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STATE OF VERMONT
OFFICE OF THE STATE TREASURER

TO: Vermont Pension Investment Committee

FROM: Beth Pearce, State Treasurer

RE: Position of State Treasurer On Fossil Fuel Divestment

DATE: July 23, 2015

Summary

The threats resulting from climate change are severe and global in scale, requiring efforts at all levels of government, the private sector and the public at large. A transition to a low carbon future will require fundamental changes in demand and transformation of our energy systems. These changes will result in additional regulatory and financial risks for companies.

First and foremost, the Vermont Pension Investment Committee has a fiduciary obligation. A fiduciary is an individual, corporation or association holding assets for another party, often, as with this case, with the legal authority and duty to make decisions. VPIC members act in a fiduciary role and owe a duty to the 48,000 members and beneficiaries of the participating retirement plans.

We make a commitment to Vermont's teachers, State employees, and municipal employees when they sign up to teach our kids, plow our roads, protect our streets, and fix our bridges. That commitment as a fiduciary is to be a steward of their retirement dollars. I have a duty to make sure that those who work hard for Vermont are made whole and that the promise of retirement security is delivered.

The Treasurer's Office and VPIC have conducted both third party and internal reviews of our current holdings to determine the exposure to fossil fuels and the financial impact that a divestment strategy would have on the portfolio. There would likely be significant, in the millions of dollars, one-time and ongoing annual losses as a result of implementing such a strategy. Based on our analyses, and our statutory requirements and policies, I believe

divestment from fossil fuels is not a strategy appropriate to the Vermont pension plans. What follows below is a description of the applicable statutes and considerations that are the basis of my recommendation.

Statutory Basis

All types of governmental plans, including the Vermont plans, are subject to the following, in order be a qualified plan under the IRS:

> "it shall be impossible at any time prior to the satisfaction of all liabilities with respect to members and their beneficiaries for any part of the corpus or income to be used for, or diverted to, purposes other than the exclusive benefit of members and their beneficiaries"

The source for this is IRS code, Section 401(a) (2) and is also included in the Vermont statutes for each plan.

VPIC's statutory investment authority (3 V.S.A. § 523(a)) requires the VPIC members to act in accordance with the standard of care established by the prudent investor rule (14A V.S.A. § 902 (the "prudent investor rule").

The Vermont standard of care statute is as follows:

> § 902. Standard of care; portfolio strategy; risk and return objectives
>
> (a) A trustee shall invest and manage trust assets as a prudent investor would, by considering the purposes, terms, distribution requirements, and other circumstances of the trust. In satisfying this standard, the trustee shall exercise reasonable care, skill, and caution.
>
> (b) A trustee's investment and management decisions respecting individual assets must be evaluated not in isolation but in the context of the trust portfolio as a whole and as a part of an overall investment strategy having risk and return objectives reasonably suited to the trust.
>
> (c) Among circumstances that a trustee shall consider in investing and managing trust assets are such of the following as are relevant to the trust or its beneficiaries:
>
> (1) general economic conditions;
>
> (2) the possible effect of inflation or deflation;

> (3) the expected tax consequences of investment decisions or strategies;
>
> (4) the role that each investment or course of action plays within the overall trust portfolio, which may include financial assets, interests in closely held enterprises, tangible and intangible personal property, and real property;
>
> (5) the expected total return from income and the appreciation of capital;
>
> (6) other resources of the beneficiaries;
>
> (7) needs for liquidity, regularity of income, and preservation or appreciation of capital; and
>
> (8) an asset's special relationship or special value, if any, to the purposes of the trust or to one or more of the beneficiaries.
>
> (d) A trustee shall make a reasonable effort to verify facts relevant to the investment and management of trust assets.
>
> (e) A trustee may invest in any kind of property or type of investment consistent with the standards of this chapter. (Added 2009, No. 20, § 1.)

Further, 3 V.S.A. 523(d) requires the VPIC to formulate policies and procedures deemed necessary and appropriate to carry out its functions. These statutes are the basis on which VPIC policies are developed, on which decision-making is based. The VPIC's investment policy statements reference these statutes. Specific to this discussion, as noted in the <u>Vermont Pension Investment Committee Environmental, Social And Governance Initiatives,</u> adopted, November 26, 2013:

> The Committee is required by law to strive to maximize total return on investment, within acceptable levels of risk for public retirement systems, in accordance with the standards of care established by the prudent investor rule under 14A V.S.A. § 902 (the "prudent investor rule"). Further, the three State pension plans are qualified plans in accordance with Section 401(a) of the Internal Revenue Code. Federal and State law prohibit the use or diversion of any part of the corpus or income of the plans at any time prior to the satisfaction of all liabilities with respect to members and their beneficiaries for purposes other than the exclusive benefit of members and their beneficiaries."

