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Environmental Bill of Rights Registry Number 012-8840, Planning Ontario's Energy Future: A Discussion Guide to Start the Conversation

Dear Ms. Pastori,

The following submission provides the undersigned's responses to the "Pipelines" section on page 26 and 27 of *Ontario's Energy Future: A Discussion Guide to start the Conversation*. Our submission includes general comments about TransCanada's Energy East pipeline project, as well as more specific responses to the third question posed on page 27 of the discussion guide. While some of the undersigned are making separate submissions to the discussion guide about Ontario's energy future from our respective organizations, we felt it was necessary to make a joint submission on the topic of Energy East in particular to affirm that the pipeline project is not in the best interests of Ontarians. While the undersigned share concerns about Energy East's risks regarding pipeline safety, environmental impact, emergency response, spill risk, and risks to drinking water, we will focus our comments in this submission to concerns about the pipeline's climate and energy implications.

The Ontario Energy Board's (OEB) technical assessments and consultations on Energy East demonstrate that TransCanada's application as filed with the NEB does not meet the seven pipeline principles set out in the 2013 Long-Term Energy Plan (LTEP) and adopted by Ontario and Quebec in November 2014, along with the need to take greenhouse gas (GHG) emissions into account. Energy East could have adverse impacts on the natural environment and pipeline safety in Ontario. The proposed pipeline's economic benefits for Ontario claimed by TransCanada are exaggerated and are outweighed by the risks. And the GHG emissions from Energy East would be inconsistent with Ontario's climate change action plan and the provincial and federal government's commitments under the Paris climate agreement.

If the OEB's report is to inform Ontario's intervention on Energy East at the NEB, then Ontario should publically highlight the environmental and economic risks of Energy East to Ontario and call on the NEB and the federal government to reject the pipeline. The questions being asked in the discussion guide should not be "Will Ontario's pipeline principles protect the best interests of Ontarians and allow for informed participation in the NEB's review of the Energy East project? What considerations should be taken into account?" Rather, the question that should be asked is "Is Energy East in the best interest of Ontarians?" And the answer is no. Ontario should oppose Energy East during its participation in the National Energy Board (NEB) review of the project.

The OEB's report on Energy East's Potential Impacts on Ontario

In November 2013, the Ontario Minister of Energy (the Minister) asked the OEB to undertake a series of studies and consultations to seek the views of Ontarians on the proposed Energy East pipeline project and help inform the Ontario government's position when it appears before the NEB hearings on Energy East. Please find appended to this submission a summary of the OEB's report on energy East's potential impacts on Ontario. The main points include:

- TransCanada's assertion that Energy East would not cause adverse environmental effects in Ontario was not supported. TransCanada's application did not have emergency response plans available, it presented no evidence that the route of the converted gas pipeline in Ontario is appropriate for an oil pipeline, and the proposed pipeline route did not adequately consider reroutes to avoid oil spills or reduce potential effects;
- TransCanada's in-line inspection tools may not be adequate to prevent stress corrosion cracking on the four sections of pipeline in northern Ontario coated with polyethylene tape and Energy East could not satisfy the pipeline safety principles set out by the Ontario government because of an absence of details regarding valve placement, leak detection and emergency response plans;
- The economic analyses commissioned by TransCanada were limited and suggestive. The pipeline's economic benefits to Ontario are small and likely inflated. Energy East would result in only modest economic benefits for Ontario that do not outweigh the environmental risks.
- The GHG analysis of Energy East was problematic and made assumptions that are far too lenient and favourable for industry. The modellers falsely assumed that oil transported by pipeline could be substituted by rail if the pipeline were not built and based their analysis on an oil price of \$100 per barrel, a far cry from the \$40 to \$50 per barrel that Western Canadian producers are fetching in 2016. The OEB analysis was not consistent with other studies. For example, a Pembina Institute analysis concluded that Energy East would result in upstream GHG emissions of between 30 and 32 MT annually, equivalent to the emissions from all of the cars on Ontario roads in 2014,¹ while a study from the Institut Québécois du carbone projected that the most likely scenarios for downstream GHG emissions from Energy East would be 12 to 32 MT per year.²

If the OEB's report is to inform Ontario's intervention on Energy East at the NEB, then Ontario should publically highlight the environmental and economic risks of Energy East to Ontario and call on the NEB and the federal government to reject the pipeline.

