



## Action Report

# Environment: Natural Resource Management (Oil Sands)

**ExxonMobil**

May 4, 2011

Ticker	Exchange	Meeting Date	Record Date	Annual Meeting Location
XOM	NYSE	5-25-11	4-6-11	Dallas, Texas

## Agenda

Item	Proposal
1	MGT: Elect directors
2	MGT: Ratify selection of auditors
3	MGT: Advisory vote on executive compensation
4	MGT: Advisory vote on frequency of future advisory votes on executive compensation
5	SH: Establish independent chair of board
6	SH: Report on political spending
7	SH: Adopt sexual orientation non-discrimination policy
8	SH: Adopt policy on human right to water
9	<b>SH: Report on oil sands risks</b>
10	SH: Report on hydraulic fracturing
11	SH: Report on sustainable energy leadership
12	SH: Adopt goals to cut greenhouse gas emissions

**Si2 Briefing** [Environment: Natural Resource Management, Environment: Climate Change, Special Report on ExxonMobil, Investor Pressures and the Environment](#)

**Report Author** [Heidi Welsh](#) and Amy Wilson

**Links** [Proxy Statement](#)

**Resolved Clause** Shareholders request that the Board prepare a report discussing possible long term risks to the company's finances and operations posed by the environmental, social and economic challenges associated with the oil sands. The report should be prepared at reasonable cost, omit proprietary and legal strategy information, address risks other than those associated with or attributable to climate change, and be available to investors by August 2011.

**Lead Proponent** [Green Century Capital Management](#)

**Vote History** The proposal is a resubmission from 2010, when it received 26.4 percent support. Exxon unsuccessfully challenged the proposal at the SEC, arguing it was moot (Rule 14a-8, i-10). The SEC disagreed, saying "it does not appear that ExxonMobil's public disclosures compare favorably with the guidelines of the proposal."

**Summary**

The proponents believe there are significant risks associated with oil sands development projects, and that ExxonMobil is not doing enough to disclose these risks to its shareholders. They cite regulatory, operational, reputational and liability-related risks associated with the “resource-intensive and environmentally damaging nature of oil sands development.” The proposal describes increased regulatory restrictions about the high water demands of oil sands projects and their impact on local waters; tightening regulations, as well as remediation and reclamation costs, associated with tailings ponds; lawsuits filed by Aboriginal groups seeking protection of their Canadian treaty rights; and market risks related to the high cost of oil sands production and overall oil market volatility. ExxonMobil opposes the resolution, saying it already provides “sound and thorough information on the Corporation and its activities” and that the report requested by the proponents “would be duplicative to information already available.” The company also notes that oil sands projects are an important source of future growth and that it is already taking a number of significant steps to reduce environmental and other risks associated with its oil sands operations. The company released a new report in January 2011 on the oil sands.

**Note:** Separate Si2 Action Reports cover [Item 10 \(hydraulic fracturing\)](#) and the [two climate-specific resolutions](#)—Item 10 (sustainable energy leadership) and Item 11 (greenhouse gas emissions reduction goals).

**I. ExxonMobil and Oil Sands Operations**

ExxonMobil is the world's largest publicly traded oil and gas company. Its business covers the whole range of oil- and gas-related activity, including exploration, extraction, refining, transportation and sale of natural gas and petroleum products, plus petrochemicals. (See Si2's [Special Report on ExxonMobil](#) for more detail.)

Financials					
<b>Revenue</b>	\$370,125 million	<b>Net Income</b>	\$30,460 million	<b>Reporting Year</b>	2010

**Reserves:** In its 2010 Form 10-K, Exxon reported that total proved oil and gas reserves of 24.8 billion barrels of oil equivalent. With the June 2010 completion of its merger with XTO Energy, a company with extensive unconventional natural gas holdings, ExxonMobil's continuing transition from petroleum toward natural gas was reinforced. The company's natural gas reserves now make up 53 percent of its total reserves.

**Production:** In 2010, ExxonMobil produced an average of 2.42 million barrels of oil a day and processed 12.1 trillion cubic feet of natural gas (with an energy content equivalent to 2.0 million barrels of oil a day). Natural gas production now accounts for 46 percent of ExxonMobil's energy production, up from 39 percent in 2009, reflecting the company's acquisition of XTO Energy's natural gas assets.

**Alberta's Oil Sands**

Oil sands (sometimes called 'tar sands') are a mixture of clay, sand, water and bitumen, a sticky, tar-like form of crude oil, which ExxonMobil says is about the consistency of peanut butter. Once recovered and separated from these other materials, bitumen can be processed into synthetic crude oil, which is then refined into useable petroleum products. Alberta, Canada, contains the world's largest oil sands deposits, an estimated total of 170 billion barrels of recoverable crude bitumen, based on current extraction technologies. Second only to Saudi Arabia's oil reserves, these deposits underlie some 20 percent of the

province, an area totaling about 54,000 square miles (roughly the size of Florida), and are located in three main deposits—Athabasca, Cold Lake and Peace River. The United States is the biggest market for Canadian oil, about half of which is produced from oil sands; Canada first edged out Saudi Arabia to become the leading supplier of oil to the U.S. market in 2004, and in 2010, Canada provided more than one-fifth of U.S. oil imports.

Bitumen is extracted using two basic methods, depending on the location of a given oil sands deposit: shallow deposits are *surface-mined*, while deeper deposits are extracted through *in situ processes*, which use steam under high pressure (and in some cases solvents) to soften the bitumen to a flowable consistency, which allows it to be collected and pumped to the surface. Surface mining is the dominant form of ongoing oil sands extraction by volume, accounting for about 55 percent of production in Alberta in 2009. In situ recovery is expected to become increasingly important, however, because more than 80 percent of Alberta's oil sands deposits are too deep for surface mining. Bitumen production in the province totaled about 1.5 million barrels per day in 2009 (the most recent year for which data are available), 55 percent of which was attributable to surface mining operations and 45 percent to in situ methods. Alberta's Energy Resources Conservation Board projects that production will more than double to 3.2 million barrels per day by 2019.

**Environmental impact:** There are significant environmental concerns surrounding both surface mining and in situ extraction techniques. For both methods, these include greenhouse gas emissions, habitat fragmentation and destruction in the boreal forest, water and air pollution, toxic waste storage and water use.

### **ExxonMobil's Stake in the Oil Sands**

ExxonMobil's oil sands operations are conducted via its 70-percent-owned subsidiary, Imperial Oil Ltd. of Canada. Imperial holds about 465,000 acres of oil sands leases, and operates both a mining operation, Kearl, and an in situ project, Cold Lake. Imperial also holds a 25-percent stake in Syncrude Canada, an oil sands mining joint venture and the world's largest producer of crude oil from oil sands. In November 2009, ExxonMobil and Imperial acquired a 50 percent interest in 33,000 acres of additional oil sands leases in Athabasca.

