



Will fossil fuel divestment hurt my pension?

A guide to financial studies and market analyses

Summary

Only 1.9% of the Somerville pension fund is invested in the Top 200 fossil fuel companies, which means that any impact of fossil fuel divestment will be relatively small. However, the recent history of the market and several financial studies suggest that the most likely immediate impact would be a small increase in returns with a decrease in volatility and risk. In the medium- to long-term, divesting limits exposure to significant risk as the world deals with climate change and transitions to more sustainable forms of energy production.

Market studies of environmentally responsible investment and fossil fuel divestment

Any time investment decisions are guided by considerations other than financial returns, there are concerns about how such decisions will impact returns. There have therefore been many studies over the years of environmental and socially responsible investment.

Studies have shown that socially and environmentally responsible investing does not hurt returns:

- ▶ A review of the literature by the investment consulting firm Mercer found that there was evidence of improved returns for socially responsible investing in half of the 20 studies reviewed, evidence of neutral effects in 7 studies, and evidence of negative effects in only 3.¹ They conclude: "On balance, the evidence suggests that there at least does not appear to be a performance penalty from taking wider factors into account in the investment management process. Over time, as more resources are allocated to research in this field and data comparability improves, we anticipate that the evidence supporting ESG [environmental, social, and governance factors] integration will become more robust."

More recently, several studies have shown that fossil fuel divestment specifically does not significantly increase risk and may improve returns:

- ▶ Three studies by the Aperio Group have estimated the increase in risk as result of fossil fuel divestment by examining tracking error (the difference between the performance of a fossil free fund and a traditional index fund).^{2,3,4} They found that full divestment from the fossil fuel industry increased risk by only .01%, which is much lower than the risk induced via the strategies used by most actively managed funds. They also showed in that in a historical back-test, a fossil free fund outperformed a traditional fund in 73% of the years since 1997.

- ▶ A study by Impax Asset Management concludes: “Analysis of historical data shows that over the past seven years eliminating the fossil fuel sector from a global benchmark index would have actually had a small positive return effect. Furthermore, much of the economic effect of excluding fossil fuel stocks could have been replicated with 'fossil free' energy portfolios consisting of energy efficiency and renewable energy stocks, with limited additional tracking error and improved returns. Impax believes that investors should consider reorienting their portfolios towards low carbon energy by replacing fossil fuel stocks with energy efficiency and renewable energy investments, thereby retaining exposure to the energy sector while reducing the risks posed by the fossil fuel sector.”⁵
- ▶ A study by MSCI showed that a fossil free fund outperformed a traditional fund over the last 1, 3, and 5 years. In addition, they conclude that “fossil fuel divestment has the potential to reduce overall portfolio risk because of Energy Sector volatility”.⁶

The future of fossil fuel companies and the medium- to long-term impacts of fossil fuel divestment

"Every pension fund manager needs to ask themselves have we incorporated climate change and carbon risk into our investment strategy? If the answer is no, they need to start to now."

--Howard Pearce, head of a \$3 billion pension fund for the UK government

The studies above primarily reached their conclusions by looking at historical market data. However, as the history of the market (and its history of booms and busts) shows, past performance is not always a good indicator of future performance. What is the future of fossil fuels as an investment?

Fossil fuel stocks have underperformed index funds over the last few years, and many analysts believe that this trend will continue. In the long-term, fossil fuel companies are a highly risky investment. There are two primary reasons for this:

