

An Energy Strategy for Canada

by Michal C. Moore
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An Energy Strategy for Canada

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▶ **Executive Summary**

Canada is struggling to fully develop, sell and move its energy resources. This is a dramatic change from the recent past where the U.S. has provided stable growth in demand for energy supplied by the provinces, from hydrocarbons to electricity. Current circumstances now challenge this relationship, adding environmental, policy and economic hurdles that exacerbate the impact of fluctuations in world demand and pricing.

In addition, competitive interaction between provinces, aboriginal land owners and special interest groups complicate and compound the issues of royalty returns, regulatory authority and direction, land-use management and long-term market opportunities for Canadian companies. There is no strategic document guiding the country's energy future.

As the steward of one of the largest, most diverse and valuable energy "banks" in the world, Canada has a unique opportunity to exploit a critical and valuable economic niche in the world economy. Given the lack of federal leadership and the tendency for each province to undercut each other in the same marketplace, there is also the distinct possibility the nation will squander the opportunity.

This document offers the rationale for a comprehensive energy strategy, literally a vision where Canada can lead and not follow opportunities in energy markets. This strategic approach to energy systems by definition will include transportation, housing, employment and financial markets. It is not a plan, not a foil for tax or policy guidance in one or more sectors. This strategy is a fundamental rail on which plans, tactics and policies can be built. This vision identifies how the provinces can work together using all the tools available to them, maximizing long-term resource development while minimizing environmental damage.

This document assumes there can be a broad commitment and effort by the federal government to help build those tools, providing guidance and assistance where needed without obstructing or denying the fundamentals of the Canadian Constitution, First Nations people, and the role of provinces in managing the resources within their borders. This recommended energy strategy highlights changes occurring in world markets that threaten successful, coherent energy policy development in the absence of a unifying strategy. This strategy highlights the need to look ahead, understand these changes, and create adaptive, unifying processes that will provide long-term economic and geopolitical stability using energy as the common denominator for Canada's future.

Une stratégie de l'énergie pour le Canada

Michal C. Moore

▸ Sommaire

Le Canada lutte pour maximiser la mise en valeur, la vente et le transport de ses ressources énergétiques. Cela représente un changement significatif par rapport à un passé récent où les États-Unis assuraient une croissance stable de la demande pour l'énergie fournie par les provinces sous forme d'hydrocarbures ou d'électricité. Les circonstances actuelles constituent un défi pour cette relation, ajoutant des obstacles environnementaux, politiques et économiques qui exacerbent l'incidence des fluctuations de la demande et des prix mondiaux.

De plus, l'interaction concurrentielle entre les provinces, les propriétaires fonciers autochtones et les groupes d'intérêts spéciaux compliquent et aggravent les enjeux des revenus de redevances, de l'autorité et de l'orientation réglementaires, de la gestion de l'utilisation des terres et des débouchés commerciaux à long terme pour les entreprises canadiennes. Il n'y a aucun document stratégique qui guide l'avenir énergétique du pays.

En tant que responsable de l'une des plus importantes, diverses et précieuses réserves d'énergie au monde, le Canada a une occasion unique d'exploiter un créneau économique essentiel et de grande valeur dans l'économie mondiale. Étant donné le manque de leadership fédéral et la tendance des provinces à se faire concurrence sur le même marché, il existe également une possibilité réelle que la nation ne sache pas profiter de l'occasion.

Le présent document présente le raisonnement qui sous-tend une stratégie globale de l'énergie, une véritable vision en vertu de laquelle le Canada peut être un chef de file dans les marchés de l'énergie plutôt que d'être à la remorque des opportunités. Cette approche stratégique des systèmes énergétiques inclura par définition les transports, l'habitation, l'emploi et les marchés fédéraux. Il ne s'agit pas d'un plan pour l'orientation fiscale ou stratégique dans un secteur ou plus. Cette stratégie est une plateforme fondamentale sur laquelle on peut édifier des plans, des tactiques et des politiques. Cette vision identifie la manière dont les provinces peuvent travailler

ensemble en ayant recours à tous les outils à leur disposition pour maximiser la mise en valeur des ressources à long terme tout en minimisant les dommages environnementaux.

Dans le présent document, on prend pour acquis l'engagement et les efforts du gouvernement fédéral pour aider à mettre au point ces outils, en offrant au besoin orientation et assistance sans bloquer et sans trahir les fondements de la constitution canadienne, les membres des Premières Nations et le rôle des provinces dans la gestion des ressources à l'intérieur de leurs frontières. Cette stratégie énergétique recommandée met en relief les changements qui se produisent sur les marchés mondiaux et qui menacent la mise au point d'une politique énergétique fructueuse et cohérente en l'absence d'une stratégie fédératrice. Cette stratégie souligne la nécessité de regarder vers l'avant, de comprendre ces changements et de créer des processus unificateurs et souples qui assureront la stabilité économique et géopolitique à long terme en utilisant l'énergie comme dénominateur commun pour l'avenir du Canada.

"Keep the dialogue open. Famously it has been said that the first casualty of every battle is the plan, but by the same token no sensible soldier goes into battle without a plan and a guiding strategy."¹

Canada is struggling to fully develop, sell and move its energy resources. This is a dramatic change from the recent past where the U.S. has provided stable growth in demand for energy supplied by the provinces, from hydrocarbons to electricity. Current circumstances now challenge this relationship, adding environmental, policy and economic hurdles that exacerbate the impact of fluctuations in world demand and pricing.

In addition, competitive interaction between provinces, aboriginal land owners and special interest groups complicate and compound the issues of royalty returns, regulatory authority and direction, land-use management and long-term market opportunities for Canadian companies.

There is no strategic document guiding the country's energy future.

Canada needs a thoughtful, unifying map to guide its energy future based on uniting and not separating its provincial constituencies. The country needs a strategic vision for energy development, and use and sale of fuels and raw materials, informed by but not limited by mistakes and policy initiatives of the past. The challenge of working *within* the Canadian federation must be met in order to compete in a world awash in relatively inexpensive oil and gas resources, where a unified front offers the advantage of national security and long-term market success.

Canada is the steward of one of the largest, most diverse and valuable energy "banks" in the world. The management, extraction and transformation of these resources over time presents a complex and compelling opportunity symbolizing the modern dilemma, namely satisfying a basic need while protecting the environment and continuing to improve the welfare of all Canadians. Access to energy is quite literally a social contract. People depend on energy sources to provide heat, light, sustenance and comfort. The nature of the built environment, moreover, highlights the non-negotiable aspects of continuous energy supplies. We can't move goods, or conduct even the most basic commercial exchanges without energy resources.

This document offers the rationale for a comprehensive energy² strategy, literally a vision where Canada can lead and not follow opportunities in energy markets. This strategic approach to energy systems by definition will include transportation, housing, employment and financial markets. It is *not* a plan, not a foil for tax or policy guidance in one or more sectors. This strategy is a fundamental rail on which plans, tactics and policies can be built. This vision identifies how the provinces can work together using all the tools available to them, maximizing long-term resource development while minimizing environmental damage.

