



DURABLE BALANCE:

.....
**INFORMED REFORM OF ENERGY
DECISION-MAKING IN CANADA**
.....

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WITH RAFAEL AGUIRRE AND MARISA BECK**

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The University of Ottawa's Positive Energy project uses the convening power of the university to bring together energy leaders and academic researchers to determine how to strengthen public confidence in energy decision-making.

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EXECUTIVE SUMMARY

In 2015, the University of Ottawa launched the Positive Energy initiative. The mandate of the first three years of Positive Energy has been to strengthen public confidence in Canadian energy policy, regulation and decision-making through evidence-based research and analysis, engagement and recommendations for action. This report marks the conclusion of the first three years of Positive Energy, summing up what was undertaken and achieved, what was learned that may inform the actions of others, and what remains to be done as Canada looks to grapple with ever growing strains on its energy economy and decision-making system.

Over the first three years of Positive Energy, a number of important **guiding concepts** have emerged from our research and engagement.

- 1 Energy decision-making is a system of multiple parts operating within the market-based and physical energy systems.
- 2 Energy systems embody multiple imperatives that often conflict and demand trade-offs and balance.
- 3 A long-term energy vision for Canada needs to be as clear as possible when it comes to how competing priorities will be balanced and bridged.
- 4 Energy decision-making needs to balance and bridge municipal, Indigenous and broader (regional, provincial, national) energy interests and concerns.
- 5 The energy system isn't broken but needs to be modernized through 'informed reform' that takes the long view.
- 6 'Durable balance' needs to be the touchstone for reform.

The concepts of 'durable balance' and 'informed reform' lie at the heart of Positive Energy's research, engagement and recommendations for action.

Reforms need to strike a durable balance between competing priorities and tensions: demands of communities for engagement, involvement, transparency and representation; requirements of investors for adequate stability, timeliness and predictability in decision processes and outcomes; demands of consumers for safe, affordable, reliable energy. Governments have a crucial role to play in 'durable balance' – not only in their reforms to the system, but in standing behind system reforms and the decisions made once reformed systems are in place. In other words, governments too must have – and be seen to have – confidence in the system.

'Informed reform,' for its part, emerges from the fact that energy decision-making is a complex organic and ever-changing system of multiple component parts. It is in need of repair, but it requires informed reform that carefully considers both short- and long-term intended and unintended consequences from a systems perspective. Reforms to any one part of this system that fail to account for its interconnections will fall at the first fence.

'Durable balance' and 'informed reform' emerged from extensive research and engagement undertaken through two core Positive Energy projects: the 'Communities Project' (undertaken in collaboration with the Canada West Foundation) and the 'Public Authorities Project'.

The Communities Project

The Communities Project involved a series of six case studies looking at energy decisions for a wide variety of projects and jurisdictional responsibilities, in diverse circumstances and communities across Canada. Several broad themes emerged from the case studies. They were pivotal in developing the guiding concepts enumerated above, and in framing the ‘problem’ of why public confidence has become an increasing challenge in Canada:

- More often than not, policy failures played an important role in understanding community satisfaction or dissatisfaction.
- More important still were what might be termed process failures.
- Context matters.
- No community is monolithic.
- Economic interests, while important, appeared to play a secondary role relative to values.
- Information matters but energy literacy is not necessarily the issue.
- Engagement has to be real and early in the process.
- Planning matters and it most often needs to be done in a regional context.

The Public Authorities Project

The Public Authorities Project expanded the analysis from energy project decision-making at the community level to the entire energy decision-making system: from policy through to planning, regulatory development and project decision-making. The project revealed that many unresolved tensions have emerged in energy decision-making in recent decades:

- Many horses have left many barns. Decision-makers are operating in a very different context due to widespread social and value change.
- There are many elephants in many rooms. Policy gaps on issues like climate, reconciliation with Indigenous peoples and cumulative effects have spilled over into project decision-making processes that are ill- or not at all equipped to deal with them.
- In this context, policymakers and regulators – but especially regulators – are sitting ducks for critique when it comes to the substance and process of their decisions.

Drawing on its extensive research and engagement program over the last three years, **Positive Energy proposes a number of key directions to achieve durable balance and informed reform, thereby strengthening public confidence in energy decision-making.**¹

¹ Readers are invited to review three interim reports: *Who Decides? Balancing and Bridging Local, Indigenous and Broader Societal Interests in Canadian Energy Decision-Making* (Fast 2017); *The Policy-Regulatory Nexus in Canada: From Best Practices to Next Practices* (Bird 2018); and *How to Decide? Engagement: Information and Capacity* (Simard 2018).

1 *The Policy-Regulatory Nexus: Bridging the Two Silos*

- Well-articulated public policy flowing from federal, provincial and territorial governments will be the foundation of successful outcomes.
- Governments need to talk to regulators.
- Governments need to respect the independence of regulators.
- There could be benefit in mechanisms for oversight of the complete decision-making system.

2 *Local, Indigenous and Broader Societal Interests: Who Decides?*

- Strengthened local and Indigenous input and decision-making will be of critical importance.
- Federal, provincial and territorial governments are the ultimate decision-makers.
- Capacity building is critical.

3 *How To Decide? Information, Capacity and Engagement*

- Engagement of citizens will grow as an essential foundation of durable decisions.
- Information lies at the heart of all reforms.
- Capacity is of critical importance for citizens as well as governments.

Confidence and trust in the decision system needs to be widespread, extending well beyond individual citizens.

Yes it starts with citizens, but it needs to extend to local communities and their mandated authorities; it needs to extend to investors – without whom there will be no energy project decisions to make; and, pivotally, it needs to extend to public authorities themselves, whose goal should be a system characterized by durable balance and one in which they themselves have and are seen to have confidence.



INTRODUCTION AND OVERVIEW

In early 2015, the University of Ottawa launched the Positive Energy initiative. The mandate of the first three years of Positive Energy has been to strengthen public confidence in Canadian energy policy, regulation and decision-making through evidence-based research and analysis, engagement and recommendations for action. This report marks the conclusion of the first three years of Positive Energy, summing up what was undertaken and achieved, perhaps more importantly, what was learned that may inform the actions of others, and more important still, what remains to be done as Canada looks to grapple with ever growing strains on its energy economy and decision-making system (Appendix 1 provides a timeline of key changes in the political, policy, regulatory and project environment over the last three years, alongside Positive Energy's key research and engagement activities over this time period).

Positive Energy: Not an Inadvertent Pun.

Positive Energy research, engagement and products are marked by certain characteristics, points of focus, choices of vocabulary and guiding concepts. First and foremost, the initiative is grounded in the proposition that the energy dialogue in Canada needs neutral nonpartisan evidence-based forums where different perspectives can be brought together in the search for constructive, positive solutions. The convening power of the University has been central to this aim, as has the capacity for academe to undertake solution-focused applied rigorous research. Canadians from longstanding habit are centrist, cautious and inclined to constructive compromise. This is all good, up to a point, but not when it leads to false agreement and failure to turn rhetoric into action. It is worse still when it leaves the relevant actors frustrated and ever more suspicious of the competence and good faith of decision-makers and Canada potentially paralyzed with respect to its energy choices for the future. Positive solutions need real agreement based on evidence and analysis, practical steps and consensus among diverse participants based on genuine engagement.

With that in mind, the first three years of Positive Energy set out to take the problem of public confidence apart, examine its origins, understand how it plays out in real world situations, and open discussion and solution-seeking on the issues with a wide range of informed decision-makers and thought leaders. Positive Energy is also marked by its emphasis on the role of public authorities (i.e., federal, provincial, municipal and Indigenous policymakers and regulators), which has informed the work from the outset and which in turn is linked to choice of vocabulary. As developers of capital assets (by no means not only in the energy economy) began to discover some decades ago, the public has lost any reticence about making its views known about project plans up to and including vigorously opposing them. The focus of most discussions was on the developers of assets, whether the private sector or crown corporations, and the underlying attitude was well

captured in the widespread use of the pejorative NIMBY (Not in My Backyard). In other words, something was going on that sometimes lacked legitimacy but was no less real, and project developers had to act – and did – through the evolution and application of measures such as greater and earlier engagement of communities, and mechanisms like Impact and Benefit Agreements (IBAs). With the passage of time, these societal dynamics evolved to the point where not only did the focus expand to consider energy decision-making systems writ large, but the perceived legitimacy of project opponents and public authorities in energy decision-making changed with it. The new focus was the community and the new term of art ‘social license,’ with the whole thing captured in the proposition that ‘governments grant permits but communities grant permission.’

For this important debate, Positive Energy is founded on the premise that neither the pejorative ‘NIMBY’ nor the approving ‘social license’ are helpful contributors to either articulating or resolving the issues. Moreover, although project developers remain central to energy decision-making as the mobilizers of capital and skills – just as communities are of central importance as the places where many of the benefits and the costs of projects ultimately land – there seemed to be far too little attention paid to the role of governments or, as Positive Energy has referred to them, ‘public authorities.’ Public authorities are in fact the ultimate granters of both permits and permission and assertions to the contrary are erroneous and counterproductive in a democratic society founded on the rule of law. The issue, rather, turns on the questions surrounding public confidence in the decisions and the decision processes of public authorities, the public defined here as citizens and taxpayers (whether individually or organized as non-government organizations), communities, investors – and, importantly, policymakers themselves, having confidence and being seen to have confidence in the overall system.

STRENGTHENING PUBLIC CONFIDENCE IN ENERGY DECISION-MAKING: GUIDING CONCEPTS

Over the first three years of Positive Energy, a number of important guiding concepts have emerged from our research and engagement.