Electricity Services Required to Operate Energy East Pump Stations

Energy East requires 71 new pumping stations to move oil through the pipeline, including eight in Northern Ontario that will be powered by off-grid generators that will require natural gas pipelines connected to the existing TransCanada Mainline. Yet none of these pumping stations or natural gas

¹ Pembina Institute. February 2014. Climate Implications of the Proposed Energy East Pipeline. A Preliminary Assessment. Retrieved from <https://www.pembina.org/reports/energy-east-climate-implications.pdf>.

² Institut Québécois du carbone. 27 April 2016. The Downstream Emissions Resulting from the Energy East Pipeline: an evaluation considering economic, technical and political risk factors. Retrieved from: <http://www.iqcarbone.org/new-iqcarbone-publication-estimates-downstream-emissions-resulting-from-energy-east-pipeline/>.

connections is included in the scope of the project to be reviewed by the NEB. These new facilities will create local and regional power system impacts that may create difficulties for other power users or power generators. They will also create additional GHG emissions that may be inconsistent with Ontario's climate targets to reduce GHG emissions 37% below 1990 levels by 2030 and 80% by 2050.

Energy East and Ontario's Subnational Climate Leadership

We applaud Ontario for its leadership on climate change, both within Canada and internationally. Ontario executed the single largest GHG reduction initiative in North America with its phase-out of coal plants between 2004 and 2014. It was an early proponent of renewables and conservation with its *Green Energy and Economy Act*. It is putting a price on carbon with the launch of its cap-and-trade program in 2017 and reinvesting the proceeds in the Ontario Climate Change Action Plan. It has set ambitious GHG emissions reduction targets of 15 per cent below 1990 levels by 2020, 37 per cent by 2030 and 80 per cent by 2050. The province has also been instrumental in helping to forge federal action on climate change and supported the Paris climate agreement to strive to limit global warming to 1.5 degrees Celsius.

But Ontario must explain how Energy East aligns with its vision for a low-carbon economy. The operational lifespan of Energy East would be 40 to 50 years, lasting well past 2050, when Ontario and Canada have committed to be 80 per cent toward decarbonisation. Ontario should not be supporting projects that increase GHGs while simultaneously committing to meet ambitious climate targets. The expansion of the tar sands that Energy East would permit means that other sectors and provinces, including Ontario and its industries, would need to go further in their own emissions reductions in order to meet Canada's targets.

The recent federal approval of the Enbridge Line 3 Replacement pipeline and the Kinder Morgan Trans Mountain Expansion pipeline help illustrate these challenges. Together, the Line 3 and Kinder Morgan pipelines would enable 23 to 28 MT per year of upstream emissions (10 to 13 MT³ and 13 to 15 MT⁴, respectively). Enabling emissions increases of this magnitude would require at least equivalent, and if not greater, emissions reductions from other sectors and provinces to stay within the carbon budget Canada committed to. For example, offsetting the emissions from these pipelines would approximately be like Ontario halving the GHG emissions from its industrial sector (51 MT) or its transportation sector (58.7 MT).⁵ If Energy East is built, this would be like approving additional annual emissions equivalent to nearly all of Ontario's building sector (34.8 MT).⁶

If Line 3 and Kinder Morgan are built, emissions from the tar sands would approach or exceed Alberta's 100 MT cap. The additional emissions from Energy East would certainly exceed the cap. If Canada is to meet its 30 per cent GHG reduction target by 2030, national emissions need to be reduced to 524 MT, meaning one sector (tar sands) in one province (Alberta) would be responsible for about one-fifth of

³ Environment and Climate Change Canada. November 2016. Enbridge Pipelines Inc. – Line 3 Replacement Program: Review of Related Upstream Greenhouse Gas Emissions Estimates. Retrieved from <http://www.ceaa-acee.gc.ca/050/documents/p80091/116489E.pdf>.