ExxonMobil's net proved reserves at year-end 2010 included 2,102 million barrels of bitumen and 681 million barrels of synthetic oil, which together represented about 11 percent of the company's total proved reserves. More than three-quarters of the company's bitumen reserves are undeveloped.

**Kearl mining project:** The Kearl oil sands project is a joint venture mining



Source: [Alberta Geological Survey](#)

operation, owned by Imperial Oil (70.96 percent) and by ExxonMobil Canada Properties (the remaining 29.04 percent), a wholly-owned subsidiary of ExxonMobil. Located 40 miles north of Fort McMurray in Alberta, Kearl is comprised of six oil sands leases covering about 48,000 acres in the Athabasca oil sands deposit. Kearl is being developed in phases; the Phase 1 mining and extraction facilities are half done and scheduled for startup in late 2012, with two additional phases now envisioned. The first phase is expected to cost about \$7.8 billion altogether and initially produce 110,000 barrels of bitumen per day, with the later expansions expected to increase production to about 330,000 barrels per day in all. ExxonMobil estimates Kearl's total reserves to be more than four billion barrels of bitumen.

Imperial explains in its securities filings that “the Kearl oil sands project is central to our growth strategy.” The project has an estimated 40-year lifespan and “represents one of the best undeveloped deposits of minable oil sands in the region. Ore grade and the quantity of bitumen that can be produced for a given volume of mined material are better than other undeveloped leases, providing the project with an inherent cost advantage.” Bitumen mined at Kearl will be treated with Imperial's proprietary paraffinic froth treatment process, in which the bitumen will be diluted with natural gas condensates to achieve a consistency that will allow it to be shipped via pipeline to a refinery. This eliminates the need to incorporate an upgrading facility on site at Kearl and reduces the project's carbon dioxide emissions and development costs. Controversies have arisen about the Midwest pipelines, however (see box).

**Cold Lake in situ project:** Cold Lake is an in situ oil sands operation that uses steam to extract bitumen from deep underground deposits. The project is 100 percent owned and operated by Imperial Oil and is the company's largest single source of production; it is also the world's largest thermal in situ heavy oil operation. Cold Lake is a mature commercial project, piloted in the mid-1960s, with commercial production beginning in 1985; since then it has undergone thirteen phases of development, and now has almost 4,000 active wells. Imperial currently operates four plants at Cold Lake and is in the process of expanding operations to add a fifth facility, Nabiye. Existing operations include a 170 MW cogeneration facility which provides energy efficient production of steam and electric power. Nabiye will incorporate another cogeneration facility that will produce steam and electric power for oil sands production and will export electricity to the regional power grid. The Nabiye expansion is expected to add 30,000 barrels per day to Cold Lake's average current production of about 140,000 barrels per day. Cold Lake produced its one-billionth barrel of bitumen in 2009, and Imperial Oil noted last year, “Over the last four decades, technological advancements have nearly tripled recovery rates at Cold Lake while significantly reducing fresh water use and surface land disturbance.”

**Syncrude joint venture:** Imperial is a founder of and holds a 25-percent interest in Syncrude Canada, a joint-venture open-pit oil sands mining project near Fort McMurray, Alberta. Syncrude is the world's largest producer of crude from the oil sands and is the largest single source producer in Canada, accounting for approximately 13 percent of Canada's total oil production. The project encompasses eight leases covering about 250,000 acres of Athabasca oil sands, with proved plus probable reserves of ap-

#### New Report on Midwest Pipeline

In April 2011, Friends of the Earth released a new report criticizing TransCanada Pipelines, which has built two pipelines to the U.S. Midwest to carry oil sands product to American consumers. The company is planning a third pipeline. The report, *Dirty Business*, contends the firm is “manipulating oil markets, threatening fresh water and skimping on safety” in the United States. Although Senator Ron Wyden (D-Ore.) called on the Federal Trade Commission in April 2011 to investigate the price manipulation charges, these do not appear to involve ExxonMobil or Imperial Oil, although Wyden's letter to the FTC suggested possible involvement by **Conoco-Phillips**, another recipient of an oil sands shareholder proposal this year.

proximately 5.1 billion barrels of synthetic crude oil after royalties. Since startup in 1978, Syncrude has produced more than two billion barrels of synthetic crude oil, which is shipped via pipeline to Edmonton, Alberta. In 2010, Syncrude produced a total of 105 million barrels; ExxonMobil's share was about 67,000 barrels per day.

### ***Oil Sands Risks***

The shareholder resolution asks ExxonMobil to issue a report that provides information on potential long-term risks to the company posed by its operations in the oil sands. These risks are generally identified as “environmental, social and economic challenges,” such as environmental restrictions and regulations that might hinder or financially penalize operations, litigation risks posed by Aboriginal land-rights issues and market forces that could make oil sands projects economically undesirable. ExxonMobil does provide information on its general environmental policies and practices in its [10-K](#), its [Corporate Citizenship Report](#) and on its [website](#) pages about oil sands production (relevant information is summarized in Si2's [Special Report on ExxonMobil, Investor Pressures and the Environment](#)). It also added a new publication in January 2011, entitled [Canada's Oil Sands: Responsible Development, Innovation, and Opportunity](#), available on its website. More information about ExxonMobil's oil sands projects, the potential risks associated with those operations, and the company's ongoing and future efforts to reduce environmental impacts also is available directly from Imperial Oil, via its own [10-K](#) and [Corporate Citizenship Report](#). The reports provide a good overview of the company's oil sands operations and how it is pursuing efforts to minimize their environmental impacts.

The company's various reports provide a significant amount of information, including key performance indicators and reports on performance over time. But the information about oil sands operations and performance against goals for these operations in particular is not broken out; the more quantitative approach used in the company's Corporate Citizenship Report with regard to performance is not for the most part employed in the new oil sands publication. In the conclusion of the oil sands report, ExxonMobil explains, “Technological innovation cannot be scheduled, but with the size and quality of the research effort underway, as well as ExxonMobil's and Imperial Oil's commitments to improving performance, we will continue to make significant progress.”