This document assumes there can be a broad commitment and effort by the federal government to help build those tools, providing guidance and assistance where needed without obstructing

¹ Canadian Council of Chief Executives July 2012

² Energy is used throughout this document to indicate a range of energy sources from liquid hydrocarbons used primarily in vehicles, to natural gas, radioactive fuels and renewables used for electricity generation.

or denying the fundamentals of the Canadian Constitution, First Nations people, and the role of provinces in managing the resources within their borders. This recommended energy strategy highlights changes occurring in world markets that threaten successful, coherent energy policy development in the *absence* of a unifying strategy. This strategy highlights the need to look ahead, understand these changes, and create adaptive, unifying *processes* that will provide long-term economic and geopolitical stability using energy as the common denominator for Canada's future.

BACKGROUND

Canada is a unique political and economic institution. Under the rules of the federation, the provinces control the energy resources within their political boundaries while the federal government is responsible for authorizing infrastructure between them, such as pipelines. This can present a challenge for efficient development and sale of energy resources, not to mention capital attraction and consistent levels of environmental control or relationships with landowners such as First Nations peoples.

As a country, Canada controls some of the most extensive energy reserves anywhere in the world.³ Energy is a critical basis of the overall economy, affecting every sector and providing as much as eleven per cent of the country's Gross Domestic Product (GDP).⁴ This comes from a family of provinces, with a wide but uneven distribution of resource potential from renewables such as hydropower and wind, to abundant hydrocarbon reserves of coal, natural gas and a range of heavy to light and sweet oil. These resources have traditionally supported not only a vibrant domestic economy, but a very strong export market focused on United States utilities and consumers.

The world Canada faced in the 1990s when demand from the United States supported increased investments in infrastructure was based on a perceived long-term and stable market for both oil and gas exports. That market is now undergoing a profound change in form and structure. According to the U.S. Energy Information Administration (EIA), the United States will soon increase domestic production to a level sufficient for them to commence net exporting of oil and natural gas products.⁵ Given the timing of this change, the urgent need for additional pipeline capacity from Canada, not to mention increased exports to the U.S., may be seriously threatened.

Recently, a social media-directed public debate has emerged, signaling a vote of "no-confidence" for traditional energy and infrastructure regulation. Policymakers have backed away from controversial and new-paradigm energy projects under threat of diminishing budgets, public protest and a diffuse but powerful NIMBY trend pitting communities against each other. In Canada, project proponents and infrastructure investors find themselves in the uncomfortable position of de-facto policy making, initiating projects that anticipate need(s) or opportunities, rather than following initiatives or policy objectives already vetted by policy makers.

³ The range of resources is geographically vast including hydro, oil and gas and uranium.

⁴ Energy flows are involved throughout the economy, but for direct sector contributions Statistics Canada reports ~8% for mining, quarrying and oil and gas extraction, and ~3% for export sales of energy products.

⁵ Legislation to allow this happen is pending in the current Congress.

The result is an often chaotic and uncoordinated debate conducted on a project-by-project basis rather than an energy policy basis. Worse, the process is being conducted not in policy forums but in regulatory forums, where the authority to create public policy does not exist. Arguably, we do not have a guiding strategy or vision on which to base the myriad of competing, time-sensitive proposals or economic development projects that underpin our energy industry.

This process is repeating itself against a backdrop of geopolitical instability combined with tighter environmental standards worldwide. In many ways, the world market for energy is undergoing a large-scale paradigm shift in both supply and demand for fuels from natural gas for electricity generation, and away from coal or even hydroelectric systems. Traditional investment interest in "blue-chip" utility areas such as central station electric utilities, high unit-cost oil refineries or even long-term renewable energy facilities is sacrificed in favour of short-term, higher-return capital investments.

Competition for the oil and gas resources produced by Canada is increasing around the world as a function of new discoveries, as well as more productive technologies. This in turn is aided by more efficient and cost-effective tidewater shipping, reducing the barrier cost that made exports of natural gas prohibitively expensive.⁶ The process, meanwhile is hindered by a lack of collective leadership on infrastructure improvements, distrust and rejection by some interest groups, and the ponderous approval process that seeks to accommodate all disparate points of view in siting and approving energy project. All this is occurring at a time when development of new Canadian port capacity on both coasts is threatened by internal disagreement over siting, revenue sharing, and approval or support from First Nations land title holders where even the *threat* of a First Nations right to title case can tie up a project for decades, if not indefinitely, as project proponents simply move on.

For the Canadian economy, the past twenty years has been marked by an increasing dependence on productivity in the resource sector to underpin both national and regional economic stability and to attract new investment capital. However, when viewed on a province-by-province basis, impacts from resource export slowdowns have been unequally distributed, and can be destabilizing.⁷ This change has become apparent in agricultural markets, manufacturing exports and even in interprovincial trade. In the case of energy, Canada faces a deep dilemma in terms of maximizing total returns from its energy export potential. This is rooted a function of the design and structure of the federation itself where individual provinces own, market and control energy exports; where there is little requirement, given the history of the federation and the unwillingness of the federal government to commit to a national vision in most resource issues for fear of risking political capital in debates with those provinces who resist cooperative resource development.

Provinces *have* taken steps to work with other provinces but in general these agreements cannot be mandated or enforced, especially if the sitting federal government has no singular vision as a driver, leaving little room or preference for coordination. In the case of the current federal government, an ideologically-based opposition to coordinated national economic visions only

⁶ See Risky Business, SPP Vol. 7, Issue 18, 2014.

⁷ The recent impacts of oil price reductions illustrate this very clearly.

leaves bottom-up or industry-driven initiatives, which are often cause for undue public mistrust and scrutiny.

These issues become especially problematic with respect to environmental policy or market tools such as carbon exchanges or carbon taxes that must by their nature flow across multiple provincial borders.

As a consequence, national government policies directed at energy systems have been inconsistent in design, duration and application. There is a lack of coherence and anticipation regarding market shifts, geopolitical preferences and public sentiment. Most policies have been designed to follow and strengthen investments, or initiatives designed to capture existing market share, but not to *develop or anticipate* new or emerging markets or changes in geopolitical relationships.

In the world outside Canada, turmoil in countries that might have been attractive import locations is increasing. This includes Eastern Europe and the Pacific Rim, where structural shifts in demand, coupled with increased competition from other supply nations such as the U.S. or Qatar, means a race is on. That race will be won over contracts and guaranteed deliveries rather than spot and liquid markets for oil and gas. Canada has the resources and cost-effective management skills to compete in these markets, but could be excluded by failing to show delivery capability in the near term.

Domestic demand for energy products continues to be stable, but the uneven distribution of energy resources means that in many cases it is easier and more cost effective for regions such as Eastern Canada to import energy from the U.S., rather than transferring it on Canadian soil. This creates a problem for Canadian producers since the U.S. has been a long term reliable and primary export client; it is now increasingly interested in so-called energy independence in both hydrocarbons and electricity generation. Increased self-sufficiency in the U.S. is likely to lead to net export capability in conventional oil, and likely in natural gas supplies in the next five years.⁸

Without expanded export facilities of its own, Canada faces lock-in for its own supplies (this does not imply there is no market for Canadian export energy, rather that the energy – both oil and gas – that moves will be subject to more competitive pricing and will take higher discounts prior to delivery in order to be sold). With the newly expanded Panama Canal opening and construction of new Gulf Coast LNG projects moving ahead of schedule, the U.S. is poised to capture a large fraction of the new natural gas demand in the Asia-Pacific region, and perhaps in Europe as well.⁹

Political difficulties arising from historical patterns of authority, ownership and economic relationships have the potential to thwart or encumber future pan-Canadian energy projects and development. A lack of real cooperation here can be a serious impediment to coordinated policy development and long-term market development, as demonstrated by the disagreements over oil and gas pipelines in Alberta and British Columbia, and across Ontario and Quebec. The lack

⁸ U.S. demand for heavy oil from Canada exported to the mid-continent region is expected to remain strong given the large installed refining base there.