1 Energy decision-making is a system of multiple parts operating within the market-based and physical energy systems.

- The energy decision-making system incorporates everything from policy through to operational regulation and all parts in between, with multiple agencies working together (whether effectively or not is another matter and one of the central questions of Positive Energy's research and engagement).
- The component parts of the public decision system all matter. Regulators function in the context of overarching policy frameworks; policymakers are constrained by what is feasible under regulation; planners derive guidance from policy and implement their plans through regulation; and the public decision system operates within a larger

complex of physical energy systems, of consumer markets and of global capital markets. Decision-makers put themselves at great peril if they ignore physical energy realities, the response of price sensitive consumers or the response of risk and return sensitive investors in domestic and global markets.

2 Energy systems embody multiple imperatives that often conflict and demand trade-offs and balance.

- Energy systems must meet economic tests set by consumers, economic beneficiaries and investors; they must be safe and reliable; and they must limit their impacts on the environment, the social context and community heritage.
- The critical point as with any optimization problem is balance: decision-makers who are overbalanced whether by nervous investors, anxious project developers, angry consumers, committed climate change campaigners or demanding social activists will most often find themselves scrambling belatedly to fix large problems of their own making.



3 A long-term energy vision for Canada needs to be as clear as possible when it comes to how competing priorities will be balanced and bridged.

- The public confidence question sits within a larger frame of questions that make up what is often termed an energy strategy or vision. This should comprise a realistic view of Canada's long-term energy future, including how that future will adapt to the imperatives of carbon management, and how competing energy priorities will be managed. Canadian governments and stakeholders have grappled with this question for decades with at best mixed success.
- Whether a truly durable strategy or vision is possible in Canada's federal system will always remain an open question, but there is no question that its absence remains a significant challenge facing those responsible for energy decision systems.
- Without a clear understanding – including clearly articulated trade-offs – of where the country is going with its long-term energy future, many energy projects (not just oil and gas) will continue to be opposed on broader questions of public policy in the regulatory realm. This will intensify public frustration and increase regulatory risk for investors.

4 Energy decision-making needs to balance and bridge municipal, Indigenous and broader (regional, provincial, national) energy interests and concerns.

- Various communities demand a voice in the decision process and outcomes that meet at least some of their needs. The list is long and in twenty-first century Canada it most notably involves Indigenous peoples, many of whom have long borne the negative impacts of energy development, but in a story less often told, have frequently also enjoyed benefits.
- For the future, Indigenous communities will often function as legally recognized rights holders and stand to be central beneficiaries of energy development. They will be decision shapers and influencers as well as decision-makers in their own right.
- A program of reform that misses the full dimensions of what the 'role of local' means and how it fits within the interests of the larger society is slated for failure.



5 The energy system isn't broken but needs to be modernized through 'informed reform' that takes the long view.

- The system as it exists has – on its face – been generally effective and efficient: most things get built, communities accept if not applaud the outcomes, and domestic consumers and export markets are reliably served. But it is becoming less efficient and effective as public trust and confidence of citizens, communities, investors – and even policymakers – have declined.
- The system is in need of repair, but it requires 'informed reform,' that carefully considers both short and long-term intended and unintended consequences from a systems perspective. Those who deny the need for repair or – worse – suggest that the whole system is broken, risk eroding both public and investor confidence even further.
- 'Reforms' to any one part of this system that fail to account for its interconnections will fall at the first fence.

6 'Durable balance' needs to anchor reforms to energy decision-making.

- At the heart of 'informed reform' is the need for reforms to strike a durable balance between competing priorities and tensions: demands of communities for engagement, involvement, transparency and representation; requirements of investors for adequate stability, timeliness and predictability in decision processes and outcomes; demands of consumers for safe, affordable, reliable energy.
- Reforms need to be durable and the decisions produced through reformed systems also need to be durable. Having the perfect system from a process perspective does little good if no proponent is willing to use it. Likewise, having a speedy, top-down process does little good if it results in interminable challenges to decisions.
- Governments have a crucial role to play in 'durable balance' – not only in their reforms to the system, but in standing behind system reforms and the decisions made once reformed systems are in place. In other words, governments too must have – and be seen to have – confidence in the system.



THE COMMUNITIES PROJECT: LOCAL RESPONSES TO ENERGY PROJECT DECISION-MAKING – ‘A MATTER OF TRUST’

At the inaugural Positive Energy conference in March 2015, one of the key emerging insights related to local communities, specifically, the relative lack of understanding of their experiences and level of satisfaction (or lack thereof) with public authorities (policymakers, regulators) in energy project decision-making. As such, an early centrepiece of Positive Energy’s research focused on local communities. The ‘Communities Project,’ undertaken in collaboration with the Canada West Foundation, involved a series of case studies looking at energy decisions for a wide variety of projects and jurisdictional responsibilities, in diverse circumstances and communities across Canada. An initial literature review (Nourallah 2015) and two dozen interviews with energy leaders (Cleland with Nourallah and Fast 2016) helped to frame up the research. The case studies, undertaken in 2016, involved multiple interviews on site with relevant parties (public authorities, community members, proponents) as well as quantitative survey research where population numbers permitted. Table 1 summarizes the cases investigated.

Table 1: Case Studies for the Positive Energy/Canada West Foundation Communities Project

Project and Community	Approved or not, built or not (if built, when)	Primary responsible jurisdiction	Linear (transportation), regional or local project	Power or fuel; fossil or renewable
Northern Gateway Energy Pipeline – Kitimat and Haisla Nation, British Columbia	Approved by regulator but overturned by Federal Court of Appeal and federal government	Federal government	Linear	Fuel transport; fossil
Western Alberta Transmission Line (WATL) – Eckville-Rimbey, Alberta	Approved, built and in service, December 2015	Alberta provincial government	Linear	Power transmission; fossil and renewable
Wuskwatim hydroelectric facility – Nisichawayasihk Cree Nation (NCN), Manitoba	Approved, built and in service, June 2012	Manitoba provincial government	Local	Power; renewable
Urban natural gas power stations – Oakville and King Township, Ontario	Oakville – not approved King – approved, and in service, May 2012	Ontario provincial government	Local	Power; fossil
Wind farm – St-Valentin, Québec	Not approved	Québec provincial government	Local and regional	Power; renewable
Shale gas exploration – Kent County and Elsipogtog First Nation, New Brunswick	Not approved	New Brunswick provincial government	Regional	Fuel; fossil

Several broad themes emerged from the case studies. The themes were pivotal in developing the guiding concepts enumerated in the introduction of this report, and in framing the ‘problem’ of why public confidence has become an increasing challenge in Canada (the latter is discussed in the next section of this text). The final Communities report (Cleland et al 2016) provides a comprehensive discussion of the themes, as do the reports of each of the individual case studies (Bird 2016; Fast 2016; Sajid 2016a; Sajid 2016b; Simard 2016). Here we provide a high-level summary.

More often than not, policy failures played an important role in understanding community satisfaction or dissatisfaction.

Policy failures of various sorts lay behind projects that were successfully sited and those that were not. Three big policy challenges seem to dominate the energy landscape: climate change, recognition of Indigenous rights, and effective regional planning and cumulative effects management. Strikingly, in none of the cases was climate change a dominant factor one way or the other. Far more important were local environmental and health impacts (whether real or perceived and only in some cases pointing to instances of what might actually be termed policy ‘failure’). Three of the cases concerned historical experience with treaties and land claims and much of that probably can be fairly termed policy failure.

More important still were what might be termed process failures.

Process failures, put another way, reflect the inability to translate government intent through a coherent, stable process of engagement with affected communities, and from there through a regulatory process that was perceived as legitimate, stable and comprehensible. These failures had different sorts of effects. Some were overcome by creative adaptation (Nisichawayasihk First Nation) or by dogged persistence (Eckville/Rimbey, King Township). One formally approved project was left lacking in underlying political and, as it turned out, legal legitimacy (Kitimat/Haisla Nation). Three projects were not approved (Oakville, St-Valentin, Kent County/Elsipogtog First Nation).

Context matters.

This obviously includes the internal context of the affected communities – sometimes based on traditional economies dependent on local renewable resources, in other instances urban communities objecting to intrusions that were perceived to have important potential health impacts. External context was equally important although not – as sometimes charged – connected to externally derived celebrity communications such as on climate change, but more often due to the community in question being unconvinced that the project was justified in the larger scheme of things. The legacies of past events may have had a direct impact on the community (seen most notably with Indigenous communities) or were seen as implying risks (for example, of pipeline spills) that the community was not prepared to tolerate. What seems important here for policymakers, regulators and project proponents is that all the various dimensions of context need to be carefully considered and addressed early on in the process and as often as possible well before a project arrives at the formal project decision-making stage.

No community is monolithic.

Based on the quantitative surveys, a notable divergence of opinion emerged across the cases (this was in mid-2016, what a survey undertaken at the time of each of the project controversies might have revealed is another matter). In only two of the five surveyed communities did a majority express opposition to the project and in only one (Kent County/Elsipogtog First Nation) was that opposition overwhelming (70 per cent). But even where the 2016 results showed majority support, the projects ultimately did not go ahead (Northern Gateway) or produced significant and politically costly controversy (Eckville/Rimbey, King Township). Interestingly, there was somewhat less divergence in response to the question ‘do you trust public authorities making decisions about energy projects?’ In four of the surveyed communities, levels of distrust were in the range of 60 and 70 per cent. Somewhat surprisingly, given the ultimate outcome, Kitimat/Haisla Nation showed the lowest level of distrust of public

authorities at around 50 per cent. How exactly to unearth and understand the attitudes of the 'community' and so better manage the process is an enduring challenge.

Economic interests, while important, appeared to play a secondary role relative to values.