⁴ Environment and Climate Change Canada. November 2016. Trans Mountain Pipeline ULC – Trans Mountain Expansion Project: Review of Related Upstream Greenhouse Gas Emissions Estimates. Retrieved from <http://www.ceaa.gc.ca/050/documents/p80061/116524E.pdf>.

⁵ Environmental Commissioner of Ontario. November 2016. Facing Climate Change: 2016 Annual GHG Progress Report. Retrieved from <https://media.assets.eco.on.ca/web/2016/11/2016-Annual-GHG-Report-ENGLISH.pdf>.

⁶ Ibid.

Canada's entire carbon budget. Ontario must consider whether it is fair for such disproportionate levels of emissions to be allowed, thereby requiring deeper cuts from other sectors and provinces. Ontario must also consider whether it is possible at all for Canada to meet its 2030 climate targets if these pipelines are built. And as GHG emissions decline in lockstep with global demand for oil, the risk of Energy East and other fossil fuel infrastructure in Ontario becoming stranded increases.

If Ontario is serious about climate leadership and realizing a national and provincial vision for a low-carbon future, it would be inconsistent to support Energy East and enable the growth of tar sands that Energy East would permit.

Conclusion

This joint submission provides comments in response to pages 26 and 27 of *Ontario's Energy Future*, particularly regarding the proposed Energy East pipeline project's climate and energy implications for Ontario. If Ontario's position on Energy East is to be based on the fulfilment of the joint Quebec-Ontario principles for pipeline projects and the OEB's report to the Minister of Energy, then Ontario should publically highlight the environmental and economic risks of Energy East to the province and call on the NEB and the federal government to reject the pipeline.

We look forward to continuing to work with Ontario on its Long-Term Energy Plan and alignment of provincial energy policy and planning with the Ontario Climate Change Action Plan. We also look forward to ongoing engagement with Ontario to highlight the environmental and economic risks of the proposed Energy East pipeline project. If you have any questions or require any clarification on the contents of this submission, please feel free to contact the undersigned.

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Appendix: ENERGY EAST: A BAD DEAL FOR ONTARIO

A Summary of the OEB's report on Energy East's Potential Impacts on Ontario

Summary

In November 2013, the Ontario Minister of Energy (the Minister) asked the Ontario Energy Board (OEB)ⁱ to undertake a series of studies and consultations to seek the views of Ontarians on the proposed Energy East pipeline project and help inform the Ontario government's position when it appears before the National Energy Board (NEB) hearings on Energy East.

The OEB's technical assessments and consultations demonstrate that the Energy East application as filed with the NEB does not meet most of the seven principles set out by the provincial government to guide its decisions regarding pipeline projects. Energy East could have adverse impacts on the natural environment and pipeline safety in Ontario. The proposed pipeline's economic benefits for Ontario claimed by TransCanada are exaggerated and could be outweighed by the risks. And the greenhouse gas (GHG) emissions from Energy East would be inconsistent with Ontario's climate change action plan and the provincial and federal government's commitments under the Paris climate agreement.

If the OEB's report is to inform Ontario's intervention on Energy East at the NEB, then Ontario should publically highlight the environmental and economic risks of Energy East to Ontario and call on the NEB and the federal government to reject the pipeline.

