

Spectra Energy Corp.  
Form PX14A6G  
April 17, 2013  
Trillium Asset Management, LLC  
711 Atlantic Avenue  
Boston, MA 02111

April 11, 2013

Dear Spectra Energy Corporation Shareholders,

We are writing to urge you to VOTE “FOR” PROPOSAL 5 on the proxy card, which asks the Company how it is managing the economic and regulatory risks related to methane leakage in the Company’s operations.<sup>1</sup>

The shareholder proposal makes the following request of Spectra Energy:

Shareholders request that the Board of Directors publish a report (by October 2013, at reasonable cost, and omitting proprietary information) for investors on how Spectra Energy is measuring, mitigating, and disclosing methane emissions.

After reviewing the proposal, Institutional Shareholder Services (a division of MSCI and the leading provider of proxy voting advice) has recommended a vote in favor of the proposal:

“A vote FOR this proposal is warranted, as shareholders would benefit from additional information on how the company is managing its methane emissions. Such information, including quantitative emissions goals, would allow shareholders to assess relevant company performance.”

Implementing the Proposal would allow investors to better assess the Company’s fugitive methane risk exposure to unnecessary economic loss from leaking gas, an evolving regulatory regime (i.e. the Company’s ability to respond quickly and economically to a change in policy), and environmental liability. Without proper disclosure, we believe shareholders are unable to effectively assess fugitive methane risk. A strong program of measurement, mitigation, and disclosure would indicate a reduction in regulatory and legal risk, as well as efficient operations maximizing gas for sale and shareholder value.

We believe best practice disclosure would address the following:

A report adequate for investors to assess Company strategy, as referenced in the Proposal, would include the methane leakage rate as a percentage of production or throughput; how the Company is measuring and mitigating emissions; best practice; worst performing assets; risk mitigation; and environmental impact. Additional information useful to investors evaluating risk would include whether the Company has a published policy in place to reduce methane leakage; if the Company has set quantitative goals for reducing methane leakage; if the Board reviews progress against a policy; technologies being implemented for measurement and reduction; and plans to upgrade older assets with best practice technologies.

Spectra Energy does not provide current, publicly-available information on the impacts methane emissions may have on the Company or the associated company policies and procedures to address related risks and/or opportunities: see “Lack of Disclosure & Policies” below.

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<sup>1</sup> IMPORTANT NOTICE: The cost of this communication is being borne entirely by Trillium Asset Management, LLC. Trillium is NOT asking for your proxy card and is not providing investment advice. We will not accept proxy

cards, and any proxy cards received will be returned.

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We find current reporting to be inadequate and there is a large dissonance between current industry/company reporting/estimates and scientific findings. Academic studies have identified methane leakage rates of up to 9%, over 3X Environmental Protection Agency (EPA) estimates and 5X industry estimates. The short-term climactic benefit of natural gas over coal is reportedly negated when leakage rates exceed 3.2%.<sup>2</sup>

The environmental impact of natural gas development and methane emissions management is under question as recent academic papers have revealed evidence of higher rates of leakage than previously estimated. Recent studies illustrate the large dissonance between current reporting/estimates and scientific findings with the latest published results suggesting 9% methane leakage rates, over 3x the EPA's 2.3% leakage estimate (based mainly on early 1990's data) and over 5x the industry's 1.6% estimate.

A January 2013 Nature Article, entitled "Methane leaks erode green credentials of natural gas", byline "Losses of up to 9% show need for broader data on US gas industry's environmental impact," describes these findings from the National Oceanic and Atmospheric Association (NOAA) and the University of Colorado. The team also revealed new evidence to affirm findings from a study in February 2012, which revealed 4% methane leakage rates.<sup>3</sup> This is a troubling development, as a study by the Environmental Defense Fund (EDF) and Princeton from April 2012, asserts that the short-term climactic benefit of natural gas over coal is negated if the leakage rate exceeds 3.2%.<sup>4</sup> A prior study by Cornell University professor Robert Howarth, which garnered public attention from Forbes and The New York Times, estimated total fugitive emissions of 3.6% to 7.9% over the lifetime of a well.<sup>5</sup> A 2010 study out of Fort Worth Texas also revealed highly skewed distribution of emissions, with 10% of well sites accounting for 70% of emissions,<sup>6</sup> underlining the concern expressed in the Proposal that while "some operations may incorporate best practice management...the risk of leaks at high growth or select geographies can negate best practices elsewhere." Studies are continuing and results from the latest EDF and University of Texas study are expected in the coming months.