In looking at this, the policy addresses a process to review all ESG initiatives but within our statutory requirements:

> "The Committee may choose to consider ESG Initiatives, provided they are consistent with the Committee's obligations to the members and beneficiaries of the participating retirement systems and with the standard of care established by the prudent investor rule. In cases where investment characteristics, including return, risk, liquidity, and compliance with the allocation policy are appropriate for the Portfolio, the Committee may consider ESG Initiatives that have a substantial, direct and measurable benefit to the economic interests of the Portfolio."

Divestment as a Strategy

Jane Ambachtsheer, who participated as a United Nations consultant in the formation of United Nations Principles for Responsible Investment (also acts as a North American advisor to the Carbon Disclosure Project and sits on the Investment Committee of the Toronto Atmospheric Fund) and Craig Metrick, a principal and US Head of Responsible Investment for Mercer, wrote in a 2013 article that:

"Divestment is only one tool in the tool box. While divestment is not a new approach, divestment from fossil fuels is relatively untested and potentially difficult for investors for many reasons, such as:

- Fossil fuels represent a significant component of today's energy mix and they are used in a wide range of commercial and consumer uses beyond the energy sector (e.g., automotive, manufacturing);
- Appropriate substitutes for fossil fuel companies may be fewer compared to other divestment campaigns, such as South Africa and Sudan;
- Divesting from such a large sector of equities markets might be considered a breach of fiduciary duty;
- Divestment eliminates a shareholder's ability to engage with companies and influence business strategy and companies may not be impacted by divestment on a relatively small scale, as a result;
- There is active debate over the ability of divestment to impact the value or behavior of companies, particularly in such a large and profitable sector;
- Divestment is likely to have up-front and recurring costs; and

- Institutions may be wary of setting a precedent where they are subject to more frequent company or issue specific student requests (a.k.a. the "slippery slope" of divestment)." [1]

The bottom line is that there are issues with divestment. It is not a "one and only solution", and in the case of the Vermont pensions, would be a costly strategy where other approaches, constructive engagement and implementation of our sustainability initiatives, can achieve results without asking taxpayers to pay more and to put the retirement security of 48,000 members and retirees at risk.

A 2014 Bloomberg White Paper, "Fossil Fuel Divestment: A $5 Trillion Challenge" made similar observations including, but not limited to:

- Fossil fuels are an enormous asset class;
- Fossil fuels offer four attributes (overall scale, liquidity, value growth, and dividend yield), a more complete investment package than that provided by most other sectors; and
- Other major sectors offer some of the attributes of oil and gas companies, but not all of them.[2]

Studies

The prioritization of the financial impacts of the plan are , in fact, consistent with those presented to the General Assembly, Government Operations Committee, by students at the Nelson A. Rockefeller Center at Dartmouth College. While relying heavily on the Aperio model (described below), the Dartmouth report nonetheless states "As Vermont's laws currently stand, the pension board can only divest fossil fuel funds if there is a reasonable argument that returns will not be adversely affected" and, its summary, "despite its adaptability, divestment has its limits when applied to fossil fuel shares in pensions. ...the decision on whether or not to divest needs to be framed through a financial lens before social arguments can even be taken into consideration."[3] Further, the Carbon Tracker Initiative recognizes the same limitation. In a paper entitled "To Divest or Not to Divest," Carbon Tracker, one of the key movers in the fossil fuel and carbon bubble debate states "For those investors who are constrained by the structure of the investment process, or indeed are not mandated to make ethical investment choices, they need an alternative way of approaching the problem. The majority of institutional

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[1]Craig Metrick and Jane Ambachtsheer, "Doing the Homework on fossil-fuel Divestment", Pensions & Investments, May 8, 2013.
[2] Bloomberg, "Fossil Fuel Divestment: A $5 Trillion Challenge", Bloomberg New Energy Finance White Paper, August 25, 2014, p1.
[3] Connolly, Sèan, Katelyn Schultz and Nicholas Shallow, "divestment from Fossil Fuel Investments: An Analysis of Potential Impacts and Strategies, Presented to the Vermont Senate Government Operations Committee, PRS Policy Brief 1314-01, February 2014, Nelson A. Rockefeller Center at Dartmouth College, pages, 3 and19.

investors are likely to fall into these categories." The Carbon Tracker Initiative paper goes on to identify ways to proceed for investors who do not have divestment as an option. I am pleased to state that we are making progress on all four of their recommended actions. Much of our efforts are detailed in a "Sustainability and ESG Activity Report" prepared by the Treasurer's Office and submitted for your review.

