

September 30, 2015

Climate Change Advisory Panel
11th Floor, South Petroleum Plaza
9915-108 Street
10800 - 97 Avenue
Edmonton, Alberta T5K 2G8

Sent by email to: ab.ccp@gov.ab.ca

Re: Renewing Alberta's Climate Change Framework

Dear Panel:

We are writing to submit the following comments to the Climate Change Advisory Panel's (the Panel) request for input into a new action plan on climate change for Alberta. We appreciate the opportunity to provide feedback and commend the government of Alberta for convening the Panel. We are firm believers that lasting and sustainable solutions require the input of all stakeholders. While the Panel's mandate is a daunting one, it is of the utmost importance to Alberta's future and it is within this context that we provide the following comments.

With approximately C\$6 billion in assets under management, NEI Investments' approach to investing incorporates the thesis that companies integrating best environmental, social and governance (ESG) practices into their strategy and operations will build long-term sustainable value for all stakeholders and provide higher risk-adjusted returns to shareholders. We invest globally and are the largest provider of retail socially responsible investment (SRI) funds in Canada. Alberta-based companies are a key part of our portfolio and at times have represented close to 15% of our total worldwide equity and bond holdings. Our holdings include companies that operate in the conventional and unconventional energy sectors in Alberta, as we believe these resources can be developed responsibly in a way that creates value for all stakeholders.

We have been actively engaging Alberta-based companies on responsible energy development for many years and have developed a deep understanding of the challenges and opportunities facing Alberta's energy companies. As well, we have sat on the Canadian Association of Petroleum Producers (CAPP) Responsible Canadian Energy (RCE) advisory panel for the last few years. We are committed to seeing Alberta's energy resources developed responsibly.

As an investor in companies operating in Alberta, carbon policy is a material topic for our portfolio. We believe that the implementation of a fair, robust and credible carbon policy will be critical to the performance of the energy sector and key to the diversification of Alberta-based investment opportunities writ large. We strongly agreed with the 2011 findings of the Premier's Council on Economic Strategy that the optimization of Alberta's natural resources means using the profits from today's development to fuel the diversification of opportunities tomorrow.¹ This should be a central tenet of Alberta's climate policy.

To be clear, we believe that increased ambition in Alberta's climate policy is critical to the success of

¹ Premier's Council for Economic Strategy (2011). Shaping Alberta's Future.
http://alberta.ca/AlbertaCode/images/ShapingABFuture_Report.pdf

the province in the long-term and that the status quo will simply not meet investor needs. Without a more assertive climate policy in place, Alberta-based companies will face increasing scrutiny from global markets in relation to greenhouse gas emissions, which will in turn feed uncertainty in regard to the long-term prospects of Alberta's energy sector. We encourage the Panel to be bold in its recommendations, yet mindful of ensuring transparency with the Alberta public, as an informed electorate will be critical to the successful implementation of any climate strategy.

Carbon Pricing is Critical

At a high level, we agree with the Ecofiscal Commission's assertion that the most important near-term climate change policy that can be enacted is a broad-based and credible price on carbon at the provincial level.² This would mean expanding the present system beyond the current sectoral approach to place a price on carbon broadly across all sources. We strongly recommend that as it develops its own policy recommendations, the government of Alberta consider the work of the Ecofiscal Commission and its findings on carbon pricing specifically.

We believe that having a broad-based price on carbon is critical to engaging the public on the importance of climate change action. As well, it is the most equitable approach for assigning responsibility for reducing emissions. While large emitters are clearly a key target for emissions controls in Alberta, focusing exclusively on single sectors ignores the greater responsibility we all bear. In regard to real concerns about the impacts of a broad-based carbon price on low-income households, we would point to the experience in British Columbia, where the province enacted the Low Income Climate Action Tax Credit to offset these costs.³ The real world experience in BC has been that low-income individuals and families are actually better off (i.e. facing a lower economic burden) after the implementation of the carbon tax than they were before.⁴

However, this does not mean that the previous climate policy should be abandoned – there are elements of the current Specified Gas Emitters Regulation (SGER) that we also find compelling. In particular, there is an argument to utilizing the current "marginal cost" approach of SGER to incent real reductions in the major emitting industries. What SGER is currently lacking is ambition. Specifically, if one of the goals of the climate policy is to reduce emissions in the energy sector while still supporting an active oil & gas industry, there is a compelling case to be made for utilizing a marginal pricing scheme.