Two industry trade associations, the American Petroleum Institute (API) and America's Natural Gas Alliance (ANGA) have reacted to the public debate and possible regulation by issuing their own estimate of methane emissions, one-half that of EPA estimates.<sup>7</sup> While the report reaches a very different conclusion than the academic studies, it underlines the depth of the issue and lack of disclosure necessary to assess risk on both a company and industry level:

The accuracy of GHG emission estimates from natural gas production has become a matter of increasing public debate due in part to limited data, variability in the complex calculation methodologies, and assumptions used to approximate emissions where measurements in large part are sparse to date. Virtually all operators have comprehensive methane mitigation strategies; however, beyond the requirements of the Environmental Protection Agency's (EPA) Mandatory Reporting Rule or incentives of programs like the EPA's Natural Gas Star program, data is often not gathered in a unified way that facilitates comparison among companies.<sup>8</sup>

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2 Alvarez, R.A, Pacala, S.W., Winebrake, J.L, Chameides, W.L. & Hamberg, S.P. Proc. Nat'l Acad. Sci. USA 109, 6435-6440 (2012).

3 Pétron, G. et al. J. Geophys. Res. 117, D04304 (2012).

4 Alvarez, R.A, Pacala, S.W., Winebrake, J.L, Chameides, W.L. & Hamberg, S.P. Proc. Nat'l Acad. Sci. USA 109, 6435-6440 (2012).

5 <http://thehill.com/images/stories/blogs/energy/howarth.pdf>

6 <http://fortworthtexas.gov/gaswells/default.aspx?id=87074>

7 <http://www.eenews.net/eenewspm/2012/10/25/archive/5?terms=EPA+methane+estimates>

8 <http://www.api.org/~media/Files/News/2012/12-October/API-ANGA-Survey-Report.pdf>



#### Lack of Disclosure & Policies:

We believe Spectra fails to provide adequate disclosures on how methane leakage is measured and mitigated and the policies in place to manage methane risk. The Company argues that its last sustainability report, which focuses on 2010 and 2011 operations, includes information on the Company's efforts to study, measure, and mitigate methane emissions, and acts to substantially implements the Proposal.

While Spectra states that they measure "the methane that escapes during the transmission process"<sup>9</sup> and reference "more efficient practices"<sup>10</sup> in the Sustainability report, there is absolutely no detail provided as to how such measuring and mitigating is conducted, apart from referenced participation in the EPA's Natural Gas STAR program. It is critical to note that STAR reports are not publically available.

A disclosure adequate to assess how Spectra is 1) measuring methane emissions would include Spectra's methodology for measuring methane emissions, the methane leakage rate as a percentage of production or throughput, the leakage rate of best and worst performing assets, and the percentage of total assets measured. Currently Spectra reports the metric tons of CO<sub>2</sub>e emitted, but it is not clear if this number is only for pipeline assets, the entire value chain, or only the largest assets. Therefore, it is not possible to determine a leakage rate, a metric essential for peer comparison and understanding the scope of environmental and financial impact. Further, there is no disclosure of best or worst performing assets.

