The End of the World as WE know it:
Transitioning to a Low-carbon Energy System

About NEI Investments
NEI Investments operates three mutual fund brands: Ethical Funds, NEI and Northwest Funds. For the funds that follow a socially responsible investing approach, we apply our complete Responsible Investing Program, which includes the use of environmental, social and governance (ESG) criteria to determine eligible and ineligible companies alongside investment analysis. The program also involves using our rights as a shareholder to encourage companies we invest in to adopt responsible business practices. Finally, we also engage policy-makers and other standards-setters on key ESG issues, often in collaboration with companies, other investment institutions, impacted communities and civil society organizations. Some of our funds may participate in the engagement aspects of our program but not in the application of ESG criteria to investment decision-making.

Executive Summary

The recently signed Paris Agreement, ratified by 195 countries at the 21st Council of the Parties, potentially signals a change in the urgency with which the world will address the risks of climate change. The Agreement sends a clear signal that the world will be transitioning to a low-carbon economy that will look radically different — from an energy perspective — than the one we know today. While the degree to which the ambition of the Agreement is matched by actions remains to be seen, we believe the energy transition is already underway and change is now inevitable. As a result, investors face both risks and opportunities, but more importantly, we believe investors have a responsibility to actively drive this transition.

We have developed a comprehensive energy transition strategy in recognition of the importance of this issue, and have been working to implement this strategy in a robust and accountable way. The strategy is results-based, transparent and, most importantly, it is proving effective. There is no one easy solution to addressing climate change risks, but rather a number of complementary actions that together can drive real change. We believe investors have a critical role to play in the transition to a low-carbon economy and acknowledge that our own strategy will evolve as we learn and adapt to developments. But we believe that our current approach, which utilizes all the tools available to shareholders, puts us on a firm footing for the energy transition and we encourage other investors to consider adopting similar strategies.

NEI's Approach to Climate Change

Since 2001, NEI Investments has accepted the conclusions of the Intergovernmental Panel on Climate Change (IPCC): that failure to acknowledge and act to reduce greenhouse gas (GHG) emissions has put the planet on a path toward severe, pervasive and irreversible impacts that will be felt in the decades to come. Urgent action is required and investment institutions have both an obligation to act and a key role to play.

To address this profound challenge, NEI has developed a comprehensive program for taking action to mitigate risks. Our strategy for addressing climate change goes beyond fossil fuel companies. Fundamentally, the global economy faces both a demand and a supply problem. Fossil fuel companies work to meet market demand. Until we change that paradigm by reducing demand and delinking our economy from carbon, efforts to stem the supply of fossil fuels will inevitably fall short.

We have spent considerable time engaging with the energy sector because of its material contribution to climate change. We have a long-term vision for energy companies in our portfolio. Namely, we seek to own innovation-focused, sustainable energy companies that respect human rights, have positive relationships with local indigenous communities and are positioned to provide energy for long-term needs.[1] Looking at the landscape of energy companies today, we clearly have a long way to go. However, we have a strategy in place to get us there and we have seen significant progress. This work spans all three of our responsible investment program areas: evaluations, engagement and policy.

Investor actions to drive the energy transition

Evaluations and Exclusion

- Exclude any company that is actively fighting the implementation of progressive climate policy or willfully misleading or ignorant of the material risks associated with climate change.

Engagement

- Demand disclosure on company efforts to manage the risks and opportunities associated with climate change from all heavy GHG emitters in portfolios.
- Ask companies how they plan to remain viable in a low-carbon future — let them know it is a material concern.
- Ask companies to show leadership in publicly supporting climate policy implementation — or at least be transparent in their positions.

  Governance

- Support shareholder resolutions that ask companies to disclose carbon-related risk management strategies.
- Demand that companies implement board and executive diversity strategies (gender, culture and experiential diversity) and vote against key board members where company response is inadequate.
- Vote against key board committee members at those companies that are not adequately disclosing the risks and opportunities related to climate change — and communicate the rationale for such votes to the board.

Policy

- Actively engage governments, asking for the implementation of robust climate change policies.
- Ask securities regulators and standards setters to make disclosure on climate change risks mandatory.
- Join collaborative investor efforts to drive proactive climate policy changes.

[1] This vision is captured in our focus list press release here: http://www.neiinvestments.com/Documents/Focus_list/Focus%20List%202014%20EN.pdf

Investment

- Seek innovative ways to invest in the companies that are working on solutions towards the energy transition.

The Way Forward

The lead-up to COP 21 saw an enormous amount of attention paid to the role of investors in driving the energy transition, with a plethora of announcements and initiatives aimed at both supporting a progressive global agreement and catalyzing new investment streams. We believe this momentum is a good thing — regardless of whether we agree with the utility of all strategies. The very fact that investors are paying attention has put us on the right path. Critical to our success will be focusing on those strategies that have the biggest payoff and that address the real challenges we face.

We believe that we, along with our peers following similar strategies, have had much success in driving quantifiable progress at the corporate level and in the policy sphere. The launch of the NEI Environmental Leaders Fund is the latest evolution of our strategy, and we believe it will be critical to our success in driving the energy transition. We plan to continue implementing our strategy of reducing our exposure to companies facing the biggest risks through exclusions, engaging with our portfolio to mitigate current impacts and take advantage of future opportunities, advocating for a robust policy environment that incents the transition, and investing directly in the emerging technologies and sectors that will be required — and profitable — in a low-carbon, resource-constrained world.

While there are signs that many investors are becoming aware of their role in driving the transition, we feel there is an imperative for greatly increased action. We believe there are concrete steps that investors can take immediately that will have a beneficial impact. Not every investor is ready or even has access to the tools to implement all strategies at once. However, every investor is comfortable with at least some of the possible actions that will be required to smooth the transition to a low-carbon economy.

Introduction

The recently signed Paris Agreement (the "Agreement"), ratified by 195 countries at the 21st Council of the Parties, potentially signals a change in the urgency with which the world will address the risks of climate change.[2] The Agreement sends a clear signal that the world will be transitioning to a low-carbon economy that will look radically different — from an energy perspective — than the one we know today. While the degree to which the ambition of the Agreement is matched by actions remains to be seen, we believe the energy transition is already underway and change is now inevitable. As a result, investors face both risks and opportunities, but more importantly, we believe investors have a responsibility to actively drive this transition.

NEI will be celebrating the 30th anniversary of the launch of its Ethical Funds brand in 2016. During the last 30 years, we have worked to improve the corporate (and investor) response to numerous environmental, social and governance (ESG) issues, ranging from human rights to executive compensation. One issue that has been a preeminent concern for the last decade has been the risks related to climate change. More specifically, we have been focused on fossil fuel companies' role in climate change, the steps that can be taken to reduce their climate impact and the most effective investor response to drive real change.

Fossil fuel companies, while providing approximately 80% of the world's energy and providing many benefits to our economy, also have negative impacts on consumers, employees, communities, society and the natural environment. Clear to almost everyone at this point is the role that burning fossil fuels has played in creating the climate crisis we find ourselves in today. As such, there is an investment as well as a social and environmental imperative need to work actively to mitigate these impacts.

[2] http://www.cop21.gouv.fr/wp-content/uploads/2015/12/l09r01.pdf

We have developed a comprehensive energy transition strategy in recognition of the importance of this issue, and have been working to implement this strategy in a robust and accountable way. The strategy is results-based, transparent and, most importantly, it is proving effective. There is no one easy solution to addressing climate change risks, but rather a number of complementary actions that together can drive real change. We believe investors have a critical role to play in the transition to a low-carbon economy and acknowledge that our own strategy will evolve as we learn and adapt to developments. But we believe that our current approach, which we believe utilizes all the tools available to shareholders, puts us on a firm footing for the energy transition and we encourage other investors to consider adopting similar strategies. This paper describes that approach in detail.

Fossil Fuel Free and the Divestment Movement: For Better or Worse

It is not an exaggeration to say that the fossil fuel divestment movement has been one of the most high-profile campaigns in the history of responsible investment. Spawned initially as a campaign to target university endowments, it has spread beyond university campuses to become a global phenomenon. While much of the hard work to understand investor risks and responsibilities related to climate change was already under way when 350.org burst onto the scene, there is no doubt that the divestment campaign has pushed this conversation along. By comparison, no topic over the last 30 years — from human rights, to sweatshops, to pollution — has garnered as much attention in the mainstream press. Credit should be given to the passion and commitment of the campaigners for making fossil fuel investments a topic that no responsible investment institution can credibly ignore.

The success the movement has had in prompting universities and foundations to embrace their responsibilities as investors should be applauded. Thirty years ago, when the responsible investment industry was just getting started, many believed that university endowments would assume a leadership role and be among the first to adopt meaningful policies and practices. The reality is that, while there were certainly some leaders in this space, the sector has been slow to move. Their belated arrival is a welcome development.