Throughout the case studies, negotiable factors such as jobs, community investment and resource revenues played at most secondary roles. In comparison, deeply held values, both substantive (such as attachment to the natural environment or to traditional lifestyles) and procedural (being treated openly and fairly) were prominent and powerful sources of controversy. It seems clear that economic interests alone will not shake people from these values and attempts to do so are more than likely to prove counterproductive.

Information matters but energy literacy is not necessarily the issue.

For the most part, the case study communities acted to inform themselves and approached issues with at least some measure of objectivity. However, the timing, channels, sources and the nature and quality of information affected community confidence in the decision-making process. Somewhat predictably, high levels of distrust resulted: most notably when the process was accompanied by institutional instability (Eckville/Rimbey) or seeming incoherence between political and regulatory responsibilities (Oakville, King Township); was characterized by official reluctance to share information (Oakville, King Township); or revealed that public authorities were simply unprepared to deal with the issues (Kent County/Elsipogtog First Nation).

Engagement has to be real and early in the process.

Across the six cases, engagement took many forms but came up short in several respects. The most publicly notorious case was in Kitimat/Haisla Nation where the Federal Court of Appeal found that the engagement process with First Nations fell short. Where a project was seen to be the result of an externally derived need of which the local community was unconvinced (Eckville/Rimbey, Oakville, King Township, St-Valentin, Kent County/Elsipogtog First Nation), the result was controversy, delay and often failure. Pace is important. When it appeared to the community that a project was being rushed to meet some political or other governmental need (Eckville/Rimbey, Oakville, King Township, St-Valentin, Kent County/Elsipogtog First Nation) controversy seemed sure to follow. The Wuskwatim project (Nisichawayasihk Cree Nation) stands in contrast to most of the others. Here, the community and the proponent (a Crown corporation) engaged early and significantly redesigned the project both to reduce its environmental impacts and to improve the flow of benefits to the community.

Planning matters and it most often needs to be done in a regional context.

Many of the issues described above can, in principle, be better addressed through regional planning processes (which would normally precede an actual project) than through formal regulatory processes at the individual project level. Needless to say, planning brings its own challenges, but when a community first encounters the possibility of a project through formal regulatory mechanisms, the project and the regulatory process may well be on the road to great controversy and possible failure.



THE PUBLIC AUTHORITIES PROJECT: HORSES, ELEPHANTS AND SITTING DUCKS

The second major research study undertaken by Positive Energy in its first three years was the 'Public Authorities' research project (2016-2018). The project began with a planning workshop with energy leaders centred on a discussion document entitled: *Public Authorities and Energy Decision Processes: Building Public Confidence* (Cleland 2016). The advice flowing from this workshop helped shape the rest of the work and provided a means to engage the broader community.

The main substance of the Public Authorities work began with publication of the study, *System Under Stress: Energy Decision-Making in Canada and the Need for Informed Reform* in early 2017 (Cleland and Gattinger 2017a). *System Under Stress*, using an extended zoological metaphor, laid out Positive Energy's diagnosis of the problem, i.e., why Canada has been facing increasing challenges when it comes to public confidence in energy decision-making. The diagnosis drew on the Communities Project, the above-noted planning workshop, extensive familiarity with the literature, and Positive Energy's comprehensive engagement with energy decision-makers in its first two years.

HORSES, ELEPHANTS AND SITTING DUCKS: UNRESOLVED TENSIONS

Canada is no stranger to unresolved tensions in the energy sphere, marked in the post-World War II era by such notable or notorious political moments as the great pipeline debate, the National Energy Program and the role of energy in the Canada-US Free Trade Agreement. All of these and other controversies played out against a backdrop of no clear consensus across regions combined with fundamentally different world views between different parts of Canadian society; and nothing so bold as a national energy strategy based on widespread consensus to guide the course of events. But somehow things got done. Is the current context any different?

Many horses have left many barns: A very different world for decision-makers.

Positive Energy's research and engagement reveal that the contemporary context is very different. Start with the horses that have left the barn – social and value change. This difference turns on the simple fact that big decisions of this sort no longer get resolved in political back rooms; the people are real and influential players and communities of various sorts insist – and in the case of Indigenous communities with considerable justification and legal force – that they are not only players but deciders. Add to this that levels of public trust in institutions – governments, industry, the media – are generally at a nadir² (Edelman 2017) and levels of distrust remain largely stagnant (Edelman 2018); that the world is ever more fragmented both between jurisdictions and within them; and that the communications environment, notably social media, empowers individuals (especially those with powerful opinions) and militates against coherence, broad and enduring consensus and long-term thinking. Previous controversies played out largely in parliament or legislatures, occasionally in national or provincial elections, and often between the federal and various provincial governments (a sometimes difficult but manageable context, where elites of various sorts hammered it out and somehow got on with the business of the day).

² Edelman 2017 Trust Barometer Global Results revealed that trust is in crisis around the world.

Not today. For good or ill, we are in a brave new world of energy development. It used to be that democracies had a competitive advantage when it came to business investment. Companies could count on the rule of law, stable political regimes and strong regulatory institutions in democracies. Now, firms talk about ‘democratic risk’ when it comes to resource development. Indeed, Canada is at something of a cross-roads with a variety of converging factors: the potential for fundamental technological change and radically diverging perspectives respecting the speed with which new technologies to address climate change might be adopted; relatively high inherent cost structure; access to markets and potential trade instability; and, most recently, slippage in the relative competitiveness of the country’s tax system. These factors, all of them troubling, are compounded by regulatory risk: delay, uncertainty, cost.

Efforts between the federal and provincial/territorial governments to forge the Pan-Canadian Framework on Clean Growth and Climate Change and the federal Minister of Natural Resources’ effort to forge a national consensus on Canada’s long-term energy future through the Generation Energy initiative reflect positively on Canada’s governments and may yet provide a foundation for a more coherent and stable decision-making system. Improved public confidence in decision-makers is likely to be an essential part of making such frameworks feasible and actually operational. But Canadians, as reflected in public opinion research carried out for Positive Energy by Nanos Research in the fall of 2017, are pessimistic about whether governments are getting it right. To the question ‘how is Canada doing at building public confidence?’ half say a ‘poor’ or ‘very poor’ job, and less than a fifth say ‘good’ or ‘very good’ (Nanos 2017). With respect to questions about building a long-term energy vision, balancing local and national concerns and providing a stable climate for investors, the results all lean much more heavily toward ‘poor’ or ‘very poor’ than to the other end of the spectrum. Positive Energy commissioned Nanos to poll energy and environment leaders in the country on the same questions, and views about whether governments are getting it right were even more pessimistic (Nanos 2018).

Many Elephants in Many Rooms: Policy Gaps.

None of this is made easier by unresolved large-scale policy questions that continue to bedevil us and that bear heavily, even decisively, on energy choices and on decision-making for individual energy projects.

Climate change – and climate change set in the context of our long-term energy future – is the largest. Notwithstanding all the rhetoric and aspirations of governments going back to 1990 and continuing today, several fundamental tensions remain unresolved. Canadians report themselves keen on Canada acting to reduce GHG emissions, even to somehow living up to emissions reduction commitments for 2030 which – based on numbers reported up to 2016 (Environment and Climate Change 2018) – are patently unachievable despite the existence of many low carbon energy options. But most of those same Canadians react badly to anything that implies higher taxes or energy prices and little has been done to confront them with this contradiction. Many communities, at least insofar as the Positive Energy case studies revealed, regard other factors like intrusions in the community and local social and environmental impacts with considerably greater weight than climate change. This can fatally constrain the potential for low carbon energy options. And of course Canadians remain decisively ambivalent about an oil and gas industry that generates substantial economic benefits across the country – including as one of the country’s largest sources of export revenue and taxes of various sorts (such as resource royalties for half of Canada’s provinces) – but has become a convenient scapegoat in a climate debate that often ignores the real issues confronting how to transition to a low carbon future over the long term. No government in Canada has come even close to squaring the circle on energy and climate, most have not really tried (better to bluff it out) and most of the stakeholder community, including many climate activists, has done little to help build a productive path forward. In a world of backroom energy decision-making, keeping the populace in the dark and just getting on with it might have worked. But, as noted above, that horse has left the barn.

The second big elephant is Canada's unresolved relationship with Indigenous peoples and with their communities' local authorities. The tension between local and wider community costs and benefits will always exist, but as Indigenous community expectations grow, energized by judicial decisions and political enthusiasm, this tension is sure to grow. One of the ironies of the energy and climate question is that it could easily exacerbate this tension as the need grows for new and land intensive energy infrastructure (wind farms, solar, hydro), including linear facilities (transmission) to tie it all together. But in an equally ironic twist, energy, including both renewable and oil and gas, has the potential to form the foundation for Indigenous communities' economic, social and cultural revitalization and transformation. A number of past examples stand out. Two striking ones are communities in the vicinity of the Alberta oil sands and those bordering James Bay in Québec, where, through the extensive collaboration and goodwill of numerous parties, enormous and difficult controversies were eventually resolved in ways that empowered and enriched Indigenous communities.

Success with Indigenous communities and with local communities more generally will always remain elusive, in part because of the challenges of energy and climate policy, but also because Canada continues to grapple with the third elephant, cumulative environmental impacts of development. As with other questions surrounding energy and Indigenous peoples, this elephant presents numerous avenues for incremental improvement through both substantive change in project design and management and through process change that empowers local communities. There are many examples of success here, including in the Community Case Studies cited above. But these changes entail costs, whether in terms of reducing the financial returns to investors or in terms of governments undertaking much more direct investment in everything from information needed for longer term planning to

environmental management systems. Canadians may well decide in the future to accept these costs, but only if they are made transparent along with their consequences – and trade-offs – for imperatives ranging from energy affordability, to reliability, to competitiveness of Canada as an investment destination.

