

Divestment may protect from 40-60% overvaluation of fossil fuel stock

Written by Joan Russow

Monday, 05 May 2014 11:56 - Last Updated Tuesday, 06 May 2014 06:44

By [Carrie Saxifrage](#) Earth Matters

<http://www.vancouverobserver.com/blogs/earthmatters/fossil-fuel-divestment-cities-and-universities-moral-leadership-or-prudent?page=0,0> Posted: May 3rd, 2013

A growing number of municipalities have resolved to shift out of oil company investments. Meanwhile, research on the “carbon bubble” builds the case that such divestment reflects financial prudence as well as ethical leadership.

This week, San Francisco’s Board of Supervisors [voted unanimously to urge the city’s retirement fund to stop new fossil fuel investments](#) and sell more than \$583 million worth of shares in Chevron, ExxonMobil and 200 other fossil fuel companies within five years.

[Other cities](#)

that are urging their fund managers to divest include: Seattle, WA; Madison, WI; Bayfield, WI; Ithaca, NY; Boulder, CO; Rochester, MN; Eugene, OR; Richmond, CA, Berkeley, CA and [State College, PA](#)

. In Canada, the City of Vancouver has passed a resolution asking the municipal employee retirement fund to research divestment. Canadian students are campaigning for divestment at UBC, the University of Ottawa, the University of Toronto, McGill, University of New Brunswick-Fredericton and Trent University.

Most institutions cite moral reasons for divestment: that it publicly recognizes the catastrophic consequences of our carbon emissions and acknowledges that investing the fossil fuel industry requires complicity. The looming “carbon bubble” provides an equally compelling financial reason.

[Bill McKibben of 350.org](#) states that we have five times as much oil, coal and gas on the books as scientists think it is safe to burn. It may be physically underground but its economically above ground because it is figured into share prices, companies borrow money against it and nations base their budgets on it: “The numbers aren’t exact, of course, but the carbon bubble makes the housing bubble look small by comparison.”

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Why invest in assets that will be stranded by any effective response to climate change?

According to a [new study](#) by Carbon Trackers, Lord Stern and the London School of Economics, investors are on track to spend US\$ 6 trillion developing new oil and gas reserves over the next decade -even though use of known reserves will push the climate beyond safe limits. Investments that expect oil companies to reap profit from these reserves based on past performance bet that we will also have destructive storms, submerged cities, drought, famine, water shortages and the civil disruptions that would likely ensue – scenarios of unlikely profitability for any sector.

Carbon Trackers estimates are based on science that states that humans can emit between 565 to 886 billion tonnes (Gt) of CO₂ before 2050 and still avoid (with an 80% probability) unstoppable changes to the earth. Fossil fuel companies book their reserves at 762 Gt CO₂, enough to spend the entire global carbon budget without any contributions by other sectors such as waste and agriculture. A pro-rata share of the global carbon budget would give these companies around 125 to 275 GtCO₂, or 20-40% of their known reserves. Although fossil fuel companies can't safely use even their known reserves, they spent \$647 billion last year finding additional reserves and developing new extraction technologies.

This gap between known reserves and the global climate budget creates a carbon bubble: fossil fuel company valuations are based on reserves that they can't burn. HSBC, the world's second largest bank, suggests that setting aside reserves that are too dangerous to burn could reduce equity valuations by 40-60%. Fossil fuel company bond ratings could be downgraded.

The Canadian Centre for Policy Alternatives looked at [the implications of stranded fossil fuel assets for Canada](#), which has put fossil fuel development at the centre of its industrial strategy. The CCPA estimates the global carbon budget at 500 Gt CO₂ (a lower estimate than Carbon Trackers due to emissions used between 2000 and 2012 and inclusion of non-combustion emissions). Canada's share of the global carbon budget is close to 9 tonnes based on its world share of GDP or 2.4 Gt CO₂ based on its share of world population. Its proven reserves are 91 Gt CO₂ (18% of the global

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carbon budget). Its probable reserves are 174 Gt CO₂, or 35% of the global carbon budget. If Canada received the very high end carbon budget of 20 Gt CO₂, 78% of its proven reserves and 89% of its probable reserves will have to stay in the ground.

The CCPA notes that 80% of the world's oil reserves are held by state-owned companies. Two thirds of the remaining reserves are in Canada, making it a top destination for private investment. Private investment may be "easy come, easy go": carbon regulation that shrinks Canada's export market or divestment campaigns could trigger a withdrawal of capital and a shock to Canada's economy. The high-emission production from Canada's oil sands make it a likely target for early climate action.

Fossil fuels are the second largest contributor to the TSX and [many Canadian pension funds have significant fossil fuel holdings](#). Next to home ownership, pension plans are the second most important asset for many middle class households. The CCPA suggests that pension plans take actions now to protect their portfolios from the carbon bubble. Doing so would meet their fiduciary duty to both their older and younger plan owners.

Recommendations from Carbon Trackers

The Carbon Trackers report recommends that people and institutions take action to protect their fiscal stability:

- **Individuals:** engage their pension and mutual funds about how they are addressing climate risk and ask them to explain their strategy regarding stranded assets;
- **Investors:** demand that regulators, analysts, ratings agencies, and actuaries "stress-test" their contributions against a variety of climate and emissions scenarios and challenge the common practice of oil companies that reinvest funds into further exploration and development of oil reserves.;
- **Ratings agencies:** integrate systematic assessment of climate risk to provide forward looking analysis instead of assessing risk on past (unrepeatable) performance;
- **Analysts:** produce research that prices the impact of different emissions scenarios and indicators that stress test valuations against scenarios based on future likelihood rather than past performance;
- **Financial regulators:** require companies to disclose CO₂ embedded in fossil fuel

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reserves and then provide assessments of the systemic risk those reserves create;

- **Finance ministers:** initiate an international process to incorporate climate change in assessments of systemic risk in capital markets;
- **Investment advisers:** redefine risk (currently risk is deviation from the investment benchmark) to reflect the potential for stranded assets based on the probability of future scenarios; and
- **Actuaries:** include different emissions scenarios in their asset-liability models.

Recommendations for Canada

The CCPA recommends actions that would slowly deflate the carbon bubble and allow Canada's economy to remain stable through the transition to low carbon technologies. These include:

- A national carbon budget to manage fossil fuel resources for wind-down and provide financial markets with clear and credible emissions targets;
- Make the market reflect the true price of carbon by removing subsidies to fossil fuel producers, pricing carbon, regulating emissions standards and making public investments in low carbon technologies;
- Create green infrastructure bonds to give pension funds a stable, long term alternative to fossil fuel investments;
- Direct pension funds to divest from fossil fuel companies; and
- Mandate carbon stress tests in financial markets and require disclosure of carbon liabilities.

Act now to secure your future

Many argue that we can't act against climate change without creating immediate hardship. But what if this isn't true? Cities and universities are divesting from fossil fuel stocks based on moral standards that are buttressed by research that shows there is [no immediate financial downside](#) and a great deal of long term safety. No one wants their portfolio to dive by 60% -- although even that may be a relatively small price to pay to secure the survival of people and prevent a major extinction event.