Under a broad-based carbon pricing scheme, where every tonne of GHGs is charged at the same rate (such as under a carbon tax regime similar to the one used in BC), an energy producer will have to weigh the costs of investing in technologies to reduce emissions versus paying the price on carbon for those emissions. If a company is faced with a major investment in the hundreds of millions that would reduce its emissions by 20%, it will weigh those costs against the cost of paying the price on carbon for that 20% of emissions. In order for the company to be incentivized to make the technology shift, the cost of that 20% must be sufficiently high. However, setting a price on carbon high enough to incent the desired behaviour means the remaining 80% of emissions are being taxed at that same high price. This is likely to be a sizeable, ongoing cost to producers and could create significant resistance from industry. From a practical standpoint this will be a hard sell in Alberta.

² <http://ecofiscal.ca/wayforward/>

³ <http://www2.gov.bc.ca/gov/content/taxes/income-taxes/personal/credits/climate-action>

⁴ http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2492766

By contrast, if the current SGER feature of a greatly increased cost associated with emissions over the reduction target is retained, the incentive for investing in a reductions technology is suddenly much more compelling, as the company will be able to significantly reduce its cost structure by eliminating (or reducing) that marginal cost. We do not think there is any reason why both approaches (a broad-based carbon price and a marginal cost scheme like SGER) could not be utilized in harmony. Regardless, consideration must be given to what will achieve the greatest emission reductions over time.

Critical to the successful implementation of any carbon pricing scheme is demonstrating the intent that the policy will increase in stringency over time at an orderly pace. In order for companies (and investors) to allocate capital efficiently there must be clear path forward that makes low-carbon investments attractive. Any carbon pricing scheme must provide a level of certainty that is currently lacking in regard to climate policy in Canada.

Lastly, in regard to carbon pricing, we acknowledge that not all companies will prosper under a carbon pricing system. While we firmly believe that a robust climate policy will in fact help many energy companies in Alberta, we do not believe that all companies are well positioned to respond to the challenge of an increased carbon price. However, we would note that this is an issue of management quality and not a market failure. As an investor we are focused on investing in companies that outperform and we believe that a robust climate framework will simply aid our identification of these opportunities.

The Strategy Should Drive Innovation

The case for increased innovation is compelling. There is little disagreement that a greatly increased focus on innovation is required if we are to achieve the step-change improvements we need to see in emissions reductions. This will demand greatly increased research and development spending and more effective commercialization of existing technologies. The pace and scale of innovation needs to increase significantly.

A substantive price on carbon will itself act as an incentive for companies to increase efficiency and find innovative ways to reduce emissions. However, a price on carbon alone will not be enough. Ideally, some of the revenues from the carbon pricing scheme should be used to directly incentivize climate solutions research and development. From an inter-generational equity perspective (as noted by the Premier's Council in 2011), it seems clear that some of the profits generated from today's carbon-intensive economy should be put towards ensuring future generations have access to a sustainable low-carbon energy system.

The current system in place under SGER, whereby companies pay into a technology fund administered by the Climate Change and Emissions Management Corporation, is a good start. However, both the scope and the scale of the fund need to be expanded significantly. Care should be taken to ensure that the fund is supportive of a balanced mix of both near- and long-term opportunities. From our perspective as a provider of retail mutual funds, we see significant opportunities in regard to public demand for low-carbon investment opportunities. However, the mandates of many investment institutions constrain their ability to seed early-stage, high-risk technologies and projects. In order to eventually tap into the broader capital markets, Alberta should be prepared to utilize some of the revenues from its carbon pricing system to unlock these high-risk, high-reward projects.

Regardless of the mechanism chosen to incentivize innovation, from tax cuts and subsidies to direct

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research funding, innovation must be central to the government strategy. Canadian companies have traditionally not performed well in regard to innovation, but it seems clear to us that future prosperity will be materially dependent on how well we stimulate innovation-based cultures.⁵ The Canadian Oil Sands Innovation Alliance (COSIA) is a welcome development that we believe could be a model for driving environmental innovations in other sectors.⁶ Creating an organization modeled on COSIA but focused on the challenges to renewable energy or other low carbon solutions would be a worthwhile consideration.

Particular attention should be paid to creative solutions for driving diversification within sectors historically associated with high emissions – such as Alberta’s oil sands sector. We believe Alberta should consider how its new framework could actively encourage this type of diversification (noting that this is currently beyond the remit of COSIA). For example, given a choice between paying into a compliance fund and providing direct investment capital to a potentially lucrative opportunity (i.e. low carbon solutions), we feel that many companies might choose the latter. While not every oil sands company is a good fit for diversification, we strongly believe that the long-term future of our current energy leaders in Alberta will hinge on the ability to utilize their current strengths (e.g. complex project management skills, high risk tolerance, engineering culture, and access to capital) to gain a solid footing in the energy transition. Smart policy should consider the barriers to participating in diversification strategies and address them accordingly.