The Dartmouth study relies heavily on reports by the Aperio Group in making the assumption that there is no or little cost to the state. I have great respect for the work done by the Aperio Group but believe it is misapplied by others to the VPIC portfolio. However, some advocates (not the Dartmouth study), in testimony at the legislature, have ignored the caveats presented in the Aperio report and in one case went so far as to state that "the Aperio study showed the return penalty a myth". That is a characterization that the Aperio study authors have not made.

We took the time to contact the Aperio Group and review their findings. While the study clearly identifies that "historically it has been possible to closely track broadly diversified indices with carbon-free portfolios" they state that "is beyond the scope of this paper to judge whether investors should implement or avoid screening"[4]. Moreover, the studies include several caveats in their use:

- "The use of hypothetical performance has significant limitations, some of which are described below. The performance actually achieved from the strategies described may materially differ from that represented by the back tests."[5]
- In referring to back testing, the report does state that it provides "at least some sense of how a screened portfolio would have performed" but also added the caveat that "such back testing should be taken with a healthy grain of salt" [6]
- "back-tested performance does not reflect the impact that material economic and market factors might have had on the manager's decision-making process if the manager were actually managing client's assets"[7]
- "the investment strategy that the back-tested results are based on can be changed at any time in order to reflect better back-tested results, and the strategy can continue to be tested and adjusted until the desired results are achieved, and... there is no indication that the back-tested performance would have been achieved by the manager had the program been activated during the periods presented above."[8]
- "the often-presumed assumption of a return penalty is not consistently borne out by research. In fact, results from a wide range of studies on social and environmental

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[4] Aperio Group, "Do the Investment Math: Building a Carbon-Free Portfolio", 2013, p_, 2014, p 2.
[5] Aperio Group, "Do the Investment Math: Building a Carbon-Free Portfolio", 2014, p12.
[6] Aperio Group, "Do the Investment Math: Building a Carbon-Free Portfolio", 2013.
[7] Aperio group, "Do the Investment Math: Building a Carbon-Free Portfolio", 2014, p12.
[8] Aperio Group, "Do the Investment Math: Building a Carbon-Free Portfolio", 2014, p12.

screening do not provide a consensus on whether there has been a return penalty or benefit from carbon screening."[9]

- "The hypothetical returns for Tracking Portfolios should in no way be construed to imply that divestment leads to better performance. It shows only that over the time periods analyzed, this version of divestment just happened to play out that way. While doomsayers claiming a return penalty to divestment may resent the fact that there was no such penalty over the period, advocates of divestment may want to avoid promising any grand return benefit in future based on the stranded asset hypothesis that supposes carbon assets to be over-valued. An inability to predict returns leaves investors with managing risk, something we can all control to a much greater extent."[10]

The studies (now multiple) completed by the Treasurer's Office and independently by NEPC are not hypothetical historical optimizations but detailed efforts to assess risk and return to the specific portfolio characteristics of VPIC. The Treasurer's staff effort was led by Matt Considine. Matt is a graduate of Wesleyan University with Honors in Mathematics and Economics. He also has an MBA with concentrations in Finance and Entrepreneurial Management from the Wharton School at the University of Pennsylvania, and has spent almost 20 years as an equity analyst and portfolio manager. Prior to retiring to Vermont in 2008 Matt managed approximately a half billion dollars in institutional pension assets. He is a CFA charter holder.

NEPC LLC has been hired by VPIC as an unbiased advisor to the system, bringing its considerable knowledge and expertise to its role. NEPC is one of the nation's largest independent, full service investment consulting firms, serving over 300 retainer clients with total assets over $850 billion. NEPC offers no proprietary products. NEPC is an independent fiduciary that does not invest funds of any kind, therefore not creating a conflict or marketing advantage by articulating a brand of investment or any other such conflict.

