

Canada's Role in the Global Energy Picture: Making the case for a more coherent national energy approach

Philip Gass

John Drexhage

International Institute for Sustainable Development (IISD)

Canada's Role in the Global Energy Picture: Making the case for a more coherent national energy approach

Philip Gass
John Drexhage
International Institute for
Sustainable Development (IISD)

**Authors would also like to thank
Bruce Carson and Aaron Cosby for
their helpful comments; they of
course carry no responsibility for
the final product.**

© 2010 International Institute for Sustainable
Development (IISD)

Published by the International Institute for
Sustainable Development

IISD contributes to sustainable development by advancing policy recommendations on international trade and investment, economic policy, climate change and energy, measurement and assessment, and natural resources management, and the enabling role of communication technologies in these areas. We report on international negotiations and disseminate knowledge gained through collaborative projects, resulting in more rigorous research, capacity building in developing countries, better networks spanning the North and the South, and better global connections among researchers, practitioners, citizens and policy-makers.

IISD's vision is better living for all—sustainably; its mission is to champion innovation, enabling societies to live sustainably. IISD is registered as a charitable organization in Canada and has 501(c)(3) status in the United States. IISD receives core operating support from the Government of Canada, provided through the Canadian International Development Agency (CIDA), the International Development Research Centre (IDRC) and Environment Canada, and from the Province of Manitoba. The Institute receives project funding from numerous governments inside and outside Canada, United Nations agencies, foundations and the private sector.

International Institute for Sustainable Development
161 Portage Avenue East, 6th Floor
Winnipeg, Manitoba
Canada R3B 0Y4
Tel: +1 (204) 958-7700
Fax: +1 (204) 958-7710
Email: info@iisd.ca
Website: www.iisd.org

As a follow up to the paper briefly examining the state and future of the energy picture globally, this paper focuses on Canada's role in that picture, the case for the development of a national energy strategy and prospects for the development of a more coherent international energy regime.

This report is an excerpt from the paper "Towards a National Clean Energy Strategy" presented to the Banff Dialogue, April 8–10, 2010 in Banff, Alberta. The event was hosted by the National Round Table on the Environment and the Economy, Public Policy Forum and the Canada School of Energy and Environment.

Table of Contents

Canada Has Much To Offer on the Clean Energy Front	1
Making the Case for a National Strategy	3
More Coherence on the International Front?.....	5
List of References	7

Canada Has Much To Offer on the Clean Energy Front

One of the fundamental advantages and challenges Canada faces in this global energy dynamic is that it offers one of the last remaining opportunities for large-scale investments in traditional energy producing activities—including oil (number two in reserves with oil sands included), natural gas (number one exporter), hydro (number one exporter) and uranium (number one producer [Canadian Nuclear Association, 2009])—for the private sector. From an energy security perspective, Canada has a competitive advantage over many other countries that have state-controlled resources or very unstable political regimes/markets in place. In addition to being one of the more welcoming environments for large-scale private sector traditional energy investments, Canada is as stable and secure a democracy as they get. Compared to the very real security threats that private investors face to both infrastructure and employees in many developing countries, investment in Canada is far more secure. This unique profile¹ represents both a challenge and a significant opportunity for Canada. The challenge is that a growing portion of the energy exports are associated with the development of Alberta's oil sands and Saskatchewan's growing oil portfolio; the opportunity lies in the other areas of its energy resources, such as continued production and development of hydro and natural gas resources and Canada's place as a world leader in uranium production. It is not a matter of whether or not these resources will be used—clearly they will—rather, it is a question of how Canada can best manage these resources to best position itself in the new energy future.

Over the past few years, we have seen huge public and private investments in both renewable energy and new technology to reduce emissions of conventional fuels. These include the investment of C\$3 billion in carbon capture and storage (CCS) from Alberta and the federal government. There have been a number of other clean energy investments and policies that are beginning to show a real shift in Canada's energy profile, including Quebec and Manitoba's strong investments in hydro development, Ontario's clean energy policies, including its feed-in tariff program (Ontario Power Authority, 2010) for small- and large-scale renewable energy production, B.C.'s ambitious energy conservation targets and Nova Scotia's push for tidal power development. All of these portray diverse and active participation across Canada in “clean” and “green” energy development.

Taking the opportunity to be a business leader can have a positive trade impact, not only in the developed clean energy technology directly, but also by making the energy itself a more attractive resource for trade partners due to its “cleaner” nature. There has been much talk and debate recently on the issue of low carbon fuel standards, which could significantly hurt exports of Canadian fuels due to carbon content. Investment in “decarbonizing” this energy source could go a long way to securing its trade value into the future.

¹ While Australia and Norway are two other countries with stable democracies and export-based, resource-oriented economies, neither enjoys anything close to the wide range of resource export opportunities that Canada does.

