From: Stephen Klein
Sent: Thursday, July 16, 2015 1:40 PM
To: 'Anthony Pollina'
Cc: Neil Schickner
Subject: RE: Fossil Fuel Divestment Question

I asked Neil Schickner to review all the material in your email links along with an analysis of the divestment initiative done for the Vermont Pension Investment Committee (VPIC) by the investment consultant NEPC. NEPC is one of the industry's largest independent, full-service investment consulting firms. He also reviewed a similar analysis done for the City of Seattle by NEPC and relevant statutes. Based on that preliminary review, if the Joint Fiscal Office were formally requested to analyze the issue, our report would likely make the following points:

►As of July 2014, the Vermont state employee and teacher's pension funds were funded at a funding level of 77.9% and 59.9% respectively. Investment returns are a critical component to ensuring that there are sufficient assets for retirement benefit funding.

► In the context of established, generally accepted principles of pension fund management, VPIC's lack of support for divestment is reasonable.

By statute VPIC owes a duty to the beneficiaries of the retirement fund to manage the fund's assets in accordance with the prudent investor rule which, inter alia, directs trustees to diversify trust investments. 3 VSA §523, 14A VSA §901(a) and §903.

► Legislative action would be needed to carry out divestment of funds to product the pension managers from legal risk.

The two corner stones of pension fund management are (1) invest the fund's assets in a diversified portfolio that mirrors in its weighting the entire universe of investible assets and (2) periodically rebalance the portfolio to reflect market driven changes in the relative weighting of the different sectors and of companies in each sector.

One benefit of this mechanical, market driven approach is that it eliminates personal speculation as a factor of fund performance. A pension fund essentially invests in assets that have proven to be profitable and which the market as a whole expects to continue to be profitable; and then relies on changing market valuations to signal which sectors, technologies and companies are or are expected to become more or less important or profitable in the future.

A pension fund portfolio that is rebalanced periodically on a fixed schedule also has the benefit of balancing out the negative effects of fortuitously buying at the top or selling at the bottom and of making portfolio changes that incrementally reflect the evolving consensus of the market over time.

Prudent pension fund management is thus a market disciplined approach. A pension fund may allocate a small portion of its portfolio to investments intended to anticipate market or economic developments but such active, inherently more speculative, decision-making is limited to the margins of the portfolio.

The strictly financial arguments in support of fossil fuel divestment, in turn, involve a level of uncertainty and an exclusion of a significant portion of the market that is inconsistent with these core principles of pension fund management.

► VPIC's position on divestment is based on an analysis by an experienced, independent pension fund management consultant.

In response to the divestment initiative, VPIC hired the pension fund consultant NEPC to analyze Vermont's retirement funds and the likely impact of divestment. NEPC's preliminary analysis delivered in February 2013 concluded that divestment would hypothetically result in (all figures are midpoints of ranges) (1) a onetime transaction cost of $1.9 million, (2) an annual increase in management fees of $820,000, (3) an annual decrease in expected investment return (beta) of $6 million and (4) an annual decrease in expected investment return (Alpha) of $2.0 million. In addition to these estimates the report states that "NEPC believes that divesting of the energy sector will also impact VPIC's equity and total portfolio risk."

NEPC is an experienced, reputable and independent pension fund management consultant. At a minimum, NEPC's analysis demonstrates that the future profitability of fossil fuel investments relative to fossil free investments is a matter of some debate among experts. Beneficiaries of Vermont's retirement funds will want to know the extent to which divestment is motivated by political objectives distinct from a concern for the stability and reliability of their retirement incomes. By retaining an independent pension fund management consultant, VPIC fulfilled its duty of due diligence in that regard. Having done so, and having received an opinion that divestment would be inadvisable, VPIC would have to have a compelling argument to overrule its own consultant which obviously complicates their decision-making.

► The investment case for fossil fuel divestment involves a degree of risk and uncertainty that would raise serious concerns at a prudently managed pension fund.