⁹ Risky Business, op.cite.

of central leadership incentive creates indecision, not only in provinces that are vested in the outcome, but in project proponents and investors as well.

This structural characteristic, combined with deferred legal pressure¹⁰ based on assertions of provincial and First Nations autonomy, thrusts the burden of energy project leadership on private companies and the provinces themselves. The result forces the provinces, rather than "Canada" to offer proxy policy leadership in various areas where they are ultimately dependent on changing political and public sentiment. In a recent news article, Bank of Nova Scotia Chief Executive Officer Brian Porter opined that global market access for the country's energy must be a "common objective," and "Canadian leaders must put aside bickering and indecision to ensure major energy projects get done before global markets move on to other suppliers." Porter further added, "Our inability to deliver energy to world markets is detrimental to Canada's economy...it is also detrimental to our country's brand and future economic prospects for all Canadians."¹¹

Finally, the political and popular culture throughout North America is changing rapidly and dramatically. Policy and regulatory institutions are being challenged in both authority and process by smaller and more diverse interest groups. No longer relegated to the category of "special" interest groups, the protest, push-back and negative plebiscites intended to derail energy development have imposed delays and project redesign that have the potential to alter or even stop traditional energy investments throughout North America.

Regulatory institutions and independent oversight have been made subservient and convenient for policymakers,¹² removing some of the buffer that financing agencies look for in long-term capital projects, and substituting short-term political will for long-term understanding and rules on investment, land and resource commitment, rule-making and regulatory enforcement. For instance, existing energy policies and regulatory processes have put the issue of First Nations land title in the background¹³ as if they were subservient to project approval or as something too cumbersome and unwieldy to deal with *prior* to considering or implementing various land development proposals in each province. This is hardly a surprise, since there is no uniform national policy or standard by which to consider pre-existing rights or responsibilities that can guide developers in general. As a practical matter, it is typically beyond the authority of provincial regulatory commissions to adjudicate land or territorial access or claims. Consequently, this practice, since it can hardly be called a strategy, has resulted in delays, lawsuits, poisoned relations within and between bands and other communities, and has cost untold losses in employment and revenues.

¹⁰ This is not just a matter of deferral, of course. The Natural Resources Act gives the provinces authority over natural resources. When the authority was conveyed to them, there was no sense that the market for energy would be a national priority, nor that it would be complex enough to destabilize interprovincial or federal-provincial relationships. The ownership and control of resources, and by implication, the infrastructure that delivers them, is considered a right that supersedes loyalty or responsibility to a greater Canadian heritage.

¹¹ Washington Post, Canada Must Make Energy Projects 'Priority,' April 13, 2015.

¹² The recent decision to reserve final approval or possible rescission of regulatory decisions highlights this dilemma.

¹³ It is possible that the debate currently occurring in various regions and with varying intensity and interest would not have occurred without recent proposals for energy infrastructure. Arguably this is a discussion that has been hidden in the closet for too long and should come to some common agreement if only to give First Nations people some comfort and confidence about future use and control of their lands.

THE ROLE OF ENERGY POLICY

Energy policy acts as a proxy for the function and value of many other interrelated sectors from agriculture, defense, manufacturing, transportation and finance to name a few. Ad hoc policymaking, whether responding to a perceived crisis such as high prices (that brought on the National Energy Program), or obstacles to siting energy projects such as the Northern Gateway pipeline or Keystone XL, is not only dangerous, but creates cumulative and progressive impacts that can rapidly induce chaos in other seemingly unrelated markets. A good example might include the recent sudden and unanticipated shifts from pipelines to rail car transport for oil deliveries as production increased without the benefit of new cross-border pipeline capacity.

Policy planning depends on an informed framework to be effective, inclusive and adaptive. This creates a clear need for a comprehensive *energy strategy* that does more than describe a vision for the nation. A true energy strategy is a unifying document that expresses a thorough understanding of the resources available. This includes the constraints to using or acquiring the resource(s), the human and financial capital that must be mobilized over time, the market for the products, and the environmental consequences and mitigation required, for both today and tomorrow. Finally, a strategy reflects an honest assessment of the involvement, commitment and values of the population. The dilemma and contradiction implied by this revelation is that it must somehow simultaneously address the interests of all the provinces, which in a practical sense may not be the interests of Canada over time.

A successful Canadian Energy Strategy must be inclusive and national, balancing the economic and social needs of the provinces while reflecting the majority will of the country as a whole. It would be a unifying statement that relies on laws, precedent and existing agreements while designing a path that is ultimately enabled by the constitution and ultimately must be tested and validated in courts and, most importantly, by a majority of Canadians. While a successful energy strategy that benefits all Canadians over time would be grounded in federal authority and implemented or incented with federal guidance, there is only a remote possibility that this path would be acceptable to the provinces under current circumstances. Consequently, this strategy is presented in the hope that it creates an attractive vision for the future that presents opportunities for mutual benefit, but not necessarily simultaneous benefit in time. No long-term strategy offers consistent gains to everyone involved. However, the long-term benefit should be strong enough and clear enough to offset the periodic sacrifices for greater and more sustainable economic gains.

This strategy identifies threats as well as benefits, and one of the clearest is to miss opportunities either because Canada as a whole misreads the trends of the energy market or succumbs to the disruption of minority voices that seek to delay or upset responsible, coordinated and collective development of a key national asset.

I. A PROPOSED CANADIAN ENERGY STRATEGY

This document describes a possible and attainable energy strategy for Canada, based on and in the existing federation, constitution, and current political and physical boundaries of the

country. The central tenets of such a strategy include cooperation between actors, appropriate enabling legislation to sustain new infrastructure planning and development, and a dramatic shift in the national emphasis on information, both in the form of data as well as interpretive, independent and ongoing data gathering. This strategy respects the boundaries of the current federal-provincial alignment and power-sharing agreements, but relies on new arrangements and cooperative agreements to anticipate and excel in a rapidly changing world community.

Ultimately, this recommended energy strategy, if successful, will at least be national in scope, or multi-national when dealing with an area as large as North America (meaning Canada, the United States and Mexico) or our trading partners in Europe or the Asia Pacific. As used in this document, a *strategy* is a forward-looking statement of intent that imagines a common productive future, and the investment and collective commitment needed to achieve success in that future.¹⁴ A strategy is more refined and focused than a vision (invaluable but perhaps fungible depending on current political conditions), and depends on plans, programs, incentives, tactics and other tools, including those for the ongoing measurement of outcomes of success such as individual goals and objectives, environmental standards and compliance.