Divestment has always been a part of our approach to responsible investment. In fact, it was our first-hand understanding of its benefits and impacts that led us to be skeptical of the divestment movement as it was first formulated. While we firmly believe that investors should consider divesting of companies that have significant negative ESG impacts and have proven resistant to progress through engagement, we are under no illusion that our past divestments have necessarily made the situation better. Rather, our divestments are driven by an ethical decision to not benefit from ownership in such companies. We strongly believe that the ethics of an investment decision should be guided by the potential social impact of that decision and that is how investor actions on climate change risks and opportunities should be judged.

There is genuine merit in considering the exposure to fossil fuels from a purely economic lens — at some point high carbon investments will be a risk to portfolio returns — so there is a legitimate rationale to reducing exposure to these sectors based on an investment thesis related to carbon risk. However, recent research by the Cambridge Institute for Sustainability Leadership found that of the massive potential impacts on portfolio performance that future climate risks could bring (losses of up to 45% in equity portfolios), only half of this risk is hedgeable by reallocating investments, while the other half is "unhedgeable," meaning investors and asset owners are exposed unless some system-wide action is taken to address the risks.[3] This speaks to the need for solutions that don't simply avoid risk but drive real change.

To that effect, despite the many positives that have come out of the divestment movement, a strict adherence to a "fossil fuel free" approach has significant limitations; primary among these being the focus on supply and not demand. As long as the economy remains rooted in fossil fuel energy, simply switching investments to other sectors is an ineffective, and possibly misleading, strategy.

[3] http://www.cisl.cam.ac.uk/publications/sustainable-finance-publications/unhedgeable-risk

As we write this paper, the price of a barrel of oil is hovering around the $40 mark, the S&P Energy Index has lost 28% of its value year-over -year, and investors have left the oil and gas sector in droves. Numerous oil and gas players are under deep financial stress, and many won't make it out of this rout intact. But the stark reality is that demand for their product has only increased in response, a fact that we believe highlights the fragility of a strategy that targets the production of fossil fuels.

Key players in the current oversupply of oil (and resulting crash in oil price) are the state-owned oil companies such as Saudi Aramco. With over 80% of global reserves under the control of state-owned companies, recent events vividly highlight the likely limitations of targeting the production of public companies. State-owned companies will happily fill any gaps and attempting to influence these companies on ESG performance is difficult, if not impossible. A strategy that has the potential to expand the influence and reach of these untouchable players seems deeply flawed.

As we do anticipate demand for fossil fuels to exist for the near future, we feel it is of prime importance that this production is handled in the most responsible manner possible — from both an environmental and social perspective. The unintended impact of a blanket divestment program is that leaders are treated the same as laggards, which, if anything, undermines the motivation to be a leader — and we need leaders in this industry to drive action on issues such as capturing methane, reducing the energy intensity of production, respecting Indigenous communities and publicly speaking out in favour of carbon regulations.

If the proceeds from fossil fuel divestment were used to fuel the transition to a low carbon economy (e.g. by investing in the development of renewables), that would be a positive development. The reality, however, tends to be much different, with investors either switching investments to "low carbon" sectors such as banks or IT or investing in fossil fuel services companies, which may have lower direct carbon footprints but are still an integral part of the fossil fuel energy system.[4] This is in large part because we believe the renewables sector, though likely poised for rapid growth, is not yet ready for a massive scale up of investment and because of the different attributes these investments bring to a portfolio. We don't believe this "fossil fuel free" approach is driving substantive change and may, in fact, be misleading to beneficiaries and unitholders who believe they have done their part by avoiding fossil fuel investments, when in reality their impact may be marginal at best.

Despite the rhetoric surrounding fossil fuel free approaches, much of the divestment movement has evolved in a manner that aligns with our approach. There is a heightened awareness that some actors are worse than others and should be treated as such (i.e. targeted, not blanket divestment); investors are targeting the sector that has viable alternatives (e.g. coal); and there is a growing acceptance that engagement is likely going to play a major role in driving the energy transition. We see this as a very promising development.[5]

Shortcomings of a fossil-fuel divestment strategy

- It will not impact demand for fossil fuels.
- It is unlikely to lead to increased investment in renewables.
- It will not improve fossil fuel company performance.
- It will have no impact on overall production of fossil fuels.

A word of warning – the triple bottom line still matters

While we certainly believe that climate change is one of the most pressing concerns facing society — and thus investors — we would caution against making decisions on "decarbonisation" and "portfolio carbon weighting" in an ethical vacuum. Viewing portfolios through the lens of carbon is certainly useful,

[4] Investors that are making substantive commitments to investing in solutions – and there are many – should be recognized for showing leadership.

[5] For example, the latest announcement of investors committed to divestment ($3. 4 trillion in AUM) now includes investors who have explicitly committed to a program similar to NEI (Norwegian Pension Fund, Allianz and the California state pension funds represent $2.2 trillion in AUM between them). http://350.org/cop21-divestment/

but investors must be careful not to throw out the traditional triple bottom line approach (e.g. people, planet, profit).

Positing the lowering of a portfolio carbon footprint as the defining aspect of responsible investment will inevitably have some unintended consequences. There are numerous examples of oil and gas companies that might be more carbon efficient due to the nature of their assets (e.g. weighted to natural gas or conventional oil) but have abysmal records on human rights or worker safety, or are majority state-owned in a country where women's rights are routinely violated. Investors might also choose consumer goods investment based solely on carbon efficiency, without regard to the existence of sweatshops in the supply chain. There is no reason that investors have to follow carbon metrics blindly — but little has been said so far about how to balance these competing concerns.

In fact, we would argue that if there is any single issue that is significant enough on its own to warrant overriding other ESG concerns, it is human rights. We believe investors have an absolute obligation to ensure they are not directly linked to, or benefiting from the gross violation of human rights.[6] The energy transition itself will have various impacts on human rights — from mitigating the impacts on Indigenous groups in the Northern Hemisphere due to a rapidly changing climate, to potentially contributing to the impacts on local Indigenous groups from the use of forests as carbon offsets, to the imperative to ensure developing countries are not held back from escaping poverty by the costs of the energy transition. For responsible investors, context is king (or queen). We have a responsibility to ensure our focus on carbon does not lead us to abandon the fundamental tenets that underpin the work of many long-time ESG actors.

NEI's Approach – Comprehensive Solutions for a Complex Problem

Since 2001, NEI Investments has accepted the conclusions of the Intergovernmental Panel on Climate Change (IPCC): that failure to acknowledge and act to reduce greenhouse gas (GHG) emissions has put the planet on a path toward severe, pervasive and irreversible impacts that will be felt in the decades to come. Urgent action is required and investment institutions have both an obligation to act and a key role to play. To address this profound challenge, NEI has developed a comprehensive program for taking action to mitigate risks.

At the core of our strategy lies a primary concern to achieve positive outcomes. Careful analysis reveals considerable variation in how fossil fuel companies are responding to climate change. Some are seeking to become energy firms of the future by developing renewable energy portfolios and serving the growing appetite for clean energy. Some are seeking to reduce their emissions, increase efficiency and address other negative environmental impacts by increasing their spending on research and development and entering into new collaborative models for advancing industry practices. Others are taking a business as usual approach. And some actively muddy the waters on climate science and oppose government action. A comprehensive and effective climate change strategy should be responsive to this variation.