The OEB Process

In spring 2014 and winter 2015, the OEB held consultations in seven communities in eastern and northern Ontario, including Kenora, Thunder Bay, Kapuskasing, Timmins, North Bay and Cornwall, and a similar number of meetings with First Nation and Métis communities concerned about their treaty and Aboriginal rights. The OEB also commissioned five technical reports to examine the potential impacts of Energy East to inform the public and the process, including:

- An assessment of the impacts of Energy East on the natural environment
- An assessment of the impacts of Energy East on pipeline safety
- A review of the economic impacts of Energy East on Ontario
- An assessment of the impacts of Energy East on Ontario natural gas supply and prices
- In response to concerns about climate change raised by the Ontario public, the OEB also commissioned an assessment of the impact of Energy East on GHG emissions from an Ontario, national and global perspective.

These technical reports were based on TransCanada's application filed to the NEB on October 30, 2014, and additional technical material filed on January 30, 2015. The OEB's technical reports and public consultations were finalized and packaged in an August 2015 OEB report to the Energy Minister, *Giving a Voice to Ontarians on Energy East*. This briefing note provides a summary of that report and shows why Energy East is a bad deal for Ontario. It is our expectation that these reports will inform Ontario's intervention on Energy East in front of the NEB (See Appendix A for the role of provinces in the NEB review process). **Based on the information provided to the Minister from the OEB, Ontario should call on the NEB and federal government to reject Energy East**

Ontario-Quebec Seven Joint Principles Concerning Pipeline Projects

The OEB's assessment also took place in light of an agreement signed by Ontario and Quebec in November 2014 that set out seven joint principles that must be applied by proponents of pipeline projects, including:ⁱⁱ

- Compliance with the highest available technical standards for public safety and environmental protection;
- World-leading contingency planning and emergency response programs;
- Proponents and governments consult local communities and fulfill their duty to consult with Aboriginal communities;
- Take into account the contribution of GHG emissions;
- Provide demonstrable economic benefits and opportunities to the people of Ontario and Quebec, in particular in the areas of job creation over both the short and long term;
- Ensure that economic and environmental risks and responsibilities, including remediation, should be borne exclusively by the pipeline companies in the event of a leak or spill on ground or water, and provide financial assurance demonstrating their capability to respond to leaks of spills;
- Interests of natural gas consumers must be taken into account.

While the Ontario government has made public statements that are broadly supportive of Energy East,ⁱⁱⁱ the Quebec government has been much more active in identifying the risks of Energy East and publicly questioning TransCanada's application of these seven principles. It has required the Bureau d'audiences publiques sur l'environnement to assess an environmental impact study for Energy East. Quebec Premier Philippe Couillard has consistently raised concerns about the project's implications for pipeline safety and climate change.^{iv} Most recently, Quebec Finance Minister Carlos Leitao expressed concern about Energy East's risks to the province's drinking water.^v

Energy East Impacts on the Natural Environment

The technical assessment of the impacts of Energy East found that TransCanada's assertion that the pipeline would not cause adverse environmental effects in Ontario wasn't supported. **TransCanada's application did not have emergency response plans available**, meaning the project's contingency planning could not be described as "world class". The assessment also found that **TransCanada presented no evidence in its application that the route of the converted gas pipeline in Ontario is appropriate for an oil pipeline.**^{vi}

Some aspects of the Energy East application were also inconsistent with the "highest available technical standards for environmental protection", including incomplete mapping of surface water intakes, intermittent mapping of potential oil spill trajectories, and lack of consideration of alternative pipeline routes to avoid impacts to surface water resources, endangered species habitats, and wetlands. **The assessment concluded that the route of the Energy East pipeline proposal did not adequately consider reroutes to avoid oil spills or reduce potential effects.**

At OEB community meetings, Ontarians expressed concerns about the threats of an Energy East oil spill to the province's rivers and lakes, and in particular the risks to local water sources. Participants felt that all water bodies should be "significant water crossings", not just those categorized as such in

TransCanada's application, because even minor water bodies connect to larger watersheds. Ontarians also raised concerns that the diluted bitumen that would be carried by Energy East is toxic and would sink to the bottom of rivers, making it difficult to clean up.