THE UNDERLYING NEED FOR A COMPREHENSIVE, VISIONARY ENERGY STRATEGY

The interprovincial competition model has worked in the past for the Canadian provinces, each with a unique inventory of natural resources. In some cases the results of competition have been dramatic, and have been dominant in export markets such as hydroelectric systems in British Columbia, Quebec and Ontario, or hydrocarbon reserves in Alberta and Saskatchewan. In this list, with energy as the common denominator, the United States has been the reliable, predictable and primary client. What is less obvious on the surface is that current Canada to U.S. export arrangements cross an international border, not always with explicit federal regulatory approval, and put each province in the de facto position of arrangements normally reserved for national government oversight and review. This was highlighted in a series of essays by Mike Cleland in 2011. He tied much of the need for and conflict surrounding adoption of a meaningful energy strategy to basic economic competition. He wrote: "A growing body of evidence suggests that the energy services on which we depend will become increasingly expensive. This phenomenon reflects several converging factors:

- increasing dependence on inherently high-cost and remote resources (although natural gas in North America is a perhaps temporary exception to this trend);
- the need for reinvestment in aging energy infrastructure;
- the inevitable costs of higher environmental and social standards; and

¹⁴ Success is a subjective term. For some success might mean reining in or trading the current energy system for one more benign in character, perhaps even limited to subsistence levels of generation and use. In this document, success is assumed to mean the long-term efficient development, use and control of pan-Canadian energy resources in both domestic and international markets.

- the emerging cost of carbon mitigation."¹⁵

Cleland went on to suggest the critical need to involve the federal government in leading the provinces to a meaningful energy strategy by exploiting "the genius of federalism by experimenting in different jurisdictions and taking the lessons to the national level. In some instances (such as a carbon price) national harmonization may be more important than experimentation. But harmonization can be achieved either top down or – more slowly and by degrees – bottom up. The choice should be suited not only to the legal jurisdiction but also to the opportunity and the need."¹⁶

Recent arrangements to expand hydroelectric service to the U.S., potentially at the expense of neighboring provinces¹⁷ (as in the case of Ontario Hydro expansion), or the adoption of greenhouse gas trading schemes point to the complicated and potentially conflictive nature of provinces treading in areas normally reserved for national governments (such as international tariffs or cross-border environmental agreements). For instance, a change in standards for greenhouse gas and carbon trading equivalency can lead to bidding wars over pollutants such as greenhouse gases (GHGs) that are truly global in nature, and which are not regulated consistently between provinces or by the federal government.

Changes in markets and country-to-province relations, including tariffs, environmental standards and land-use permission (e.g. Keystone XL or long-distance electric systems), can end in a confrontation between unequal partners, or worse, between companies acting as a proxy for these partners without the authority or jurisdiction to enact changes or standards that would satisfy other governments. At best, this describes an inconsistent, shape-changing forum. At worst, it gives away strategic advantage to other countries, companies or individuals who may be able to move quickly to capture important shares of developing or limited markets. Long-time friends can quickly become aggressive rivals.

In the case of Canada, with limited existing port capacity and no new access points on either coast or in the North, the essentially land-locked nature of the country has facilitated a close and attractive relationship with the United States that is convenient and historically profitable. In spite of declining rates of demand in the U.S., it remains the largest consumer of energy on a per capita basis in the world. However, as federal Minister of Natural Resources Greg Rickford pointed out recently with regard to oil and gas exports “. . . right now our biggest customer is also our biggest competitor.”

CONFLICTS IN RELATIONSHIPS

Much of the current discussion in Canada regarding energy policy revolves around alleviating constraints to free and open trade. Given the wide development of capacity in the form of wires, pipes, rail and storage systems, this comes down to a question of whether or not growth in demand in North America or beyond will be served by future Canadian products. There is a well-

¹⁵ Canada West Foundation, Let's Talk Energy Series, M. Cleland, Article No. 1 and 2.

¹⁶ Ibid.

¹⁷ The Ontario Hydro expansion will provide increased electric capacity to the US, but not necessarily contribute to the overall energy system in Atlantic Canada.

established marketplace for current production of oil and gas shipped to the United States, although price discounts are currently discouraging.

There are many reasons why some of the provinces might be content with leaving energy trade and development at present levels (or destinations). It is convenient, well-established and Canadian companies with ownership and interests in shipping or upgrading on both sides of the border enjoy safe and competitive returns on existing levels of development. In the case of electricity sales, the bulk transmission facilities are more than convenient, they are critical to operations on both sides of the border.

For fuels, growth in domestic demand is relatively flat, as it is in the United States where vehicle fuel demand has peaked and electricity growth overall has diminished. Thus, at present, and perhaps for the foreseeable future, continued growth in exports is threatened; moreover, the economy has lost a great deal of resiliency and diversity¹⁸ due to shocks such as the long-term loss of auto manufacturing, a weakened telecom industry, and changes in U.S. consumer driving behavior that have the potential to threaten Canada's long-term economic future.

Canada is a trading nation (forty-five per cent of the Canadian GDP represents foreign trade compared with thirty per cent in the U.S.), relying heavily on a few large trading partners, primarily France, Britain and the U.S. In this sense, Canada has done reasonably well historically by putting all its eggs in a single basket. The bilateral or limited multilateral trade agreements¹⁹ that underpinned many early trade relations look less sustainable in a highly multilateral future.

There have been conflicts between provinces in recent years, reflecting differing goals and objectives, as well as commitments to capital expenditures, relationships with aboriginal groups and environmental standards. Examples include the permitting of oil and gas pipelines between western provinces, west to east transmission facilities, hydroelectric development and revenue streams in the Maritimes, and the siting of oil pipelines between western and eastern provinces. In the future, these conflicts could extend to rail systems that might serve shelf operations in the Northwest Passage, nuclear facilities for baseload power or new ports serving national markets in previously inaccessible coastal locations.

A LEADERSHIP ROLE FOR THE FEDERAL GOVERNMENT

Canadian provinces have a critical and fundamental role as owners and managers of Canadian energy resources. This role is exclusive in the sense of ownership, but not in terms of impacts or influence on other provinces or territories. Thus, for cross-border development or movement of resources, federal oversight and review is required. For market development and trade the issue is less clear and the results can be confusing or even contradictory when provinces make agreements or enter contracts that have the effect of either diminishing opportunities for others

¹⁸ Resiliency and diversity, like transparency in regulation, are terms of art and convey a direction rather than absolute values. Canada's banking industry weathered the recent recession well, in part due to stricter reporting standards and reserve requirements. Nonetheless, losses in the market place combined with weakness in the manufacturing and resource sector can affect the Canadian economy and make it susceptible to future shocks or shifts in trade patterns.

¹⁹ Such as Trade in the British Empire; Auto-pact; FTA and then NAFTA.

(e.g. exclusive ports or pipelines or processing facilities), or have the effect of creating pan-provincial standards that normally would be reserved for the federal government (e.g. GHG or carbon markets).

No planning or policy development in Canada will ever be effective without cooperation from and respect for existing provincial powers and roles. Just as true, however, is the fact that no strategic vision can be designed or implemented as a series of linked provincial initiatives. On the other hand, in a forum where the unifying strategy identifies opportunities for cooperation, designing incentives to bridge income and investment strategies has obvious collective advantages. The power of a collective single voice in a chaotic world market can overcome many hurdles over time.

