

**Testimony regarding S.131 before the  
Vermont Senate Committee on Government Operations  
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My name is Eric Becker. I am the chief investment officer of Clean Yield Asset Management, a registered investment advisory firm based in Norwich, Vermont. Clean Yield manages socially and environmentally screened investment portfolios, including fossil fuel free portfolios, for individuals and families. We have approximately \$220 million in assets under management. Previously I was a portfolio manager at Trillium Asset Management in Boston, where I acted as co-manager of the Green Century Balanced Fund, an environmental mutual fund with a fossil-fuel free mandate. I have just under 20 years of investment experience.

I am here to testify in favor of fossil fuel divestment by VPIC. As you have heard, there are strong moral arguments to be made for divestment given the science and impacts of global warming and the central role that fossil fuels play. Business as usual is not an acceptable strategy given what we know. That applies to both government policy regarding fossil fuels and investment strategy as well. I am here to share my perspective as an investment manager who understands the complexities of structuring portfolios to maximize financial returns within a given risk tolerance.

I believe you have received two reports regarding divestment, one from VPIC's Director of Investments and one from VPIC's consultant NEPC. They cover too much ground for a point by point rebuttal, but I want to focus on three assertions they make: that divestment from fossil fuels would increase risks, reduce returns, and be costly. Finally I want to address the concerns in the VPIC memo regarding the Exclusive Benefit Rule.

I will start with risk. In the investment world there are many types of risk, but for our purposes I want to talk about three. The first two are volatility of portfolio value and tracking error versus a benchmark index. Divestment of a broad sector of the equity investment spectrum like fossil fuel stocks rightly triggers concerns about increased risk. Fortunately, a recent study by Aperio Group, an investment management firm specializing in custom indexing, shows that avoiding the Oil, Gas and Consumable Fuels industries (which would meet the results in tracking error versus the Russell 3000 benchmark of 0.60% and increased volatility of just 0.01%.<sup>i</sup> That is, after removing fossil fuel companies from their universe of stocks, they were able to build a portfolio with an annual standard deviation from the benchmark of just over half a percent, but which overall was virtually no riskier in terms of total volatility. It's important to note that tracking error cuts both ways. Half the time you would expect that tracking error to work in your favor (outperforming the benchmark), and half the time against you. More on that when I later touch on the returns impact.

But there is a third, critical kind of risk that neither the Aperio study nor NEPC and VPIC's work take into account. That is the growing awareness that there are in fact huge potential risks of investing in fossil fuel stocks. As it becomes starkly clear that we must, as a society, drastically reduce the burning of fossil fuels or face dire repercussions, government policies and regulations that substantially raise the costs of extracting and burning fossil fuels are increasingly likely in the coming years. The International Energy Agency states in its *World Energy Outlook 2012*, "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°C goal, unless carbon capture and storage (CCS) technology is widely deployed."<sup>ii</sup> That means that two thirds of the proven reserves that fossil fuel companies have on their balance sheets must remain in the ground if we are to maintain a livable planet. Society may yet decide that we cannot let those reserves be extracted and consumed at any cost. Investing in companies with these potentially stranded assets on their balance sheets carries substantial risk that is most certainly not yet reflected in their stock prices. So while the quantitative figures above may point to some marginal increase in risk by divesting from fossil fuels, there may well be a risk reduction in

avoiding owning assets that will one day be written down in value because that value cannot be realized. Indeed, Standard & Poors Ratings Services recently issued a report with Carbontracker.org that states, “The financial models that use past performance and creditworthiness may be insufficient to guide investors looking to understand the possible effects of future carbon constraints on the oil sector.”<sup>iii</sup>

I now want to address the so-called return penalty of divestment. The Aperio study showed that there was indeed a theoretical return penalty – of 0.0034% annually. That compares with the estimate by NEPC of a 0.25-0.50% return penalty. The VPIC report estimated foregone returns of \$10 million annually (about 0.28%). The implied foregone returns according to Aperio Group’s figures would be on the order of \$125,000, rather than \$10 million. The NEPC study refers to the outperformance that the energy sector has exhibited in recent years versus the broader market and infers that by avoiding fossil fuel stocks in the future the funds will miss out on continued outperformance. This is a deeply flawed analysis, as the last 15 years have been an extraordinary period during which oil prices rose from \$12 per barrel in 1998 to \$110 per barrel today. But from 1980 to 2000, the energy sector as a percentage of the S&P 500 plunged from 28.2% to 6.6%, as the real price of energy fell and energy stocks fell out of favor. A fossil fuel free portfolio over that period of time would have vastly outperformed the broad benchmarks. My point is not that fossil fuel stocks are certain to underperform going forward. But it is quite possible and certainly just as likely as the possibility that they outperform. There is a strong trend of reversion to the mean in investment markets. Things go in cycles of outperformance and underperformance. Using a naïve assumption that outperformance will continue is misleading and dangerous.