Taken together, the big policy questions range from: tractable, albeit with a cost (cumulative local effects), tough but tractable (with a huge source of opportunity in terms of energy and Indigenous communities), to simply tough (the transformation of an energy economy still dependent on fossil fuels for over three quarters of the country's needs (National Energy Board 2017) to a very low carbon configuration). Understood as elements of a system, these policy issues present opportunities not only for substantive improvement but also for constructive dialogue. However, common sense and experiences such as Ontario's coal policy (with its impacts on prices and related consumer backlash) and the debate about carbon taxes (even where implemented, still at levels far short of the carbon prices needed to meet near term commitments) illustrate how big policy leaps can be perilous, toxic to reasoned debate and public understanding, and prone to public dissent. The result can be unfortunate but predictable policy reversals, the polar opposite of informed reform and durable balance. If change is to be informed and durable it must reflect a balance among competing energy imperatives (economic, environmental, security) and the needs and demands of multiple communities (local, regional, provincial and national).

Specifically, it must deal with three core elements of the energy decision-making system at the centre of Positive Energy's Public Authorities research and engagement, the first of which concerns the relationship between policymakers and regulators, both of which – but especially regulators – being the **sitting ducks** in our animal metaphor.

THE PROPOSED REFORMS TO FEDERAL ENERGY DECISION-MAKING: A LONG WAY FROM ACHIEVING DURABLE BALANCE

Bill C-69, *An Act to enact the Impact Assessment Act and the Canadian Energy Regulator Act, to amend the Navigation Protection Act and to make consequential amendments to other Acts*, at present before the Environment and Sustainable Development Committee after passing second reading in the House of Commons, entails a sweeping revamp of the processes by which projects in federal jurisdiction are reviewed and approved.

The Bill contains several features that are broadly aligned with what Positive Energy has called ‘informed reform,’ but it also contains troublesome aspects that could prove a significant impediment to the development, sustainability, affordability, reliability and competitiveness of Canada’s energy system, whether oil, gas, nuclear or renewable based. In short, the proposed reforms increase complexity and uncertainty regarding both process and outcomes. Economic benefit and competitiveness considerations appear to take a back seat to environmental and social policy objectives, making it less likely that Canada will attract the investment necessary to both optimize its current resource-based economy and transform its energy system over the coming decades.

The good news: some of the proposed reforms touch on fundamental stresses affecting the system.

- The proposed legislation attempts to address higher citizen expectations for engagement in decision-making:
 - There is increased commitment to ensuring a stronger role for local authorities in energy decision-making, at least Indigenous authorities, although exactly how this would work remains to be determined.
 - Similarly, there is extensive provision for engagement and consultation of citizens who have an interest in or are affected by projects.
- While together these provisions will probably add both time and cost, Positive Energy’s research and engagement underscore that these costs could be well worth it if they are structured and managed effectively and if they help build widespread consensus in support of projects, thereby reducing risk and uncertainty for all parties.
- The proposed legislation is represented as having tighter timelines aimed at providing greater certainty and predictability for investors, although these are subject to exceptions that will likely create a lengthier and more uncertain process, especially given the far larger number and range of considerations that will inform project decision-making.

The bad news: the proposed reforms are likely to move us further from achieving durable balance.

- While Bill C-69 attempts to clarify the respective roles of policymakers and regulators, it fails to create a sound and durable framework; its overall effects seem indifferent to the fundamental point that energy projects are necessary, that they require investors willing to put capital at risk and that they inevitably raise questions of tradeoffs that will leave many constituencies dissatisfied.
 - The policy and planning work that should precede projects is left *de facto* largely in the hands of project proponents via the impact assessment process, as opposed to being developed *ex ante* by policymakers or planners as an overall framework within which project decision-making takes place. This will likely exacerbate existing policy gaps, with the effect of institutionalizing the existing stresses in the system.
 - The effect will be to add not only time and cost but increase uncertainty for project proponents – whether oil, gas, nuclear, or renewable – who will need to navigate a much lengthier list of important – but vaguely specified – social justice and environmental (notably climate change) requirements.
 - The effect of climate change requirements may be a point of particular uncertainty given their open-ended nature and that politically determined requirements can be added late in the process, despite a project meeting other formal policy requirements, including being subject to carbon pricing.
- While it is appropriate that more avenues are created for citizen and community engagement, it remains an open question whether more engagement in and of itself will strengthen public confidence in energy decision-making. The Act emphasizes engagement during project decision-making, not during the policy and planning phases which should precede projects and are the responsibility of public authorities. In the project review and approval phase, an open-ended system of determining who has standing to testify invites open-ended debate on policies (and related planning frameworks) that should have been set *a priori*. The unintended consequence may be citizens who are no more satisfied than with the current system.
- Final project approvals rest in the hands of the government, making such decisions highly vulnerable to political considerations, whether short term or even outside the scope of the project. These arrangements also make the ‘evidence’ upon which decisions are taken less open and transparent.
- The overall tone and probable effect appears to have taken an existing process which some critics see as too ‘industry friendly’ and flipped it on its head. Strategic assessments are entirely environmental and in the hands of the Minister of the Environment and Climate Change; the whole effect seems to give short shrift to integrated strategic assessments that reflect both the impacts and benefits of energy development (including to local communities) and the necessity of decisions regarding inevitably highly impactful energy projects (especially as electric transformation gathers momentum) being made in the broad public interest.
- The proposed reforms raise major questions about coordination between federal regulators, and between federal, provincial, and territorial regulators, and Indigenous peoples. While the details of the process remain unclear, the principal driver appears to be the impact assessment process, with an advisory role for the Canadian Energy Regulator and the integration of complex issues essentially in the hands of the Environment Minister and Cabinet. The notion of ‘one project, one assessment’ appears out of reach.

WHERE TO FROM HERE: DURABLE BALANCE, INFORMED REFORM AND PUBLIC CONFIDENCE IN THE ENERGY SYSTEM

This section builds on three more detailed Positive Energy studies on how to resolve the stresses in energy decision-making identified in *System Under Stress* (Appendix 2 details the research and engagement undertaken for each of the studies). The reports reflect much more detailed consideration of the issues and include many more specific ideas for ‘informed reform’ than space permits here. But as Positive Energy has developed these proposals, the concept of ‘durable balance’ is increasingly compelling and, alongside ‘informed reform,’ Positive Energy urges governments to anchor reforms in these concepts. Both terms require elaboration.

The idea of durability operates at several levels. In a democracy, change needs to rest on broad buy-in from across the electorate or it will introduce instability and uncertainty both for communities and for investors and it will often not outlast changes of government. New approaches need to actually work, yet we know from experience that there are many ways for new mechanisms to come up short of expectations or backfire entirely. Mistakes are part of the game; they are inevitable, but they needn’t be fatal if that reality is acknowledged, if they are at a scale that makes them resolvable (hence the perils of big leaps into the future) and if they become a source of learning rather than despair.

Durability is also a key consideration within energy decisions themselves. Neither public nor investor confidence is enhanced when massive amounts of expended capital risk becoming stranded by second guesses flowing from changes of government. Even before physical capital is actually invested, when governments overturn or at least try to overturn decisions taken legitimately through the work of formally mandated tribunals, they risk creating in the minds of investors an expectation that no approval is really an approval. Governments do grant permits but if they do so in the rhetorical glow of the idea that only communities grant ‘permission,’ then everything is political and nothing is durable.

Balance, as noted in the first section of this report, has two main dimensions. The primary one, to reiterate, concerns the competing imperatives of the energy system. No energy system is sustainable and no decision concerning that system is durable if the system is unable to meet consumer needs for a system that is safe, secure and affordable, as well as environmentally acceptable. Carbon management is one more imperative – albeit a massive one – but it exists in the larger energy context, a reality that continually gets lost in debates on climate policy. Lying behind this physical reality is the social and political reality of the balance that must be found among communities which habitually place governments in seemingly impossible positions. There is no ‘answer’ to this conundrum and governments, especially in a democracy, eventually have to make hard political choices and live with the consequences. But it is just possible that a society that is better informed, whose voices at least have forums where they can be heard, where local communities are empowered to shape the future while also being enjoined to act with the larger society in mind, and where decision systems are seen as open and fair, evidence-based and stable, will find its way to balanced outcomes that are truly durable.

The following section, drawing from the three detailed reports and related Positive Energy engagement, lays out essential directions for the future from which informed reform should flow.

DIRECTIONS FOR THE FUTURE

The Policy-Regulatory Nexus: Bridging the Two Silos.

The first set of directions concerns the structure of the decision systems themselves, what Positive Energy terms the policy-regulatory nexus.

- **Well articulated policy flowing from federal, provincial and territorial governments is the foundation for successful outcomes.** This may not take the form of anything as grand as a Canada-wide strategy but perhaps only – and maybe preferably – an ongoing and publicly accessible set of forums supported by resources for analysis and communication and reflected in much more highly evolved regional planning, including various sorts of government statements and public directives to regulators.
- **Governments need to talk to regulators** who are themselves deep sources of expertise, experience and sensitivity to local communities. The idea of regulatory ‘independence’ often gets translated, perversely in Positive Energy’s view, in the emergence of two solitudes. Done appropriately – upstream in the decision system and as transparently as possible – there is no reason why this sort of interaction should compromise the roles of regulators.
- **Governments need to respect the independence of regulators.** When it gets to the level of individual project decision-making processes or other regulatory decisions (such as rate making or system management), policymakers need to clearly acknowledge the need for objectivity, technical expertise (of diverse sorts) and processes of ‘hearing’ that are open and meet high standards of procedural integrity as well as efficiency. If after due consideration the outcomes of regulatory processes fairly reflect procedural norms as well as government policy, then in only the rarest of circumstances should policymakers intervene further in the decision process.
- **There could be benefit in mechanisms for oversight of the complete decision-making system.** The regulatory systems (and the policy systems that stand above them) are complex and incomprehensible to the public and inevitably subject to the suspicion that something nefarious is going on behind the scenes. The overall system would benefit from the existence of a review mechanism or mechanisms that could establish an evolving set of principles of good practice and could report periodically and publicly on the state of play.