The financial case in support of divestment assumes that:

(1) Political, economic and technology developments over the next 10-30 years will evolve such that their combined effect will be to impair the profitability of companies in the fossil fuel business,
(2) It is possible now by using the single criterion of ownership of fossil fuel reserves to identify those companies whose profitability will be impaired by these developments,
(3) The identified fossil fuel companies are overvalued in today's market, i.e. their current market valuations do not account for the risks to their future earnings potential,
(4) It is possible now to identify companies in the fossil free sector whose earnings potential will be enhanced as those of fossil fuel companies decline,
(5) The identified companies in the fossil free sector are undervalued in today's market, and
(6) Divestment of fossil fuel assets and re-investment in fossil free assets will provide Vermont's retirement funds with an exposure to the energy sector that reflects the sector's relative weight in the market and the general economy.

The strictly financial case for divestment involves a number of inter-dependent variables of uncertain probability whose uncertainty is compounded by an unusually long time horizon. Even if an investor believed that each of the required events will unfold over time as forecasted and that each of the initial assumptions as to current valuations proves over time to be true, the potential excess return to be gained by investing now when so much is uncertain would have to be weighed against the risk of loss and underperformance if the initial assumptions prove to be wrong or events do not evolve as projected. Investors with a higher appetite for risk could reasonably disagree in making that risk-versus-reward assessment. For a pension fund manager tasked with generating a steady stream of income the assessment is much more problematic.

The problem with the “stranded asset” argument that fossil fuels are lower value is that it is based on a judgment that the current market’s assessment of the risks posed to fossil fuel companies by political, economic and technological developments over the next 10-30 years is wrong. The current market’s assessment of that risk may well turn out to be wrong; but a pension fund trustee who substitutes their judgment for that of market and makes substantial changes in a portfolio based on that judgment is arguably violating their duty of care owed to pension beneficiaries (and certainly exposing themselves to personal liability).

The fact that fossil free portfolios have outperformed fossil fuel indices over the past 1, 2 or 5 years is unpersuasive for several reasons.

First, any comparison ending in 2014 or early 2015 includes the 6-8 month period in which crude oil prices declined by 50%.

Second, companies in the renewable energy sector are, in part dependent on government subsidies. Whether those subsidies will be continued and whether the companies will be profitable without them are key unknowns that cloud any projection of their future performance.

Third, and most importantly from a pension fund perspective, the fossil free sector is minuscule compared to the fossil fuel sector. Divestment would constitute a de-diversification of a significant portion of Vermont’s pension fund portfolios followed by a concentration of assets in a small sector of the economy.

► Incremental periodic portfolio rebalancing will accomplish a similar financial objectives without the risks.

To the extent that political, economic and technological developments over the next 10-30 years evolve exactly as laid out by the divestment advocates, the pension funds’ normal periodic portfolio balancing would gradually shift the funds’ energy sector portfolio from one dominated by fossil fuel companies to one dominated by fossil free companies.

The incremental shift would have the advantage of avoiding the substantial risks involved in a single massive divestment and reinvestment within a short period of time. Besides the risk that the divestment case projections might be wrong, or that they may be right but stretched out on a different time horizon, a single massive shift stamps all the transactions with the valuations that happen to exist in a certain market at a certain time.

Incremental portfolio rebalancing eliminates those risks but also sharply reduces the risks inherent in the underlying uncertainties of the divestment case. That is because the portfolio would divest fossil fuel assets and invest in fossil free assets only when political, economic or technology developments have crystallized to the point as to be validated by the general market.

RESPONSE TO JFO

To: Stephen Klein; Neil Schickner
From: Senator Anthony Pollina
Response to JFO Re: Fossil Fuel Divestment Question

I appreciate JFO taking the time to begin addressing our questions regarding the potential divestment of Vermont pension funds from the 200 companies with the largest carbon reserves over 5 years. To follow up our conversation where I questioned parts of the analysis, and in the spirit of continuing dialogue I offer the following comments:

We share the goal of maintaining and in fact improving the integrity of our retirement funds and protecting the economic security of our retirees. We would not support actions that undermine that security.

We share Treasurer Beth Pearce's concern with global warming and the environmental impacts of burning fossil fuels. There is also little doubt that Vermont's continued investment in fossil fuel industries contradicts our stated policy goal of reducing our reliance on fossil fuels.