### ***Greenhouse Gas Emissions***

Climate change is one of the most significant environmental issues for oil sands operations. Critics have called a great deal of attention to the energy-intensive nature of oil sands production compared with conventional oil production. The Canadian oil sands are a significant and politically stable source of petroleum for U.S. consumer needs, yet recent regulatory developments may create preferential market conditions in some areas for fuels with a smaller carbon footprint. Oil sands-derived petroleum may become increasingly disadvantaged in the North American market because of its relatively greater carbon intensity, which many estimate to be 5 to 15 percent higher than that of conventional oil over the entire life cycle of the product, with an even greater differential, according to critics—300 percent or more—for the production and refining portions of the product life cycle (though there is variation in the carbon intensity of conventional crude oil as well). California adopted a new low-carbon fuel standard in 2009, for instance, which will require fuel companies to ensure the mix of fuel they sell in California meets standards for reduced GHG emissions. Further, the U.S. Energy Independence and Security Act of 2007 prohibits U.S. federal agencies from contracting for vehicle fuels produced from petroleum resources with a larger carbon footprint than conventional oil production.

The Canadian federal government announced in February 2010 it had aligned its GHG emissions reduction target with the United States, and its goal is to reduce GHG emissions 17 percent by 2020, based on

2005 levels. Alberta's Climate Change and Emissions Management Act went into effect in July 2007, and it requires large industrial emitters to cut their emissions intensity (emissions per unit of production) to 12 percent below the 2003-2005 industry average. Options for compliance include making improvements to operations that result in reductions in GHG intensity, purchasing carbon offset credits, contributing to the province's Climate Change and Emissions Management Fund, or purchasing or using Emission Performance Credits, generated by facilities that exceed the requirement. Environmental advocacy groups have labeled the regulation weak for its reliance on emissions intensity rather than a hard cap on emissions; this means that as oil sands operations in Alberta grow, overall GHG emissions may increase even as companies maintain compliance.

Greenhouse gas emissions are particularly relevant for in situ oil sands operations, which burn natural gas to generate steam for the extraction of deep deposits of bitumen. The use of cogeneration plants to produce electricity and steam simultaneously helps to reduce the overall carbon footprint of such facilities. Cogeneration plants also can be used in oil sands mining projects, which sometimes use steam to process recovered oil sands to extract the bitumen. Imperial Oil uses cogeneration at its Cold Lake in situ facility and will install a cogeneration plant as part of its Kearl mining project. Imperial's primary strategy for reducing greenhouse gas emissions is to maximize its facilities' overall energy efficiency through technological developments and investments, such as cogeneration. Exxon says results from a 2010 study from Cambridge Energy Research Associates "indicate that a project designed like our new Kearl operation—using advanced mining techniques, energy-saving cogeneration, and producing diluted bitumen without an upgrader—will result in about the same life-cycle greenhouse gas emissions as the average of oil refined in the United States." Overall, it says, the oil sands industry has cut "production-related emission by almost 40 percent per barrel" since 1990.

Imperial's target is to continue to improve energy efficiency across its refining and chemical operations, to continue its sponsorship of GHG-related research through the University of Alberta and other institutions and to evaluate carbon capture and storage as a strategy for emissions reduction. ExxonMobil lists several new technologies Imperial is developing for reduced energy intensity and lower greenhouse gas emissions for its in situ oil sands operations in the new January 2011 report.

**Imperial Oil's climate risk disclosure:** [Imperial's 2010 10-K](#) describes risks associated with potential and known pending regulatory changes regarding greenhouse gas emissions in both Canada and the United States. The company acknowledges these regulatory developments could affect Imperial's business through increased capital expenditures and operating costs and reduced demand, but says it is too soon to accurately assess any material risks they may pose. As noted in Si2's [Special Report on ExxonMobil](#), it also lists risks related to the oil sands as potentially material in its 10-K disclosures.

### ***Environmental Impacts to Air, Water and Land***

Oil sands operations also have raised red flags for their emissions of air pollutants, particularly nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>), as well as their heavy use of water resources and their impacts to land, including habitat destruction and fragmentation and, in the case of mining operations, the creation of tailings ponds that may pose risks to nearby water sources and to wildlife such as migratory waterfowl. In addition to spurring criticism from environmental groups, these impacts garner negative media attention and public criticism, and efforts to reduce and mitigate environmental impacts also incur significant costs to oil sands operators. Implementing policies, practices and technologies to protect the environment from the impacts of oil sands operations poses a financial burden for companies, and poor environmental performance can result in damage to corporate reputation, as well as the potential for additional expenses related to litigation and fines or sanctions from regulatory violations.

**New regulatory restrictions:** New and pending regulations and other environmental restrictions in Canada promise to impose a stricter operating environment on oil sands projects. In February 2009, Alberta's Energy Resource Conservation Board (ERCB) released draft regulations that propose to limit freshwater use by in situ oil sands operations to no more than 10 percent of annual water volumes. The ERCB also released new rules for tailings reclamation, which require companies to reduce tailings by 50 percent by June 2013. Oil sands operators had to submit their initial plans for compliance by September 30, 2011, and ExxonMobil reports that its tailings plan was approved "with conditions" by the Alberta government in August 2010. In February 2010, the Cumulative Environmental Management Association, a coalition of industry, government and non-profit organizations, released new recommendations for a voluntary water management plan that, if adopted, would cut water withdrawals from the Athabasca River by nearly 50 percent during low-flow periods. Nationally, Canada has announced plans to reduce air pollution by up to 55 percent by 2012, and has proposed caps on NO<sub>x</sub>, SO<sub>2</sub> and other industrial air pollutants. Oil sands operators, like other industries, will have the option of reducing emissions or purchasing credits to offset pollution that exceeds the regulatory limits.

**Air:** Citing the increasing regulatory requirements for air quality in Canada and specifically in Alberta, Imperial states it has "imple-

### Royal Society of Canada Report

In December 2010, the Royal Society of Canada issued a comprehensive peer-reviewed report, *Environmental and Health Impacts of Canada's Oil Sands Industry*. It examined how the oil sands have been developed, current and emerging extraction technologies and the regulatory framework and its efficacy, also looking into the major environmental and public health issues relating to the industry. The report notes that available literature on these issues have distinct viewpoints, either for or against oil sands development, while it sought instead to dispassionately examine the claims and counterclaims in the strident debate.

The report concluded that there were "deficiencies in environmental assessment practices compared with international best practice guidance." In addition:

Notably, there has generally been inadequate overall risk assessment for technological and natural disasters, assessment of community health impacts (negative and positive), integrated and cumulative ecological impact assessment, and assessment of regional socio-economic impacts.

The report identified "major community health disparities for the oil sands region compared to the provincial average," which have yet to be mitigated, although these were "largely symptomatic of boom-town conditions." The RSC said the provincial government's capacity to deal with the major environmental challenges is insufficient. More study of the health impacts on Aboriginal peoples is needed, as well. New governmental policies should be developed "to protect Albertans from financial liabilities from reclamation of oil sands operations," since there is a "compelling need to develop and implement an overall financial risk management approach to address this risk to the public purse."