There is also no disclosure of the methodology for how the Company is measuring methane emissions, which can vary tremendously from simple throughput estimates to deploying measurement technologies. Spectra states in their Sustainability Performance Scorecard, that a "Next Step" is to "focus on the accuracy of methane emissions in the United States,"<sup>11</sup> implying current methodologies may fall short in accurately measuring the Company's full environmental impact. It is impossible to determine if current methodologies fall short given the lack of disclosure of how they are currently measuring methane emissions. The Company also references "a study to more accurately measure our methane emissions and better understand the sources of those emissions,"<sup>12</sup> further implying current methodologies may fall short. A public report on the findings of this study would be a useful step toward greater transparency, disclosure, and investor understanding of risk, and be in line with our request.

A disclosure adequate for investors to assess how Spectra is 2) mitigating methane emissions would include a description of the Company's policy to reduce methane leakage, quantitative goals for reducing methane leakage, technologies implemented for measurement and reduction, a description of how the Company assesses risk, plans to upgrade older assets with best practice technologies, and how the board reviews progress against the Company policy. Currently, the Company does not have a published policy to reduce methane leakage, has no quantitative goals for methane reduction, and does not disclose how they assess risk, a risk mitigation plan, plans to upgrade assets, or how the Board measures progress. The Sustainability Report provides no examples of how the Company is implementing more efficient practices to reduce methane leakage apart from a generic description of avoiding methane emissions "by improving operating procedures and through scheduled pipeline and operational facility integrity management programs"<sup>13</sup> and having "reduced methane emissions" by "implementing more efficient practices."<sup>14</sup> The absolute methane emission reduction claim is only relevant to reductions made in methane emissions between 2007, the baseline year of the Company's sustainability report, and the subsequent 2009 report. Since 2009, methane emissions have been increasing each year on an absolute basis, which could be a troubling signal to investors given public uncertainty surrounding the environmental profile of natural gas.

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<sup>9</sup> Spectra Energy (2011). 2011 Sustainability Report, [www.spectraenergy.com/sustainability](http://www.spectraenergy.com/sustainability), 18.

<sup>10</sup> Spectra Energy (2011). 2011 Sustainability Report, [www.spectraenergy.com/sustainability](http://www.spectraenergy.com/sustainability), 17.

<sup>11</sup> Spectra Energy (2011). 2011 Sustainability Report, [www.spectraenergy.com/sustainability](http://www.spectraenergy.com/sustainability), 9.

12 Spectra Energy (2011). 2011 Sustainability Report, [www.spectraenergy.com/sustainability](http://www.spectraenergy.com/sustainability), 18.

13 Spectra Energy CDP Report (2012).

[www.cdproject.net/Sites/2012/27/17527/Investor%20CDP%202012/Pages/DisclosureView.aspx](http://www.cdproject.net/Sites/2012/27/17527/Investor%20CDP%202012/Pages/DisclosureView.aspx).

14 Spectra Energy (2011). 2011 Sustainability Report, [www.spectraenergy.com/sustainability](http://www.spectraenergy.com/sustainability), 17.

It should also be noted that methane related risks are omitted from Spectra Energy's 2011 10-K filing, ignoring the current academic evidence and public debate.

While Spectra references participation in the Carbon Disclosure Project, only the Carbon Disclosure Project's (CDP) 2013 Oil and Gas supplement's new questionnaire on methane emissions is referenced in the Proposal as presenting a widely accepted format for methane risk disclosure going forward. Current Carbon Disclosure Project reports do not adequately address methane leakage in our estimation.

In February 2013, the EPA released the first widespread data on methane emissions, as reported through the Greenhouse Gas (GHG) Mandatory Reporting Rule, subpart W. While a start at improved disclosure and understanding large scale methane impact, the data falls short at the company level. It does not allow for peer analysis, as the data cannot be normalized since production and throughput numbers for the reported facilities are not available. Moreover, the data is only for the companies' largest facilities, painting an incomplete picture of total impact. There is also no disclosure as to what percentage of total operations those facilities represent. As a result, Spectra shareholders may not have an adequate picture of the full scope of SE's operations. The onus is therefore, in our opinion, on Spectra to report the full company methane emissions as a percentage of throughput/production, methane leakage performance, and management practice.