No collective energy strategy is likely to emerge without the leadership and cooperation of the federal government. This is demonstrably true given the "strategies" or proposed agreements to work together offered by the premiers in recent meetings. In spite of the relatively benign suggestions of support, the vital areas demanding real financial or regulatory cooperation engender dissent and reluctance on the part of some provinces while others simply fail to sign up. It is clear that there is no shared vision of collective net benefits that makes working together to gain access to outside, or even domestic, markets worthwhile.

If the federal government takes the role of leading the creation of a unifying energy strategy it will have to build in a framework of visible and verifiable benefits that each province can use to show their own constituencies the magnitude of future gains. Ultimately, these gains will be realized through a stable labour force, increased access to financing and investment, fair and impartial progress in dealing with First Nations, and by providing clear, useful and timely information about markets and opportunities for economic gain.

The federal government is the only entity capable of creating and implementing a pan-Canadian strategy, although that in turn rests on cooperation from the provinces. This means that any strategic direction must demonstrate net benefits for all over time.

Some examples of federal leadership in this area that could underpin a future energy strategy and invite provinces to adopt a common strategic initiative imply literally offering money for infrastructure and renewable energy technology while sharing control of the planning process and necessary objectives and methods. Examples of these include:

- funding for common infrastructure planning rather than reliance on private development companies;
- identification and acquisition of future rights of way for infrastructure needed to support national economic growth;
- establishing federal support for common and shared energy research;

- the creation of an independent and impartial energy information agency to monitor trends, provide analysis about market behaviour and identify future market opportunities;²⁰
- provide federal support for renewable energy integration with existing systems;
- develop long term tariff and rights of way agreements with the U.S. and other trading partners;
- develop pan-Canadian and multi-regional GHG or carbon equivalent markets for trading and offsets;
- develop realistic pan-provincial environmental standards.

ALTERNATIVE POLICY INITIATIVES

Designing documents that purport to be or call for a national energy strategy are not new, although most share a common design characteristic in that they call for – in fact plead for – cooperation and unity between provinces in order to achieve a better shared future. The involvement of the federal government, outside of broad pre-existing oversight and regulation, is rarely included. Most of these documents reflect a distinct air of planning frustration, policy disappointment or tactical objective overlying their prescriptions. The range of advocates is wide, from the Alberta-led "shared energy vision" in 2007, to so-called national energy 'frameworks' and energy tax incentives of 2013 and 2014, promulgated by many of the premiers, designed to spur investment and clear hurdles for project approval. It is noteworthy, as well, that these proposals do not represent a consistent thread or force, with interest in them coincident largely with perceived threats to one or more provinces over time.

As Gattinger²¹ points out, a "flurry of reports advocating national approaches to energy were issued in 2012 by legislative, industry, environmental and labour organizations (e.g., Blue-Green Canada 2012; Canadian Council of Chief Executives 2012; Canadian International Council 2012; Energy Policy Institute of Canada 2012; Standing Senate Committee on Energy, the Environment and Natural Resources 2012; Tides Canada 2012)."

A useful example includes the 2011 initiative from the Canada West Foundation that outlined eight themes that should be included in a *successful* energy strategy, where the strategy would:

- embrace Canada's energy diversity as a strength;
- ensure robust environmental stewardship;
- set a price for carbon;

²⁰ See "A proposal to create a pan-Canadian energy information organization (CEIO)", M.C. Moore, The School of Public Policy, 2012.

²¹ Monica Gattinger (in press), 'A National Energy Strategy for Canada: Golden Age or Golden Cage of Energy Federalism?' in Loleen Berdahl and André Juneau, eds. Canada: The State of the Federation 2012-2013, Montreal & Kingston: McGill-Queen's University Press, 39-69).

- transform the demand side of the energy system;
- strengthen Canada's position in the world;
- promote energy security in the North American context;
- drive innovation and technological development; and
- understand that strategy is a dialogue.

Groups as diverse as the National Roundtable on the Environment and the Economy, the Canadian Council of Chief Executives and the Pembina Institute have sponsored special collaborative meetings, publications and research, and have advocated policy initiatives and special legislation such as that considered by the Federal Standing Senate Committee on Energy, the Environment and Natural Resources. The Energy Policy Institute of Canada, for its part, comprised of major energy producing and consuming corporations, was formed for the express purpose of advocating for a national energy framework and strategy. In 2012, prior to the Council of the Federation meeting, the premiers discussed the issue of a cooperative energy strategy that rapidly disintegrated over a lack of agreement between the two dominant provinces in the current debate, namely British Columbia and Alberta, which could not agree on permitting for hydrocarbon pipelines destined for yet-to-be-developed²² Pacific Coast ports necessary for global transshipment.

The federal government emphasis has been on single-project energy initiatives, such as speeding pipeline siting, smoothing the regulatory process and reserving final approvals for senior ministers, now requiring the cabinet to confirm²³ National Energy Board approvals and more recently limiting the inspection function of the Board. The government has identified natural resource development as an important *national goal*, with Prime Minister Stephen Harper at one point suggesting that Canada's destiny was to become an energy superpower,²⁴ based on vast and exportable reserves. What the Prime Minister left out of his speech was the fact that most of the initiative required to attain and retain energy superpower status requires a willing global investment and development community that will act in the face of limited *domestic* markets. This demands a growing market for a wide variety of export products, transfer infrastructure to move the product to consumers and a cooperative arrangement between the federal government, provinces, states and corresponding sovereign nations.

Achieving a collaborative synthesis of these groups has proven extraordinarily difficult and, over time, the difficulty increases at an exponential rate as solutions and agreements become naturally more complex, and expensive. The consequences of failure are becoming visibly profound. Even the disunited provinces concede in their rhetoric regarding energy "strategies"

²² There are many potential large port locations on the British Columbia coast, with Prince Rupert and Kitimat the most likely areas for upgrading to handle large volumes of liquid or gas exports.

²³ The NEB primarily regulates the construction and operation of oil and natural gas pipelines and the construction and operation of international power lines, defined as lines built "for the purpose of transmitting electricity from or to a place in Canada from or to a place outside of Canada." The government can overrule a positive decision but not a negative decision without new legislation. However, for a project to proceed, they must obtain a Certificate of Public Convenience and Necessity that needs cabinet approval.

²⁴ July 2006 address by Prime Minister Stephen Harper to UK Chamber of Commerce.

the need for coordinated, successful, sustainable and publicly-supported energy development that is tied inexorably to the overall economic health of their respective regional economies and the nation. Getting to a sustainable end state, however, requires concessions in various areas and cooperation between actors, along with the confidence that coordination and standards are maintained by a broader federal power acting genuinely in the entire nation's interest. This is eloquently highlighted by Gattinger²⁵ who suggests that "the longer-term prospects for a national energy strategy will ultimately rest upon the willingness of federal and provincial governments to shift from hyper-competition to a more collaborative approach" to developing and implementing strategic endeavors when it can be demonstrated that the net long-term returns for all provinces end up positive. In other words, that there is a net collective benefit to be shared.

