Backgrounder:

What to look for in the Canadian Energy Strategy

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Since 2012 there have been discussions between provincial and territorial governments to craft a Canadian energy strategy that would guide the development of Canada's energy resources. Provincial efforts to find common ground on energy issues have become increasingly important due to the federal government's failure to advance strategies related to energy development—other than for Alberta's tar sands—and its lack of leadership on climate change.

Last August in Charlottetown, the premiers appeared poised to finalize an energy strategy at the Council of the Federation meeting, an annual gathering of provincial and territorial premiers. But late in the process, Ontario's newly elected Premier Kathleen Wynne insisted that climate change be more prominently integrated into the strategy. After a year of further discussions, chaired by the governments of Alberta, Manitoba, New Brunswick, and Newfoundland and Labrador, it is rumoured that the premiers are once again set to finalize and unveil the strategy at this week's Council of the Federation meeting, July 15-17 in St. John's, Newfoundland.

The global and national context on energy and climate change

Canada has an abundance of energy resources. The challenge is to choose the right ones. Which of our many energy resources should be developed in order to maintain a healthy environment, a safe climate, and a strong economy? Political decision-making and the scientific and economic research is clearly pointing Canada and the global community towards low carbon energy development.

Last month in Germany, the Group of 7 industrialized nations committed to decarbonising their economies—eliminating the use of carbon-based fossil fuels such as coal, oil, and natural gas—in this century.[1] The timeline would have been much shorter were it not for the resistance of the Canadian and Japanese governments.[2] In the near future, agreements on more urgent timelines will likely be struck, especially since research on a global carbon budget—the total amount of carbon that can be released into the atmosphere—shows that the carbon budget beyond 2050 is very small if the world is to avoid dangerous climate change.[3]

For Canada, the main challenge is the already significant, and growing, pollution from the tar sands. **The pace and scale of expansion in Alberta's tar sands will play a determining role in whether or not Canada is able to achieve absolute emissions reductions in the short term. Because of this, the energy strategy must explicitly consider the impact of the tar sands and their related infrastructure on sub-national efforts to tackle climate change.**

Scientific and economic analyses have concluded that in order to address the potentially catastrophic impacts of climate change, tar sands production must be capped and then phased out in relatively short order. A study from the Massachusetts Institute of Technology found that oil derived from the tar sands "becomes essentially non-viable" in a scenario with global action on climate change.[4] Research published in the scientific journal *Nature* concluded that, because of its high cost and high carbon content, at least 85 per cent of tar sands reserves need to stay in the ground.[5] At today's production levels, the tar sands would have to shut down within a decade. More recently, over 100 Canadian and American scientists have called for a moratorium on tar sands expansion because of the high environmental impacts, including on climate change, of not capping production.[6]

The tar sands are also a poor horse for Canada's economic wagon. The industry is vulnerable to fluctuating oil prices (among other factors) and as we are seeing now, a drop in oil prices leads to job losses and economic disruption.

The necessary priorities of the energy strategy

Given the confluence of political, scientific, and economic thinking concerning the dim future for high-carbon energy resources, the overarching goal of a Canadian energy strategy must be to transition away from fossil fuels and phase in clean, renewable energy solutions. The International Energy Agency has repeatedly warned that further construction of high carbon infrastructure locks the world into an unsustainable future and closes the door on avoiding dangerous climate change.[7] The construction of more oil pipelines, tar sands projects, or coal-fired power plants that will last many decades is thus inconsistent with a global effort or a national plan to tackle climate change in a meaningful way.

The priority of any Canadian energy strategy must also be on the reduction in energy demand through energy efficiency and conservation, and the development of clean, renewable, and low-impact sources of energy. Canada has the technological know-how to undertake both. Renewable energy and energy efficiency programs have been undertaken by Canadian provinces and municipalities with considerable success but never consistently applied across the country by a federal government who holds these as priorities. In 2013 alone Canada lost out on $8.7 billion in export opportunities for clean energy because the federal government put all its eggs in the tar sands basket.[8] We have more than enough clean renewable energy in Canada to meet our needs and be a net exporter.[9]

A Canadian energy strategy must be the moment provinces commit to facilitating our transition to sustainable energy by co-operating on modernizing electricity systems across the country. Investing in national grid infrastructure like transmission and distribution lines is essential to making renewable energy the predominant source of electricity for all Canadians and for taking advantage of opportunities to export renewables. Pipelines are our past. Infrastructure projects that move clean energy from coast to coast are the nation-building projects of our future.

Based on the global and Canadian context surrounding energy development and relatively recent drafts of the energy strategy obtained by Environmental Defence, there are two overarching issues that remain contentious among provinces in finalizing the strategy: 1) whether clean energy or fossil fuels are prioritized and developed, and 2) what trajectory Canada should take in reducing its greenhouse gas pollution. These are fundamental issues so it is not surprising that different approaches to these can lead to contrasting visions of Canada's energy development.

Clean energy vs. fossil fuels in the Canadian energy strategy

There are many examples in the draft strategy where addressing climate change and implementing renewable energy, energy efficiency, and conservation measures are put forward as priorities. There are initiatives that involve building electrical transmission to share clean energy and reduce carbon pollution across provinces. And there are references to using carbon pricing (carbon taxes or a cap-and-trade system) to reduce carbon pollution and reviewing best practices on carbon pricing which fall short of committing to implement carbon pricing across the country. Nonetheless, these are examples where provinces could work productively together.

