Failure

Behind ExxonMobil's risk management problems on climate change lies a simpler and deeper problem – a failure in the company's governance. The Board of Directors of ExxonMobil is failing to properly oversee management's handling of climate change-related risk. They appear to have delegated most active responsibility for this critical issue to the Chair and CEO, Lee Raymond.

If the Chief Executive is exposing the company to increased risk or impeding the development of adequate risk management it should be a matter of fundamental concern for investors. As recent history demonstrates only too vividly, when a CEO ignores a key risk it can bring down the company – however competent he may have been at delivering value in other areas.

We note that it may be significant that the CEO is due for retirement in the next couple of years. This may be affecting his approach to a long-term challenge such as climate change and its risks. However, precisely because of this the Board needs to ensure that no hidden liabilities are being passed to his successors that will jeopardize long-term shareholder value.

Indeed, it is the responsibility of the Board to supervise the CEO and act as a counterweight to his influence. By failing to exercise adequate corporate governance on one of the major risks facing ExxonMobil, the board is not serving the best interests of shareholders. However, the board has options at its disposal to ensure adequate governance.

First, the board should give consideration to separating the positions of Chief Executive Officer and Chairman of the Board. This is increasingly regarded as good practice in the US (and has long been regarded as best practice in the UK). It is particularly relevant in this situation, with a change in the CEO due shortly. An independent chair could supervise the succession, ensure the risk management structures are robust and safeguard against hidden liabilities, while allowing the CEO to continue day-to-day operational control. It should not been seen as a censure of the existing CEO but as sound governance.

Secondly the board has a Public Issues Committee whose role is to review "ExxonMobil's policies and practices on relevant public issues, including their effects on safety, health, and the environment."[94] The members of the committee (all non-executive directors) are: Philip Lippincott (Chair), Donald Fites, Helene Kaplan and Walter Shipley. The Committee should as a priority fulfill its mandate by conducting a thorough and independent review of the company's policies and practices on climate change, and should ensure the company makes adequate disclosure of its findings to shareholders.

On this important and difficult area the Committee needs to ensure that it has the capacity and resources to ensure that a review is adequate and robust, so it can distinguish between policies and practices that sound superficially reasonable, but still carry risks and those which are genuinely protecting long-term shareholder value. In particular, the following are essential:

- The committee should ensure it has adequate training and is independently briefed.
- The committee should question senior management on how current climate change related activities are enhancing long-term shareholder value.

- The committee should review the Company's risk management over climate change, and ensure it is based on objective risk assessments.
- The committee should conduct a benchmarking exercise on corporate climate policy, comparing the Company with its peers.
- The committee should conduct its analysis and reach its conclusions without executives being present, to ensure independence.
- The committee should formally approve climate policy, or endorse it for approval by the entire board.
- The committee should ensure that adequate disclosure is made to shareholders on its findings and process.

Failure by board committees to adequately execute their responsibilities can have catastrophic consequences, as the Enron and Tyco debacles demonstrate. In view of the committee's apparent failure to properly manage the climate change issue, shareholders should consider whether the current Chair of the Public Issues committee is best serving their interests.

Toward a Prudent Path on Climate Change

It is worth mapping out how ExxonMobil could manage the risks and opportunities presented by climate change in a prudent, sensible and cost effective way:

- Undertake proper disclosure of emissions, using established frameworks and protocols.
- Set emissions targets to demonstrate a commitment to reducing impacts, as well as the company's risk exposure.
- Make attainment of emissions targets a factor in employee compensation, as several of its competitors have done.
- Provide an analysis of the risks and opportunities that climate change may present for the company. Such analysis should start from the IPCC science and consider a range of policy developments. It should then consider appropriate management responses.
- Provide shareholders with an analysis of the opportunities of renewable energy, which should include recognition of their advantages and an evaluation of potential synergies.
- Avoid rhetorical and irrelevant statements when discussing climate change (such as diversions into the global need for energy, or the stock market performance of the company) – focus on what the company is doing on climate change.
- Review the board structures for managing climate change – separate the CEO and Chair role, and/or instruct and empower the Public Issues Committee to adequately and independently consider the issue and report to the board and investors.
- Improve disclosure to investors by including a statement on material risks and opportunities posed by climate change in ExxonMobil's securities filings.