Natural gas's environmental profile and social license to operate may be under significant question when taking fugitive methane emission leakage into account. Methane emissions have 72x greater impact on global temperatures than CO<sub>2</sub> over a 20-year time frame<sup>15</sup> and oil and gas sector emissions represent one of the most rapidly growing sources of human generated methane emissions in the US, contributing 20% of short-term global warming impact.<sup>16</sup> Fugitive methane impact has spurred academic, industry, and public debate, has been featured in Forbes and The New York Times, and has led to investor, regulatory and legal action over the last year.

It is increasingly likely that Spectra Energy is subject to higher levels of scrutiny and regulation given the regulatory, legal, and public attention related to methane emission management. The Company does not provide current, publicly-available information on the impacts that methane emissions may have on the Company nor on associated Company policies and procedures to address related risks and/or opportunities. The points highlighted below underline the magnitude of the issue for the industry as a whole and Spectra Energy specifically.

In the Press:

Forbes, The New York Times, and Bloomberg, have called the environmental profile of natural gas into question, highlighting the current debate. The July 2012 Forbes article, entitled "Fugitive Methane Caught in the Act of Raising GHG," questions whether natural gas is in fact better than coal from a climate change perspective and whether the current characterization of natural gas as a "bridge fuel" from oil and gas to non-fossil fuels is accurate.<sup>17</sup>

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<sup>15</sup> [http://www.ipcc.ch/publications\\_and\\_data/publications\\_and\\_data\\_reports.shtml#T9CflZjSdaw](http://www.ipcc.ch/publications_and_data/publications_and_data_reports.shtml#T9CflZjSdaw)

<sup>16</sup> [http://www.globalmethane.org/documents/analysis\\_fs\\_en.pdf](http://www.globalmethane.org/documents/analysis_fs_en.pdf)

<sup>17</sup> <http://www.forbes.com/sites/jamesconca/2012/07/15/fugitive-methane-caught-in-the-act-of-raising-ghg/>

The New York Times addressed the question in depth in an April 11, 2011 story entitled “Studies Say Natural Gas Has Its Own Environmental Problems.”<sup>18</sup>

The problem, the studies suggest, is that planet-warming methane, the chief component of natural gas, is escaping into the atmosphere in far larger quantities than previously thought, with as much as 7.9 percent of it puffing out from shale gas wells, intentionally vented or flared, or seeping from loose pipe fittings along gas distribution lines. This offsets natural gas’s most important advantage as an energy source: it burns cleaner than other fossil fuels and releases lower carbon dioxide emissions.

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The findings are certain to stir debate. For much of the last decade, the natural gas industry has carefully cultivated a green reputation, often with the help of environmental groups that embrace the resource as a clean-burning “bridge fuel” to a renewable energy future. The industry argues that it has vastly reduced the amount of fugitive methane with new technologies and upgraded pipe fittings and other equipment.

The New York Times concludes in a April 2012 article entitled “Fugitive Methane Stirs Debate on Natural Gas,” “The first step in getting beyond this debate, many environmental advocates argue, is for the industry to stop refusing to take detailed measure of its methane leakage rates, to make that information public, and to submit to rules requiring them to capture it.”<sup>19</sup>

This sentiment points to weakness in current industry environmental management of fugitive methane emissions, as well as risk of regulation and continued public scrutiny. Our Proposal looks to the Company to address these risks head on through disclosure on measurement and mitigation.

