



Oil Companies May Face Risk Of Stranded Assets

Danielle Fugere | Jun. 2, 2014

A recent report^[1] by the Carbon Tracker Initiative (CTI), *Carbon Supply Cost Curves: Evaluating Financial Risk to Oil Capital Expenditures*, raises a warning to shareholders that up to \$1.1 trillion of oil industry capital expenditures in high cost, high carbon projects may ultimately be written down over the next decade.

The report examines a trend of escalating costs in the upstream oil industry resulting from a variety of factors, including increasing exposure to physically challenging environments and development of unconventional oil reserves such as deep water, Arctic, oil sands and shale oil, among others. As increasing project costs converge with other energy market shifts, including new carbon and pollution constraints, potential demand plateaus or reductions, challenges from renewables, and fuel switching, the likelihood for stranding of high cost assets only increases.

To assist in assessing risk, the report examines and compares companies with high levels of planned capital expenditures in higher cost production methods and locations, providing comparisons by geographic region, type, and price range. The report notes that while independent oil companies may be at highest risk, up to a quarter of the planned capital expenditures of the super majors will need oil prices in the region of \$95 to be profitable.

Carbon supply curves are also examined by the report. CTI builds on its 2012 report *Unburnable Carbon*, which calculated the worldwide carbon budget for fossil fuel required to maintain global temperatures below 2 degrees Celsius (the temperature above which global governments agree catastrophic impacts will occur).^[2] To keep the world under 2 degrees warming will require that nearly 70 percent of fossil fuel reserves remain unused, meaning a write down of as much as 60 percent of the market capitalization of energy companies. Using that budget, *Supply Curves* emphasizes that the oil industry's portion of a 2 degree carbon budget is far more limited than planned industry capital expenditures, and will be exhausted through production of only \$75 per barrel market price oil — making production above that price potentially unnecessary and unsaleable.

Unburnable Carbon showed that in 2012, oil and gas companies collectively spent an estimated \$674 billion finding and developing new carbon reserves — reserves that collectively cannot be utilized without breaking the world's carbon budget. According to Barclays Bank, that number will rise to \$723 billion in 2014.^[3]

This research and a growing recognition of energy market shifts have led to increasing investor concern that individually, or in combination, the return on investment for most fossil fuel types may be substantially reduced, or companies will be burdened with unburnable reserves subject to write down. Coal offers an example, having already begun to lose value due to increasing pollution controls combined with competition from natural gas.

Investors have responded in a variety of ways. In 2013, the first two "carbon bubble" resolutions were filed against CONSOL Energy and Alpha Natural Resources — two of the nation's largest coal producers — asking each to report to investors on carbon asset risks, including how much of the company's coal and related assets would be "stranded" if sweeping greenhouse gas regulations were to be enacted.^[4] Those resolutions went to a vote in May 2014, achieving support from nearly one in five voting shareholders.^[5] Of note, in late 2013, after the filing of a second stranded asset shareholder resolution, CONSOL Energy divested nearly half of its coal assets.^[6]

A further shareholder initiative to address carbon risk was launched in 2013.^[7] Shareholders representing over \$3 tril-

lion in assets under management asked, in a formal letter to 45 fossil fuel companies, for increased disclosure and transparency on whether the companies are addressing carbon-related risk; the potential for stranded assets related to carbon regulations or reduced demand; what strategies, if any, the companies are implementing to avoid stranded assets; and what impact carbon risks, demand shifts, and changing cost curves are having on the companies' capital expenditure decisions.

While some progress was made through this effort, including informative dialogues, companies have not provided the information sought by shareholders. Consequently, 10 shareholder proposals were filed in 2014 formally asking management to provide reports on Carbon Asset Risk and stranded assets from: Peabody Energy Corporation, Alpha Natural Resources, and CONSOL Energy; oil and gas companies Exxon Mobil Corp., Chevron Corporation, The Hess Corporation, Anadarko Petroleum Corporation, and Devon Energy Corporation; a utility, FirstEnergy Corporation; and pipeline company Kinder Morgan Inc.