In effect, the need for a truly collaborative and coordinated energy strategy and planning process is unprecedented. Provinces have been well served by the north-south trading relationships with the United States, despite distance and quality discounts for products like heavy oil, and the electricity network in the west and east has been a mainstay of the U.S. electricity grid. Consequently, with no real need to share, or even apply moral suasion to interprovincial or federal-provincial discussions, the natural evolution of effort, and reward, reflects a preference for fostering relationships with the principal client, the U.S. This situation is amplified by the fact that there is a dearth of pan-provincial, unbiased energy information and analysis focused on broad national issues or impacts, or on interprovincial and export trade threats (implied by pipeline siting and commodity quality rules and tariffs) and issues (see CEIO).²⁶

Two recent proposals from the premiers show there is broad agreement that working collaboratively is advantageous, not only for the country but for individual provinces. However, when faced with more than rhetorical agreement, there is no consensus as to next steps, responsibility, or even rewards and sharing of benefits over time. We are left with a common set of platitudes but no strategic intent. One of the supportive papers from the 2011 premiers' meeting illustrates this point. "In turning that vision into an effective strategy for the country, we (the Canadian Council of Chief Executives) envisage 10 key elements:

1. Enhance the Canadian brand;
2. Strengthen energy literacy, build a culture of energy conservation and facilitate informed consumer choice;
3. Build greater North American energy self-sufficiency;
4. Diversify energy markets;
5. Invest in sound energy infrastructure;

²⁵ Gattinger, Op cite 2015

²⁶ M.C. Moore, A Proposal for a Canadian Energy Information Organization, SPP, 2012

6. Create a Canadian energy technology advantage;
7. Ensure efficient regulatory processes, including:
 - establishing appropriate timelines for decision-making to increase timeliness and predictability;
 - clarifying responsibility among the myriad federal departments and centralizing and simplifying the decision-making process;
 - specifying the types of major projects that require formal federal assessment and those for which an equivalent provincial process can be substituted;
 - clarifying what issues are for assessment by the appropriate regulatory body with respect to the individual project, and what issues are the prerogative of government as the key decision-maker with respect to the overall public interest;
 - streamlining the intervenor process so that all legitimate points of view can be heard, but avoiding duplication and delays that do not enhance the final decision.
8. Facilitate stronger partnerships with Aboriginal peoples on energy projects;
9. Facilitate a coherent national climate policy; and
10. Build an integrated labour force strategy.”²⁷

Beyond sporadic actions by the federal government, such as limiting the status of intervenors in regulatory hearings, reserving final energy project authority for cabinet and truncating the timeframe for project review, none of the recommendations from groups such as the Council of Chief Executives has been implemented or undergone further review and delineation. In many ways this is predictable, since there is a lack of consensus about shared benefits, the incidence of cost or even the shape and nature of the markets available and accessible for energy products (both domestic and export). A lack of central strategic leadership and changing policy prescriptions did not hamper energy development or export volumes in the past, since they were directed to a large, growing and stable export client (the U.S.). As global competition increases and demand patterns in the U.S. change, Canadian energy firms have taken it upon themselves to initiate projects to move resources to new markets. However, given a lack of coordinated direction, these efforts can become mired and stalled in a thicket of uncoordinated and often conflicting regulations, policies and even cultural impediments.

The risk(s) involved in continuing this process are well known both in and out of the Canadian energy industry, and are cited as tools that can bring the industry, and resource development

²⁷ FRAMING AN ENERGY STRATEGY FOR CANADA SUBMISSION TO THE COUNCIL OF THE FEDERATION, Canadian Council of Chief Executives July 2012.

growth, to a halt by some environmental or special interest groups interested in mitigating the externalities of energy development. Broadly, these risks include:

1. failing to grow (simply maintain the existing status quo);
2. contraction and decline of industry;
3. employment displacement;
4. threatened domestic supply stability
5. diminished incentive for investment in existing energy infrastructure; and
6. loss of time – time matters in the energy industry; the new market is not the old one, and lost time is likely to not only mean late entry but no entry to markets.

II. CONSTRUCTING A FUNCTIONAL ENERGY STRATEGY

Energy is not separable from other sectors of the economy, thus "protecting" energy infrastructure and investment is a critical part of maintaining other linkages within the economy. A short list illustrates the point that "energy" is effectively a surrogate for other 'energy-linked' and 'interdependent' sectors including:

- water
- telecom, data and communication
- agriculture
- trade (international and domestic)
- land management, ownership and First Nations Treaties and agreements
- defense and security
- environmental quality
- consumer costs
- waste products
- built environment design²⁸

Consequently, an energy strategy is an amalgam, a formalized acknowledgement of a need for continuous attention, investment and oversight of a complex and interrelated industry that cannot be ignored without great public risk. By its very nature, an energy strategy is a national statement and vision of the future; it must supersede at critical points regional and local economic and geographic planning and interests to create a shared common interest and good for the entire country. This is not to suggest that well-established rights and privileges for provinces and territories would or should be abrogated, but that a new future world energy market demands coordination and invested commitment. In spite of widespread agreement that this is a positive goal, the practical logic of this approach is stubbornly resisted by the provinces and the federal government when asked to implement policy or agreements beyond the

²⁸ The range of this list also implies the number of potential veto players is vast, a common dilemma for initiatives that attempt to break a mold or create a new social vision.

rhetorical stage. Gattinger refers to this in terms of a "decades-long political prohibition on national approaches to energy," characterized as a "third-rail energy federalism: get too close to provinces' energy powers or dare to propose national approaches to energy and suffer the consequences.²⁹ This is clearly a risk, but in the interest of staying competitive in a complex and increasingly complex world market, one that cannot be avoided.

A HIERARCHY OF PLANS, VISION AND STRATEGY

An energy strategy is a term of art, but grounded in historical experience in other sectors. By definition it is not a "plan," and must be more than a "vision," terms often employed by policy makers to convey short-term objectives or political platforms. The terms as used here are described in Table 1 below.

Figure 1
Definitions and Tools Supporting an Energy Strategy

Category	Description
Vision	An overarching description of the role, stature and nature of the body, typically without specific or testable components – literally what we can realistically imagine and ultimately achieve.
Strategy	A strategy provides a “framework” ³⁰ to move from a current position to a future position or role. A strategy or strategic statement describes roles, responsibilities and expected benefits from pursuing actions or investing in a process that can be tied to broad public goals. It would include: <ul style="list-style-type: none"> • design of the structure needed to get there; • definition of who participates and roles; • clear role of resource owners, but obligation to nation; • clear role and rewards (and indemnification of) developers and lease holders; • role of policy and regulatory institutions (provincial); • need for financing of existing and future infrastructure; and • role for finance and investment community.
Plans	Plans are short-term tools or instruments that are expected to move toward long-term goals, or provide rewards and benefits (or bear sustainable losses) in order to achieve those goals. Creating and enacting agreements between actors (such as the CEIO or other companies and political agencies) are important at this stage, centered on building the elements that support the strategic goals in the future.
Tactics	Tactics are the description of actual means used to gain an objective. In the case of an energy strategy, tactics are likely to be extremely contentious, especially as plans and policies mature, in order to react to and influence the markets and resource development on which they are based.

²⁹ Gattinger, Op cite, 2015.

³⁰ Gattinger, Op cite, 2015.

THE NATURE AND STRENGTH OF A SUCCESSFUL STRATEGY

Since a strategy is by definition a unifying vision of an attainable goal, it presumes a rational view of the future. In the case of energy demand, both domestic and export, that demand can be expected to fluctuate, mature and, in certain applications, grow over time. There are exceptions to this, mostly in terms of rates, but in aggregate we are seeing real declines in electricity demand in some sectors, net substitution for local generation and renewable resources in others and, in the transportation sector in North America, a visible decline in rates and absolute demand for petroleum products year over year (there are strong regional and seasonal exceptions to this).³¹ Simultaneously, there are supply changes as new drilling and extraction technologies are employed in old and new oil and gas fields, and the advent of unconventional oil and gas development through hydraulic fracturing has created surplus conditions in countries such as the U.S.