It is important to remember that the development of the energy sector in Canada is closely tied to the trade environment under which it operates. While listing out advantages with oil, natural gas, hydro and uranium above, as well as our secure democracy and other export opportunity advantages is important, they must be considered in parallel to our trade situation, which is overwhelmingly tied to the United States. Being a natural, geographically adjacent trade partner with the U.S. provides us great advantages that we have exploited in the past. The United States in fact accounts for 98 per cent of Canadian energy exports and Canada is the largest supplier of energy to the U.S. (Department of International Affairs and Foreign Trade, 2006): While this has afforded us many advantages, it also ties our energy sector to U.S. energy policy in a way that could lead to potential trade implications should the U.S. decide to more actively pursue a domestically focused energy security agenda. Whether this is positive (a desire for increased reliability on a “secure” source of reliable energy) or negative (trade restrictions on fossil fuels, an increased push for energy independence) depends on the outcome of the policy debate and therefore emphasizes Canada’s need to be proactive on this front. Trends toward U.S. energy security will mean, as noted here, that we are probably set for more investment, since we are so economically linked to the U.S. However, trends toward clean energy development mean that our markets are threatened, since we are the suppliers of conventional and dirty non-conventional fuels. Conversely, it also means our markets for hydro power have great potential strength.

Given the need to address growing energy demands via conventional methods, but in much less carbon intensive ways, the opportunities for development in the oilsands (assisted by unprecedented public investments in CCS) have led to increased private investment as well. Recognizing the aforementioned need to balance growth with sustainability, many companies in Canada are developing low-carbon policies and plans. One such example is Shell’s “more energy, less carbon dioxide” (Shell, n.d.) strategy. Here, industry is acting on the development of clean energy technology (i.e., CCS) and energy efficiency, but is at the same time calling on government to provide sound energy policy and a clear price signal under which to operate in order to see the initiative succeed. The industry willingness is there to take action, but government has to play its role.

Such opportunities extend far beyond the oilsands. Canada also has opportunities, particularly offshore and in the Arctic, that will have to be carefully considered to ensure that they can fit within a low-carbon energy development strategy. Canada, as a developed nation with resources and private investment potential, can play a leadership role globally in the development of the necessary low-carbon technologies on all of these fronts. We can enable clean energy development at home, and contribute to global low carbon energy development by sharing technology successes with developing countries that would struggle with the investment and capacity needed to enact low-carbon technology unilaterally.

Making the Case for a National Strategy

The most basic case for a national strategy is a need for an overarching, coherent vision on energy development. With the current fragmented strategy largely driven by the provinces and territories, there is a lack of coherence to Canada's position on energy development. Each region promotes its own energy development strategy, with no overarching vision of how our various jurisdictions and their respective contributions can work together. The result is a series of individual policies and infrastructure that act independently of one other, at times even competing. Many Canadian provinces and territories are promoting valuable and important clean energy initiatives, but there needs to be a way to better utilize these regional strengths and meet energy needs to maximize our return on what is a strong and diverse sector.

The absence of such a strategy leaves Canada hamstrung in its ability to fulfill important public policy goals. For example, climate change is a long-term issue, with national policies and targets for emission reduction set out until the middle of the century. We need to consider climate change as part of our broader energy equation to a much greater extent. Just as we need a long-term national climate change strategy, it must go hand-in-hand with a long-term national (not federal, but truly national) energy strategy with proactive goals and policies to have any hope of addressing growing consumer concerns about energy security, trade protectionism and environmental threats. What we now have is a series of "ad hoc," regionally inspired energy policies reacting to climate policy pressures. Without a coherent approach to energy development, any chance of meeting our climate change goals is virtually impossible.

Another example of the need for a national-level energy policy is shown by the threats and opportunities offered to Canadian exporters by developments in the U.S. market. An effective national policy aimed at clean energy development stands a much better chance of weathering adverse trade barriers such as low-carbon fuel standards and border measures targeting high-carbon exports. It also stands a much better chance of exploiting export opportunities such as U.S. renewable portfolio standards, which could significantly increase demand for Canadian hydro exports. Above and beyond the market prospects for energy exports, if Canada is not successful in de-linking its growth in energy production from GHG emissions, it will develop a reputation internationally that will dampen export and investment prospects in markets other than the U.S. as well. National branding is not often a key factor in such prospects, but if it is bad enough or good enough, it can eventually play a significant role. China has found this out to its dismay in the wake of concerns about the environmental fallout from its low-cost production and human rights issues (Hong, Cosbey & Savage, 2009).

A reactive policy also leaves us incapable of shaping the international regimes that will affect our market prospects. If the U.S. were to decide that tariffs on fossil fuels were an important part of its energy policy, the impact would not only be felt in Alberta and Saskatchewan, but across the Canadian economy. The same argument could be made if large-scale hydro power were not considered “clean” energy, which has been under constant debate. Here, the primary impact would be in Quebec and Manitoba, but again the impact would be Canada-wide.

There is also great potential for Canada to contribute to global good if it undertakes to lead in a particular aspect of clean energy development (i.e., CCS) and share the results of our technological capacity building with those in the developing world that do not have the resources to undertake that same level of technology development.