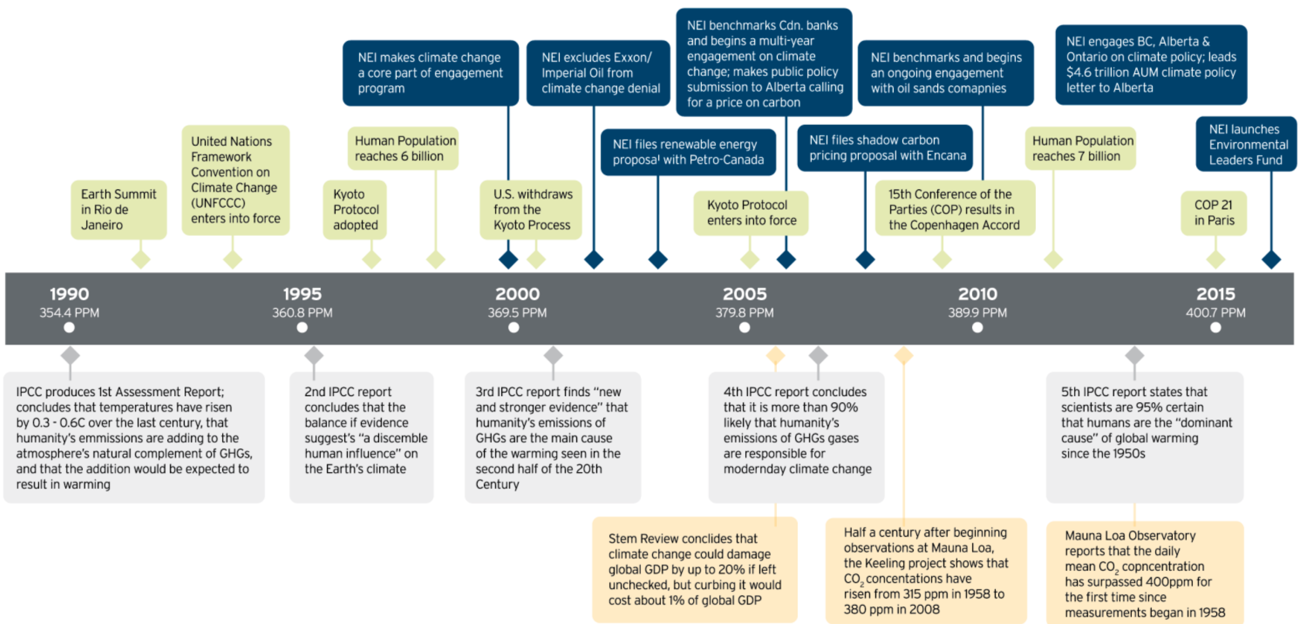
To this end, NEI maintains that investment institutions should divest from specific fossil fuel companies — the worst performers — while also putting in place a range of strategies to engage both the supply and the demand side of the energy equation. Energy companies are selling fossil fuels but other industries — and consumers — are buying them. We also believe that investors should work in collaboration with other stakeholders, including other investors, companies, environmental organizations, academic institutions and First Nations, to advance viable strategies for change. Finally, we believe that investment institutions should engage government to seek enhanced protection for forestlands and other carbon sinks, a meaningful price on carbon and vastly increased funding for development of low-carbon energy solutions.

Engagement is NEI's preferred responsible investment strategy. We have a 15-year track record of engaging with companies and a wide range of government and standards-setting entities. Our firm has established robust and effective strategies for change. We encourage all investors to consider embracing these practices.

[6] This duty is outlined in the UN Guiding Principles on Business and Human Rights: http://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf. We would note that the Guiding Principles expressly state you have an obligation to use your influence to mitigate the risk to human rights – walking away from the situation is posited as the option of last resort if you cannot influence the situation for the better.

Climate Change Timeline

The issue of anthropogenic climate change first came to the public's attention in 1988. That year, NASA scientist James Hansen testified before the U.S. Senate Committee on Energy and Natural Resources and the Intergovernmental Panel on Climate Change (IPCC) was established. This timeline presents some of the major climate-related events over the last 25 years, tracks atmospheric CO2 concentrations (in parts per million) and highlights some of the work NEI has done in an effort to mitigate the impacts of climate change.



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NEI's Program on Climate Change

NEI has an overarching strategy for addressing climate change that goes beyond fossil fuel companies. Fundamentally, the global economy faces both a demand and a supply problem. Fossil fuel companies work to meet market demand. Until we change that paradigm by reducing demand and delinking our economy from carbon, efforts to stem the supply of fossil fuels will inevitably fall short.

We have spent considerable time engaging with the energy sector because of its material contribution to climate change. It would be irresponsible to own fossil fuel companies and not engage on the myriad issues they face.

We have a long-term vision for energy companies in our portfolio. Namely, we seek to own innovation-focused, sustainable energy companies that respect human rights, have positive relationships with local indigenous communities and are positioned to provide energy for long-term needs.[7] Looking at the landscape of energy companies today, we clearly have a long way to go. However, we have a strategy in place to get us there and we have seen significant progress.

[7] This vision is captured in our focus list press release here: http://www.neiinvestments.com/Documents/Focus_list/Focus%20List%202014%20EN.pdf

In the following sections, we discuss the actions we have taken to achieve our overarching climate change goals, with particular emphasis on how we are working towards our goal of sustainable energy companies. This work spans all three of our responsible investment program areas: evaluations, engagement and policy.

Evaluations and Exclusion

For the funds that follow a socially responsible approach to investing, our in-house team of ESG specialists evaluates every investment candidate before it is purchased to ensure that our ESG standards are met. Our process excludes companies that are:

- serving as impediments to progress on climate change; or
- failing to address the real climate risks associated with their business strategies.

Companies that are impeding progress on climate change by withholding information, funding organizations challenging the scientific consensus on climate change or explicit lobbying to scuttle legislative attempts to address climate change are excluded from our funds. Such companies do not have a place in our portfolio.

The most high-profile example of this is our exclusion of Exxon Mobil for its concerted campaign to undermine the scientific consensus on man-made climate change. Most recently, the company has been accused of lying about its knowledge of the impacts of climate change as far back as the late 1970s.[8] Similarly, Valero Energy is on our list of excluded companies for actively funding campaigns to claw-back existing climate legislation in certain U.S. states and discouraging national level legislation. In both cases, we believe the harm caused by the companies' actions is significant and lasting, and we see little opportunity to address these risks at these companies through engagement.

A related expectation is that companies involved in the GHG-intensive fossil fuels industry must, at a minimum, articulate the climate change risks they face related to their business models and provide evidence of credible actions to mitigate those risks. For example, companies operating in the oil sands of Alberta face higher GHG emission challenges than other oil and gas players. The leaders in this sector acknowledge this challenge and are working to lower emissions.[9] The laggards — companies that provide no evidence that they are addressing these risks — are excluded from our portfolio. The same applies to all oil and gas companies and other relevant industries.[10] We anticipate that our expectations for oil and gas companies will continue to become more stringent as the leaders in the sector continue to raise the bar.

As noted in our introduction, the oil and gas industry is essential to our economy. There are currently few viable alternatives to oil and gas as a source of energy for transportation. This clearly needs to change, but not acknowledging this reality is counter-productive.

Coal is different, as there are viable alternatives to the burning of thermal coal for electricity generation. Recognizing this, our baseline expectations for the industry have become more stringent over time as technologies and alternatives have emerged. As such, we have very high expectations for companies in this industry. Specifically, coal companies must explicitly support the implementation of climate legislation, including a price on carbon; actively pursue carbon storage and sequestration (CCS) technologies; and refrain from mountain-top removal mining methods, a practice that is primarily conducted in the Appalachian region of the United States. As a result of these expectations, there are no thermal coal companies in the Ethical Funds portfolio. While we do invest in utilities that have coal-fired power

[8] Exxon has recently been served a subpoena by the New York Attorney General in relation to an investigation into whether the company has lied to the public or investors about the impacts of climate change: https://www.cdproject.net/en-US/Programmes/Pages/Members-List.aspx

[9] It should be noted that oil sands companies have seen a significant drop in emissions intensity over the years. However, these gains have largely flat-lined, while absolute emissions continue to grow. But, the recent collapse in oil prices has ramped up the pressure to reduce costs (and energy is a major cost for oil sands companies) and leading companies are committing to maintaining R&D in this area.

[10] For example, we have excluded insurance companies that have failed to acknowledge the risks that climate change poses to their business models.

generation, our expectation of these companies is that they are pursuing diversification strategies away from coal and supporting effective climate legislation.

It is worth noting that major investors are now following this same path. The Norwegian Pension Fund, CalPERS, and CalSTRS have all been mandated by their respective governments to eliminate or greatly reduce their exposure to coal.[11] Together, these three institutions alone represent around US$1.4 trillion in assets under management (AUM). Likewise, major banks such as CitiGroup, Bank of America and Credit Agricole SA are explicitly scaling back credit exposure to coal, based largely on climate concerns.[12] We see this as a welcome affirmation of our approach.

Engagement

While evaluation and exclusion criteria are an important part of our process, the bulk of our resources are directed toward engaging companies to address the real risks they face. We feel that a robust engagement strategy is essential to driving change.

Investor silence on carbon disclosure a risk

While engaging the companies in our portfolio on disclosing the material risks associated with climate change, we often hear that we are one of the only investors asking for this data. We believe that this is in part explained by the fact that investors are using the information provided without providing feedback to companies, but it also suggests that investors are simply not paying adequate attention to carbon disclosure. In order to continue seeing improvement in corporate disclosure, in particular across more companies, investors need to actively engage companies on providing the information in the first place, but they also need to provide informed feedback on the quality of that disclosure directly to companies. Without obvious interest from shareholders, companies will simply assume that investors do not see carbon disclosure as a material issue.

Disclose Emissions and Acknowledge the Risks

When NEI started engaging companies on climate change there was little to no company disclosure on the issue. Investors have played the critical role in changing this dynamic, and NEI has led this effort in Canada.

Disclosure is one of the building blocks of improved performance. In order to reduce its climate impacts, a company must first be able to measure its GHG emissions. Once companies begin to disclose both their emission profiles and the risks associated with these emissions, an explanation of what they are doing to mitigate and reduce emissions becomes a reasonable expectation. Public disclosure also creates an expectation among stakeholders that companies will make progress. As such, we view disclosure as fundamental to driving corporate change and have engaged extensively on this issue.