#### Investor Action:

The financial community appears to be following the issue closely. In response to the lack of appropriate disclosure surrounding fugitive methane emissions, a 2012 joint investor statement representing \$20 trillion in assets was published by the Institutional Investors Group on Climate Change (IIGCC), the Investor Network on Climate Risk (INCR,) and the Investors Group on Climate Change (IGCC), entitled “Controlling fugitive methane emissions in the oil and gas sector.” The statement highlights the significant climate change concerns posed by high global warming impact fugitive methane emissions, as well as regulatory and reputational risks to the oil and gas sector, calling on companies to implement best practice control technologies and programs of disclosure.<sup>20</sup>

Further, HSBC just issued a report entitled “Shale: water first, leak later: The climate benefits of shale gas could leak and wash away”.<sup>21</sup> The report notes the controversy surrounding methane leakage and risk to companies’ social license to operate:

We think 2013 will see a continuation of the shale debate as more studies are published. These studies, as well as public opinion, affect policy decisions. Countries such as the UK, Poland, Canada and China are developing shale production whilst others such as France and Bulgaria have banned fracturing. The issue is also highly divisive at subnational level: Pennsylvania passed legislation last year allowing shale drilling in the entire state; Vermont voted to ban the practice outright in May; Maryland put applications on hold for three years (environmental impact study); New York State has a moratorium in place (public health effects); Quebec suspended fracturing (environmental review).

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<sup>18</sup> [http://www.nytimes.com/2011/04/12/business/energy-environment/12gas.html?\\_r=1&](http://www.nytimes.com/2011/04/12/business/energy-environment/12gas.html?_r=1&)

<sup>19</sup> <http://green.blogs.nytimes.com/2011/04/12/fugitive-methane-stirs-debate-on-natural-gas/>

<sup>20</sup> <http://www.ceres.org/files/methane-emissions/investor-joint-statement-on-methane-emissions>



21 <https://www.research.hsbc.com/midas/Res/RDV?ao=20&key=y5Vf4Ytq3u&n=356860>.PDF

## Policy & Legal Developments:

Policy and legal developments over the last year foreshadow increased regulatory scrutiny for Spectra. The EPA's New Source Performance Standards, issued in April 2012 and slated to take full effect in 2015, represent the first federal air standards for natural gas wells that are hydraulically fractured, along with requirements for several other sources of pollution in the oil and gas industry that currently are not regulated at the federal level. However, the rule has been criticized by the New York Attorney General for failing to regulate methane directly, leaving almost 95% of these emissions uncontrolled.<sup>22</sup>

The EPA also began requiring company level methane emissions estimate disclosure for the first time in September 2012 as part of the Greenhouse Gas Reporting Rules - Subpart W.<sup>23</sup> While this reporting requirement does not regulate levels of methane; it could provide the basis for increased regulatory scrutiny in the future.

A February 2013 Bloomberg article entitled "Fracking Seen by EPA as No. 2 Emitter of Greenhouse Gases" features the EPA's latest findings on GHG impact, taking, for the first time, methane emissions into account. According to the article, "Emissions from drilling, including fracking, and leaks from transmission pipes totaled 225 million metric tons of carbon-dioxide equivalents during 2011, second only to power plants, which emitted about 10 times that amount."<sup>24</sup>

According to a subsequent February 2013 Bloomberg article entitled "Fracking Emissions Get Review After EPA Watchdog Report," the regulatory risk to the oil and gas sector appears to be increasing following the publication of the latest air emission and methane data. The article states, the EPA has "agreed to more closely study air emissions from hydraulic fracturing after the agency's auditor concluded its current data is insufficient to make policy decisions."<sup>25</sup> The group also referred to current air pollution estimates as being of "questionable quality."<sup>26</sup>

New regulations are being proposed in California, according to the Los Angeles Times. In December 2012, California oil regulators released a first draft of fracking rules that would require energy firms to test the integrity of their wells before fracking to guard against leaks and report the results of those tests to regulators before they begin operations.<sup>27</sup>

On the east coast, seven states, including New York, Connecticut, Delaware, Maryland, Massachusetts, Rhode Island, and Vermont are suing the EPA for violating the Clean Air Act by failing to address methane emissions from oil and gas drilling.<sup>28</sup> New York Attorney General Eric T. Schneiderman stated the coalition of states "can't continue to ignore the evidence of climate change or the catastrophic threat that unabated greenhouse gas pollution poses to our families, our communities and our economy."<sup>29</sup>