Opportunities in the Electricity System

Aside from a broad-based and credible price on carbon, we note that Alberta’s current electricity system offers some of the biggest near-term opportunities in regard to emission reductions and we see solutions on this front as both available and affordable. Specifically we are referring to the advanced phase-out of coal-fired generation. While we do not have specific recommendations on the exact mechanics of how to properly incent a transition to low-carbon electricity (e.g. through feed-in tariffs, renewable energy targets, etc.) we would instead point to the growing reality that the market is well on its way to making this decision for Alberta. Investors are already moving to eliminate coal-related holdings from their portfolios from a purely economic perspective – there is an overriding sentiment that coal mining and coal-based generation is a risky investment due to reduced demand and heightened environmental regulations. Combined with the impact that coal-based generation has on the emission profiles of various jurisdictions, it is fast becoming a consensus that coal, absent significant developments in carbon capture and storage, will be the first fossil fuel phased out.

Citigroup recently issued a report noting that the value of listed coal companies it monitors has dropped from approximately US\$50 billion in 2012 to \$18 billion in 2015.⁷ It believes that this trend will persist for the foreseeable future. Perhaps more telling is that major institutional investors are now facing mandated restrictions on coal financing due to legislation from elected governments. In Norway, the country’s main government pension fund has been mandated to exit the stocks of companies that derive at least 30% of revenues from coal (both mining and electricity generation). Similarly, the state legislature in California recently passed a motion requiring the state’s pension funds (CalPERS and CalSTRS) to divest of all companies earning at least 50% of revenues from coal mining.⁸

⁵ <http://www.conferenceboard.ca/hcp/details/innovation.aspx>

⁶ www.cosia.ca

⁷ <https://ir.citi.com/5%2BD3LAj%2Ba5yhsTAE9%2FJU0FQGOiQPJvnrPrLhR%2BdUSVMRjVsSyhROJBwV0st%2F1TE>

⁸ Note that this legislation still has to be signed into law by the Governor of California.

In light of prevailing investor sentiment, we believe that the risk of an accelerated phase-out of coal greatly impacting investment in the province is marginal.

Develop and Promote a Green Bonds Market

We note the growing market (and support) for green bonds and climate bonds, both within Canada and globally.⁹ We believe there will be a growing role for green bonds in stimulating the energy transition and recommend the government of Alberta strongly consider how it could leverage the capital markets to drive significant emissions reduction projects in the province.¹⁰ In 2014 Ontario issued the first provincial green bond. This bond was strongly embraced by investors, with the issuance being more than four times oversubscribed. However, access to this offering was extremely limited for the retail investor, which is consistent with the global trend for green and climate bonds. The secondary market for green bonds is decidedly shallow. Despite the rapid growth of the green and climate bond market, it is still relatively difficult for investors to get exposure to this asset class.

We believe that Alberta has a particularly attractive opportunity to incent the creation of green bonds in the province. Namely, the province is currently lacking any energy efficiency programs to incent homeowners and building owners to undertake energy-saving retrofits. This would appear to be a very good fit for a green bond program. The government of Alberta could play a role as an aggregator and financial backstop, allowing access to private capital markets that would provide significant leverage on public money spent. Collaboration between the public and private sectors could create a final product much more effective than either sector could achieve alone.

We recommend that the Panel consider the creation of a multi-stakeholder panel tasked with exploring the creation of policies to incent green bond issuance, identifying the most robust structure for a green bond, and developing assurance mechanisms for measuring environmental impacts, among other things. Such a panel would be made up of financial institutions, financial regulators, government officials, relevant trade bodies, investors and others.

We would further encourage the Panel to consider current international efforts to create robust, global standards for green bonds and to reach out to these organizations. We would point to the International Capital Market Association's *Green Bond Principles* and the Climate Bonds Initiative's *Climate Bond Standard* as two initiatives Alberta should be engaging with.¹¹ We are able to provide introductions to facilitate the further exploration of this idea.

Optimization, not Maximization

As noted above, we believe the Premier's Council on Economic Strategy provided some well-reasoned concepts that would be to the benefit of both Alberta and companies operating in Alberta. In fact, we believe the Premier's Council identified a key policy imperative that is currently acting as an impediment to Alberta's ability to transition to a low-carbon economy. Namely, the Council made the distinction between *maximizing* a resource (such as the oil sands) and *optimizing* a resource. Alberta has currently legislated for maximization (see for example the Oil Sands Conservation Act) when a

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<http://www.neiinvestments.com/documents/PublicPolicyAndStandards/2014/Investor%20Statement%20on%20Green%20Bonds%20and%20Climate%20Bonds%2020141211.pdf>