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[11] http://www.nytimes.com/2015/06/06/science/norway-in-push-against-climate-change-will-divest-from-coal.html?_r=0
http://www.pionline.com/article/20151008/ONLINE/151009858/california-governor-signs-bill-requiring-calpers-calstrs-to-divest-coal

[12] http://www.bloomberg.com/news/articles/2015-10-05/citigroup-citing-climate-change-will-reduce-financing-for-coal

The primary vehicle for encouraging disclosure from companies has been the CDP (formerly called the Carbon Disclosure Project),[13] an investor led effort to create a publicly available storehouse of corporate climate change-related information. Today, the CDP has more than 800 investor signatories representing over US$95 trillion in assets under management. NEI was the first Canadian institutional investor signatory to the CDP in 2002, was one of only three Canadian institutions that were CDP Investor Members in 2015 and was the only North American investor representative on the CDP's Oil & Gas Working Group in 2015.

In order to ensure the growth of the CDP, we have advocated for emissions reporting through dialogue, filing shareholder proposals and letter writing campaigns. In 2013, 58% of Canadian companies responded to the CDP survey, while 90% of the S&P/TSX 60 responded.[14] This represents a significant increase in response rates over the past decade. It is now the norm for all large Canadian companies — in particular large energy companies — to provide disclosure on how they are addressing their GHG emissions. This is a tangible result from our more than 10-year engagement effort.

Unfortunately, the level of disclosure of the junior oil and gas companies is still very poor. To address this shortcoming, we have worked with the Canadian Association of Petroleum Producers (CAPP) to develop sector-wide reporting expectations, and we have seen some progress.[15] Individual companies are now obligated to report their GHG emissions data to CAPP, which then aggregates these numbers into an industry average. While we continue to push for individual company disclosure, the fact that all CAPP members now have systems in place to track, measure and report on their GHG footprint is a step forward, which also removes a barrier to future, economy-wide carbon accounting and carbon pricing — namely the objection that measuring GHG emissions would be too difficult or costly. We can now definitively state that we know this is not the case.

Carbon Risks in the Banking Sector

In 2006, we became concerned that the Canadian banking sector was falling behind international peers in addressing the climate change risks in its commercial lending portfolios. To address this concern, we benchmarked the top five Canadian banks against international best practices for corporate lending policies.[16] We sought to identify the existence and assess the quality of policies that addressed climate change risk across four areas of business: corporate lending, debt and equity underwriting, advisory services and investment research analysis. Our findings were concerning — Canadian banks significantly lagged many of their international peers.

We presented our findings to the banks and embarked on a multi-year dialogue to encourage change. In some instances this involved filing shareholder proposals and in others it involved in-depth dialogues and feedback on proposed policy developments. In the end, we were successful in encouraging all the major banks to enact robust lending policies that embedded not only climate risks, but also addressed issues of equal concern such as biodiversity protection, forest conservation and Indigenous Peoples' rights. This was an important success. The Canadian banking sector influences all areas of the Canadian economy — including the oil and gas sector — and having climate-related requirements in place raised the profile of these issues for everyone.

As an illustration of the success of our engagement approach, TD, the bank that ranked last in our benchmarking, jumped to the top of the rankings when we reassessed the Canadian banks several years later.[17] The turnaround at TD was dramatic and prompted us to invite TD to join the Boreal Leadership Council, a multi-stakeholder initiative created

[13] www.cdp.net
[14] The CDP survey is sent to the 200 largest companies on the TSX index. The TSX 60 is a subset of the TSX index that consists of 60 large companies across 10 sectors of the economy. Details on the reporting rates in Canada can be found in the CDP Canada 200 Climate Change Report 2013: https://www.cdp.net/CDPResults/CDP-Canada-200-Climate-Change-Report-2013.pdf
[15] We have sat on CAPP's Responsible Canadian Energy advisory group and have actively pushed for enhanced disclosure across the industry.
[16] We did not publish the original benchmarking as this was used primarily as an engagement tool.
[17] *Credit Risk, Biodiversity and Climate Change: Canada's Banks and the Fight Against Global Warming*: http://www.neiinvestments.com/neifiles/PDFs/5.4%20Research/bankreport.pdf

to preserve Canada's boreal forest and its capacity to serve as the world's largest carbon sink. (See the Boreal Leadership Council discussion, below).

Oil Sands

Oil sands companies have a substantial carbon footprint. For this reason, in 2009 we undertook a benchmarking exercise to examine key ESG issues, including First Nations engagement, water and land impacts, innovation strategy and climate change.[18] On climate change, we examined the relative GHG-emissions intensity of each company's operations, absolute emissions growth, the degree to which each company was investing in technologies to address emissions, whether each company was performing carbon costing scenario planning and whether each had established carbon-reduction targets.

We found significant variation between the companies, but our overall impression was that there were a number of weaknesses across the board — including climate change management. Accordingly, we embarked on a multi-year engagement campaign with the benchmarked companies in our portfolio to address these weaknesses.[19]

The following climate-related issues came to light through the benchmarking and were further refined through our ongoing engagement.

Carbon Scenario Planning

We found that very few of the companies operating in the oil sands were using a shadow carbon price to assess the viability of future production. Shadow carbon pricing refers to the application of a range of carbon pricing scenarios to the projected costs and profitability of future projects, in order to assess their potential profitability in a carbon-constrained environment. Considering the long life span of oil sands projects (up to 40 years for some), it is almost certain that they will face increased costs of carbon in the future.

When we started engaging on this issue, there were only two companies that disclosed any information about the range of carbon prices they assessed their projects against. Encana disclosed this information only because we had filed a shareholder proposal on the issue the previous year. Two years later, we filed the same proposal with Suncor Energy, and withdrew it after the company agreed to disclose a detailed carbon costing impact analysis of any future oil sands projects.

Today, after several years of engaging on this issue, few, if any, large companies in the oil sands — and indeed across the oil and gas industry — do not have some form of carbon scenario planning in place. We consider this a success for several reasons.[20]

From an investor's perspective, the fact that companies are now actively planning for a future where there is a significant price on carbon represents a substantial shift in the mindset of the industry, and we believe an indication that it will be less likely to fight progressive climate policies now that the uncertainty about the impacts of a price on carbon has been reduced. Further, if the numbers don't look good we believe marginal projects will not be developed, thus reducing the risks for investors and the environment.

From a policy perspective, encouraging companies to disclose the range of carbon prices they stress-test their projects against has a useful side-effect. Companies are required to report to investors if they uncover material risks to their business. The message from companies that have disclosed carbon pricing scenarios ranging up to $75/tonne of CO_2 is that even in these pricing scenarios their projects are still profitable. This is a very important assertion when it comes to

[18] *Lines in the Sands: Oil Sands Sector Benchmarking:*
http://www.neiinvestments.com/neifiles/PDFs/5.4%20Research/lines_in_the_sands.pdf
[19] We had already begun to engage on some of these issues before conducting the benchmarking.
[20] See Sustainable Prosperity's *Towards a Green Economy for Canada*:
http://www.sustainableprosperity.ca/dl864%26display

convincing government of the need for a price on carbon. We can now point to these disclosures to counter the argument that any price on carbon will threaten the viability of the oil and gas industry.

Steam-to-oil Ratio

Another of the findings from our oil sands benchmarking was that in-situ[21] oil sands companies were not consistently disclosing their steam-to-oil (SOR) ratios. The SOR is a measure of the efficiency of the in-situ project — those projects with a low SOR burn less natural gas to extract the bitumen, which in turn leads to the production of fewer GHGs. Companies were reluctant to disclose these ratios, in part because of the poor SORs that some projects were achieving.

We engaged all the companies with in-situ projects on SOR disclosure, but focused specifically on the companies who had the best SORs. The rationale for this was to encourage the leaders to use this indicator as a differentiator. We believed that once these companies regularly disclosed the efficiency of their operations, investors would begin to ask for this information from all companies. This has turned out to be the case and now virtually every in-situ project publishes its SOR performance. More importantly, mainstream investors are now asking companies to explain their strategies for keeping their SOR numbers down, resulting in increased pressure on the industry to improve the efficiency of their operations. This represents another concrete result from our multi-year dialogue.

Innovation

Another important finding — and the most disputed by companies — from our benchmarking was the relatively low levels of research and development (R&D) spending in the sector. The industry had lower R&D numbers than almost all others across the economy. For an industry that touted its technological advancements, we found this shocking. The companies in the study initially rejected the finding, stating that they did spend significant amounts on research but just did not disaggregate these data for the benefit of investors, but most eventually acknowledged the need to provide this information and improve on this metric.