All of the sets of studies, conducted in 2013, then in 2014 and most recently for this meeting conclude that fossil-fuel divestment for VPIC is a substantial risk, likely to result in the loss of millions of dollars on an annual basis. The most recent studies have been submitted to VPIC and will be reviewed in detail by the committee.

As fiduciaries, we have both a substantive and a procedural obligation. As noted in a publication by the Investor Responsibility Research Center, "A fiduciary who invests in a socially screened investment without making adequate investigation into its risk and return characteristics thereby violates his or her procedural fiduciary duties. A fiduciary who makes an adequate

[9] Aperio Group, "Do the Investment Math: Building a Carbon-Free Portfolio", 2014, p2.
[10] Aperio group, "Do the Investment Math: Building a Carbon-Free Portfolio", 2014, p6.

investigation, but then makes an investment decision that exposes beneficiaries to a risk that is excessively high relative to return, thereby violates his or her substantive fiduciary duties." [11]

VPIC has acted in the only way its fiduciary responsibilities would permit. We completed the requisite studies, consistent with our investment policies and our ESG policy, not one but two separate studies specific to VPIC in 2013, (both were subsequently updated, VPIC in 2014 and again in 2015) to determine the impact and concluded that substantial harm would come to the fund under a fossil fuel divestment strategy. While each member has a responsibility to evaluate the research and factors, consistent with the adopted ESG policy, I believe the results of our studies compel me to recommend against divestment from fossil fuels.

Pension Funding, VSEA Position

As previously noted VPIC has an obligation to the 48,000 active, vested and retired members of the systems to act on their behalf.

The current funding status of the systems is as follows:

Teacher Plan	2013	2014
Actuarial Accrued Liability	$2,566,834,655	$2,687,049,333
Actuarial Value of Assets	$1,552,924,370	$1,610,285,523
Unfunded Liability	$1,013,910,285	$1,076,763,810
Funding percentage	60.5%	59.9%
State Plan		
Actuarial Accrued Liability	$1,914,299,984	$2,010,089,866
Actuarial Value of Assets	$1,469,169,902	$1,566,075,540
Unfunded Liability	$445,130,082	$444,014,326
Funding percentage	76.7%	77.9%
Municipal Plan		
Actuarial Accrued Liability	$528,426,358	$580,972,276
Actuarial Value of Assets	$446,235,922	$500,557,919
Unfunded Liability	$82,190,436	$80,414,357
Funding percentage	84.4%	86.2%

[11] Miller, G. Daniel and Carol V. Calhoun, "Analysis of legal Issues Concerning Tobacco Divestment and Socially Screened Investments", Tobacco Divestment and Fiduciary Responsibility, A Legal and Financial Analysis , Investor Responsibility Research Center, 2000, p. B-15.

All three systems suffered losses during the Great Recession that contributed to a decline in funding position. The Teachers' system, in particular, also suffered from a prolonged period of underfunding by the Administration and the General Assembly through the 1990s and the early 2000s. Significant benefit changes and increases in employer and employee contribution changes have been made over the last several years to put the plans on a path to achieve full funding by 2038. This has involved efforts by employees and taxpayers alike. I appreciate employees stepping up to the plate to make these sacrifices to achieve greater financial security for our systems and the efforts by the Governor and the General Assembly to fully fund the actuarially determined funding recommendation (Annual Actuarial Required Contribution or ARC) since 2007. But additional stresses in the form of lost investment income/increased costs through fossil fuel divestment runs counter to our funding goals and our statutory obligations to the members of the system and the taxpayers. Investment returns historically provide the majority of funding for pension benefits. It is estimated that, on average, 70 cents out of every dollar paid to retirees is from investment of those taxpayer and employee contributions. Taxpayers and these employees and retirees depend on VPIC to act prudently and responsibly on their behalf.

Treasurer and VPIC Initiatives on Climate Change

As noted earlier, the Carbon Tracker Initiative paper identifies ways to proceed for investors who do not have divestment as an option. The Treasurer's Office and VPIC have undertaken several initiatives:

• The Treasurer's Office was a founding member (in 2003) of the Investment Network for Climate Risk (INCR), operating through Ceres, a non-profit organization advocating for sustainability. INCR has since grown to a network of 114 institutional investors representing more than $13 trillion in assets under management, pooling their collective efforts for joint action on climate risk.