Local, Indigenous and Broader Societal Interests: Who Decides?

The second set of directions concerns ‘who decides’ and how to balance and bridge local, Indigenous and broader societal interests.

- **Strengthened local and Indigenous decision-making will be of critical importance.** The need for effective incorporation of local and Indigenous authorities in the energy decision system is not new, although the scale at which it will be needed in the future is beyond that of anything seen previously. It starts with acknowledging that the roles of Indigenous and municipal governments have been permanently elevated in the energy decision-making system. This decentralization of decision-making authority will add costs and extend decision timelines, but it can create wins all around through better planning, increased legitimacy of decisions, public confidence-building, better projects, and ultimately reduced ‘social risk’ and increased durability of decisions for project proponents.
- **Federal, provincial and territorial governments are the ultimate decision-makers.** Ultimate authority to decide whether energy projects are in the broad public interest needs to be retained by federal and provincial governments through their policy and planning efforts and through the authority of objective regulatory processes. This is particularly true for linear infrastructure. This is a difficult balance to be sure, but one that may be facilitated by greater use of formal co-management bodies that share

authority among federal, provincial and territorial governments and relevant Indigenous or municipal authorities. This must be accompanied by a realistic recognition by local authorities (municipalities and Indigenous governments) that they are part of a bigger Canada whose interests and values are reflected in well established and largely successful constitutional arrangements.

- **Capacity building is critical** especially as and if local authorities (whether municipal or Indigenous) assume formal decision responsibilities (economies of scale will bear heavily here). Governments should consider establishing or funding an expert body or bodies to help build technical capacity (planning, finance, safety, regulatory process principles) within Indigenous and municipal governments. Executive and personnel exchanges between industry, regulators, policymakers, Indigenous governments and municipal governments can also build both capacity and mutual understanding.

How To Decide? Information, Capacity and Engagement.

The third set of directions, 'how to decide,' addresses questions concerning engagement, information and capacity.

- **Engagement of citizens will grow as an essential foundation of durable decisions** starting at the policy level, flowing through regional planning and throughout the regulatory processes from project decision-making to ongoing operation and abandonment. In one sense this is an old idea and there is a wealth of experience with a variety of

mechanisms to draw on, but there is a new need for a firm commitment by governments to the creation of a comprehensive and sustained approach to engagement and experimentation with innovative approaches. All the while, governments – and others in the system – must recognize that this will cost, will possibly extend timelines and will potentially constrain government discretion – but all set against the very real potential for greater legitimacy and stability in decision-making.

- **Information lies at the heart of all reforms** and Canada has to bring its energy information systems up to the level that is essential to both public and investor confidence. Governments have shirked this need for many years, but it is essential to success for a twenty-first century energy system to be properly resourced to gather, analyze and publicly disseminate information about energy that is seen as objective, credible, reliable and non-partisan.
- **Capacity is of most critical importance** in the case of public authorities – especially local authorities (Indigenous and municipal) – that may be relative newcomers to energy decision-making. This need also extends to citizens at large. A modern information system is the foundation but so is the ability of non-government actors such as academia, think tanks, environmental groups, individual citizens and trade associations to contribute solid analyses in the public domain. An oversight mechanism for the regulatory system could contribute immeasurably to the capacity of citizens to understand the system and contribute to needed system maintenance and redesign as well as the ongoing overarching policy processes.

THE CANADIAN ENERGY INFORMATION SYSTEM

In Canada, there is currently no centralized organization in charge of coordinating data and analysis on national energy supply, demand, production, and products. Instead, energy data are currently collected and compiled by various organizations across the country, none of which can claim universally recognized authority on this issue. While data collection is largely undertaken by Statistics Canada, data analysis and dissemination are loosely coordinated across various actors, including public agencies, regulators, NGOs, and industry associations. Observers note that these bodies often use different standards and different tools for compiling and analyzing data, leading to redundancies, gaps, and lack of coherence (CERI 2015, 2016; Moore 2012). These issues affect the credibility of Canadian energy information among investors and the general public.

Credibility is the key criterion for a functioning energy information system. High quality, credible energy information must be relevant to users' needs; accurate and reliable; timely and punctual; coherent and comparable; accessible and clear (United Nations Department of Economic and Social Affairs, Statistics Division 2016). Furthermore, to avoid political bias, energy information systems should operate at arm's length from the government.

Multiple proposals for reforming Canada's energy information system suggest the establishment of a strong, central leadership organization capable of taking on a coordinating function between various actors involved (CERI 2016; Moore 2012; The Expert Panel on the Modernization of the National Energy Board 2017). This leadership role may either be assigned to an already existing organization (e.g., Statistics Canada) or a new agency. But so far, the federal government has not determined a strategy for reform.

International comparisons may usefully inform the Canadian debate. In the United States, a single government agency, the Energy Information Administration (EIA), is charged with collecting, analyzing, and disseminating national energy information to decision-makers and the general public. The agency is government-funded yet politically independent. Established in the 1970s, the EIA has developed a powerful brand and is trusted by users. In contrast, Germany's energy information system relies on a network of public and private organizations. For example, key energy data analysis is produced by the Working Group on Energy Balances (AGEB), a collaborative network of industry associations and research institutes. The final energy balance is based on deliberation and negotiation between the various actors involved, enhancing its credibility.

– Marisa Beck

CONCLUSION: PUBLIC CONFIDENCE – THE OPPORTUNITY AND CHALLENGE

The above directions have been outlined conscious that Positive Energy’s overarching mandate concerns public confidence in the energy decision-making system. It is a long road ahead, but these ideas, systematically adopted across Canada by various governments, hold real potential to rebuild confidence over time.

Essential to this process is recognition that the ‘public’ also includes investors, who inevitably worry about costs, delays and the risks of unstable decisions. Within the directions for reform outlined above, one can discern the potential for new costs and longer time horizons for decisions, but against that these potential impacts can be offset by reduced risk that on balance make the reforms more than worthwhile.

In the end, the entities whose confidence in the system may be the most important to restore is that of governments themselves. If governments kick critical decisions down the road by avoiding policy or by indulging too much in what has been called (and can be) ‘creative ambiguity’; if they overbalance decision processes towards one objective or another or toward one stakeholder group or another; or if they change their minds or feel some unique political pressure, they will constantly be tempted to intervene in decision processes and outcomes, often at

inappropriate junctures, leaving no decision truly durable. Again, there are questions of balance to attend to, notably the need for public financial support for new mechanisms or ensuring mechanisms don’t excessively constrain government discretion or expose governments to undue criticism.

Fundamentally, informed reform and durable balance come down to the question of whether the myriad challenges facing energy decision-making in Canada now and into the future can be effectively tackled without the sorts of tradeoffs explicitly described or implied above. This assessment underscores that the answer is clearly ‘no’ and that a durable balance requires them. The prize is an energy system that meets the needs of twenty-first century Canada and whose ongoing development is less rancorous and costly than it will likely be with the system as it stands. This is the very essence of informed reform.

REFERENCES

- Bird, Stephen. 2018. *The Policy-Regulatory Nexus in Canada: From Best Practices to Next Practices*. Ottawa: University of Ottawa (Positive Energy).
- , 2016. *A Matter of Trust. The Role of Communities in Energy Decision-Making. Case Study: Gas-fired Power Facilities, Oakville and King Township, Ontario*. Calgary and Ottawa: Canada West Foundation and University of Ottawa (Positive Energy).
- Canadian Energy Research Institute. 2015. *The Business Case for an Energy Information and Research Organization in Canada. Part 1: Strategic Vision and Value Added Services* (September 2015). Calgary: Canadian Energy Research Institute.
- , 2016. *Why a Canadian Energy Information Organization is Needed* (October 2016). Calgary: Canadian Energy Research Institute.
- Cleland, Michael. 2016. *Public Authorities and Energy Decision Processes: Building Public Confidence*. Ottawa: University of Ottawa (Positive Energy).
- with Stephen Bird, Stewart Fast, Shafak Sajid and Louis Simard. 2016. *A Matter of Trust: The Role of Communities in Energy Decision-Making*. Calgary and Ottawa: Canada West Foundation and University of Ottawa (Positive Energy).
- and Monica Gattinger. 2017a. *System Under Stress: Energy Decision-Making in Canada and the Need for Informed Reform*. Ottawa: University of Ottawa (Positive Energy).
- and Monica Gattinger. 2017b. 'System Under Stress: Energy Decision-Making in Canada and the Need for Informed Reform.' *Energy Regulation Quarterly*, Volume 5, Issue 4, December.
- with Laura Nourallah and Stewart Fast. 2016. *Fair Enough: Assessing Community Confidence in Energy Authorities*. Calgary and Ottawa: Canada West Foundation and University of Ottawa (Positive Energy).
- Edelman. 2017. *Trust Barometer 2017. Global Results*. Available on-line at <https://www.edelman.com/trust2017/>
- Edelman. 2018. *Trust Barometer 2018. Global Results*. Available on-line at <https://www.edelman.com/trust-barometer>
- Environment and Climate Change Canada. 2018. Overview of 2016 Reported Emissions. January 2018 Facility Greenhouse Gas Reporting Program. Available on-line at <https://www.canada.ca/content/dam/eccc/documents/pdf/climate-change/emissions-inventories-reporting/overview-of-reported-2016-emissions.pdf>
- Fast, Stewart. 2017. *Who Decides? Balancing and Bridging Local, Indigenous and Broader Societal Interests in Canadian Energy Decision-Making*. Ottawa: University of Ottawa (Positive Energy).
- , 2016. *A Matter of Trust. The Role of Communities in Energy Decision-Making. Case Study: Shale Gas Exploration, Kent County and Elsipogtog First Nation, New Brunswick*. Calgary and Ottawa: Canada West Foundation and University of Ottawa (Positive Energy).