But there is also language in the draft strategy that is problematic and would jeopardize both economic and environmental health:

- **"Canada's hydrocarbon products":** This is a clear reference to getting Canadian oil and natural gas to market via pipelines, including the proposed Energy East pipeline, the expanded Kinder Morgan pipeline, and possibly oil trains. Provinces that want to be seen to be leaders on climate action should not be agreeing, either explicitly or implicitly, to ease the path for oil pipeline construction in exchange for notional or aspirational commitments from high-emitting, oil-producing provinces to address their carbon pollution. **The math is very clear that tar sands production must be capped and reduced in order for Canada to meaningfully address climate change. More oil pipelines take us in the wrong direction, towards greater levels of carbon pollution.**

- **A "non-discriminatory" approach to transportation and transmission of energy resources:** This is also language that could refer to the stifling of opposition to pipelines and other high carbon infrastructure. In a world facing the crisis of climate change, all energy is not equal. And developing a strategy that guides energy development *should* be discriminating, i.e. analytical and differentiating, since it is about setting priorities for the future and making the right choices. Most provinces understand that energy development needs to maximize economic benefits while minimizing risks to the environment and the climate.

- **"Longer or permanent extension" of the Accelerated Capital Cost Allowance for energy processing**: This also relates to the direction of energy development in Canada and whether we are going to wean ourselves off polluting energy or build new infrastructure that will lock in pollution for decades to come. The federal government has repeatedly agreed with international partners at the G7, G8 and G20 to phase out fossil fuel subsidies.[10] So the provinces should not be intervening with the federal government to extend or make permanent a federal subsidy to the fossil fuel industry.

The trajectory for carbon pollution in Canada

The future of carbon pollution is also being discussed by the provinces in the context of a Canadian energy strategy. How the task of reducing carbon pollution is framed will reveal how serious the provinces are in addressing the pollution that causes climate change and its impacts:

- **Reductions in absolute emissions vs. emissions intensity:** Emissions intensity is the level of carbon pollution emitted per level of economic activity, e.g. per level of GDP or per barrel of oil. Emissions intensity can drop while actual carbon pollution is going up. In fact, that is what is happening now in Canada.[11] That's why using emissions intensity as a metric has never made sense since tackling

climate change necessarily means reducing emissions in absolute terms, and every federal party's goal is to do just that. And yet, a draft of the Canadian energy strategy discusses emissions intensity, and a reference to "absolute emission reductions" was bracketed, i.e. opposed by at least one premier.

- **Transition to a "lower carbon economy":** Recent drafts of the energy strategy refer several times to a transition to a lower carbon economy. While lower carbon emissions would be preferable to growing emissions, the medium-term goal for Canada should be a low carbon economy on our way to a carbon neutral economy. The science is clear that this is what is needed to avoid the worst of climate catastrophes, and provinces need to acknowledge it and strive towards that goal. Provinces are already overburdened with the damages and expense wrought by floods, forest fires, and other symptoms of an increasingly unpredictable climate.

Conclusion

Many provinces are to be commended for moving forward with energy and climate change policies that are forward-looking and ambitious, and for working to craft a Canadian energy strategy that provides a unifying vision for all provinces that is based on sustainable energy development. Especially in the absence of federal engagement on this important challenge, provincial leadership is welcome.

It is important that the strategy provides a launch pad for clean energy technologies such as wind, solar, and geothermal energy, energy efficient design and retrofitting, energy storage technologies, and electric vehicles. These technologies are already being implemented but have so much more potential. **If the final strategy includes trade-offs on irreconcilable issues—for example agreeing to the construction of long-lived, unsustainable energy infrastructure in exchange for modest steps on climate policy—it will ensure that Canada's clean energy potential never truly takes off.**

Endnotes

[1] G7 Germany. (2015). "Think Ahead. Act Together: Leaders' Declaration, G7 Summit, 7–8 June 2015." p. 15.
[2] Blanchfield, M. (2015). Canada, Japan block G7 push on climate change. *Toronto Star*. June 8. Accessed at: http://www.thestar.com/news/canada/2015/06/08/canada-japan-said-blocking-g7-push-on-climate-change.html
[3] Intergovernmental Panel on Climate Change. (2014). *Climate Change 2014: Synthesis Report*. p. 83.
[4] Chan, G., Reilly, J.M., Paltsev, S., Chen, Y.-H. (2015). "Canada's Bitumen Industry Under CO2 Constraints." p. 1.
[5] McGlade, C. & Ekins, P. (2015). The geographical distribution of fossil fuels unused when limiting global warming to 2°C. *Nature.* 8 January, 2015. Vol. 517. p. 190.
[6] Oil Sands Moratorium. (2015). Accessed at: http://www.oilsandsmoratorium.org/
[7] See for example Harvey, F. (2011). World Headed for Irreversible Climate Change — IEA. *The Guardian*. November 11. Accessed at: http://ourworld.unu.edu/en/world-headed-for-irreversible-climate-change-iea
[8] Clean Energy Canada. (2015). "Tracking the Energy Revolution – Global: The Top 10 Trends Propelling the Global Clean Energy Transition. p. 23. Accessed at: http://cleanenergycanada.org/trackingtherevolution-global/2015/
[9] Torrie, R. e*t al.* (2013). "An Inventory of Low-Carbon Energy for Canada." Trottier Energy Futures Project. p. viii. Accessed at: http://www.davidsuzuki.org/publications/downloads/An%20Inventory%20of%20Low-Carbon%20Energy%20for%20Canada.pdf
[10] See for example: G20 Pittsburgh. (2009). "Leaders' Statement the Pittsburgh Summit." p. 3; and G7 Germany. (2015). "Think Ahead. Act Together: Leaders' Declaration, G7 Summit, 7–8 June 2015." p. 13.
[11] Environment Canada. (2015). *National Inventory Report 1990-2013: Greenhouse Gas Sources and Sinks In Canada*. Part 1: p. 19.