Conclusion

ExxonMobil's failure to properly assess and disclose the growing risks from climate change represents a corporate governance failure. Its strategy appears to be a "hope for the best" strategy – one that works as long as the risk of climate change evaporates. But if anything other than that occurs, the company does not appear prepared. And significantly, there are signs that many of the risks – in climate policy, in markets, in litigation and in reputation – are increasing.

Shareholders should be concerned that ExxonMobil, notable for its dynamism elsewhere, seems to be a "sleeping tiger" when it comes to climate change. The company may be exposing itself to hidden liabilities, which could seriously jeopardize long-term shareholder value.

Recommendations

Given the lack of appropriate action by ExxonMobil's board and CEO on climate change, shareholders need to send a clear signal to the company that they consider action on the issue to be essential. They can do this by:

- Supporting the resolution calling for the company to prepare a report on the risks presented by climate change (Item 14 on the Proxy Card).
- Supporting the resolution calling for a report on how the company will respond to pressure to develop renewable energy sources (Item 15 on the Proxy Card).

In addition, investors should consider:

- Supporting the resolution calling for the Board to take steps to ensure that the Chairman does not also act as the Chief Executive Officer (Item 9 on the Proxy Card).
- Voting against the re-appointment of the Chair of the Public Issues committee, Philip Lippincott, in view of the committee's failure to properly manage the climate change issue.

Endnotes

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[81] http://www2.exxonmobil.com/Corporate/Notebook/Climate/Corp_N_ClimateDetails.asp

[82] http://www.bp.com/environ_social/environment/clim_change/perform.asp#f

[83] The United Nations Environment Programme has developed "the GHG Indicator: UNEP Guidelines for Calculating Greenhouse Gas Emissions for Businesses and Non-Commercial Organizations.", in conjunction with the fund managers Henderson Investors (see http://www.uneptie.org/energy/act/ef/ghgin/docs/GHG_Indicator.pdf). This work connects with a World Resources Institute (WRI) / World Business Council for Sustainable Development (WBCSD) collaboration to produce a GHG Protocol for companies (see http://www.ghgprotocol.org). A growing number of companies report or intend to report using these frameworks.

[84] ExxonMobil Advertorial "Managing Greenhouse Gas Emissions"; http://www.exxonmobil.com/corporate/files/corporate/031002.pdf.

[85] Energy Information Administration, Annual Energy Review 2001, DOE/EIA-0384(2001) (Washington, DC, November 2002). Projections: Table A2.

[86] U.S. Department of Energy figures; http://www.eere.energy.gov/EE/industry_chemical.html.

[87] U.S. Department of Energy figures; http://www.oit.doe.gov/steel/profile.shtml.

[88] Energy and Environmental Profile of the US Petroleum Refining Industry, December 1998, prepared by ENERGETICS (Columbia, Maryland) for U.S. Department of Energy's Office of Industrial Technologies, http://www.oit.doe.gov/petroleum/profile.shtml.

[89] U.S. Department of Energy; Office of Industrial Technology, http://www.oit.doe.gov/aluminum/profile.shtml.

[90] American Forest and Paper Association, http://www.eia.doe.gov/emeu/mecs/iab/forest_products/page2f.html.

[91] ExxonMobil Advertorial "Managing Greenhouse Gas Emissions"; http://www.exxonmobil.com/corporate/files/corporate/031002.pdf.

[92] http://www.bp.com/environ_social/environment/clim_change/perform.asp\

[93] http://www.shell.com/home/Framework?siteId=shellreport2002-en&FC1=&FC2=&FC3=%2Fshellreport2002-en%2Fhtml%2Fiwgen%2Fenvironmental_performance%2Fprotecting_the_environment.html&FC4=&FC5=#0

[94] ExxonMobil's 2003 Proxy Statement, available at www.ExxonMobil.com