Subsequently, ExxonMobil, the largest U.S. energy company, after extensive dialogue with investors, agreed to publish a carbon asset risk report on its website describing how it assesses the risk of stranded assets from climate change, if any, including the potential of a 2 degree regulatory scenario, and greater transparency about its capital expenditure program.[8] While many shareholders were disappointed in the level of detail provided in the final Exxon report, published on March 31, 2014,[9] (ironically the same day the fifth Intergovernmental Panel on Climate Change was issued noting that the world is "ill-prepared for risks from a changing climate"[10]), Exxon's report did recognize the risks of global warming, and provided information on whether it is preparing for contingencies such as regulations limiting warming to 2 degrees. The controversial and short answer from Exxon was that it plans to continue business as usual, that it does not foresee strong regulatory action to reign in climate change, and it believes that demand for its products will continue to rise. This information, although not sufficiently detailed in a number of ways, is important to allowing shareholders to understand and compare its planning to other companies.

Peabody Energy also agreed to provide greater transparency on carbon asset risk in the coming year in exchange for withdrawal of its shareholder proposal. No other companies that received shareholder resolutions have yet committed to providing the requested report, although in many cases dialogues are ongoing.

A key obstacle in responding to shareholder demands for greater transparency has been companies' concern about disclosing what has variously been identified as proprietary, commercially sensitive, and trade secret data regarding costs, reserves, and results of scenario planning. Shareholders' need for increased transparency and understanding of how companies are likely to be impacted by the factors described above is hitting this hard wall. This challenge will need to be addressed creatively in the near future to meet shareholder's needs.

In the meantime, CTI's Carbon Supply Cost Curves provides important information for shareholders to compare and contrast company capital expenditures and the relative risk or value of those investments. As the report notes, the inevitable transition to a low-carbon world is likely to bring increasing structural pressure on future oil demand and prices. Cost-control and capital discipline will be essential strategies for fossil fuel companies to protect shareholders from carbon asset risk.

—By Danielle Fugere, **As You Sow**

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[1] <http://www.carbontracker.org/site/carbon-supply-cost-curves-evaluating-financial-risk-to-oil-capital-expenditures>.

[2] The International Energy Agency (“IEA”), in its 2012 World Energy Outlook, states that no more than one-third of proven reserves of fossil fuels can be consumed prior to 2050 if the world is to achieve the 2 degree Celsius goal. World Energy Outlook 2012, p.3. <http://www.iea.org/publications/freepublications/publication/English.pdf>. This limit has been echoed and emphasized by increasingly forceful reports from the United Nation’s Intergovernmental Panel on Climate Change. IPCC Fifth Assessment Report, <http://www.ipcc.ch/report/ar5/>.

[3] http://business.financialpost.com/2013/12/09/oil-and-gas-companies-to-spend-6-more-in-2014-barclays/?_lsa=fa44-0385.

[4] See “Shareholders File First-Ever ‘Carbon Bubble’ Resolutions,” <http://insideclimatenews.org/news/20130307/investor-shareholders-activism-as-you-sow-carbon-bubble-climate-change-global-warming-fossil-fuels-consol-alpha>.

[5] Alpha Natural Resources, Form 8-K Current Report, Filed May 24, 2013, alnr.client.shareholder.com/secfiling.cfm?filingID=1301063-13-34&CIK=1301063. See Proposal No. 7 (Votes for: 15,580,478; Votes against: 71,030,797; Total votes: 86,611,275) (Total Value of Supporting Votes: \$108,907,541.22). CONSOL Energy, Form 8-K Current Report, Filed May 14, 2013, www.sec.gov/Archives/edgar/data/1070412/000119312513219570/d537637d8k.htm. See Proposal No. 6 (Votes for: 32,670,821; Votes against: 133,003,678; Total votes: 165,674,499 total votes cast).

[6] See Corporate Responsibility Report, “Letter from the CEO,” (2013) http://www.consolenergy.com/media/24348/2013_consol_energy_corporate_responsibility_report.pdf. See also CONSOL Energy, Inc., Form 10-K Annual Report (Feb. 7, 2014), p. 121, Note 2-Discontinued Operations, <http://www.sec.gov/Archives/edgar/data/1070412/000107041214000005/cnx-123113x10k.htm>.

[7] <http://www.ceres.org/files/investor-files/car-factsheet>.

[8] http://www.asyousow.org/wp-content/uploads/2014/04/exxonmobil2014carbonbubble_withdrawal.pdf.

[9] ExxonMobil Corp., March 31, 2014, Energy and Carbon — Managing the Risks, <http://cdn.exxonmobil.com/~media/Files/Other/2014/Report%20-%20Energy%20and%20Carbon%20-%20Managing%20the%20Risks.pdf>.

[10] IPCC Press Release, http://www.ipcc.ch/pdf/ar5/pr_wg2/140330_pr_wgII_spm_en.pdf (March 31, 2014); IPCC Fifth Assessment Report page, <http://www.ipcc.ch/>.