Beyond R&D spending, very few of the companies appeared to have a culture that embraced innovation, which we considered to be a strategic barrier to meaningful improvement. This topic was therefore integrated into all of our dialogues with oil sands companies. Some companies, such as Cenovus Energy, responded quickly. Cenovus began disclosing not only its R&D spending, but also made public commitments to create new, game-changing technologies. Further, the company ensured that environmental strategy and innovation was at the forefront of its overall plan by creating a Senior Vice President position explicitly responsible for strategy and environmental performance. As is often the case when engaging companies, we were able to use the example of Cenovus to encourage other companies to develop a more innovation-focused culture. The impacts from several years of engaging on this topic have been twofold.

First, companies are now regularly reporting on the amount they spend on R&D to drive new technologies and working to position themselves as leaders in innovation, creating more of a “race to the top” mentality. This has led to the understanding among shareholders that companies with weak R&D programs are considered a higher risk. We believe this expectation will become further ingrained as the risks associated with future carbon pricing and growing fuel costs become more material.

This new paradigm is evidenced by recent comments from Suncor Energy’s CFO in response to the pressure that 2015’s persistently low oil prices were having on corporate budgets: despite undertaking major cuts to its capital expenditures and workforce, the company remains committed to keeping its R&D budget intact.[22]

The second impact is related to something we highlighted in our 2009 benchmarking. Specifically, we noted that there were several instances where companies had worked together to tackle environmental challenges. We thought this model was sound and suggested that the industry should greatly increase its level of collaboration on environmental innovation.

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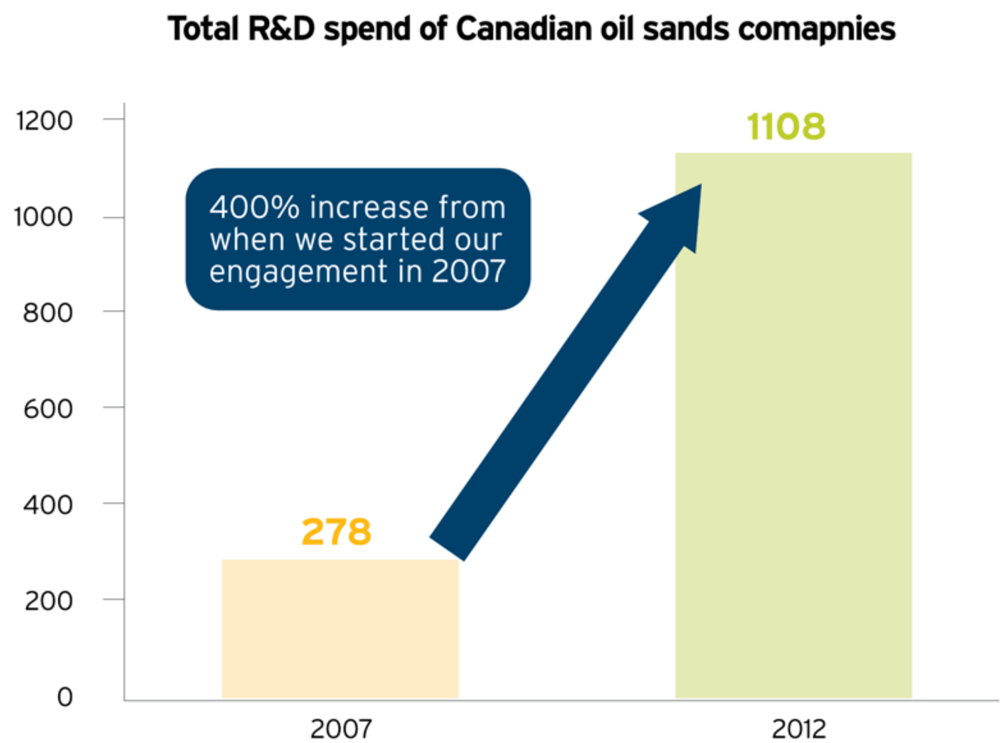
[21] Those companies that inject steam underground to remove the bitumen, as opposed to mining it at the surface
[22] http://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/oilpatch-takes-aim-at-rd-spending-to-make-way-for-more-cuts/article26374102/

It turns out that the industry was listening. In 2012, the industry launched the Canadian Oil Sands Innovation Alliance (COSIA), a significant and unprecedented alliance of oil sands producers working together to accelerate the pace of improvement in environmental performance[23] in four priority areas, including GHGs. The members of COSIA have taken the extraordinary step of sharing proprietary patents on environmental technologies in the interest of driving further innovation. Moreover, the terms of membership require each company to dedicate internal resources to R&D activities. This should have a far-reaching effect that goes beyond just the oil sands industry. For example, as the industry works on ways to increase the efficiency of steam generators, water treatment technologies and other industrial processes, it is likely that it will develop technologies and concepts that can be applied in other industries. This shift to embrace innovation is a positive step that we are proud to have influenced.



Reducing Methane Emissions

Much of the focus of our engagement with companies on the issue of hydraulic fracturing (fracking) has been the potential impacts to water and the cumulative impacts of fracking operations in areas such as northeastern British Columbia. However, a crucial aspect of fracking is the potential for significant methane emissions, particularly in the form of emissions associated with flaring and venting. NEI has been one of a coalition of investors asking companies to adopt hydraulic fracturing principles that, among other objectives, would see companies reduce or eliminate the flaring and venting of methane.[24] This work has been undertaken through our membership in the UN Principles for Responsible Investment (PRI).[25]

[23] http://www.cosia.ca/

[24] We are supporters of the Investor Environmental Health Network's Extracting the Facts principles, a set of best practices related to fracking that have broad investor support. We provided input into the final document and have alerted companies to the framework in our dialogues. http://www.iehn.org/publications.reports.frackguidance.php

[25] http://www.unpri.org/

Methane is a potent GHG[26] that is found across the oil and gas supply chain — from production to transportation to refining. Some methane emissions are intentional (e.g. the venting of gas from heavy oil wells to reduce dangerous build up) and some are the result of faulty valves and seals (termed fugitive emissions). Regardless of the emissions pathway, methane is not only a dangerous GHG, it is an economic waste. Research has shown that capital expenditures on reducing methane emissions can result in net positive revenues for operators.[27]

This engagement is ongoing, but the economic rationale for eliminating needless flaring and venting is strong and, as such, investors are gaining ground on this topic. Companies are now setting targets for reducing flaring and venting. Progress on this front will be aided by recent regulatory and political commitments to reduce methane emissions.[28] In a similar vein, we have been in dialogue with companies such as Encana, pressing for detailed disclosure of venting and flaring numbers on a play-by-play basis, which will help investors determine exactly where each company is facing issues relative to excessive flaring and venting and allows for direct pressure for improving performance. Once we have had success in pushing one company to adopt a leadership position (e.g. setting flaring reduction targets or providing detailed play-by-play disclosure) we will use this to leverage change with other companies.

Unburnable Carbon

The unburnable carbon thesis (sometimes called the “carbon bubble”) is an elegant explanation of a very complex problem, and one of the most compelling concepts we have seen in relation to the nexus of ESG issues and investor risks.[29] It is accepted that if we are to meet our current climate change mitigation goals, the most tangible of which is limiting global warming to 2 degrees Celsius, our economy simply cannot burn approximately 80% of the currently recognized fossil fuel reserves on the planet. Yet public fossil fuel companies continue to put billions of dollars towards efforts to find even more reserves because the market places significant value on their ability to replace reserves. This predicament has been dubbed the carbon bubble — implying that once it becomes clear that these reserves cannot be burned, the value of fossil fuel companies will plummet, leading to the stranding of assets and resulting in potentially catastrophic impacts on investor portfolios.

It would be foolish to ignore the carbon bubble thesis simply because of uncertainty about imminent action from governments on climate change. Responsible investors should be compelled to take the time to internalize the message the carbon bubble represents — that the current trajectory is not sustainable.

The challenge lies in what to do next. For our part, we have been engaging with a diverse set of stakeholders to help us understand the risks of unburnable carbon. For example, in November 2014, in collaboration with the Royal Bank of Canada, Suncor Energy and the Pembina Institute, we held a day of learning on unburnable carbon and stranded assets. The event was a full-day conversation between companies, investors, academics, think-tanks and environmental NGOs with the aim of better defining the risks of stranded assets and identifying strategies to mitigate these risks. The event was well attended and well received, with numerous attendees noting it was unique to have such a diverse set of stakeholders at the table. Our own finding from the event was that the risks of stranded assets are real and warrant further exploration.

We have incorporated the problem of stranded assets into our engagement program. We are actively discussing the issue with the companies in our portfolio to help us understand the risks and how companies are working to mitigate them. These conversations are still in their infancy but we see a number of potential avenues we can pursue.

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[26] With a global warming potential up to 25 times that of CO_2.