Gattinger, Monica. 2016. *Public Confidence in Energy and Mining Development: Context, Opportunities/Challenges and Issues for Discussion*. Paper prepared for the June 8-9 2016 Stakeholder Workshop on Public Confidence in Energy and Mining Development for the 2016 Energy and Mines Ministers Conference.

-----, 2017a. *Big Projects, Big Politics, Big Policy: Strengthening Public Confidence in Energy Decision-Making in Canada*. Invited paper for the 2017 Energy Policy Papers, Canadian Global Affairs Institute.

-----, 2017b. 'Canadian Energy's Johnny Cash Moment,' *The Hill Times*. August 21.

Gattinger, Monica and Michael Cleland, with Rafael Aguirre, Marisa Beck, Stephen Bird, Stewart Fast and Louis Simard. 2017a. *National Energy Board Modernization: A Systems Approach to Informed Reform of the National Energy Regulator's Mandate*. Discussion Paper Commissioned by the National Energy Board Modernization Expert Review Panel. Ottawa: University of Ottawa, Positive Energy.

Gattinger, Monica and Michael Cleland, with Rafael Aguirre, Marisa Beck, Stephen Bird, Stewart Fast and Louis Simard. 2017b. *National Energy Board Modernization: Response to the Expert Panel's Report by the University of Ottawa's Positive Energy Project*. Ottawa: University of Ottawa, Positive Energy.

Gattinger, Monica and Michael Cleland, with Rafael Aguirre, Marisa Beck, Stephen Bird, Stewart Fast and Louis Simard. 2017c. *Submission to the National Energy Board Modernization Expert Panel from the University of Ottawa's Positive Energy Project*. Ottawa: University of Ottawa, Positive Energy.

Gattinger, Monica and Michael Cleland, with Rafael Aguirre, Marisa Beck, Stephen Bird, Stewart Fast and Louis Simard. 2017d. *Environmental and Regulatory Review: Response to the Government of Canada's June 2017 Discussion Paper by the University of Ottawa's Positive Energy Project*. Ottawa: University of Ottawa, Positive Energy.

Moore, Michal C. 2012. *A Proposal to Create a Pan-Canadian Energy Information Organization (CEIO)*. The School of Public Policy Publications, Volume 5, Issue 11, March 2012.

Nanos. 2015. *Positive Energy Conference – National Opinion Survey, Nanos, March 2015, Submission 2015-622*. Ottawa: Nanos Research.

-----, 2016. *Canadians' Views on Canada's Energy Future. University of Ottawa Positive Energy Summary, Nanos, October 2015, Submission 2015-691*. Toronto and Ottawa: Nanos Research.



- , 2017. *Canadians more negative than positive about energy decision-making*. University of Ottawa Positive Energy Summary - Draft, October 2017, Submission 2017-1058. Ottawa: Nanos Research. http://www.uottawa.ca/positive-energy/sites/www.uottawa.ca/positive-energy/files/2017-1058_positive_energy_sep_omni_-_populated_report_with_tabs.pdf
- , 2018. *Energy and environmental leaders agree or somewhat agree that Canada needs to better manage cumulative project effects on communities; 'final say' on projects crossing multiple communities should rest in the hands of government*. Positive Energy Panel - Wave II - Summary. Unpublished.
- National Energy Board. 2017. *Canada's Energy Future 2017. Energy Supply and Demand Projections to 2040*. <https://www.neb-one.gc.ca/nrg/ntgrtd/ftr/2017/2017nrgftr-eng.pdf>
- Nourallah, Laura. 2016. *Communities in Perspective: Literature Review of the Dimensions of Social Acceptance for Energy Development and the Role of Trust*. Ottawa: University of Ottawa (Positive Energy).
- Sajid, Shafak. 2016a. *A Matter of Trust. The Role of Communities in Energy Decision-Making. Case Study: Northern Gateway Energy Pipeline, Kitimat and Haisla Nation, British Columbia*. Calgary and Ottawa: Canada West Foundation and University of Ottawa (Positive Energy).
- , 2016b. *A Matter of Trust. The Role of Communities in Energy Decision-Making. Case Study: Western Alberta Transmission Line, Eckville and Rimbey, Alberta*. Calgary and Ottawa: Canada West Foundation and University of Ottawa (Positive Energy).
- Simard, Louis. 2018. *How to Decide? Engagement: Information and Capacity*. Ottawa: University of Ottawa (Positive Energy).
- , 2016. *A Matter of Trust. The Role of Communities in Energy Decision-Making. Case Study: Wind Farm, St-Valentin, Québec*. Calgary and Ottawa: Canada West Foundation and University of Ottawa (Positive Energy).
- The Expert Panel on the Modernization of the National Energy Board. 2017. *Forward, Together. Enabling Canada's Clean, Safe, and Secure Energy Future*. Report of the Expert Panel on the Modernization of the National Energy Board.
- United Nations Department of Economic and Social Affairs, Statistics Division. 2016. *International Recommendations for Energy Statistics*. Statistical Papers. Series M No. 93. New York: United Nations.

APPENDIX 1: TIMELINE

2015		
Energy policy/regulatory relevant events and decisions	Positive Energy: engagement with decision-makers, events and publications (selected activities)	Reform of Canada's energy decision-making system and PE's direct engagement in reform processes
<p>JULY - At the Annual Council of the Federation, Premiers adopted the Canadian Energy Strategy, a framework that intends to facilitate interprovincial collaboration to promote the transition to a lower carbon economy and to enhance energy information and awareness. Public trust is only mentioned once, and marginally, in the document.¹</p> <p>Despite a series of legal challenges to build a hydroelectric dam in Peace River (northeast B.C.), including from Indigenous peoples, the provincial government decides to start the \$4B project.</p> <p>NOVEMBER - Alberta announces its Climate Leadership Plan, which in part aims to aggressively increase the use of renewable sources of energy, to reduce methane emissions from upstream oil and gas production (45% less by 2025), and to cap oil sands emissions at 100 MT/yr.</p> <p>As a way to enhance U.S. leadership in the fight against climate change, President Barack Obama rejects the Keystone XL pipeline, a TransCanada sponsored project to expand Canadian crude oil exports to the U.S.</p> <p>DECEMBER - Near unanimous member-country adoption of the Paris Agreement, to limit average global temperature increase to 2.0 ° C (with aspirational goal of 1.5 ° C) by 2100. Canada pledges to cut emissions by 30 percent of 2005 levels by 2030 (target announced in May 2015).²</p>	<p>MARCH - Positive Energy (PE) Inaugural Conference, organized with the University of Western Ontario's Ivey Business School. Participants refine and cultivate key premises of the project, underscoring the importance of better understanding the new, heightened role of communities, Indigenous peoples and public opinion on energy projects and energy policy.³</p> <p>A Nanos poll commissioned by PE shows that a majority of Canadians want to develop Canada's renewable and fossil fuel resources and expect federal leadership (above provincial leadership) on energy and climate change policy. The poll also shows that Canadians regard the national interest as more important than regional or other interests, except in British Columbia and the Atlantic provinces.⁴</p> <p>AUGUST - PE Chair Dr. Monica Gattinger gives invited closed-door presentation on public confidence to all federal, provincial and territorial energy and mines ministers at the Energy and Mines Ministers Conference (EMMC), Halifax. The ministers decide to make public confidence the theme for the 2016 conference.</p> <p>NOVEMBER - PE Workshop: Indigenous Engagement in Energy Planning, Provision and Development. The workshop brings together leaders from the academic, industry, Indigenous and government sectors to identify key questions for PE research and engagement.</p> <p>Big Ideas Energy Leaders' Dialogue, co-organized by PE and the Economic Club of Canada. The Dialogue features leaders from business, government, ENGO and Indigenous organizations.</p>	<p>MAY - Third engagement process to update guidelines to fulfill the First Nations' Duty to Consult, led by Mr. Bryn Gray, Ministerial Special Representative. The process results with May 2016 report, <i>Building Relationships and Advancing Reconciliation through Meaningful Consultation</i>.⁵</p> <p>AUGUST - EMMC holds a closed-door presentation on public confidence in resource development (PE Chair Monica Gattinger gives the invited presentation). Ministers select public confidence as the theme for EMMC 2016.</p> <p>OCTOBER - Leading a campaign with a strong emphasis on climate change policy and on giving more robustness to decision-making and oversight of energy policy, Justin Trudeau and the Liberal Party secure a majority in the federal election with 184 seats.⁶</p> <p>NOVEMBER - Prime Minister Justin Trudeau issues Mandate Letters for the Ministers of the Environment and Climate Change (ECCC) and of Natural Resources (NRCan). The letters contain an instruction to work jointly (and with the Ministers of Fisheries, Oceans and the Canadian Coast Guard, and the Minister of Indigenous and Northern Affairs) <i>to immediately review Canada's environmental assessment processes to regain public trust and help get resources to market and introduce new, fair processes that will:</i></p> <ul style="list-style-type: none"> • <i>restore robust oversight and thorough environmental assessments of areas under federal jurisdiction, while also working with provinces and territories to avoid duplication;</i> • <i>ensure that decisions are based on science, facts, and evidence, and serve the public's interest;</i> • <i>provide ways for Canadians to express their views and opportunities for experts to meaningfully participate; and</i> • <i>require project advocates to choose the best technologies available to reduce environmental impacts.</i>⁷