¹⁰ <http://www.ofina.on.ca/greenbonds/greenbonds.htm>

¹¹ <http://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/green-bonds/>; <http://www.climatebonds.net/standards>

strategy of optimizing the resource would actually provide greater economic and environmental benefits in the long term.¹²

A policy of resource maximization will inevitably require trade-offs and is likely to create unintended consequences. Implicitly prioritizing one goal (resource maximization) over all others does not allow for the proper balancing of potential impacts and benefits. For example, we note the inherent conflict between Alberta's desire to maximize the resource recovery rate at in-situ projects and the impacts of this approach for operators from both an economic and environmental perspective. In the last few years the province has seen the first steam assisted gravity drainage (SAGD) wells approach blowdown – the final stage of production. The blowdown stage involves a winding down of steam injection rates in recognition of the diminishing returns from continued steaming. From a purely economic perspective, companies (and investors) are looking for projects with the highest rate of return, and thus companies would logically reduce steaming at the point where the economic return from continued steaming does not meet internal rate of return expectations. However, the focus on maximizing the recovery of bitumen does not allow for the operator to make this decision unilaterally. As a result, operators are potentially required to continue deploying steam at a steadily increasing steam-to-oil ratio (SOR).

This is a suspect approach from an economic perspective, as the higher the SOR, the lower the return for the operator. In regard to climate policy, it is also an emissions-intensive approach. Higher SORs mean more natural gas is burned and thus higher GHG intensities for in-situ projects. This is a problem for a process that is already emissions-intensive. A policy of optimizing the resource would acknowledge these impacts and ensure that only the highest-return, most efficient projects are incentivized. We believe there may be several instances where the policy of maximizing the oil sands resource is leading to economically and environmentally inefficient outcomes and recommend that the Panel suggest the government seek to eliminate these inefficiencies. We believe that a policy of optimization would inherently consider multiple perspectives (economic, environmental and social) and thus align better with a robust climate strategy. This is not simply a matter of semantics, but rather an issue that is fundamental to how the province approaches development of the resource.

Boreal Conservation as a Key Mitigation Strategy

Finally, a crucial element of climate policy that is often overlooked is the role of Canada's boreal forest as a significant carbon sink. The Canadian Boreal forest stores an estimated 208 billion tonnes of carbon – almost 300 times Canada's 2012 GHG emissions.¹³ We believe any credible climate policy in Canada must include a tangible commitment to preserve this key carbon sink.

We are a member of the Boreal Leadership Council (BLC), a multi-stakeholder collaboration including industry, First Nations, conservation groups and financial institutions that share a vision for conservation and sustainable development in the boreal.¹⁴ Suncor Energy is also a member of the BLC. We encourage Alberta to engage with organizations such as the BLC to build momentum towards a national Boreal strategy in line with the BLC's Boreal Forest Conservation Framework.¹⁵ We believe that Alberta has the potential to show leadership on this very crucial aspect of climate change mitigation. A firm commitment to Boreal conservation will dramatically strengthen the province's narrative on climate action while also being a globally significant conservation achievement. We would be happy to

¹² http://www.qp.alberta.ca/1266.cfm?page=1988_076.cfm&leg_type=Regs&isbncln=9780779775798

¹³ <http://www.borealbirds.org/sites/default/files/pubs/report-full.pdf>

¹⁴ <http://borealcouncil.ca/>

¹⁵ <http://borealcouncil.ca/wp-content/uploads/2015/03/Framework-2015ENG.pdf>

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facilitate a discussion with the BLC to explore this avenue further.

Investor Support for Climate Policy

As you develop recommendations for Alberta's climate policy framework and look for validation of your approach from the capital markets, we believe you will find that investors are not only keenly engaged but supportive of substantive action. We would highlight the broad support for the letter recently sent to the Premier of Alberta and relevant ministers (and sent under separate cover to the Panel) asking for a robust and credible climate policy in Alberta.¹⁶ Over 120 investors representing over \$4.6 trillion in assets under management signed the letter, explicitly stating that an effective climate change plan will be critical to future investment in Alberta. We believe there is widespread support for the province to show leadership in the area of climate policy.

In conclusion, we commend the Government of Alberta for convening the Climate Change Advisory Panel and look forward to the results of your hard work. We reiterate our support for the development of a robust and credible carbon policy framework that will benefit the province and the energy industry in the long term. If you have any questions regarding this letter, please contact **Jamie Bonham, Manager Extractives Research & Engagement, NEI Investments** (jbaham@neinvestments.com 604-742-8328).

Sincerely,
NEI Investments



Robert Walker
Vice President, ESG Services & Ethical Funds

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<http://www.neinvestments.com/documents/PublicPolicyAndStandards/2015/Premier%20of%20Alberta%20Collaborative%20Investor%20Letter.pdf>