[27] https://www.edf.org/sites/default/files/methane_cost_curve_report.pdf

[28] The Environmental Protection Agency in the US has proposed regulations that would reduce methane emissions by 45% (http://www3.epa.gov/airquality/oilandgas/methane.html) while Alberta’s recent climate announcement included a commitment to cut methane emissions by a similar amount (http://alberta.ca/climate/methane-emissions.cfm)

[29] For our newsletter story on the carbon bubble, see here: http://www.neiinvestments.com/NEIFiles/PDFs/5.1.4%20Sustainable%20Investing%20Update/ESG%20Newsletter%202013/ESG_12_13_En_web.html

In particular, we see potential to identify avenues for diversification that would enable companies to use the profitability of current business models to develop positions in the market for renewables and other low-carbon technologies.[30] In some instances, we feel the case can already be made that an investment in renewables would have a lower risk profile and a more profitable outcome than many of the complex oil and gas projects under consideration today. Unfortunately, current investor expectations are a significant impediment to exploring these options with companies. As such, part of our challenge is to find ways to remove investor inertia behind traditional approaches to valuing fossil fuel companies. We are currently looking at options for pushing this agenda with investors.

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Inevitably, there will be companies that do not respond to engagement and will not show the potential to meet our long-term objectives for the industry. Certainly not every fossil fuel company has the potential — or the will — to transition to a low-carbon model. This is to be expected. These companies will eventually no longer meet our baseline expectations and we will shift our investments to more progressive companies and industries.

Governance and Diversity

Companies face an increasingly complex set of material risks that are inherently ESG-related — from social licence and consultation issues to impacts on water and carbon emissions — yet most boards of directors have failed to change their makeup in any significant way in response. Many boards are structured to meet the challenges of yesterday, not today.

This is particularly true of oil and gas companies in the face of climate change risks. We track diversity performance across all sectors and we find the performance of the extractives sector to be particularly alarming. Not only do extractives sector companies display poor gender diversity (only 13% of extractives companies on the S&P/TSX Composite Index had a female director in 2015), they are often too homogenous in ways that make them ill equipped to address material ESG issues, including a lack of diversity in experience. We view this as a critical shortcoming.

The key strategic function of a board is to mitigate risk: financial, social and environmental. By having members with diverse backgrounds, knowledge and experience, boards can better foresee a variety of risks and avoid the dangers of “group think” that can occur where there is an absence of diverse experiences.

In fact, research has demonstrated that companies with greater gender diversity at the board level outperform on key ESG metrics against peers that lack diversity.[31] Of possibly greater interest to companies is the finding that for each female board member the cost of an acquisition is 15.4% less than if there are no women on the board.[32] In a time of expectations of increased mergers and acquisitions in the sector due to the turmoil caused by low commodities prices, having strong female representation on boards should be considered a sound business strategy.

From a workforce perspective, the extractive industries have done poorly in recruiting women, and a lack of diversity at the most senior levels likely reinforces this challenge. It is likely that by expanding the search for board members to include direct, professional ESG experience, companies will be more likely to find women in senior leadership positions that are suitable board candidates.

However, recruiting women alone will not address the current shortcomings in board readiness. Companies need board directors that have a deep understanding of climate change risks or are familiar with the challenges of cultivating a culture of innovation. That is the fundamental challenge facing fossil fuel based companies — greatly increasing their

[30] For a great example of this, albeit not from the energy sector, see Microsoft’s Carbon Fee. This is a novel way to fund internal efficiency projects and one which we are pushing energy companies to adopt. http://www.microsoft.com/environment/our-commitment/our-footprint.aspx

[31] Harjoto, M.A., Laksmana, I., & Lee, R.H. (July 10, 2014). *Board Diversity and Corporate Social Responsibility*. Journal of Business Ethics (Published Online) DOI: 10.1007/s10551-014-2343-0

[32] Levi, M., Li, K. & Zhang, F. (December 2013). *Director gender and mergers and acquisitions*, Corporate Finance Journal Volume 28, 185–200.

ability to embrace innovation and potentially new business models. Boards have a responsibility to steward this transformation.

We have acted to drive board diversity through both our proxy voting and direct engagement. Over the last three years, we have voted against the appointment of directors 849 times based solely on diversity concerns. Through our engagement with companies on this issue, we have heard that boards pay attention to these decisions and that having a greater number of institutional investors taking similar actions would have a real impact. As such, we plan to encourage fellow investors to develop proxy voting guidelines that will incent diversity.

On the engagement side, we are in the second year of an engagement program aimed at increasing the diversity of our portfolio companies. Extractives companies, due to their poor diversity performance and key ESG risks, have been the biggest focus of the campaign. The early results are encouraging — several target companies either adopted a board diversity policy or directly nominated a woman to the board. While this is a small step towards a climate change ready board, it is an important one.

Linking ESG Metrics to Executive Compensation – Pay for Performance

It is common practice in the corporate world to explicitly link executive compensation to the attainment of key performance metrics such as share price growth, earning growths, production growth, etc. The theory is quite simple — if you want executives to attain specific goals you should incent them to achieve those goals. While we don't always agree with the quantum of executive pay decisions, we do share the belief that pay should reflect performance.

However, in the case of clearly material ESG risks, companies have not always shown the same willingness to commit to explicit links between performance and pay. As such, we have carried out a multi-year engagement with company boards on creating explicit, and significant, links between compensation schemes and company performance on key material ESG risks. We have seen significant progress on this front.

When we began our engagement over eight years ago, companies either provided no indication that ESG factors influenced pay or provided no detail on the metrics used or the assessment of performance. This was particularly discouraging for the oil and gas sector, which clearly faces every material ESG risks. After several years of engagement with both boards and senior executives, we are pleased to see ESG performance metrics as an explicit consideration in the majority of extractives companies in our portfolio. Most companies provide a clear breakdown of how ESG performance impacts actual pay (some companies tie up to 25% of the CEO's bonus to ESG performance) as well as the performance targets set. The conversation with companies has now shifted from whether executive pay should be tied to ESG performance at all, to whether the current linkage is strong enough and whether the correct metrics are being incented.

Related to energy transition, we are increasingly pushing companies to explain how executives are incented to improve upon key carbon-related metrics such as increased energy efficiency, reduced GHG emissions, increased innovation, etc. We believe that companies will be expected to show significant gains against key carbon risks as a matter of both economic efficiency and social licence expectation, and as such we expect future compensation plans to be explicitly linked to relevant carbon-related metrics.

In the case of Canadian Natural Resources, we actively engaged the compensation committee of the board to include specific GHG-intensity goals in the compensation framework. After initially doing so, the company removed the metric from its 2012 corporate scorecard. We lobbied the committee to reinstate the carbon-intensity metric in light of the very material risks the company faces as a producer operating in the carbon-heavy oil sands. We were pleased to see the company reinstate the metric the following year and are now pushing other companies to follow suit.

Supporting Progressive Policy

An important message in our energy company dialogues is that companies need to be more transparent about the positions they are taking in the climate policy arena. We are wary of the dynamic whereby companies state support for addressing climate change risks in their corporate social responsibility reporting, but possibly saying something very different in their discussions with government. This is clearly an unhealthy dynamic and one that we have made very clear is not acceptable. Not only is this counter-productive for the advancement of climate policy, it is a significant risk to corporate reputation. At a time when the energy industry is facing deep scepticism, such actions will do far more harm than good to the industry. We feel that our persistent message on this issue has resonated with the energy industry and the disclosure of public policy positions (beyond what is required under the Lobbying Act) is becoming the norm for leading companies and industry associations.

We are currently working in collaboration with other investor members of the PRI to engage with industry associations and companies about active lobbying on climate change regulation. We are at a critical time with respect to progressive policy development and, as such, it has never been more important for companies to hear from investors on the issue. This is why we have chosen to undertake a collaborative effort. We note that this engagement resonates with companies and associations precisely because we are also financially invested in their wellbeing.

The problem with industry associations…

The oil and gas industry exhibits a large divergence between the public rhetoric of member companies and the actions of industry associations, a pernicious problem that is a source of significant concern for investors, as companies can state progressive positions on one hand, and then allow industry associations to thwart any moves by government that would lead to substantive actions, thus making the risk of companies having to act on their progressive positions nil. Most prominent in the U.S., where industry associations such as the American Petroleum Institute and the U.S. Chamber of Commerce have aggressively lobbied against climate regulations, the situation is also a concern in Canada, Europe and elsewhere.

Investor campaigns have asked companies to abandon those associations that are openly fighting climate action, which has been effective in extreme cases, but this is a more challenging tactic when the association position is more subtle.[1] In the Canadian context, the key challenge is that CAPP, the main industry lobby group, represents an enormously diverse set of companies, from major oil and gas companies to numerous small cap producers. As such, CAPP is often seen to be playing to the lowest common denominator and has not been as progressive as its biggest members. However, CAPP also provides lobbying services on a number of issues that the large companies don't have the resources to engage on themselves so the prospect of leaving CAPP is unappealing, and despite years of engaging companies to either publicly register their dissatisfaction with CAPP positions or leave, we have seen little progress.[1]

We have instead chosen to engage with CAPP directly, and to encourage CAPP members to do so as well. We believe we have seen progress on this front, and CAPP now discloses its position on climate legislation.