2016

Energy policy/regulatory relevant events and decisions	Positive Energy: engagement with decision-makers, events and publications (selected activities)	Reform of Canada's energy decision-making system and PE's direct engagement in reform processes
<p>MARCH - <i>Vancouver Declaration on Clean Growth and Climate Change</i>, a precedent for the Pan-Canadian Framework on Clean Growth and Climate Change, includes goal to meet or exceed 30% GHG emissions reductions below 2005 levels by 2030.</p> <p>JUNE - The Federal Court of Appeal “quashes” the Certificate of Public Convenience and Necessity recommended by the Joint Review Panel for the Northern Gateway Pipeline Project proposed by Enbridge Inc., because Canada had not discharged its Duty to Consult in the period following the regulatory process but prior to the Governor-in-Council decision. The project consisted of twin pipelines from Alberta to Kitimat on the British Columbia coast.</p> <p>OCTOBER - The federal government announces a floor for carbon pollution (\$10 per tonne in 2018, climbing to \$50 per tonne in 2022), as a benchmark for all provinces and territories.⁸</p> <p>The Alberta Utilities Commission (AUC) determines that it cannot judge the adequacy of Crown consultation with Aboriginal groups.</p> <p>NOVEMBER - The federal government announces the approval of Kinder Morgan TransMountain expansion pipeline, which will increase the capacity to deliver oil to the West Coast from 300,000 to 890,000 barrels per day.</p> <p>On the same day, the federal government directs the National Energy Board (NEB) to dismiss the Northern Gateway application because of unjustified potential environmental effects on the ecosystem of the Douglas Channel.</p> <p>The federal government moves to put in place a moratorium on crude oil tankers along British Columbia's north coast.</p> <p>DECEMBER - The federal, provincial and territorial governments (FPT) announce the Pan-Canadian Framework on Clean Growth and Climate Change. The Framework sets a national GHG reduction target of 523 Mt or 30 percent below 2005 levels by 2030.</p>	<p>MARCH - PE Chair Monica Gattinger appointed by NRCAN as a Member of the Public Confidence External Review Committee for the 2017 EMMC.</p> <p>APRIL - PE Communities Project: Report <i>Fair Enough. Assessing Community Confidence in Energy Authorities</i> (Cleland, with Fast and Nourallah). The document poses the question: “Do the planning framework and individual project decisions satisfy the inevitably complex and contradictory set of values, attitudes and interests embodied in a community?” (p. 24).⁹</p> <p>MAY - PE gives invited Testimony to the Standing Senate Committee on Transport and Communications (M Cleland).</p> <p><i>I think we should go back all of us and reread Canada's 1867 Constitution (and think about . . .) what I like to think of as a guarantee of a common market in Canada and the free passage of goods from one province across other provinces (. . .) We seem to have lost sight of that.</i>¹⁰</p> <p>PE gives Testimony to the House of Commons Standing Committee on Natural Resources on public confidence in natural resource development (M Gattinger).</p> <p>JUNE - PE Public Authorities Project: Workshop <i>Public Confidence in Energy Decision Processes: The Role of Public Authorities</i>. Basis for decision to focus on the energy decision-making system: policy, planning, regulatory and project decision-making processes.¹¹</p> <p>PE Chair Monica Gattinger receives Departmental Achievement Award from the Deputy Minister of NRCAN for <i>Outstanding Leadership on Public Confidence in Energy and Mining Development – Charting a Path forward</i>, EMMC, July 2015.</p> <p>PE gives invited Testimony to the Standing Senate Committee on Transport and Communications (M Gattinger).</p> <p><i>What we need to think through in a democratic context is how do we balance participatory democracy (. . .) with representative democracy and governments - whether it is regulators or politicians - needing to make decisions. And I think that strengthening confidence in that process of energy decision-making, that is where we should be focusing our efforts.</i>¹²</p> <p>PE invited to write discussion paper for the <i>National Workshop on Public Confidence in Energy and Mining Development</i> in preparation for the 2016 EMMC.¹³</p> <p>AUGUST - PE presents results of stakeholder session to the 2016 EMMC.</p> <p>OCTOBER - PE Communities Project Conference: <i>ENGAGE: Canadian Communities and Energy Decision-Making</i>.¹⁴ Presentation of the final report <i>A Matter of Trust. The Role of Communities in Energy Decision-Making</i>, along with the six case studies that informed it. “There is a need for a basic rethink of energy decision-making structures (including regulatory bodies and how information affects decision-making).”¹⁵</p> <p>PE gives invited presentation to the <i>Canadian Electricity Association's Bilateral Forum on Canada-US Electricity Relations</i>, Washington DC.</p>	<p>JANUARY - The Minister of ECCC and the Minister of Natural Resources NRCAN announce five interim principles for government decisions on major projects.</p> <ol style="list-style-type: none"> 1 <i>No project proponent will be asked to return to the starting line.</i> 2 <i>Decisions will be based on science, traditional knowledge of Indigenous peoples and other relevant evidence.</i> 3 <i>The views of the public and affected communities will be sought and considered.</i> 4 <i>Indigenous peoples will be meaningfully consulted and where appropriate, impacts on their rights and interests will be accommodated.</i> 5 <i>Direct and upstream greenhouse gas emissions linked to the projects under review will be assessed.</i> <p>JUNE - A stakeholder workshop on public confidence in resource development is held in Winnipeg MB in the lead-up to the 2016 EMMC. Positive Energy authors the going-in discussion paper.</p> <p>AUGUST - EMMC focuses on public confidence in resource development. PE presents to ministers.</p> <p>OCTOBER - Parliament starts a process to restore protections within the Fisheries and Navigation Protection Act.</p> <p>SEPTEMBER - ECCC begins review of the environmental assessment process. In addition to government and public engagement, the process includes creation of an Expert Panel that carries out consultations in twenty-one cities.¹⁶</p> <p>DECEMBER - NRCAN begins a process to modernize the NEB. The process relies on government engagement and intensive consultation led by an Expert Panel, which carries out a process of consultation that includes meetings in ten cities along with written submissions and commissioned studies. The Terms of Reference for the process suggest exploring an array of issues, in relation to reconfiguring the composition of the Board, defining and measuring the public interest in consideration of local, environmental and social factors, improving the engagement with Indigenous Peoples and amplifying public participation in the activities of the NEB.¹⁷</p>

2017

Energy policy/regulatory relevant events and decisions	Positive Energy: engagement with decision-makers, events and publications (selected activities)	Reform of Canada's energy decision-making system and PE's direct engagement in reform processes
<p>JULY - Building on <i>Haida v. British Columbia</i> (2004), the Supreme Court of Canada (SCC) overturns an NEB authorization for seismic testing for oil and gas deposits (Baffin Island) because the NEB did not adequately fulfill the Duty to Consult with the Inuit. The ruling also specifies that an approval process by the NEB can trigger the Duty to Consult and that the Crown can, in part or entirely, rely on the NEB to fulfill the said Duty.¹⁸</p> <p>In a companion decision, released on the same day (<i>Chippewas of the Thames v. Enbridge</i>), the SCC upheld the conduct of the NEB when discharging the Duty to Consult on behalf of the Crown in a review of the expansion of Enbridge's Line 9.¹⁹</p> <p>The decisions of the SCC imply a correction of decisions that sought to put provincial regulatory bodies away from the Crown's duty to consult (like the AUC, above). And one scholar argues that, had they been in place one year before, the criteria laid out by the SCC would have determined a different fate for the cancelled Northern Gateway project: <i>the present decisions may well imply that there was actually a legal entitlement to build Northern Gateway that was effectively snatched away in acts of what was effectively lawlessness</i>.²⁰</p> <p>Two months after the provincial election in BC, and through a vote of non-confidence against the Liberal Party, the NDP forms a government in coalition with the Green Party. The new political balance creates further dilemmas and tensions over infrastructure projects to export fossil fuels produced in Alberta. The new government also suspends construction of the Site C hydroelectric dam and directs the BC Utilities Commission (BCUC) to issue a review on its completion costs.²¹</p>	<p>JANUARY - PE Chair Monica Gattinger gives invited keynote address on public confidence in energy decision-making to the Annual Northwinds Electricity Conference, Cambridge, ON.</p> <p>Monica Gattinger also gives invited luncheon address on public confidence in energy decision-making at the Key Regulatory Topics Meeting, CAMPUT (Canada's Energy and Utility Regulators), Toronto ON.</p> <p>FEBRUARY - PE Chair Monica Gattinger presents to the NEB Modernization Expert Panel in its public consultation process, Gatineau QC.</p> <p>Monica Gattinger also gives invited presentation to the Annual Canadian Nuclear Conference, Ottawa ON.</p> <p>MARCH - PE releases <i>System Under Stress: Energy Decision-Making in Canada and the Need for Informed Reform</i> (Cleland and Gattinger). The report urges governments, and those interested in strengthening Canadian energy decision-making, to begin from a holistic systems-based perspective that explicitly focuses on the core elements of the decision-making system, the ways in which they interact and evolve, the primary stress points to address, and how to address them in balanced, durable and effective ways that comprehensively consider their impacts and feasibility within Canada's physical and market energy systems.²⁵</p> <p>PE's first Public Authorities workshop: <i>Who Decides? Balancing and Bridging Local and Higher-Order Interests in Canadian Energy Decision-Making</i>. Three key recommendations in the final report (Fast): 1) <i>encourage distributed decision-making</i>; 2) <i>support capacity building efforts for municipal and Indigenous governments</i> and 3) <i>elevate the prominence of energy in land use planning</i>.²⁶</p> <p>APRIL - PE Chair Monica Gattinger gives invited presentation on public confidence to the Economic Development Association of Canada, Ottawa ON.</p> <p>MAY - PE Chair Monica Gattinger gives invited presentation to the British Columbia Utilities Commission board and staff, Vancouver BC.</p> <p>Monica Gattinger also gives invited presentation to Cenovus Energy's senior executives, Calgary AB.</p> <p>PE Senior Fellow Mike Cleland gives invited presentation to the Ontario Independent Electricity System Operator, Toronto ON.</p>	<p>FEBRUARY - PE presents to the NEB Modernization Expert Panel in its public consultation process, Gatineau QC.</p> <p>MARCH - The Expert Panel that led the consultation to reform environmental assessments issues its report, recommending, among other things, that federal Impact Assessments (IA) for projects begin with a legislated Planning Phase that occurs early in project development before design elements are finalized, that IA provide participation opportunities open to all, and that IA integrate the best evidence from science, Indigenous knowledge and community knowledge.³⁰</p> <p>PE is commissioned by the NEB Expert panel to prepare a study on the NEB's mandate. The study, <i>National Energy Board Modernization: A Systems Approach to Informed Reform of the National Energy Regulator's Mandate</i>, underscores the need to address policy gaps on climate change, reconciliation with Indigenous peoples, and broader/regional cumulative effects of multiple energy projects. PE also points out the need to undertake 'informed reform' by carefully considering the physical and market systems that underlie the energy decision-making system, as well as the established components of energy decision-making (policymaking and regulation) and emerging components (Indigenous governments and local governments). The submission stresses the need to centre today's decisions on the necessities of the low carbon energy system that Canada intends to build during the coming decades.</p> <p>APRIL - Minister of Natural Resources Jim Carr launches <i>Generation Energy</i>, a consultation initiative designed to chart a course for Canada's long-term energy future. PE submits research studies to <i>Generation Energy</i> for posting on the initiative's website.</p> <p>MAY - The Expert Panel that led the consultation to modernize the NEB issues its report to the government, recommending, among other things: broadening the scope of public participation in reviews; a two-stage approval process (one year for national policy-level decision and two years for other considerations, including environmental impact); and replacing the NEB with a Canadian Energy Transmission Commission and a Canadian Energy Information Agency.</p>