More work is need to address greenhouse gas emissions and air quality, while a common lexicon of terminology is also required to facilitate better common understanding of the industry's impacts. In addition, a full analysis of the barriers to land reclamation must occur, while waterfowl protection must be found to mitigate the "lethal risks" of tailings ponds.

Companies should implement health impact assessment guidelines "as proposed by their international peer group," the RSC said. Further, the companies "should produce better consideration of cumulative impacts on community health, including the economic quantification of negative impacts and infrastructure spending."

Finally, the RSC report gave a list of additional research needs that should be met, using an approach that is "more intensive, time-sensitive, and integrated."

mented cost-effective technologies and adopted new operating practices to reduce air emissions.” Overall, these efforts have led to a decrease in combined air emissions (VOCs, SO<sub>2</sub> and NO<sub>x</sub>) of 12 per cent over the five-year period ending in 2007. At Cold Lake, new sulphur recovery units at two facilities have reduced sulphur dioxide emissions, from 3,200 tons in 2006 to just under 2,000 tons in 2008. Imperial also participates in the [Wood Buffalo Environmental Association](#) air quality monitoring program.

**Water:** Imperial Oil and ExxonMobil report that they are “currently working on a number of new technologies that could lead to a bitumen extraction process that significantly reduces water use, eliminates tailings ponds and reduces greenhouse gas intensity.” To this end, in December 2010 oil sands companies, including ExxonMobil, announced a new cooperative research agreement that will pool their collective findings “and eliminate proprietary intellectual property on past efforts.” Overall, about 95 per cent of the water used to produce steam at Cold Lake is recycled from the produced water that is recovered with the bitumen.

**Kearl**—The primary source of water for the Kearl mining project is the Athabasca River. One of the main concerns about oil sands mining’s impact on the Athabasca cited by Aboriginal and environmental groups is water withdrawals during the winter low-flow period, and the effect this may have on fish, other wildlife, and First Nations groups’ traditional land use activities, such as fishing and hunting. Imperial says it will meet all regulations and environmental standards related to water withdrawals, will work with others in the industry on water sharing and reduction opportunities, and that it will reduce its water withdrawals during low-flow periods by making most of its withdrawals during the summer and storing that water for later use. The company participates in the [Regional Aquatics Monitoring Program](#), which has monitored the Athabasca since 1997 for chemical, biological and physical impacts from the oil sands industry. Wastewater from the mining process at Kearl will be collected and contained until it is ready to be released to the environment. Imperial plans to use a closed-circuit, constructed system to purify the water through bacterial action and allow solids to settle, passing the water through manmade streambeds, wetlands and end pit lakes.

**Land:** At Cold Lake, Imperial is using a “megapad” approach to reduce the surface footprint of its drilling operations. In this approach, multiple wells are drilled from a single surface location, “enabling a smaller footprint, more efficient resource recovery, reduced development costs and improved economics.” The company anticipates that improved drilling and recovery technology will reduce surface disturbance by 40 per cent in its Nabiye expansion project. In its new report on oil sands developments, ExxonMobil says it has recently partnered with Ducks Unlimited Canada on how best to restore affected wetlands, and that “Early indications from ongoing monitoring have shown positive results with signs of re-vegetation.”

**Kearl**—As a mining project, Kearl will incorporate tailings ponds, which will be used as temporary storage for the mining byproducts (clay, sand, water and leftover bitumen) to be stored until they can be treated and the land can be reclaimed. Imperial says it will use groundwater monitoring wells to check for leaks from its tailings ponds, as well as deterrents and monitoring efforts to ensure water birds do not land in the ponds. The company plans to reclaim both tailings ponds, burying the fine solids, and affected surface areas, using set-aside topsoil, and recycle and reuse the water from this process. The company is also researching a non-aqueous bitumen extraction technology that could significantly reduce water use and the size of tailings ponds with the production of dry stackable tailings. New Alberta regulations specify that growth in existing wet tailings ponds will be “virtually eliminated” by 2016, and “after 2016, industry must process wet tailings at the same rate they are produced,” ExxonMobil notes.

**Syncrude**—Thus far, just one oil sands site, a 104-hectare parcel used by Syncrude Canada for the temporary storage of removed topsoil and overburden, has been awarded an official reclamation certificate from Alberta’s provincial government, in March 2008. But the *Alberta Wild Lands Advocate*, the journal

of the Alberta Wilderness Association, observed in a 2008 [article](#) that the reclaimed land “bears little resemblance to the original boreal forest ecosystem.” Syncrude’s tailing ponds also have received negative media attention due to the deaths of more than 1,600 waterfowl after they landed in a tailings pond in April 2008; the company was sued in provincial court in Alberta. It expressed remorse but in June 2010 was convicted and in October ordered to pay \$2.92 million, according to an [article](#) that month in *The New York Times*. The case is not listed in the section on legal proceedings in ExxonMobil’s most recent 10-K; it is not financially material to a company of ExxonMobil’s size.

**Imperial’s environmental costs:** According to Imperial Oil’s 10-K, the company has spent about \$3.1 billion on environmental protection and facilities in the last five years. In 2010, environmental expenses totaled approximately \$708 million, down some from \$770 million in 2009, mainly for emissions reductions, remediation of idled facilities, and freshwater protection programs. Imperial expects to spend approximately \$675 million on environmental protection in 2011.

**ARO—**A look at Imperial’s Asset Retirement Obligations (ARO), which represent funds set aside by the company to pay for the anticipated cost of legally-required site restorations at facilities with determinable useful lives after operations have ceased (discounted to present value), may be useful for investors wishing to assess the environmental costs of oil sands operations. Imperial reports in its current 10-K that its ARO totals \$773 million, with \$89 million due in 2011, \$392 million in the period from 2012 to 2015 and an additional \$292 million from 2015 onward. For facilities with an indeterminate useful life, ARO cannot be measured, but “the company accrues provisions for environmental liabilities when it is probable that obligations have been incurred and the amount can be reasonably estimated.”

**Environmental compliance risks—**Regarding risks related to environmental compliance and changes in environmental regulatory approaches, Imperial’s 10-K acknowledges, “Compliance with environmental legislation can require significant expenditures and failure to comply with environmental legislation may result in the imposition of fines and penalties and liability for cleanup costs and damages.” Future regulatory changes could “result in stricter standards and enforcement, larger fines and liability, and increased capital expenditures and operating costs, which could have a material adverse effect on the company’s financial condition or results of operations.”