Chevron executive Rhonda Zygoeki was featured in a February 2013 Energy & Environment article after stating that regulators should turn to industry to figure out how much methane can be reduced:

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<sup>22</sup> <http://www.ag.ny.gov/press-release/ag-schneiderman-leads-multi-state-coalition-action-curb-climate-change-pollution-oil>

<sup>23</sup> <http://www.epa.gov/ghgreporting/reporters/notices/index.html>

<sup>24</sup>

<sup>4</sup>

<http://mobile.bloomberg.com/news/2013-02-05/greenhouse-gas-emissions-fall-in-u-s-power-plants-on-coal-cuts.html>

<sup>25</sup> <http://www.bloomberg.com/news/2013-02-21/fracking-emissions-get-review-after-epa-watchdog-report.html>

<sup>26</sup> <http://www.foxnews.com/politics/2013/02/22/report-flaws-in-epa-drilling-pollution-data/>

<sup>27</sup> <http://latimesblogs.latimes.com/california-politics/2012/12/california-oil-regulators-release-draft-of-fracking-rules.html>

<sup>28</sup> [http://www.huffingtonpost.com/2012/12/11/drilling-methane-emissions-lawsuit\\_n\\_2279573.html](http://www.huffingtonpost.com/2012/12/11/drilling-methane-emissions-lawsuit_n_2279573.html)

<sup>29</sup> <http://www.ag.ny.gov/press-release/ag-schneiderman-leads-multi-state-coalition-action-curb-climate-change-pollution-oil>



"The issue there is we don't have a good grasp on the measurement," she said. Studying it will allow the industry to "get our arms around it, and then we should look at the industry to say now that we understand it, what is technically and economically feasible to put into a standard?"<sup>30</sup>

There are significant controversies associated with Spectra Energy's methane emissions. While Spectra has not been involved in company specific litigation related to methane emissions, it is important, again, to take the emerging nature of the issue into account and observe the nexus between the issue and the Company specifically. The public controversy surrounding methane emissions management and disclosure (detailed at length above) is not limited to the industry as a whole.

Spectra's issues with fugitive emissions have been identified in numerous venues. For example, in March 2012 Spectra was quoted in a Houston Chronicle story, "Energy leaders urge transparency to win public support":<sup>31</sup>

Efforts for improved public awareness of energy company operations will help advance production of the abundant supplies of natural gas that have many at the conference excited, said Greg Ebel, president and CEO of Spectra Energy.

"We need to maintain that because the public's criticism of us has been pretty significant these days," Ebel said.

See also, Huffington Post, "Natural Gas Leaks: A Risky Business in Need of a Fix"<sup>32</sup> and Vancouver Observer, "Failure to account for 'fugitive' methane gas could undercut BC's climate change efforts, experts say"<sup>33</sup> - both identifying Spectra.

#### Agency & NGO Response:

Agency and non-governmental organization reports further stress the importance of the issue. A February 2013 Bloomberg article provides the perspective of environmental groups:

Environmental groups have asked the agency to establish standards to prevent methane leakages from the drilling, fracking and transport of oil and gas. The boom in that production in states such as Pennsylvania and North Dakota means that those rules are necessary, according to environmental groups.

"Reducing fugitive methane emissions is a top priority because they are so powerful" a force for global warming, said Mark Brownstein, managing director of the Environmental Defense Fund in New York. "You want to make sure the goose is laying what approximates golden eggs."<sup>34</sup>

The International Energy Agency (IEA) also indicates the need for policy and illustrates the risk of failing to implement best practice management and disclosure in their 2012 report, "Golden Rules for a Golden Age of Gas." In an effort to "pave the way for the widespread and large-scale development of unconventional gas resources," the IEA asserts that "society needs to be adequately convinced that the environmental and social risks will be well enough managed to warrant consent to unconventional gas production, in the interests of the broader economic, social and environmental benefits that the development of unconventional resources can bring." The IEA also recognizes that "to achieve the trajectories of methane emissions consistent with the internationally agreed goal to limit the rise in global mean temperature to 2°C above pre-industrial levels, additional policy measures will be needed," as "the most comprehensive projections of future emissions, from the EPA (US EPA, 2011), assume no change in emission factors, for want of a better approach, and project a 26% increase in methane emissions from the oil and gas industry between 2010 and 2030." <sup>35</sup>