Energy East Impacts on Pipeline Safety

This technical assessment addressed Energy East's impacts on pipeline safety, including integrity, engineering matters and emergency response, focusing on the elements of TransCanada's application that are intended to minimize the likelihood of a pipeline failure and the elements that are intended to mitigate the consequences associated with a pipeline failure.^{vii}

The assessment reported that **TransCanada's in-line inspection tools may not be adequate to prevent stress corrosion cracking on the four sections of pipeline in northern Ontario coated with polyethylene tape.** While TransCanada's application generally met or exceeded good industry practice for mitigating the consequences of failures, **the assessment could not conclude that Energy East satisfied the principles set out by the Ontario government because of an absence of details regarding valve placement, leak detection and emergency response plans.**

"Participants at nearly all of the (OEB) community meetings generally felt the provisions ensuring the safety of Energy East needed to be strengthened."^{viii}

Many residents were concerned about the leak detection system, saying it would take too long to shut down the pipeline in the event of a failure and that TransCanada is not planning for enough shut-off valves, especially given the number of waterways the pipeline would cross. The leak detection system is not designed to detect leaks under 1.5 per cent of full flow, which on a 42" pipe amounts to approximately 2,000 cubic metres per day. This means a leak could go undetected for days and might only be discovered by passerby. Residents were also worried about the lack of local emergency response plans and the increased risk of bitumen to pipeline integrity because it is more corrosive than crude oil.

Economic Impacts of Energy East on Ontario

TransCanada claims that Energy East would bring economic benefits across Canada. In Ontario, TransCanada alleges that the pipeline's construction and operation would increase GDP by \$24 billion and generate \$4.2 billion in tax revenue over 20 years, and create nearly 5,500 full-time equivalent jobs annually.^{ix} However, the Mowat Centre's review and analysis of Energy East's economic impact tells a more mixed story.^x **The review found the economic analyses commissioned by TransCanada were limited and suggestive,** and used models that are not accurate at measuring large-scale impacts across a large economy such as Ontario's. For example, TransCanada's jobs numbers are calculated using *person-years of work*, which includes direct, indirect and induced jobs over 20 years. **When its numbers are presented as full-time, long-term, direct jobs, Energy East would employ just 114 people in Ontario.**^{xi}

The Mowat analysis indicated that the benefits TransCanada projected for Ontario were likely exaggerated by TransCanada.

"Any claims about substantial GDP growth and job creation in Ontario from Energy East should be viewed critically."^{xii}

TransCanada's employment numbers don't consider the likelihood of workers being transferred from the Canadian Mainline, TransCanada's natural gas pipeline network that already runs across Ontario, to Energy East or potential shortages of skilled workers in Ontario. **Its economic benefit numbers are small and likely inflated because the pipeline in Ontario involves the conversion of existing infrastructure rather than new construction.** The Mowat analysis also questions the operational lifespan of Energy East, noting the need to reduce GHG emissions, and policies to that effect, could lead to lower demand for Western Canadian oil and therefore lower economic benefits. **Ontario may also face long-term economic risks from the pipeline, due to the long-term losses to natural capital and the services that the natural environment provides.**

A number of OEB community meeting participants, including municipal representatives and unions, expressed support for Energy East because of the alleged economic benefits it would provide. But others noted the short-term nature of the jobs and benefits of pipeline construction and insisted that many more jobs could be created through investment in alternative energy projects rather than pipelines. **The OEB's report concludes that Energy East would result in only modest benefits for Ontario that do not outweigh the risks. It is questionable if this meets the joint principle of demonstrating short and long-term benefits for the province.**

Energy East Potential Implications on Ontario Natural Gas Consumers and Prices

TransCanada's Canadian Mainline is an existing natural gas system that includes two segments running through Ontario, one from the Manitoba-Ontario border to North Bay, another forming a triangle between North Bay, Maple (north of Toronto), and Iroquois (near Cornwall). The Mainline is critical to ensuring Ontario has a reliable supply of natural gas and also transports western Canadian natural gas through Ontario to the US northeast. Energy East's plan as filed would have converted part of the Mainline to carry oil, raising concerns there would not be sufficient pipeline capacity to serve the needs of Ontario markets, particularly in eastern Ontario.