The overarching need to address low-carbon development despite a global recession, coupled with policy and legislative uncertainty in the North American context, provides a unique opportunity for Canada. Now is the critical time to look inward at our intricate energy makeup and strengthen our approaches, policies and goals to present an efficient, effective and sustainable plan to the world. We should take advantage of this gap in global leadership, as Canada is well placed to fill it given our unique characteristics, if coupled with a coherent vision of our clean energy future.

More Coherence on the International Front?

To be fair, this lack of national coherence around energy policy is very much mirrored in the international arena. As previously mentioned, the international energy regime is at best, a “patchwork affair” with the result that other forums, not least the United Nations Framework Convention on Climate, become the proxy for international discussions for energy and future clean energy development. There is some thought now being given to whether something more distinctly coherent on the international energy front could be developed, looking to existing international energy bodies that could be examined for their potential to fill this role. The Organization of the Petroleum Exporting Countries (OPEC) represents the majority of remaining oil reserves, but limited membership and a focus on protection of the oil industry limits its scope on wider energy development. The International Energy Agency (IEA) offers policy advice to its Organisation for Economic Co-operation and Development (OECD) member states on the “Three Es” of energy policy-making, including energy security, economic development and environmental protection (IEA, 2010). Its membership is limited to OECD countries, although the IEA highlights it is focusing current work on outreach to “major consumers and producers of energy like China, India, Russia and the OPEC countries” (IEA, 2010). The OECD resolution on “Enlargement and Enhanced Engagement” (OECD, 2007) reflects these same interests. The International Renewable Energy Agency (IRENA) includes a much larger base of 142 states, but as it was only established in January 2009, its role in the international energy regime may require more time to develop. Its third session, in January 2010, was focused on setting rules and regulations that will guide the agency, as well as make the organization fully operational (IRENA, 2010).

International trade partnership bodies and organizations could also play a role given the increasing relationship among climate change, energy and trade. Both the World Trade Organization (WTO) and the North American Free Trade Agreement (NAFTA) provide bodies for consultation and dispute resolution. More substantively, trade rules with respect to trade in energy are rife with gaps and uncertainties (it is not even clear, for example, whether electricity exports are a good or a service under trade law). Russia’s moves over the last several years to embargo gas exports to the Ukraine and thence to the EU have made that point with stark clarity, and underlined the serious need for further elaboration of rules on energy exports in particular, though these are much clearer under NAFTA than under the WTO. There may also be a need for changes or clarifications to trade rules, such as those on intellectual property rights, to foster tech transfer, or rules on subsidies to allow for free allocation of allowances under cap-and-trade schemes. Further, there is potential for trade rules, properly framed, to contribute to clean energy development by, for example, lowering tariffs on low-carbon goods or by lowering fossil fuel subsidies.

The “Three Amigos” clean energy initiative between the U.S., Mexico and Canada may also prove to be an interesting model for broader forums of discussion/negotiation, as it appears to lay equal weight to considerations about energy, trade and the environment (particularly climate). While its utility is currently saddled while Congress wrestles with the topic of energy and climate change legislation, if and once that becomes clearer, the dialogue will clearly be one of the primary vehicles in setting North American policies around energy production and consumption.

Regardless of the particular prospects of any of these institutions (or more likely a combination of them) in laying claim to establishing a more coherent international regime, one way or the other, the international governance of energy issues will continue to be a topic of evolving interest. Again, Canada, in its profile as a “(clean) energy superpower,” needs to have an ongoing national dialogue about where Canada would fit in that regime and what its profile and contribution can be in providing secure, safe and clean energy resources while also incenting sustainable consumption.

List of References

Canadian Nuclear Association. (2009, October). Nuclear facts. Retrieved March 8, 2010 from: <http://www.cna.ca/english/pdf/nuclearfacts/04-NuclearFacts-uranium.pdf>.

Department of Foreign Affairs and International Trade. (2006). Canadian energy facts. Retrieved March 11, 2010 from: http://www.dfait-maeci.gc.ca/enviro/energy-energie/facts-faits.aspx?menu_id=21&menu=R.

International Energy Agency. (IEA). (2010). About the IEA. Retrieved March 4, 2010 from: <http://www.iea.org/about/index.asp>.

International Renewable Energy Agency (IRENA). (2010). Third session of the Preparatory Commission. Retrieved March 4, 2010 from: http://www.irena.org/index.php?option=com_content&view=article&id=256&Itemid=146.

Hong, S., Cosbey, A. & Savage, M. (2009). China's electrical power sector, environmental protection and sustainable trade. Winnipeg, MB: IISD.

Ontario Power Authority. (2010). Renewable energy feed-in tariff program. Retrieved March 8, 2010 from: <http://fit.powerauthority.on.ca/>.

Organization for Economic Co-operation and Development. (OECD). (2007). OECD council resolution on enlargement and enhanced engagement. Retrieved March 4, 2010 from: http://www.oecd.org/document/7/0,3343,en_2649_201185_38604487_1_1_1_1,00.html.

Shell. (n.d.). Shell energy scenarios to 2050. Retrieved March 4, 2010 from: http://www.shell.com/home/content/aboutshell/our_strategy/shell_global_scenarios/shell_energy_scenarios_2050/shell_energy_scenarios_02042008.html.