30 <http://www.eenews.net/climatewire/2013/02/05/5>

31 <http://www.chron.com/business/article/Energy-leaders-urge-transparency-to-win-public-3390421.php>

32 [http://www.huffingtonpost.com/john-b-kassel/natural-gas-leaks-a-risky\\_b\\_2402520.html](http://www.huffingtonpost.com/john-b-kassel/natural-gas-leaks-a-risky_b_2402520.html)

33 <http://www.vancouverobserver.com/sustainability/failure-account-%E2%80%9Cfugitive%E2%80%9D-methane-gas-could->

34 <http://mobile.bloomberg.com/news/2013-02-05/greenhouse-gas-emissions-fall-in-u-s-power-plants-on-coal-cuts.html>

35 [http://www.worldenergyoutlook.org/media/weowebiste/2012/goldenrules/weo2012\\_goldenrulesreport.pdf](http://www.worldenergyoutlook.org/media/weowebiste/2012/goldenrules/weo2012_goldenrulesreport.pdf)

The World Resource Institute published just this month (April 2013) their latest whitepaper, “Clearing the Air: Reducing Upstream Greenhouse Gas Emissions from Natural Gas Systems” which addresses the scope of the issue and need for action:

Natural gas development poses a variety of environmental risks. In addition to habitat disruption and impacts on local water and air quality, one of the most significant concerns is the climate impact resulting from the “fugitive methane emissions” that escape into the atmosphere from various points along the natural gas supply chain.

There is still considerable uncertainty over the amount of fugitive methane emitted over the lifetime of a natural gas well. However, some aspects generate little debate—namely, that emissions from natural gas production are substantial and occur at every stage of the natural gas life cycle, from pre-production through production, processing, transmission, and distribution. The U.S. Environmental Protection Agency (EPA) estimates that more than 6 million metric tons of fugitive methane leaked from natural gas systems in 2011. Measured as CO<sub>2</sub>-equivalent over a 100 year time horizon, that’s more greenhouse gases than were emitted by all U.S. iron and steel, cement, and aluminum manufacturing facilities combined.<sup>36</sup>

The Conservation Law Foundation published a white paper last year entitled “Into Thin Air, How Leaking Natural Gas Infrastructure is Harming our Environment and Wasting a Valuable Resource,” that asserts “though natural gas has been promoted as a more climate-friendly alternative, current analyses often fail to account for the gas that is lost, either intentionally or unintentionally.” The analysis points to 8 to 12 billion cubic feet of methane lost annually in Massachusetts alone due to leaking pipelines. This equates to over \$38M in lost economic value. <sup>37</sup> These reports illustrate increasing public concern for this social policy issue.

Leaked gas has a direct economic impact on companies, as it is no longer available for sale, establishing a clear business case for control processes.

Significant reductions in methane emissions are possible using new technologies with positive return on investment. In fact, many leakage control technologies have payback periods of less than 3 years.<sup>38</sup> Benefits may include worker safety improvements, maximizing available energy resources, reducing economic waste, protecting human health, and reducing environmental impacts. Upgrading production assets may also improve performance, making assets more robust and less susceptible to upsets and downtime.