### ***Litigation and Related Risks***

Canada’s oil sands deposits underlie ecologically sensitive regions of northern Alberta that are subject to tribal claim by a number of Canadian First Nations peoples. Environmental as well as Aboriginal groups have raised legal objections to oil sands projects, focusing on such issues as alleged violations of First Nations treaty agreements, particularly in relation to pipelines; cancers among tribal groups along the Athabasca River allegedly caused by leaching of toxins from oil sands tailings ponds; and impact to wildlife and traditional ways of life that depend on natural resources

**Kearl legal challenge:** Imperial Oil’s Kearl mining project received a legal challenge to the project’s initial government approvals from a coalition of environmental and Aboriginal groups. The Federal Court of Canada agreed with the groups’ complaint that the initial government approvals for Kearl had failed to adequately assess the issue of greenhouse gas and other air emissions (though the court disagreed with the other issues brought up in the lawsuit). The legal decision resulted in the temporary withdrawal of the project’s water permit, although it was later reissued. The provincial government said “significant adverse environmental effects to air quality” were unlikely, “provided that the mitigation measures and recommendations proposed are completed and implemented.”

**NAFTA complaint:** In April 2010, environmental groups in Canada and the United States filed a formal complaint to the Commission for Environmental Cooperation under the North American Free Trade Agreement (NAFTA), alleging oil sands tailings ponds leach contaminants into surface and groundwater

in the Athabasca River's watershed. Environmental Defense Canada, the Natural Resources Defense Council and three citizens filed the complaint. Matt Price, policy director at Environmental Defense Canada, told the media, "We're out of options when it comes to trying to get the government to enforce its law. This is one avenue where we can, at the very least, embarrass the Canadian government into trying to enforce its law by having Mexican and U.S. officials essentially poring over our dirty laundry, which is not something Canada wants." Canadian Environment Minister Jim Prentice said, "I am told there is no scientific evidence to support the thesis that there's leaching from the oilsands tailings ponds into the Athabasca River." Two of the three member countries must approve before an investigation can be carried out under NAFTA. The complaint could theoretically result in financial penalties, though such an outcome would be unprecedented.

**Aboriginal lawsuits:** Indigenous and environmental groups have worried that oil sands operations in the Athabasca River's watershed may pose health risks to populations downstream. An unusual cluster of cancer cases among residents of the village of Fort Chipewyan on the shore of Lake Athabasca, first noticed by a local physician in 2006, prompted Alberta health authorities to conduct an investigation. That study, completed in February 2009, found a higher-than-expected rate of cancer overall (47 cases in the village of 1,400, compared to the statistically expected 39 cases) among members of the Athabasca Chipewyan First Nation but fewer rare cancer types than the community's doctor had initially reported. "These results were based on a small number of cases. There is no cause for alarm but there is an indication that continued monitoring and analysis are warranted," said Dr. Tony Fields, a vice president at Alberta Health Services, adding, "Working with the community, we will take those next steps to finding answers."

Other Aboriginal groups that have protested oil sands and other energy projects in or near their lands in Alberta include the Mikisew Cree First Nation, the Lubicon Lake Nation, the Woodland Cree First Nation and the Beaver Lake Cree Nation. The Beaver Lake Cree filed a legal challenge against the Canadian federal and the Alberta provincial governments in May 2008, citing some 17,000 infringements of the tribe's constitutionally protected treaty rights posed by oil sands development. If the Beaver Lake Cree are successful in their case, ExxonMobil and Imperial Oil, along with other oil sands operators, could lose or face restrictions on their operating permits in the affected area.

In addition to legal challenges, oil sands developers may face violent opposition and obstruction from a variety of groups, according to a June 2009 report by a researcher with the Canadian Defense & Foreign Affairs Institute. The report, *Resource Industries and Security Issues in Northern Alberta*, identified eco-terrorists, mainstream environmental groups, individual saboteurs and Aboriginal groups as the most likely groups to use tactics such as "litigation, blockades, occupations, boycotts, sabotage, and violence" against oil sands and other development projects to which they object. Although such security risks are possible, the report concluded that "extra-legal obstruction is unlikely to become large-scale and widespread unless these various groups make common cause and cooperate with each other," an event that seems unlikely "because the groups have different social characteristics and conflicting political interests."

**Imperial's Aboriginal relations:** The ExxonMobil and Imperial Oil *Corporate Citizenship Reports* include sections on Aboriginal relations. Imperial Oil says that "developing and maintaining lasting relationships with Aboriginal stakeholders based on mutual trust and respect is essential if we are to achieve our business objectives." To that end, the company introduced new principles in 2008 that "will focus our efforts in the areas of consultation, workforce development, business development and community relations." Imperial "established a network of employees to encourage the sharing of best practices in Aboriginal relations across the company," developed and funded a variety of educational programs for Aboriginal students, participated in business development workshops for local and Aboriginal firms and

spent about C\$105 million in procurement contracts to Aboriginal businesses in 2008. Imperial notes that it “was honoured in 2008 by the Canadian Association of Petroleum Producers with a Steward of Excellence Award for its Cold Lake operation’s Native Internship Program,” which provides paid on-the-job training. In its recent oil sands report, ExxonMobil emphasizes its involvement in “engagement and consultation” with Aboriginal peoples.

**Addressing concerns at Kearl**—Imperial is working to address Aboriginal groups’ concerns regarding its new Kearl mining project through community engagement on reclamation planning, and says it is committed to achieving a reclaimed landscape “that meets stakeholders’ needs and regulatory requirements.” The company has conducted traditional land use studies, and the development of the Kearl site will incorporate the construction of a series of three compensation lakes to offset the destruction of fish habitat the project will cause. Canada’s Federal Department of Fisheries and Oceans requires habitat be replaced on at least a two-to-one ratio. Imperial has worked with local First Nations groups and government wildlife experts to identify the appropriate fish species with which to stock the compensation lakes.

### **Market Risks**

The most significant issue investors may wish to consider in relation to oil sands operations, however, may not be regulatory and litigation-related risks. Investors may be more swayed by recent financial analyses that indicate oil sands petroleum may simply be too expensive to extract, making it economically unviable. A March 2009 report by Innovest Strategic Value Advisors (acquired by RiskMetrics in 2009 and now a division of MSCI), entitled *The Viability of Non-Conventional Oil Development*, found that “there is only a slender band of oil prices,” between \$65 and \$90 per barrel, at which oil sands projects are profitable, and when all of the impacts on oil prices and extraction and remediation costs are taken into account, “it does not appear that these projects are economically viable.” The recent worldwide economic downturn and the accompanying sharp drop in oil prices led a number of companies to slow down or divest their oil sands operations in 2009, though now that oil prices have rebounded to more than \$100 a barrel as of spring 2011 we can expect a corresponding rebound in oil sands investments.