- http://www.capp.ca/environmentCommunity/Climate/Pages/CAPP-Policy-Principles.aspx

Above and beyond disclosing government lobbying positions, we have encouraged companies to publicly support a price on carbon, which ties into our strategy in relation to disclosing carbon pricing scenario planning. Taken together — energy companies stating that they are in favour of a price on carbon and that their own analyses show that they will not be bankrupted by such a development — we have a powerful narrative that makes it increasingly difficult for government inaction. We have engaged Suncor Energy on these issues for a number of years, and view the company's current disclosure on its policy positions as a best practice that we use as a reference point for our dialogues with other companies.[33] Moreover, the company's explicit support for a price on carbon has been a critical driver of climate policy changes in Alberta.[34]

Our belief that oil and gas companies can have a positive impact on policy development and that their support is essential to progress on climate policy has been bolstered by recent events. We note that the announcement of Alberta's new climate change strategy, which saw the government commit to a broad price on carbon and a cap on

[33] Suncor's policy disclosure, including its support for a price on carbon, can be found here: http://sustainability.suncor.com/2013/en/about/public-policy-participation.aspx

[34] http://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/boss-of-biggest-oil-sands-player-calls-for-tougher-action-on-climate-change/article24574011/

emissions from the oil sands, was attended by four oil sands company CEOS. We have been encouraging three of these companies over several years (Suncor Energy, Cenovus Energy and Canadian Natural Resource) to be more proactive and vocal in supporting the implementation of progressive climate policy, and we believe their participation was a crucial factor in changing Alberta's policy for the better.

Tackling the Demand Side

While much of our work on mitigating climate change risks and supporting the energy transition has focused on the producers of fossil fuels, we believe that absent a reduction in demand this work will eventually be for nought. This reduction will come about through two key avenues: the development of low carbon alternatives and the greatly increased efficiency of energy use.

Direct investment in companies working on technologies specific to these areas is the clearest intervention an investor can make. However, the role of investors in engaging companies that create the demand for fossil fuels (i.e. the rest of the economy) has largely been overshadowed by the focus on producers. Companies across all sectors have a role to play in both incenting the growth of renewables — through commitments to purchase renewable energy — and in driving down their own emissions through efficiency measures and adoption of new technologies.

Our dialogues with demand-side companies are still relatively and we are working to understand the key opportunities for each sector. Support for carbon pricing has been one focus area[35] and we are specifically asking all companies in these sectors to enhance their disclosure on this topic. Our focus on demand-side company engagement will continue to grow as we learn more about best practices. Please see the Engagement section of our website for a description of companies we have engaged on this issue: https://www.neiinvestments.com/pages/about-nei/about-ethical-funds/esg-difference/corporate-engagements/.

Proxy Voting

We take our right to vote at company Annual General Meetings seriously, and ensure that each and every one of our proxies is reviewed and voted by our analysts. We note that this is not the case for many institutional investors, who rely largely on third-party service providers to vote and often just follow the recommendations of management. Our voting is based on our ESG-based Proxy Voting Guidelines, which are designed to complement our engagement objectives.[36] As such, we regularly use our proxy voting process to push boards on the issue of climate change. As noted elsewhere in this paper, we feel that corporate governance is a key foundation that enables companies to embrace innovation and effectively address the key risks and opportunities associated with climate change.

Over the last three years we have voted on 25 climate-related shareholder proposals, supporting the proposal 80% of the time. Where we voted against a climate change related proposal it was generally because the company had already addressed the issue raised. It is noteworthy that climate-related proposals are starting to gain significant support from shareholders and hope to see this trend continue.

We have also implemented new proxy voting guidelines that compel us to vote against certain committees or chairs if we believe the company has not adequately addressed key ESG risks.[37] We have used this guideline to express dissatisfaction with companies that have displayed inadequate climate disclosure. We believe that failure to address key climate risks is a sign of poor governance, and academic research has shown a positive correlation between voluntary carbon-related disclosure and good corporate governance.[38] As such, we believe that inadequate disclosure on climate related risks should be a key concern for all institutional investors.

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[35] To support this work we have actively promoted the work of experts such as the EcoFiscal Commission to our portfolio companies (http://ecofiscal.ca/)

[36] Our Proxy Voting Guidelines can be found at: http://www.neiinvestments.com/pages/about-nei/about-ethical-funds/esg-difference/proxy-voting/.

[37] The 2016 Proxy Voting Guidelines will contain this new guidance.

[38] "Board Effectiveness and the Voluntary Disclosure of Climate Change Information," Amar and McIlkenny, Business Strategy and the Environment, 2014. http://sites.telfer.uottawa.ca/cga-agrc/publications/

Our Engagement Influence

- GHG disclosure is widespread (and improving)
- Companies adopting carbon pricing scenario planning
- Companies publicly supporting (and asking for) a price on carbon
- Significant increase in R&D spend, heightened focus on innovation
- Collaboration on shared environmental challenges
- Efficiency metrics (e.g. steam-to-oil ratio) now embraced by mainstream analysts
- Adoption of targets/programs for reduced flaring and venting of methane
- Explicit linkage between exec comp and ESG performance
- Embedded carbon risk analysis into bank lending policies
- Increased diversity at the board level

NEI's Public Policy Work

While we strongly believe that corporate engagement is often the best way to affect real change, there are instances where a company-by-company approach is either inefficient or too slow, for example under a regulatory framework that is hindering or failing to enable the ability of companies to make progress on an issue. In these situations, we engage governments, regulators and standards setters to achieve broad changes across entire sectors or jurisdictions.

To that end, we have made numerous submissions to both provincial and federal governments, making the investor case for placing a meaningful price on carbon.

Most recently, in September 2015 we co-led a collaborative investor submission to the Alberta government highlighting investor support for substantive upgrades to the Alberta climate change strategy. This letter had more than 120 signatories representing over $4.6 trillion in AUM and was delivered to the government in person at an Edmonton climate summit.[39] In this instance, our networks had informed us that the recently elected government was seeking the public support of investors for its stated ambitions to overhaul Alberta's climate policy in order to blunt the criticism it was already receiving for suggesting that Alberta needed to improve its performance.

This was a unique opportunity to drive substantive policy changes in the province that has the largest GHG footprint. We subsequently published an op-ed in the Edmonton Journal highlighting the letter in order to further foster a supportive environment for progressive policy. [40]

The collaborative letter was one of three submissions we delivered to Alberta in 2015, and we believe our efforts resulted in significant policy gains.[41] Specifically, in November 2015 the Alberta government announced a new and

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[39] Our 2015 investor letter to Alberta, organized along with colleagues Shareholder Association for Research and Engagement, can be found here: https://www.neiinvestments.com/documents/PublicPolicyAndStandards/2015/Premier%20of%20Alberta%20Collaborative%20Investor%20Letter.pdf

[40] http://edmontonjournal.com/opinion/columnists/opinion-investors-need-a-strong-climate-policy

[41] We initially wrote to the new Premier to provide our support for initiating a process to overhaul the province's climate policy. Once this process was announced, and after the delivery of the collaborative letter, we provided detailed comments on our priorities for policy development. Both letters are here:

decidedly more robust climate change policy that contained many of NEI's proposed changes.[42] Namely, the government committed to: implementing an increasingly stringent price on carbon, increasing the stringency of the marginal cost carbon pricing system for large emitters, the early-phase out of coal-fired power plants and using funds from the price on carbon to support the development of innovative technologies. Further, the government committed to an overall cap on oil sands emissions that will effectively result in a slowing of the pace of development, something NEI has advocated for in numerous submissions.

We have similarly embraced the opportunity to share our investor perspective on climate change policy with other provincial governments as they continue to develop their climate policies. Specifically, we expressed support for substantive climate change policies with both Ontario and British Columbia.[43] In the case of Ontario, there were actions that we believed could have significant impact on the role that investors could play, largely due to the significant influence of the Ontario Securities Commission (OSC). Ontario has subsequently announced that it will be implementing a price on carbon, a key aspect of our submission, through the development of a cap and trade system for carbon emissions.

In 2013 and again in 2014, we wrote to the Alberta and Federal governments to make the case that investors are supportive of a price on carbon and, moreover, that our conversations with energy companies have led us to believe that the industry will continue to thrive in such an environment. More importantly, we stated that we see a need for significantly increased investment to identify and develop breakthrough technologies that can compete with, and eventually replace, fossil fuels and that a price on carbon is an ideal source of revenue for these investments.[44]

We made a similar case in response to Environment Canada's 2013 consultation on a federal sustainable development strategy for Canada, noting that lack of access is already impeding the financial viability of the oil sands in particular, and that a price on carbon could go some way to alleviating these challenges.[45]

We have many other examples of our climate related policy work, which are listed below along with those already described. We believe it is important for governments to hear from investors on the issue of climate change policy and will continue to make this aspect of our policy work a priority.