Our examination of divestment, however, is primarily driven by concern over the increasing volatility of fossil fuel companies and funds, which pose an increasing threat to the security of our retirement funds.

I remind us that our question centered on bills in the Senate and House proposing state retirement funds divest from certain fossil fuel companies (the top 200 carbon reserves) over 5 years." We asked JFO to review some literature, and the experience of those who have divested from fossil fuels and provide guidance as to the NEPC analysis and the experience of entities that have divested as well as those with contrary views. I included links to reports and articles showing benefits of divestment, including no transaction costs and comparable or higher returns.

Much of the JFO analysis centered on the NEPC report but there are reasonable questions about the report and its relevance to the proposed 5 year, targeted divestment proposal.

- NEPC appears to calculate the costs of divesting from the entire energy sector and presumes to do so at one time. This is not the proposal. The proposal calls for divesting from the top 200 publicly traded companies with the largest carbon reserves, over 5 years. The costs described by NEPC would surely be very different from what we expect under our proposal.

- NEPC looks at how the fossil fuel industry performed over the last 10 years; which may be a poor indicator for long term investors, given new market forces. When we consider climate changes, more restrictive regulation, higher capital expenditures, increasingly competitive renewable energy, volatile oil prices, political and cultural pressures and other considerations that didn't exist 10 years ago, we could argue that the next 20 years will look nothing like the last 20 years with respect to fossil fuels
- NEPC falsely suggests fossil fuel companies invest substantially in renewable/clean energy. A report from the NRDC (2011) shows that for every dollar the oil industry spent to find and produce oil they spent less than half a penny producing renewable fuels and invested only $4 billion out of their $2090 billion of investments in renewable energy, (0.1%).
- NEPC says commingled funds would all have to be transferred to separately managed accounts, increasing costs; but during the 5 year divestment period there will likely be commingled fossil free accounts.

Other questions concern the perceived strategy for divestment and reinvestment.

It appears both NEPC and JFO anticipate that fossil fuel funds will be reinvested in other energy interests, specifically the renewable energy sector. This is not the case. Funds would be reinvested where the profit potential is greatest and in keeping with portfolio priorities.

It is said that the fossil free sector is minuscule compared to fossil fuels, presumably to underscore the limitations of reinvesting in renewable energy. But, this is irrelevant since there is no dictate to shift to fossil free energy investments, in fact, the reinvestment opportunities will include everything (technology, pharmaceuticals, food, transportation, you name it…) except for that small group of companies with the largest carbon reserves.

It is said that the renewable energy sector is dependent on government subsidies that may or may not continue. This is true but the fossil fuel industry has also relied on subsidies, which also may or may not continue. A recent IMF analysis finds that when all subsidies, including cost shifts related to environmental and human health are considered the global fossil fuel sector is subsidized at a rate of $10 million a minute. Again, this may or may not continue.

Fossil fuel free funds outperform others.

JFO recognizes, and then dismisses the fact that fossil fuel free funds have outperformed those with fossil fuels saying the short time frame of the analyses makes them unpersuasive. However, the fact remains that projections and experience show fossil fuel free funds have performed the same or better than funds with fossil fuels. This goes to the very heart of the discussion and deserves greater scrutiny as asked for in our initial question.

JFO advocates an incremental approach.

JFO speaks to the benefit of taking an incremental approach to shifting investments, “to avoid substantial risks in a single massive divestment and reinvestment in a short period of time.” This is a critical point with which we agree. That is exactly why we are not proposing a massive, quick divestment. Instead, the proposal calls for divestment from a limited number of companies over a 5 year period. This is an incremental strategy.

As we continue to consider the idea of divesting from fossil fuels we should do so knowing:

- The proposed legislation does not call for reinvesting in renewable energy, so issues such as the size of the renewable sector or the fate of its subsidies is not relevant.
- There is credible evidence that, in the short term, fossil fuel free funds can and do perform as well or better than funds with fossil fuels, so there should be more focus on long term potential.
- The legislative proposal avoids a massive, quick divestment and in fact proposes limited, targeted divestment over a period of 5 years with the ability to make thoughtful, timely decisions, as advocated by JFO.