Yulia Reuter, the author of the March 2009 report, said in an [April 2010 posting](#) on RiskMetrics’ blog that “returns from the Canadian oil sands projects are highly risky, when viewed from a long-term, sustainable investment perspective,” and that higher production costs, oil price volatility, and “the price tag of environmental sustainability in both Canada and the US suggest that returns, on average, will be lower than most investors currently expect.”

Reuter noted that with more information about the risks and costs associated with oil sands production, investors will be better able to accurately assess these projects. Specifically, she cited risks associated with the environmental impacts of tailings ponds, uncertainty about the availability of biofuels for use in oil sands projects (as a strategy for meeting low-carbon fuel standards), the costs of developing a carbon capture and storage infrastructure, the costs of water demands, particularly water treatment, recycling and storage, and “continuing lack of clarity on the producers’ part as to what combination of petroleum demand and climate change scenarios would render oil sands projects financially viable.”

**A possible upside**—Other analysts see the potential for a significantly rosier future for oil sands development, depending on the future regulatory and economic environment. A May 2009 study by IHS Cambridge Energy Research Associates (CERA), a U.S. research and advisory firm specializing in the energy industry, forecasts a possible best-case scenario in which strong overall economic growth and rising oil prices could result in oil sands production of 6.3 million barrels per day by 2035 (nearly five times 2008 production levels). The report, *Growth in the Canadian Oil Sands: Finding the New Balance*,

also describes two other possible scenarios of the oil sands' future. In one scenario, governmental efforts to drive forward clean energy development in light of the 2008-2009 world economic crisis and its associated sharp increase in oil prices leads to an initial rapid expansion of oil sands production, followed by a stagnation, with 2035 production levels of about 3 million barrels per day, or about double current levels. The third scenario envisions a sustained worldwide economic "deep freeze" that slows development and reduces oil demand and oil prices, leading to 2035 oil sands production of 2.3 million barrels per day. The CERA report describes a variety of risk factors, including greenhouse gas emissions, water use, tailings ponds and Aboriginal litigation, as factors that could affect future oil sands development.

**Market risk disclosure:** ExxonMobil's and Imperial's business strategies are based on the companies' assumption that demand for oil will continue to grow in the future, and that increased production from the Canadian oil sands will be of strategic importance in meeting this demand. Imperial's 10-K informs investors that higher transportation and refining costs as well as a limited refining capacity are factors that contribute to lower market prices for bitumen than for conventional crude oil. The degree of this price differential in the future is uncertain, Imperial says, and if prices for bitumen drop significantly enough, this "could have a material adverse effect on the company's business."

### **Industry Benchmarking**

Two recent studies compare oil sands companies' environmental performance and risk profiles and provide additional information to investors wishing to evaluate oil sands risks for ExxonMobil, compared to other companies in this sector. These are [Lines in the Sands: Oil Sands Sector Benchmarking](#), a November 2009 report by Northwest & Ethical Investments (now NEI Investments), a Canadian social investment firm, and [Drilling Deeper: The In Situ Oil Sands Report Card](#), a March 2010 publication by the [Pembina Institute](#), a Canadian sustainable energy research and advocacy firm.

**Lines in the Sand:** Northwest & Ethical Investments' benchmarking study profiled thirteen oil sands companies, including Imperial, assessing corporate exposure to environmental, social and governance risk in a variety of areas, including disclosure, greenhouse gas and other air emissions, water use, and impacts on habitat and biodiversity. Imperial was one of only two companies that declined to answer the survey and referred Northwest & Ethical Investments to its public disclosure. "It is discouraging that these companies did not feel the need to respond to investor concerns, or were unaware that their public disclosure did not contain the...information required," the benchmarking study noted. Overall, the available information on Imperial's oil sands operations placed the company third from the bottom among the companies surveyed, with worse-than-average or average scores in all of the areas reviewed. The industry as a whole got less than stellar reviews; Northwest & Ethical noted in the study's conclusion, "As investors, we are not reassured after carrying out this benchmarking exercise. There are instances of good practice under every theme, but some companies are lagging in all areas—or if they are not lagging, they are not telling." Disclosure was identified as a particular area of concern. "Before investors can get a true picture of oil sands risk, many companies need to improve their public disclosure significantly."

**Drilling Deeper:** The Pembina Institute's report compares nine in situ oil sands projects that were in operation for all of 2007, including Imperial Oil's Cold Lake project. Cold Lake's overall score of 55 percent (on a scale of 0 to 100) placed it third-best among the projects reviewed. For comparison, the top-performing project, owned by Suncor, received a score of 60 percent, and the second-place project was Cenovus' Foster Creek, with 57 percent. (Cenovus is a partner company to **ConocoPhillips**, whose shareholders are voting for the fourth consecutive year on an oil sands-related resolution, described in a separate [Si2 Action Report](#).)

**Room for improvement**—The overall low scores of all of the in situ oil sands facilities reviewed indicated that “there is substantial room for improvement across the sector,” according to the Pembina Institute. “Our analysis shows that in situ oil sands development is actually more intensive on a per-barrel basis in some environmental impact categories than oil sands mining,” said Marc Huot, a technical analyst at the Pembina Institute. He added, “This finding dispels the myth presented by some in industry and government that in situ oil sands development is ‘low-impact.’ Instead, it highlights the need for serious improvements.” Environmental performance is better among mature, commercial-scale projects than pilot and demonstration projects, the study found, because pilot projects often do not incorporate technologies like water recycling and sulfur recovery. Another commonality among projects that scored better than their peers in the analysis was the fact that they performed at or slightly below expected production rates and had low steam-to-oil ratios, resulting in lower intensities for air and greenhouse gas emissions, total and freshwater use, and liquid waste production. In addition, the four highest-scoring in situ projects all included cogeneration, which further reduced their air and GHG emission intensities.

## II. Proponent Position

The proponents, led by Green Century Capital Management, believe there are significant risks associated with oil sands development projects, and that ExxonMobil is not doing enough to disclose these risks to its shareholders. The proponents cite regulatory, operational, reputational and liability-related risks associated with the “resource-intensive and environmentally damaging nature of oil sands development.” Specific risks of concern to the proponents include those related to increased regulatory restrictions to address the high water demands of oil sands projects and their impact on local rivers and streams; tightening regulations, as well as remediation and reclamation costs, associated with tailings ponds; lawsuits filed by Aboriginal groups seeking protection of their Canadian treaty rights; and market risks related to the high cost of oil sands production and overall oil market volatility.