Faced with a changing and volatile world market for oil and gas, but a relatively stable domestic market, the Canadian challenge is to harness a range of disparate resource potential combined with independent provincial views of development and trade, under a common, and functionally uniform system that can anticipate future market challenges, and build infrastructure and trading support to access them over a long period of time. This means that a true and successful energy strategy begins with a realistic view of the markets available, and takes steps to gain access to them. Domestically this will mean infrastructure development and access designed to appropriately serve both domestic and export demand. Some markets may be shrinking over time, others may be captured by competitors in the new paradigm of contract delivery, others may not be tenable given the distance and price discounts that will not support capital investment. Understanding these trends is the basis for a successful strategy that must deploy scarce and costly capital resources.

As well, long-term energy markets in all sectors will increasingly impose burdens on environmental quality both in production and in use. Building this understanding can enhance the value of products and increase the trading power of the country in world markets. Because Canada's resources are so vast, and new discoveries can be of a scale that can alter world market pricing, it will be important to fully incorporate the impact of new resources, such as those in the Northwest Passage, on the viability of existing energy investment in the country. Building such an understanding of complex interrelationships is an effort that will depend on a high degree of information independence, and must transcend administrations in order to be useful. A Canadian strategy sponsored or led by the public sector will ultimately involve planning (typically sub-regional or perhaps multi-provincial), infrastructure investment and rights of way designation, and cooperative or imaginative tax and income-generating policies. In order to anticipate, evaluate and weigh alternative strategies, we must anticipate the state of the world or region in which we have influence, changes in demand and taste both domestically and internationally, and the production capacity and competing sources of supply that can or will be offered to satisfy demand. This is more than a political calculus and involves careful data collection and information design that is dispassionate and able to be viewed outside a domestic political lens. For instance, Canadian supplies of heavy oil and coal may be ill-suited to changing

³¹ U.S.EIA, Annual Energy Outlook, 2015.

demands for fuels at present, and public programs to incent their development may run counter to market conditions and against broad public interest. Companies seeking to develop current leases for these fuels may make decisions more heavily weighted to capture subsidies and tax benefits than to address changing market conditions. The long-term result can be stranded capital assets, misdirected tax revenues and a loss to other more competitive technologies and sectors.

THE DOWNSIDE OF NOT HAVING A STRATEGY

Failure to develop a long-term energy strategy exposes the country to tremendous risk. This is exacerbated by a tendency for provinces to act alone or even at cross purposes with each other. In the past, the robust and seemingly endless well of demand offered by the US, allowed the installation of energy infrastructure that primarily moved fuels and raw resources from north to south, rarely laterally across the country. The result has been a dearth of pan-Canadian backbone electricity systems, rail or even coastal port development. The change in the Canada to U.S. trade relationship is not likely to be reversed in the future. As a consequence, failure to act collectively now will not be inconvenient in the future; it will be economically and culturally debilitating and have the potential to threaten long-term economic investment and well-being in the country.

Developing an attractive, unifying energy strategy has the potential to overcome this without necessarily risking a breakdown of the rules and conventions of the confederation. However, it will not do so without a common acknowledgement of the need to coordinate and collaborate on investments, access to common ports, and a need to solve First Nations and environmental impact issues in the near term, rather than face delays and inconsistent national achievement in the future.

RISK, RISK AVOIDANCE AND RISK MITIGATION

Energy markets are risky by nature. This risk is reflected in the imperfect way we anticipate demand, available supplies or even changes in weather. Nonetheless, identifying and anticipating risk is a fundamental business strategy for companies and public institutions such as electricity system operators. Since energy has become more and more of an essential good in most societies, we ensure its availability by creating surpluses, by publicly regulating quality and intervention in price controls and even seasonal shortages. Anticipating risk involves imperfect estimation and approximation at best. However, building institutional capacity and resiliency can mitigate impacts over time, and ensure that the public – not to mention investors – are insulated to some degree from unforeseen events.

No strategic calculation can anticipate all potential risks, but it can identify the types of risk where employing or deploying public resources can have a positive impact. There are four examples that illustrate the type of risks that are emerging to threaten Canada's energy future and that require a coordinated and collective response in order to avoid long-term and costly impacts on the Canadian economy. They are:

1. Export market demand decreases;
2. Untimely (too early or too late) development of next generation resources;
3. Inadequate or incompatible environmental controls and standards; and
4. De facto national policy imposed by provincial agreements and decisions that is not coordinated and potentially disenfranchises neighboring provinces, and ultimately does not provide the full measure of pan-Canadian benefits from labour to tax revenues.

III. A PROPOSED ENERGY STRATEGY

A workable energy strategy incorporates by definition, a clear, commonly agreed-upon statement of intent. This document proposes that:

Canada wants to achieve stable domestic and export balances with rates of growth matched to the client(s) and real market(s) growth rather than unlimited new capacity in the supply sectors.

We want to maintain price stability and not create a surplus or shortage that can threaten domestic security; we compete with and in the same markets as our principal client, the United States. In the foreseeable future, this is not likely to change. Improving our position will mean intensification and quality improvements in addition to rational extensification; thus flooding future markets with low-value Canadian energy products can be a counterproductive outcome for all.

We want to encourage cooperative but unfettered access across provinces with access to export markets, and to always try to serve markets of convenience in the U.S.

We want to maintain high environmental quality and standards, sufficient not only to sustain the quality of life in Canada, but to ensure trading access for Canadian products with other nations.

We want to achieve a national, cooperative arrangement with traditional landowners, First Nations and provinces sufficient to support a long-term energy development industry.

We want to provide assurance to all the various actors that Canadian energy policy will be consistently focused over time on achieving strategic objectives including:

- *assures domestic supplies and price stability;*
- *provides a framework for investment;*
- *provides a framework for collaboration between provinces;*
- *provides a basis for land-use planning, especially utility rights of way; and establishes the basis by which to evaluate landowner claims.*

STRUCTURAL COMPONENTS OF A UNIFYING ENERGY STRATEGY

Decades of policy direction from both the federal government and the provinces has resulted in inconsistent standards and oversight of energy development across the provinces.³² The range is tremendous, resulting in quasi-independent energy arrangements (e.g. pancake-type tariffs, separable tax arrangements from province to province or within provinces, independent band-by-band agreements with First Nations landowners), and varying and confusing environmental standards, regulatory processes and revenue schemes. The result, when viewed against the potential value in export markets, is that the total "pie" is smaller than it could be, and coordination among and between provinces is less unified than would be optimal. No public actor today has sufficient incentive to change this, unless the world energy market evolves in such a way as to exclude meaningful Canadian penetration and participation in the future. Rhetorical cooperation without investment plans, rules and collaborative roles that offer future gains for all will simply forestall effective steps that might mitigate this outcome.

The most likely successful path in creating a truly integrated energy strategy is to create a series of interlocking, related but independently developed strategic steps that can be adopted and endorsed by the premiers and be the basis of a unifying federally-responsive framework of intent and strategy.