- ▶ As easily accessible deposits of oil, coal, and gas are exhausted, companies are moving to more difficult and expensive to extract deposits, such as fracked natural gas and tar sands oil. This change reduces profit margins and it will increasingly undermine the competitiveness of fossil fuel companies versus alternatives (e.g., solar and wind), particularly as the cost of alternatives drops.^{7,8}
- ▶ The second reason has to do with the global response to climate change. Research shows that 80% of known fossil fuel deposits must stay in the ground to keep global warming within the international consensus of 2° Celsius (which is considered the minimum to avoid catastrophic consequences). This means that we must take strong measures to reduce fossil fuel usage. Not only that, these measures must happen soon: at current rates, we will exceed these limits within 15 years. This fact has led many analysts to conclude that fossil fuel stocks represent a large market bubble, based on companies holding assets that they cannot realize a profit on and continuing to spend hundreds of billions of dollars each year to explore new deposits that cannot be extracted or burned. This bubble may exceed \$20 trillion—an order of magnitude bigger than the recent housing bubble. The nature of this “carbon bubble” has been laid out in detail in two reports by the Carbon Tracker Initiative and the London School of Economics,^{9,10} and concern over the risks of fossil fuel investments have been voiced by major investment institutions including the rating agency Standard and Poor’s¹¹ and the investment bank HSBC.¹²

Conclusion

What is clear is that the future of the fossil fuel industry is highly uncertain. This uncertainty adds risk and potential volatility to any fund that holds fossil fuel stocks. Given that several studies show that divesting from fossil fuel stocks will not hurt returns and may actually improve them, this volatility and risk is unnecessary and counter-productive to the goals of the Somerville pension fund.

References and Resources

1. Mercer, "Demystifying Responsible Investment Performance: A Review of Key Academic and Broker Research on ESG Factors," UNEP Finance Initiative, 2007
http://www.unepfi.org/fileadmin/documents/Demystifying_Responsible_Investment_Performance_01.pdf
2. Patrick, Geddes, Aperio Group: "Do the Investment Math: Building a Carbon-Free Portfolio".
http://www.aperiogroup.com/system/files/documents/building_a_carbon_free_portfolio.pdf
3. Patrick Geddes et al., Aperio Group: "Building a Carbon-Free Equity Portfolio".
https://www.aperiogroup.com/system/files/documents/aperio_group_-_building_a_carbon-free_equity_portfolio.pdf
4. Aperio Group: "The Impact of Carbon Underground 200 Divestment on Financial Risk".
<https://www.aperiogroup.com/cm/s/browser?id=workspace%3A//SpacesStore/3daa160d-c681-4f5b-9c4a-171f2fde0893>
5. IMPAX Asset Management: "Beyond Fossil Fuels: The Investment Case for Fossil Fuel Divestment".
<http://350nyc.files.wordpress.com/2013/08/impax-investment-case-for-fossil-fuel-divestment-us-final-1.pdf>
6. MSCI: "Responding to the Call for Fossil-Free Portfolios".
http://www.msci.com/resources/factsheets/MSCI_ESG_Research_FAQ_on_Fossil-Free_Investing.pdf
7. Oil Change International: "Oil and investor risk".
<http://priceofoil.org/2011/05/15/oil-and-investor-risk/>
8. Josh Humphreys, Tellus Institute and 350.org: "Institutional Pathways to Fossil-Free Investing: Endowment Management in a Warming World".
<http://gofossilfree.org/se/wp-content/uploads/sites/13/2014/07/Rapport-Institutional-Pathways-to-Fossil-Free-Investing.pdf>
9. Carbon Tracker Institute: "Unburnable Carbon—Are the World's Financial Markets Carrying a Carbon Bubble?".
<http://www.carbontracker.org/report/carbon-bubble/>
10. Carbon Tracker Institute: "Unburnable Carbon 2013: Wasted Capital and Stranded Assets".
<http://www.carbontracker.org/report/wasted-capital-and-stranded-assets/>
11. Simon Redmond and Michael Wilkins, Standard & Poor's Ratings Direct: "What a Carbon-Constrained Future Could Mean for Oil Companies' Creditworthiness".
12. Damian Carrington, The Guardian: "Carbon bubble will plunge the world into another financial crisis—report".
<http://www.theguardian.com/environment/2013/apr/19/carbon-bubble-financial-crash-crisis>