The “shareholder advocacy” section of Green Century’s [website](#) describes the activist investment firm’s position on oil sands:

As access to traditional oil reserves in the U.S. and abroad declines, major U.S. oil and gas companies are looking to Alberta’s oil sands for new energy developments. Dubbed “the most destructive project on Earth” by Canada’s Environmental Defense, oil sands development is several times more carbon-intensive than conventional oil recovery projects. Green Century believes entering the oil sands is a risky and unwise business decision for major energy companies. We will continue to pressure companies to recognize the environmental and financial risks associated with the development of the tar sands.

Emily Stone of Green Century said in a 2010 press release describing the broader oil sands shareholder campaign (which encompasses **ConocoPhillips**, **BP** and **Royal Dutch Shell** as well as ExxonMobil), “Oil sands extraction has significant ecological consequences and companies are increasingly being forced to pay the price for environmental damage,” adding, “Shareholders must know how companies are preparing for these costs and mitigating future risks.”

Stone told Si2 that Green Century would like to see ExxonMobil follow the lead of **Nexen** and **Suncor**, two oil sands operators that “are leaders in recognizing and disclosing” risks associated with their oil sands operations by including significant information on these risks in their annual reports and 10-K filings. Stone said last year that ExxonMobil did “not disclose any information about the oil sands beyond some anecdotal information about several out of many environmental impacts” and that “in the absence of meaningful disclosure, shareholders have no way of fully assessing the risks and rewards from investing in ExxonMobil and are concerned about unpleasant shocks to shareholder value.” She noted,

“It is great that ExxonMobil and Imperial are undertaking some initiatives to reduce environmental impact and build relations with First Nations peoples, but this is not the same as transparency on risks.”

The resolution this year suggests in its supporting statement that:

risk information of interest to shareholders could include, among other things, assessing the impact of worst-case along with reasonably likely scenarios regarding:

- Environmentally-related restrictions that might hinder or penalize operations, including those associated with water, land and tailings;
- Potential effects of Aboriginal lawsuits against the Canadian government;
- Vulnerabilities to market forces that might lead to oil sands project cancellations.

**Argument at the SEC in 2011:** In response to the company’s 2011 challenge to the proposal at the SEC, which argued (see below) that it was moot, the proponents reiterated their view that the company’s “existing disclosure is limited and does not adequately address the risks associated with the environmental, social and economic challenges that accompany oil sands development,” standing in sharp contrast to some other competitors who do provide more information. Writing for the proponents, attorney Sanford Lewis said the proposal is concerned with long-term risks and that the “generic” risk discussion offered by the company that it cited in its SEC challenge “does not address” key risks since it is too “vague.”

Lewis went on to enumerate risks to water, which include expected new restrictions on water withdrawals from the Athabasca River that Alberta will release this year, as well as physical risks posed by expected reductions in the future flow of water in the river given climatic changes. Land disruptions include hard-to-recreate wetlands destruction, and ExxonMobil provides little to no information on the costs of its mitigation efforts, Lewis said. Tailings ponds are not now in compliance with regulations in Alberta, he pointed out, and the company has yet to explain how they will become compliant.

With respect to legal risks, the proponents said the company does not mention any of the lawsuits it faces from indigenous peoples about their land rights in Canada in the *Canada’s Oil Sands* publication. Lewis noted the [Canadian Boreal Initiative](#), a national conservation group in Canada, believes the resolution of land rights litigation in oil sands territory will have a significant impact on what companies must do in the area, potentially nullifying permits granted by the government—as discussed above in this report.

Market risks regarding the long-term price of oil are significant, the proponents contended, since the oil sands are capital-intensive, years-long projects, and some estimates suggest that demand for oil will peak before costs are recovered in the oil sands.

Lewis concluded that the company’s new January 2011 report on the oil sands and its other disclosures fall well short of providing investors with sufficient information on how ExxonMobil is considering a wide range of risks. The SEC agreed that the company’s responses to date have not made the proposal moot and said the resolution must appear in the proxy statement.

### III. Management Position

ExxonMobil opposes the resolution. It believes the company already provides “sound and thorough information on the Corporation and its activities” and that the report requested by the proponents “would be duplicative to information already available.” ExxonMobil already “has strong policies and management systems in place to assess, plan, and address environmental, social and economic challenges of oil and gas development,” the company says. Management directs shareholders wishing to learn more on this topic to publications including ExxonMobil’s Annual Report, its 10-K, its *Corporate Citizenship Report* and the new oil sands publication, *Canada’s Oil Sands: Responsible Development, Inno-*

vation, and Opportunity. It also directs investors to its publication, *Outlook for Energy – A View to 2030*. All are available on the company website.

ExxonMobil's oil sands projects are an important source of future growth, management argues. Oil sands currently account for 11 percent of the company's net proved reserves, and are of significant strategic value given anticipated growth in global energy demand, much of which ExxonMobil expects will depend on oil and gas. Management notes that world energy demand is expected to increase by about 35 percent by 2030, compared to 2005 levels, and that ExxonMobil expects that about 60 percent of total demand in 2030 will be satisfied by oil and gas. Last year the company also cited statements by the International Energy Agency that "Canadian oil sands represent one of the few growth areas among non-OPEC countries" and that "oil sands have the potential to make a significantly greater contribution to global energy security."

Management describes its policies and practices related to the development of its oil sands projects, noting that ExxonMobil is "committed to operating in a way that protects the environment, complies fully with all laws and regulations, and takes into account the economic and social needs of the communities where we operate." The company is committed to "continuous efforts to improve environmental performance" and to preventing environmental "incidents" and "reducing adverse impacts, including potential impacts associated with oil sands development."

Specific to its oil sands projects, ExxonMobil notes that it is reducing its water usage through strategies such as recycling about 95 percent of the produced water at its Cold Lake in situ project. It notes elsewhere that it has furthered this goal through research into non-aqueous extraction processes that could reduce water use and also eliminate the need for large tailings ponds. In the 2011 proxy statement, it newly notes that its "tailings management plan and containment system design for Kearl were recently approved by the regulator and include adjustments to accelerate tailings treatment."

Regarding community relations with Aboriginal groups, management says that Imperial Oil "engages Aboriginal communities in open and honest consultation regarding our plans, community concerns, and mitigation approaches." It reported in 2010 that it was honored with a Steward of Excellence award from the Canadian Association of Petroleum Producers for its Native Internship Program at the Cold Lake operation.

**Argument at the SEC in 2011:** ExxonMobil challenged the 2011 proposal at the SEC, arguing it should be excluded because it had been substantially implemented as its reporting on the oil sands addressed the proponents' "underlying concerns and essential objective."