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36 [http://insights.wri.org/news/2013/04/close-look-fugitive-methane-emissions-natural-gas?utm\\_source=feedburner&utm\\_medium=email](http://insights.wri.org/news/2013/04/close-look-fugitive-methane-emissions-natural-gas?utm_source=feedburner&utm_medium=email)

37 <http://www.clf.org/newsroom/new-report-shows-lost-natural-gas-emissions-costing-millions-to-massachusetts-gas-customers>

38 <http://www.epa.gov/gasstar/tools/recommended.html>

The National Resource Defense Fund's (NRDC) March 2012 report, entitled "Leaking Profits, the U.S. Oil and Gas Industry can Reduce Pollution, Conserve Resources, and Make Money by Preventing Methane Waste,"<sup>39</sup> outlines the environmental and economic benefits of methane control technologies. The report states emission control technologies for natural gas can:

- Generate more than \$2 billion in annual revenues from the sale of recovered natural gas, or provide fuel for use on site
- Reduce by more than 80 percent harmful methane pollution from the oil and gas industry that worsens air quality and exacerbates climate change
- Reduce emissions of volatile organic compounds (VOCs) and hazardous air pollutants (HAPs) that cause asthma attacks and other health and environmental harms
  - Provide royalties to individuals and governments for natural gas produced on private and public lands
- Improve industrial safety, limit corporate liability from leaking gases, and reduce power and maintenance needs

The Motley Fool reported on the economic waste associated with natural gas leakage in January 2013:

Based on EPA estimates, the industry lost more than \$1 billion in profits in 2009 due to venting (release of natural gas without combustion), flaring, and accidental leaks called "fugitive emissions." The U.S. Government Accountability Office, with supporting data from EPA, estimates that roughly 40% of natural gas that's vented and flared on onshore federal leases could be captured economically with currently available control technologies.<sup>40</sup>

Michael Levi, a fellow at the Council on Foreign Relations in New York, recently said in an interview gas and oil production "is an area where we have technological answers to our problems. We know how to fix many of these problems; we just need to make the decision to do it."<sup>41</sup>

The Company's level of disclosure may not be effectively compared to that of industry peers, as peers have systemically failed to adequately address the risk:

Our analysis of the industry points to a systemic lack of industry leadership in measuring, mitigating, and disclosing fugitive methane emissions. Fugitive methane emissions management is an emerging issue for investors and companies alike, as academic studies, regulatory changes, and public attention have highlighted the complexity and importance of the issue. Given the nature of this unmanaged risk, past industry and company inaction/inattention is not a bar by which any company should be measured independently. Instead, we have concluded that investor analysis is reliant upon improved disclosure going forward. Without adequate disclosure, it is not possible to evaluate methane risk.

## Conclusion

Given the importance of operational efficiency to Spectra Energy's profitability, as well as the regulatory, environmental, and social license risks facing the Company, we believe the Company's current level of disclosure is woefully inadequate.

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<sup>39</sup> <http://www.nrdc.org/energy/files/Leaking-Profits-Report.pdf>

<sup>40</sup> <http://www.fool.com/investing/general/2013/01/16/could-this-bane-become-a-boom-for-oil-and-gas.aspx>

<sup>41</sup> <http://mobile.bloomberg.com/news/2013-02-05/greenhouse-gas-emissions-fall-in-u-s-power-plants-on-coal-cuts.html>





In order for shareholders to fully evaluate methane risk, we strongly believe the Board of Directors needs to report to shareholders describing how the Company is managing and will manage methane leakage risk. In order to be useful, the report should include material quantitative metrics and a discussion of measurement methodology and management systems and policies.

For all the reasons provided above, we strongly urge you to VOTE “FOR” PROPOSAL 5. Managing methane risk may have a direct impact on the profitability of Spectra Energy and we believe it is in the best interest of shareholders.

Please contact Natasha Lamb at 978-578-4123 or [nlamb@trilliuminvest.com](mailto:nlamb@trilliuminvest.com) for additional information.

Sincerely,  
Natasha Lamb  
Vice President  
Shareholder Advocacy & Corporate Engagement  
Trillium Asset Management, LLC

**IMPORTANT NOTICE:** The cost of this communication is being borne entirely by Trillium Asset Management, LLC. Trillium is NOT asking for your proxy card and is not providing investment advice. We will not accept proxy cards, and any proxy cards received will be returned.