- Alberta Climate Change Advisory Panel: Renewing Alberta's Climate Change Framework (September 30, 2015)
- 2015 Alberta Climate Summit (September 9, 2015)
- Premier of Alberta: Collaborative Investor Letter Supporting the Renewal of Alberta's Climate Change Policy (September 8, 2015 - lead signatory)

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https://www.neiinvestments.com/documents/PublicPolicyAndStandards/2015/Premier%20of%20Alberta%20Renewing%20Alberta's%20Climate%20Change%20Framework.pdf

[42] http://alberta.ca/release.cfm?xID=38885E74F7B63-A62D-D1D2-E7BCF6A98D616C09#

[43] Our submission to Ontario can be found here:
http://www.neiinvestments.com/documents/PublicPolicyAndStandards/2015/Ontario%20Climate%20Change%20Consultation%20-%20NEI%20Comments.pdf
Our submission to BC can be found here:
https://www.neiinvestments.com/documents/PublicPolicyAndStandards/2015/Premier%20Christy%20Clark%20-%20Call%20for%20Bold%20Action%20on%20Climate%20and%20Energy.pdf

[44] Our 2014 letter to Alberta can be found here:
http://www.neiinvestments.com/documents/PublicPolicyAndStandards/2014/Alberta%20Carbon%20policy%20letter%2020141217.pdf
Our 2013 letter to Alberta and Canada can be found here:
http://www.neiinvestments.com/Documents/PublicPolicyAndStandards/2013/NEI%20Comments%20on%20Specified%20Gas%20Emitters%20Regulation.pdf

[45] Our letter to Environment Canada can be found here:
http://www.neiinvestments.com/Documents/PublicPolicyAndStandards/2013/NEI%20Investments%20-%20Federal%20Sustainable%20Development%20Strategy.pdf

https://www.neiinvestments.com/documents/PublicPolicyAndStandards/2015/Premier%20of%20Alberta%20Collaborative%20Investor%20Letter.pdf

- Roundtable Discussion on Energy and Environment Policy in Alberta (July 28, 2015)
- Premier of Alberta: Renewing Alberta's Climate Change Framework (June 25, 2015) https://www.neiinvestments.com/documents/PublicPolicyAndStandards/2015/Premier%20of%20Alberta%20Renewing%20Alberta's%20Climate%20Change%20Framework.pdf
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Multi-Stakeholder Initiatives: Boreal Leadership Council

The Boreal Leadership Council (BLC), first convened in December 2003, is comprised of leading conservation groups, First Nations, resource companies and financial institutions; all with an interest in the future of Canada's boreal forest. The BLC calls for a network of large interconnected protected areas covering half of the boreal forest and the use of leading-edge sustainable development practices in the remaining areas.[46]

The boreal forest circles the globe at subarctic latitudes, covers more than 10% of the world's area and contains half of the world's remaining intact wilderness tracts. More than this, the boreal forest regions store more carbon than any other terrestrial ecosystem, almost twice as much per acre as tropical rainforests.[47]

NEI joined the BLC in 2005 and Robert Walker, Vice President Ethical Funds and ESG Services, is the outgoing chair. In the ten years of its existence, through a variety of partnerships and projects, the BLC has helped advance significant protection for Canada's boreal forests. Over 350 million acres in Canada are under permanent or interim strict protection or have been committed to strict protection in the future.[48] This is more than the land mass of France, Germany and the U.K. combined. In addition, governments and industry have pledged to sustainably develop more than 350 million acres using state-of-the-art stewardship practices.[49] The BLC has also taken a leading role in advancing the concept of free, prior and informed consent for Aboriginal Peoples and on the application of strategic regional environmental assessments.

The BLC represents a model for how organizations with different mandates can coalesce around a common set of ambitious goals and effect significant change.

NEI's Product Solution

On January 11, 2016, we launched the NEI Environmental Leaders Fund. The Fund, which is managed by Impax Asset Management Limited, invests in companies around the globe that offer solutions to the world's environmental challenges, including energy transition.

As a growing population and increasing consumption continue to put pressure on finite natural resources, optimization of resources is more critical than ever. As a result, a thriving economy is emerging in the areas of energy efficiency, alternative energy, resource recovery, water infrastructure and treatment, pollution control and waste management, and sustainable food, agriculture and forestry, with new opportunities for growth – and profit. The NEI Environmental Leaders Fund will seek to capitalize on these markets and the investment opportunities that come with them.

Impax manages and advises on approximately US$4.7 billion, primarily for institutional clients through both listed and private equity strategies. Impax' investment approach is based on a strong conviction that population dynamics, resource scarcity, inadequate infrastructure and environmental constraints will profoundly shape global markets, creating investment risks and opportunities, and that these trends, reflecting the transition towards a more sustainable global economy, will drive earnings growth for well-positioned companies.

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[46] http://www.borealcanada.ca/

[47] http://www.borealbirds.org/resources/carbon/report-full.pdf
[48] http://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2015/04/sustaining-canadas-boreal-forest
[49] Ibid

The NEI Environmental Leaders Fund represents an additional and critical piece of our energy transition strategy, in that it is designed to:

- complement and enhance our evaluation and engagement strategies;
- allow us to invest in competitive sustainability leaders that are focused to provide solutions to the environmental challenges we have been tackling for decades; and
- provide a global equity solution that can be considered by investors that are seeking to invest in companies that are leading the transition to a sustainable economy.

Beyond Carbon

While the focus of this report has been NEI's work on climate change related topics, and on our work with energy companies specifically, it is important to note that this is only one aspect of the work we do. We evaluate, engage and create policy submissions on a host of material ESG issues. Our work covers topics such as human rights, aboriginal engagement, water impacts, sweatshop working conditions, gender diversity, reasonable executive compensation and sustainable food systems. We are equally committed to our responsible investment philosophy for these topics as well. Please visit the Engagement and Research sections of our website to see the full breadth of issues we address.

Closing thoughts and next steps

The lead-up to COP 21 saw an enormous amount of attention paid to the role of investors in driving the energy transition, with a plethora of announcements and initiatives aimed at both supporting a progressive global agreement and catalyzing new investment streams. We believe this momentum is a good thing — regardless of whether we agree with the utility of all strategies. The very fact that investors are paying attention has put us on the right path. Critical to our success will be focusing on those strategies that have the biggest payoff and that address the real challenges we face.

We believe that we, along with our peers following similar strategies, have had much success in driving quantifiable progress at the corporate level and in the policy sphere. The launch of the NEI Environmental Leaders Fund is the latest evolution of our strategy, and we believe it will be critical to our success in driving the energy transition. We plan to continue implementing our strategy of reducing our exposure to companies facing the biggest risks through exclusions, engaging with our portfolio to mitigate current impacts and take advantage of future opportunities, advocating for a robust policy environment that incents the transition, and investing directly in the emerging technologies and sectors that will be required — and profitable — in a low-carbon, resource-constrained world.

While there are signs that many investors are becoming aware of their role in driving the transition, we feel there is an imperative for greatly increased action. We believe there are concrete steps that investors can take immediately that will have a beneficial impact. Not every investor is ready or even has access to the tools to implement all strategies at once. However, every investor is comfortable with at least some of the possible actions that will be required to smooth the transition to a low-carbon economy. We list these opportunities below.

Please consult with your own professional advisor on your particular circumstances.

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Investor actions to drive the energy transition

Exclusion

- Exclude any company that is actively fighting the implementation of progressive climate policy or willfully misleading or ignorant of the material risks associated with climate change.

Engagement

- Demand disclosure on company efforts to manage the risks and opportunities associated with climate change from all heavy GHG emitters in portfolios.
- Ask companies how they plan to remain viable in a low-carbon future — let them know it is a material concern.
- Ask companies to show leadership in publicly supporting climate policy implementation — or at least be transparent in their positions.

Governance

- Support shareholder resolutions that ask companies to disclose carbon-related risk management strategies.
- Demand that companies implement board and executive diversity strategies (gender, culture and experiential diversity) and vote against key board members where company response is inadequate.
- Vote against key board committee members at those companies that are not adequately disclosing the risks and opportunities related to climate change — and communicate the rationale for such votes to the board.

Policy

- Actively (preferable publicly) engage governments, asking for the implementation of robust climate change policies.
- Engage with securities regulators and standards setters to make disclosure on climate change risks mandatory.
- Join collaborative investor efforts to drive proactive climate policy changes.

Investment

- Seek innovative ways to invest in the companies that are working on solutions towards the energy transition.