The company argued that the January "Canada's Oil Sands" report, noted above, "provides comprehensive current information to our shareholders and other interested members of the public." Exxon notes the report says the company pledges to develop its Canadian assets "in a manner that is environmentally responsible, supports local communities and contributes to economic development and growth," tries to prevent accidents and reduce adverse impacts, has improved water and tailings management, discusses land management and reclamation efforts, sets out how much support it gives to research and development of further technology for cleaner and more efficient operations, and appropriately engages affected Aboriginal communities. The report's discussion of the environmental, social and economic impacts of its oil sands operations "amply addresses" the proponents' concerns, the company asserted, particularly with regard to environmental issues. But it said it also has provided substantive disclosure in its securities filings and *Corporate Citizenship Report*.

Analysis of business risks occurs at the company through a "disciplined, systematic process," just as all the company's business does, Exxon said. It pointed out its 10-K discussion of market risk factors in-

cludes the oil sands, and mentions demand- and supply-related risks. ExxonMobil therefore contended that the proposal had been substantially implemented.

As noted above, the SEC disagreed with ExxonMobil's assessment, and said, instead, that it "does not appear that ExxonMobil's public disclosures compare favorably with the guidelines of the proposal."

## IV. Analysis

### *Key Points at Issue*

- How significant are the long-term investment risks associated with oil sands development?
- Is ExxonMobil's current level of disclosure regarding its oil sands risks sufficient?
- Do ExxonMobil and its majority-owned subsidiary, Imperial Oil, do enough to minimize investors' exposure to oil sands risks?

**Oil sands risks:** Oil sands development projects present a different risk profile than conventional oil projects given their increased exposure to climate change risks, environmental risks related to land and water impacts, their location in sensitive environmental areas that overlap with territories that are subject to claim by Aboriginal groups, and their higher recovery costs. The proponents contend that the risks associated with oil sands operations are significant enough to merit special attention from management, with more detailed reporting than what the company currently provides. Management counters that the company's treatment of oil sands operations is substantially the same as its other worldwide operations, from a risk assessment and management perspective.

**ExxonMobil's risk disclosure:** ExxonMobil and its publicly traded subsidiary, Imperial Oil, disclose to shareholders information on their oil sands projects, efforts to improve environmental performance of those projects, and a variety of risk factors for investors to note with regard to the oil sands and other operations. The company includes very few specifics in its 10-K discussion of risks, however, and it does not address several of the specific factors raised by the proponents, omitting any mention of litigation risks regarding Aboriginal claims as well as the NAFTA case.

**Minimizing risks:** Through such efforts as increasing energy efficiency, building cogeneration plants, water recycling, strategic water withdrawals, air emissions scrubbing technology, and research and development for a variety of new approaches to greenhouse gas emissions reductions, tailing management and land reclamation, ExxonMobil and Imperial Oil are working to reduce the environmental impacts and risks associated with their oil sands operations. Investors who want to independently assess company performance on environmental protection in the oil sands region of Alberta may have a hard time, however, since the company's reporting on its risk mitigation efforts there is heavy on anecdotal accounts and relatively light on performance statistics. This approach to reporting contrasts with the company's overall environmental reporting, which in the *Corporate Citizenship Report* includes key performance indicators and multi-year reporting against goals the company has set.

### *Voting Considerations*

**Voting in favor:** Those shareholders who remain concerned about the clear and substantial environmental impacts of oil sands operations may want to vote in favor of the proposal, particularly given the recent conclusion from the Royal Society of Canada that overall risk assessment in the region is weak. These investors may find the companies' existing risk disclosures insufficiently detailed, despite the new oil sands report released in January, and they may want to see more multi-year performance data. Shareholders who support the resolution also may note that some other companies with similar opera-

tions have performed better in industry benchmarking studies. They will be joined by those who question ExxonMobil's plans to open a significant new oil sands mining operation, Kearl, when many other companies are focusing their expansions on in situ projects.

**Voting against:** Investors who vote against the proposal may believe that ExxonMobil is sufficiently addressing the risks and environmental challenges it faces in Canada, and that the improvements in energy efficiency and mining that it describes in its reporting are to be lauded, not vilified. These investors may find the recent company report on the oil sands addresses concerns adequately, noting in particular the new study ExxonMobil cites that says the new Kearl project's lifecycle greenhouse gas emissions are unlikely to be any higher than those for the average barrel of oil refined in the United States. The recent increase in the price of oil makes bitumen more economically attractive, some investors may note, and it has the added attraction of being in a politically stable region close to home; this may be a particular incentive for some to reject the proposal to express supportive for further oil sands development.

## V. Resources

### *Company Publications*

- 2011 ExxonMobil Proxy Statement  
<http://www.sec.gov/Archives/edgar/data/34088/000119312511095944/ddef14a.htm>
- 2010 ExxonMobil Form 10-K  
<http://www.sec.gov/Archives/edgar/data/34088/000119312511047394/d10k.htm>
- 2010 Imperial Oil Form 10-K  
<http://www.sec.gov/Archives/edgar/data/49938/000119312511047428/d10k.htm>
- *Corporate Citizenship Report*, ExxonMobil, 2010.  
<http://www.exxonmobil.com/Corporate/community.aspx>
- ExxonMobil website section, Energy and Environment  
[http://www.exxonmobil.com/Corporate/safety\\_climate.aspx](http://www.exxonmobil.com/Corporate/safety_climate.aspx)
- *Canada's Oil Sands: Responsible Development, Innovation, and Opportunity*, ExxonMobil and Imperial Oil, January 2011.  
[http://www.exxonmobil.com/Corporate/Files/iol\\_oilsands\\_brochure.pdf](http://www.exxonmobil.com/Corporate/Files/iol_oilsands_brochure.pdf)
- *Outlook for Energy: A View to 2030*, ExxonMobil, 2010.  
[http://www.exxonmobil.com/Corporate/energy\\_outlook\\_view.aspx](http://www.exxonmobil.com/Corporate/energy_outlook_view.aspx)

### *Other Reports*

- *Drilling Deeper: The In Situ Oil Sands Report Card*, Pembina Institute, March 2010.  
<http://www.oilsandswatch.org/pub/1981>
- *Environmental and Health Impacts of Canada's Oil Sands Industry*, Royal Society of Canada Expert Panel, December 2010.  
<http://www.rsc.ca/documents/expert/RSC%20report%20complete%20secured%209Mb.pdf>
- *Lines in the Sand: Oil Sands Sector Benchmarking*, Ethical Funds, November 2009.  
[http://www.ethicalfunds.com/SiteCollectionDocuments/docs/lines\\_in\\_the\\_sands\\_full.pdf](http://www.ethicalfunds.com/SiteCollectionDocuments/docs/lines_in_the_sands_full.pdf)
- *The Viability of Non-Conventional Oil Development*, Innovest Strategic Value Advisors, March 2009.  
<http://solveclimate.com/sites/default/files/Viability%20of%20Non-Conventional%20Oil.pdf>