In its report to the Minister, the OEB expressed concern that, by converting one of TransCanada's 42-inch Mainline natural gas pipelines to carry crude oil, Energy East would reduce the supply and increase the price of natural gas for residents of eastern Ontario. The OEB asked for assurance that the new natural gas pipeline TransCanada is proposing to build will meet Ontario's medium- and long-term energy needs and that Ontario residents would not subsidize the costs of Energy East through their gas bills. The OEB commissioned Elenchus Research Associates to gather the views of large-volume gas users.^{xiii} It also engaged ICF International to analyze the effects of Energy East on natural gas prices in Ontario, particularly in eastern Ontario.^{xiv}

In the Elenchus analysis, large volume gas users and shippers maintained that converting the section of TransCanada's Mainline between North Bay and Iroquois would create a shortfall in pipeline capacity. Energy East would also increase the risk of higher tolls on the Mainline, resulting in a higher commodity price for natural gas and increased price volatility in eastern Ontario, and a higher cost of gas-fired electricity in Ontario. The conversion of the Mainline to an oil pipeline would have the effect of natural gas users subsidizing Energy East's construction and operation. It would also leave older pipelines forming part of the Mainline susceptible to higher operation and maintenance costs and future integrity issues. The ICF analysis concluded that the reduction in pipeline capacity due to Energy East would create a natural gas shortfall and increase gas prices in eastern Ontario, primarily during the winter months, when gas demand is high. ICF was less conclusive on whether Energy East would benefit or cost Ontario gas shippers.

However, this is one condition that TransCanada appears to have met after agreeing to address the concerns of three major natural gas utilities in eastern Ontario and Quebec. An agreement signed with Gaz Métro, Union Gas and Enbridge in August 2015 ensured the natural gas supply in Ontario and Quebec would not be threatened by Energy East's conversion of a gas pipeline in eastern Ontario. TransCanada agreed to replace the line between Iroquois and North Bay with a new line near Oshawa to Quebec to maintain capacity. The agreement also ensures an adequate gas supply for Ontario and Quebec, provides about for a benefit of about \$100 million to natural gas customers through 2050, and stipulates that gas customers will not subsidize Energy East.^{xv} **Regardless of the détente, TransCanada and the natural gas distributors have not explained how locking in fossil fuel infrastructure until at least 2050 is consistent with Ontario's climate change action plan and Canada's commitment to reduce GHG emissions by 80 per cent by 2050.**

Impact of Energy East on GHG emissions

During the OEB's public consultation process, **many Ontarians expressed concerns that Energy East's approval would enable expansion of Alberta's oil sands and increase global consumption of Canadian oil, exacerbating climate change.** In response, the OEB asked Navius to undertake a "wells-to-wheels" analysis of Energy East.^{xvi}

The Navius analysis projected that GHGs from Energy East's operations in Ontario, mainly from eight proposed pump stations that consume natural gas, would increase Ontario's emissions by 0.2 to 0.6 megatonnes (MT) by 2035. For a province striving to meet ambitious climate targets^{xvii}, any project that increases emissions means greater reductions need to be achieved in other sectors of the economy subject to an escalating carbon price. Across Canada, the Navius analysis projected Energy East could increase GHG emissions in 2035 by between 0.2 and 11 MT, due to increased activity in the oil sands and increased delivery of bitumen to refineries in Quebec and New Brunswick. Globally, Energy East would increase GHG emissions by between 3.6 and 7.8 MT.