That brings me to the subject of the hard costs of divestment. Certainly there would be costs to divest, but they are likely considerably lower than those suggested by VPIC and NEPC. Both VPIC and NEPC assume that the transaction costs to sell existing fossil fuel holdings and buy replacements will be high. NEPC specifically projects transaction costs of nearly \$1.9 million, while VPIC comes up with a figure of \$8.5 million. These figures assume average transaction costs that are far higher than those actually

experienced in the market. For example, on page four of its report, NEPC assumes transaction costs of 0.20% for U.S. Large Cap Stocks. To illustrate what that means, let's take the example of the ExxonMobil shares that are currently in the portfolio. As of December 31<sup>st</sup>, 2012, the pension funds owned just over 45,000 ExxonMobil shares, for a total value of \$3.9 million. If NEPC's projections were to be realized, it would cost the funds \$7,800 to sell those shares and reinvest the proceeds. In the real world, brokerage commissions are far lower than that. In fact I recently sold some ExxonMobil shares that a client had inherited. It wasn't quite as big a chunk as the state's pension funds hold, but it was about \$1.1 million worth. The commission? \$500. That worked out to about 0.045%, less than a quarter of NEPC's assumption. And that was for an individual account without the institutional volume advantages that the pension funds have certainly negotiated with their brokers. Such arrangements are often in the \$0.02-0.03 per share range. That means that the commission for the state's sale of ExxonMobil shares could be as low as \$900. Even if you were to double that (to account for the reinvestment in another stock), it would still be less than a quarter of NEPC's assumption. So I would caution the committee that NEPC's transaction cost assumptions are far too high.

On the other hand, the costs could be more substantial for exiting comingled or alternative investments. In addition, management fees are likely to be higher on actively managed funds than passive index funds. The investment industry is already responding to the demand for fossil fuel free portfolios, but the development of passive vehicles is in its infancy. This is certainly an area of real concern that deserves more study as fossil fuel free offerings emerge to meet the needs of institutional investors.

I would recommend that any divestment legislation offer a reasonable time frame of three to five years for the funds to divest their fossil fuel holdings and should include a clause that allows the funds to hold alternative investments until maturity as these assets could be very costly to exit. The key is not to speedily divest, but rather to prudently get on a path to divestment.

Finally, I'd like to address the Exclusive Benefit Rule. The VPIC memo from the Director of Investments raises the specter that adopting a divestment policy could violate the Exclusive Benefit Rule of pension investing and thereby jeopardize the funds' tax exempt status. This issue was settled in 1998, when the Department of Labor issued an advisory opinion stating, "the fiduciary standards of sections 403 and 404 do not preclude consideration of collateral benefits, such as those offered by a 'socially-responsible' fund, in a fiduciary's evaluation of a particular investment opportunity. However, the existence of such collateral benefits may be decisive only if the fiduciary determines that the investment offering the collateral benefits is expected to provide an investment return commensurate to alternative investments having similar risks."<sup>iv</sup> As indicated by the Aperio study and many other academic studies of social and environmental screening criteria, the risk-adjusted returns of funds that use such screens are comparable to non-screened funds.<sup>v</sup> Therefore there is no reason to believe that divestment would engender any risk of violating the Exclusive Benefit Rule.

In closing, I find that the reports provided to the committee by NEPC and VPIC far overstate the hard costs of divestment, as well as the potentially increased risks and diminished returns. While there are real hurdles to implementing a divestment policy, they can be addressed in a prudent fashion if VPIC is given adequate time to develop and implement a plan to do so. I urge the Committee to support legislation to put Vermont on a path to divesting its public pension funds of fossil fuel stocks. Thank you for your time.

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<sup>i</sup> [http://www.aperiogroup.com/system/files/documents/building\\_a\\_carbon\\_free\\_portfolio.pdf](http://www.aperiogroup.com/system/files/documents/building_a_carbon_free_portfolio.pdf), p. 4.

<sup>ii</sup> <http://www.iea.org/publications/freepublications/publication/English.pdf>, p. 3.

<sup>iii</sup> [http://www.carbontracker.org/wp-content/uploads/downloads/2013/03/SnPCT-report-on-oil-sector-carbon-constraints\\_Mar0420133.pdf](http://www.carbontracker.org/wp-content/uploads/downloads/2013/03/SnPCT-report-on-oil-sector-carbon-constraints_Mar0420133.pdf), p. 2.

<sup>iv</sup> <http://www.dol.gov/ebsa/programs/ori/advisory98/98-04a.htm>

<sup>v</sup> <http://www.sristudies.org/Key+Studies>