An important underpinning of this approach is the recognition that, like competing business entities, provincial governments have evolved with different discount rates and preferences than the federal government. They have a different, shorter view of future potential in the energy market, and limited reasons to give up short-term benefits without a clear sense of low-risk, future benefits from collaboration.

With that in mind, any energy strategy not destined to gather dust on a bookshelf will only succeed by providing incentives for a collective demand from the provinces, directed to the federal government, for language and authority on key issues that both optimize returns and provide some indemnification against a failure to capture and serve a rapidly changing world energy market.

As an example, such a strategy could be based on steps initiated by the federal government but *driven by the provinces* that include those elements in Table 2:

³² Provincial regulatory oversight and enforcement differs across provinces and recent changes in federal rules and procedures have introduced a new level of uncertainty for public interest groups as well as energy developers. This can be seen in the changing status of intervention, depending on project, all the way to federal intervention and support for certain projects but not to others, without a common standard of reference.

Table 2
Proposed Structural Initiatives in a National Energy Strategy

Steps and Initiatives	What it would accomplish
<i>Create a Canadian Energy Information Organization</i>	No energy strategy can succeed without a consistent and reliable source of data and information. While important to this effort, industry-supplied sources of data are simply not independent and imply a bias that has to be vetted in order to be useful over the long term. Similarly, such an organization must be perceived to serve the role and needs of the provinces as unique clients, and must be separated from the federal party in power enough to be relied upon for financing and investment purposes. Linkages with research capacity at the EIA in Washington or the U.S. national energy research laboratories can greatly extend and enhance Canadian capacity in this area.
<i>Create a Carbon and GHG Credits Exchange</i>	Anticipate the arrival of international greenhouse gas and carbon emissions targets and embedded taxes for energy shipments. This inevitable issue may take decades to resolve, but in the interim will present a global opportunity to monetize, track and administer the credits involved as every nation looks forward to a workable and cohesive standard. Canada is in a position to design, administer and underwrite the development of a truly global carbon trading exchange and, in doing so, can exhibit leadership and simultaneously create a long-term revenue generating vehicle that will guide all energy development in the future.
<i>Create a National Infrastructure Investment Bank</i>	Canada has relied on outside capital investment to support the development of critical infrastructure in the energy industry. The creation of a National Infrastructure Investment Bank can support cross-provincial systems in electricity, carbon storage and new technology development in oil and gas development. With increasing interest in mitigating environmental externalities, and the advent of higher standards for emissions and monitoring, the presence of an institution established to support and fund the highest quality energy system investments can improve the timing, design and location of future improvements and development across the country.
<i>A National Rights of Way and Infrastructure Corridor</i>	Similar to the heroic efforts that established the trans-Canadian railroad and highway systems, this step requires sacrifice and commitment from all, but clearly highlights the role of energy infrastructure in the national future. Once adopted, these corridors can serve simultaneously as a definition of access and a guarantee of a buffer for lands to be set aside for public purpose or to codify the role, and responsibility, of First Nations land stewards. Included in this powerful step would be to identify at least one additional port of entry for Canadian goods and serve as a planning goal for employment, housing and finance opportunities for investors.

<p><i>National Energy Technologies Insurance Fund</i></p>	<p>New technologies with no recent market experience or share face difficulties in market entry and competition. For the next generation of low-carbon energy technologies, a category that could include geothermal electric generation, bridge and transition gas technologies or next generation nuclear facilities, insuring initial efforts in market entry can be invaluable. Not only financing but initial production can benefit from risk sharing for new technologies. The federal government in collaboration with larger risk-bearing insurance companies has the opportunity to encourage and support new and promising technology development by creating a National Energy Technologies and Insurance Fund.</p>
<p><i>A National Transportation Plan</i></p>	<p>The energy strategy needs a key plank such as this to enable thoughtful integration of road, rail, marine facilities, storage for natural gas and CO₂ and inter-provincial and international electrical facilities. The National Transportation Plan can serve as the basis for federal cross-province investments in infrastructure and for safety and enforcement of safety standards throughout the nation, including marine safety and offshore resources. A support role for this function could consider a national energy insurance program to indemnify new technologies and exploration that would be in the national interest, such as the continental shelf in the Northwest Passage.</p>
<p><i>Centre for Energy Research</i></p>	<p>The federal government of Canada can take a unique leadership role in establishing a Centre for Energy Research, with a laboratory structure that supports science, engineering and economic research specifically targeted to energy markets. Similar to the National Energy Laboratories in the United States, the research centre can work collaboratively with other countries where the specific mandate is to conduct focused research and technology adaptation for industry as well as participating government agencies.</p>
<p><i>Ensure the Independence of the Regulatory Boards</i></p>	<p>Insist on consistent and independent regulatory oversight from the federal government. Changing standards that transparently reveal shifting political rather than stable regulatory roles will destabilize and limit the ability of Canadian energy companies to interpret the law and invest or develop resources responsibly. Failure to engage in this step will only result in deep and continuous market discounts for Canadian energy products. In this area, the provinces can adopt common standards of energy extraction, processing and transportation. Best practices are the foundation that assures public safety and minimizes future challenges that may exploit inconsistency, and will demonstrate competence and commitment to international markets and the investment community.</p>

CONCLUSION

Conditions in the world energy market have changed dramatically since this topic was considered by the premiers beginning in 2007. The approach to dealing with the problem or

issue hasn't changed in the meantime, including the recently released *Canadian Energy Strategy (July 2015)* from the premiers, a document that in fact is not a strategy but an agreement to work together on issues that may or may not affect all provinces or their native interests. This is compounded by the actions of individual provinces enacting programs or investing in facilities that would normally be coordinated by a central authority. The obvious actor missing at the table is a proactive federal government.

The issue of developing a stable and responsible energy industry that can deal with future external markets is critical. It demands leadership and commitment. A loose agreement driven from the provincial level cannot hope to succeed, if only for the fact that implementing key elements such as a role for aboriginal peoples, or the need for common rights of way, port development and realistic environmental standards demands *central authority and design* to be effective. Anything short of this will simply be another agreement that Canada's energy industry is important, but leaving the real initiative to private investors and companies, rather than developing cohesive and coordinated public policy that highlights public preferences, expectations and standards.

Lack of port access, rights of way and international disagreements have the potential to freeze out effective Canadian participation in energy markets for decades to come. Failure to address this now will have long-lasting and deleterious effects on the entire Canadian economy. Old arrangements of independent and autonomous provincial roles may have to be re-examined in order to maximize gains for all. This will involve thoughtful and timely policies, including a clear re-evaluation of roles for not only the public actors, but also for First Nations communities, in addressing in a coordinated and mutually beneficial way a serious threat to the entire nation.

An *energy strategy* is not a plan, although it will depend on robust and timely planning to be successful. To succeed in the new world energy market, Canada must provide incentives for the provinces to collaborate with the federal government. Ultimately, all levels of government in Canada must take a step back and see how a failure to provide appropriate public investments and unifying policies results in following rather than anticipating or leading world markets. This is not a market where other countries, collaborators or even investors will wait for Canada to catch up. However, with the right strategy and public commitment, Canada can break the mold and lead the world market(s) to a new and more sustainable future.

▶ **About the Author**

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