It is encouraging that the OEB heeded the concerns of Ontarians and assessed the GHG implications of Energy East, but **the Navius analysis was problematic and has been questioned by other climate modellers. Navius makes assumptions that are far too lenient and favourable for industry.** Its analysis assumes that the 1.1 million barrels of oil per day that Energy East would carry would be brought to market by rail if the pipeline were not built, meaning the emissions would happen regardless. Yet it is highly unlikely that anywhere close to that amount of oil would be transported by rail to Canada's east coast,^{xviii} especially under today's low oil prices. The modellers assume an oil price of \$100 per barrel, a far cry from the \$40 to \$50 per barrel that Western Canadian producers are fetching in 2016.

A Pembina Institute analysis in 2014 concluded **that Energy East would result in upstream GHG emissions of between 30 and 32 MT annually, equivalent to the total number of cars on Ontario roads in 2014.**^{xix} Meanwhile a study from the Institut Québécois du carbone projected that the most likely scenarios for downstream GHG emissions from Energy East would be 12 to 32 MT per year.^{xx} With Canada joining countries around the world in committing to strive to limit global warming to 1.5 degrees Celsius and Alberta committing to a cap on emissions from the oil sands, **it is questionable whether fossil fuel infrastructure like Energy East is consistent with a climate-safe future.**

Participants in OEB community meetings expressed disappointment that the NEB was not considering GHG emissions that would be produced upstream and downstream of Energy East. **A number of**

participants said that governments should be moving away from the extraction and transportation of oil, with some suggesting that, from a climate change perspective, the pipeline should be stopped altogether.

Conclusion

The provincial government has put in place principles that TransCanada must apply to build pipeline projects in Ontario. The province's own technical assessments and consultations demonstrate that Energy East does not adequately meet these principles. The OEB report showed that Energy East could have adverse impacts on the natural environment and on pipeline safety in Ontario. It showed that the economic benefits to Ontario claimed by TransCanada are exaggerated and could be outweighed by the negative economic impacts. And its flawed analysis of the upstream and downstream GHG emissions from Energy East did not show how the pipeline would be consistent with Ontario's climate change action plan, the federal government's commitment to limit global warming to 1.5 degrees Celsius, and a world committed to reducing fossil fuel use by 80 per cent by 2050. Ontario should take the findings of the OEB's analysis of Energy East during the review of the project at the NEB and join other provinces, municipalities and First Nations in questioning the environmental and economic wisdom of expanding fossil fuel infrastructure. **The OEB's report shows that TransCanada has not met the conditions laid out by Ontario for Energy East to proceed. Ontario should publically highlight the environmental and economic risks of Energy East to Ontario and call on the NEB and the federal government to reject the pipeline.**

ⁱ Letter from Minister of Energy. November 12, 2013. Retrieved from http://www.ontarioenergyboard.ca/OEB/Documents/Documents/ltr_Min_Chiarelli_to_OEB_Chair_EnergyEast_20131113.pdf.

ⁱⁱ Office of Premier of Ontario. November 21, 2014. "Agreement Reached at Ontario-Québec Joint Meeting of Cabinet Ministers. Retrieved from <https://news.ontario.ca/opo/en/2014/11/agreements-reached-at-quebec-ontario-joint-meeting-of-cabinet-ministers.html>.

ⁱⁱⁱ James Wood. "Kathleen Wynne gives tentative backing to Energy East pipeline as Rachel Notley faces criticism over project." *Financial Post* (Jan22, 2016). Retrieved from <http://business.financialpost.com/news/economy/kathleen-wynne-gives-tentative-backing-to-energy-east-pipeline-as-rachel-notley-faces-criticism-over-project>.

^{iv} Frederic Tomesco. "TransCanada's Energy East pipeline yet to win Quebec over, Premier says." *The Globe and Mail* (29 September 2015). Retrieved from <http://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/transcanadas-energy-east-pipeline-yet-to-win-quebec-over-premier-says/article26588826/>.

^v Paul Vieira. "Quebec Finance Minister Calls for Fresh Energy East Pipeline Review." *The Wall Street Journal* (14 September 2016). Retrieved from <http://www.wsj.com/articles/quebec-finance-minister-calls-for-fresh-energy-east-pipeline-review-1473860459>.

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