• The Treasurer's Office and VPIC vote their proxy-voting rights at shareholder meetings according to the VPIC proxy policy in support of progressive Environmental, Social and Governance policies adopted by VPIC. The proxy guidelines deal with issues such as executive compensation, auditor independence, shareholder rights, discrimination, and fair labor practices, as well as guidance on a range of subjects relating to environmental disclosure and climate change. We originally adopted these policies in 2004 and have continued to update them to further address environmental issues. These policies are reviewed annually.

• The Treasurer's Office and VPIC have signed on to a number of investor letters urging companies to require transparency in their political spending, increased environmental disclosure, and successfully urging a major company in the palm oil industry to adopt policies that will ensure it does not contribute to deforestation.

• The Treasurer's Office has encouraged climate risk disclosures by companies by calling on the SEC to improve enforcement of its climate change guidance issued in February 2010. The goal is to improve corporate disclosure on material sustainability risks and opportunities that can be used by investors when valuing the company and assessing the risks associated with the firm.

• The Treasurer's Office and VPIC have participated in the Carbon Asset Risk project. Staff continues to engage oil and gas companies targeted by this initiative through shareholder resolutions and participation in the INCR Carbon Asset Risk working group. To date, the project has received several guarantees of additional reporting on company issued annual reports regarding sustainability goals and the effects of climate change on company business models.

• Through shareholder engagement, utilizing our combined assets under management and our "seat at the table", we have co-filed shareholder resolutions. On April 16, 2015, 98 % of BP shareholders, in a historic vote, passed a resolution requiring increased annual reporting on climate change risks. A 75 % vote was required to make it binding. Vermont was a co-filer of this resolution. Vermont is also a co-filer on a resolution requesting ExxonMobil to adopt quantitative goals for reducing greenhouse gas emissions. While this resolution fell far short of passage with less than 10% of the vote, an important message was communicated.

• The Treasurer's Office is currently engaging with its investment managers to survey how they are incorporating concerns related to climate change, and specifically how they integrate these concerns into security selection, fund allocation decisions, and strategic fund initiatives. A preliminary result of those interviews has been made available to VPIC.

• The Treasurer's Office has committed over $25 million to local investments in energy efficiency and renewable energy. The Treasurer's Office expects to increase this total over the next several months.

• At the recommendation of the Treasurer and approval by the Retirement Boards, a fossil fuel free investment option was added in 2014 to its deferred compensation and other optional retirement investment programs. The addition of a fossil-free fund offering provides employees the opportunity to invest in companies that support a sustainable future, while supplementing their retirement savings. As of June 30, 455 participants have enrolled in the fossil-fuel free option with assets totaling $816,245.

The Treasurer's Office and VPIC stand ready to work with all stakeholders to address the important issues surrounding environmental, social, and governance issues, including climate change. While it is clear that there is much work left to do, the Treasurer's Office and VPIC are looking forward to a collaborative effort in meeting the challenges that lie ahead and accomplishing real change in meeting Vermont's energy and climate risk mitigation goals, while also continuing to provide financial security to the State and the 48,000 active, vested, and retired members and beneficiaries of the retirement system in Vermont.

One of the sad outcomes from the divestment debate is that multiple constituencies, all of whom care deeply about the environment, have become polarized. It very much reminds me of the type of stalemate we see in Washington, in our national institutions. While this is happening, we miss the opportunities to take these issues to the climate change deniers and those companies that are doing harm to our environment. This is not the Vermont way of getting things done. My experience has been one of collaborative effort to reach mutual goals. I very much hope there are areas of mutual interest where we can effectively work together with various partners to address and mitigate the risks of climate change. Our sustainability report has a series of "next steps." Some projects that joint, collaborative efforts would, I believe, make a difference include:

- Engaging the SEC to enforce its own rules and regulations on Political Contributions and Environmental Disclosures;
- Working towards achieving success with the Carbon Disclosure Project;
- Engaging with our investment managers with respect to how climate change is factored into their investment decisions
- With respect to the demand-side of the equation: as long as there is a consumer demand for oil, companies will produce it. 350. Vermont has been very good in bringing about an awareness of the dangers of climate change. The Treasurer's Office would be pleased to work with 350.Vermont to tackle the issue of demand and in moving the consumption needle.

The Treasurer's Office and VPIC stand ready to work with all of our citizens and stakeholders to address these important issues. We have an opportunity to work together in the effort to battle climate change.