AUGUST - Following a comment period that collected more than 800 submissions, the NEB announces that it will consider upstream and downstream GHG emissions when determining whether TransCanada's Energy East and Eastern Mainline projects are in the public interest.²² Energy East is a converted and augmented pipeline to transport 1.1 million barrels per day of crude oil from the Prairies to refineries in Quebec and New Brunswick.²³

OCTOBER - TransCanada Pipelines announces the cancellation of Energy East.

DECEMBER - Following the advice of the BCUC, the BC government announces the continuation of the Site C hydroelectric dam.²⁴

JUNE - PE's second Public Authorities workshop: *From Best Practices to Next Practices: Policy-Regulatory Relations in Energy Decision-Making*. The final report (Bird) underscores the need for 1) *enhanced interaction and dialogue between policymakers and regulators*; 2) *commitment to regulatory coherence* and 3) *ensuring comprehensive and cumulative regulatory oversight*.²⁷

SEPTEMBER - PE Chair Monica Gattinger gives invited presentation to the British Columbia Natural Resource Board.

OCTOBER - PE Chair Monica Gattinger named Master of Ceremonies by Minister of Natural Resources Jim Carr for NRCan's Generation Energy symposium on Canada's energy future in Winnipeg MB. Gattinger also gives invited presentation to the forum.²⁸

PE's third *Public Authorities* workshop: *How to decide? Engagement, Information and Capacity: What Works?* Three salient recommendations emerge from the final report (Simard): 1) *the need for common ground and common definition of problems*; 2) *the importance of establishing relations to generate trust in new endeavors*; 3) *the centrality of information and the processes that produce it (collaboratively, whenever possible and necessary)*.²⁹

NOVEMBER - PE gives invited presentation to the 25th Annual US-Canada Energy Trade & Technology Conference, New England-Canada Business Council, 8-9 November, Boston MA.

PE research team gives invited presentation to the Energy Council of Canada's Members Roundtable, Toronto ON.

JUNE - PE issues a response to the Expert Panel report: *NEB Modernization. Response to the Expert Panel's Report by the University of Ottawa's Positive Energy Project*. The response welcomes a number of the conclusions of the Expert Panel but also underscores concern about some aspects. Chiefly, PE points out that the two-step process proposed to review and approve significant projects of linear infrastructure could be ineffective or counterproductive in the absence of policy clarity (especially with respect to climate change mitigation) that should guide individual project decision-making processes. In addition, PE stresses the necessity to foster the development of technical capacity for regional planning and strategic environmental assessments that consider cumulative effects. PE also highlights the need to take into account the ever-present imperatives of competitiveness, reliability, and affordability of the energy system.

The federal government releases the *Environmental and Regulatory Reviews* discussion paper. The paper consolidates the views and principles derived from the reviews launched in 2016 and outlines a path of legal reform. The discussion paper complements the interim principles issued in 2016 with a new set of Guiding Principles: 1) fair, predictable and transparent environmental assessment and regulatory processes; 2) participation of Indigenous peoples, advancing the government's commitment to the United Nations Declaration on the Rights of Indigenous Peoples and reconciliation; 3) inclusive and meaningful public engagement; 4) evidence-based decisions and Indigenous knowledge; 5) One project, one assessment. The paper also highlights establishing a single agency for all assessments of designated projects and adding an early planning phase for projects with the involvement of proponents.³¹

AUGUST - PE issues a response to the government's discussion paper: *Environmental and Regulatory Reviews: Response to the Government of Canada's June 2017 Discussion Paper by the University of Ottawa's Positive Energy Project*. In the document, PE welcomes the layout of the *Guiding Principles*. However, the response emphasizes continued concern about issues and tensions that have stayed unaddressed by the process of modernization. PE highlights the risks of making the energy sector shoulder a disproportionate responsibility in the process of reconciliation with Indigenous peoples. It also underscores the need to provide clarity with respect to early planning, timelines, designation of projects and above all, the boundaries that should protect regulatory processes from values/policy debates. PE also calls on the federal government to enable further discussion on reform by tabling a White Paper as an interim step before introducing legislation.

OCTOBER - Minister Carr hosts Generation Energy national symposium in Winnipeg Manitoba and invites PE Chair Monica Gattinger to be Master of Ceremonies of the event. Gattinger also leads a panel on public confidence in energy decision-making at the symposium.

2018

Energy policy/regulatory relevant events and decisions	Positive Energy: engagement with decision-makers, events and publications (selected activities)	Reform of Canada's energy decision-making system and PE's direct engagement in reform processes
<p>JANUARY - The Ministers of ECCC and Finance Canada release draft legislative proposals to implement a federal carbon pricing system, based on the Pan-Canadian Framework and looking to reach a level of \$50 per tonne of CO₂ equivalent by 2022.³²</p> <p>APRIL - Kinder Morgan suspends all non-essential activities and related spending on the TransMountain pipeline Expansion Project while it consults with stakeholders to identify a path forward, particularly with respect to the ability to construct through BC; and, adequate protection of KML shareholders.³³</p> <p>Numeralia, for closure</p> <ul style="list-style-type: none"> • Canada's energy sector amounted to 6.5% of Canada's nominal GDP in 2016, and capital expenditure represented 31% of total non-residential capital investment in Canada.³⁴ • 400 communities engaged in energy planning, from 170 in 2014. 162 of them are Indigenous communities.³⁵ • In British Columbia alone, a survey identified 78 operational electricity projects, with a total generating capacity of 1.8 GW.³⁶ • Half of Canadians think that Canada does a poor or very poor job of building public confidence in energy decision-making.³⁷ • 70 percent of Canadians support that the federal or provincial governments have the "final say" on projects like pipelines or power lines crossing multiple communities.³⁸ 	<p>JANUARY - PE <i>Trust in Transition</i>. Ottawa Planning Workshop. Phase 2, 2018-2021. Proposed research streams: role of local; role of oil and gas (and nuclear sectors); social acceptance of technologies; futures research and public trust. A comment from one participant: <i>There are multiple ongoing efforts to integrate social and institutional realities into techno-economic models of energy system transition. Positive Energy should be at the forefront of this work.</i></p> <p>FEBRUARY - PE Chair Monica Gattinger gives invited presentation to the British Columbia Utilities Commission board and staff, Vancouver BC.</p> <p>Monica Gattinger also gives invited presentation to Cenovus Energy's senior executives, Calgary AB.</p> <p>Monica Gattinger also gives invited presentation to Seven Generation Energy's senior executives and staff, Calgary AB.</p> <p>MARCH - PE invited presentation to the 7th World Forum on Energy Regulation, Cancun, Mexico.</p> <p>APRIL - PE conference, <i>Public Confidence in Energy Decision-Making: How is Canada Doing?</i> marking conclusion of the first three years of the initiative.</p>	<p>FEBRUARY - The federal government unveils Bill C-69, <i>An Act to enact the Impact Assessment Act and the Canadian Energy Regulator Act, to amend the Navigation Protection Act and to make consequential amendments to other Acts</i>. The proposals call for:</p> <ul style="list-style-type: none"> • Creating an Impact Assessment Agency of Canada to replace the Canadian Environmental Assessment Agency and to coordinate all Crown consultations for all federally designated projects (<i>one project, one review</i>). • Replacing the National Energy Board with a Canadian Energy Regulator. Among other substantial changes, the proposal includes provisions to enhance the inclusion of traditional indigenous knowledge in expert panels and to strengthen the independence of commissioners in charge of project reviews.³⁹ • Enriching the diversity and expertise of the regulator's Board of Directors, while enhancing the independence of commissioners in charge of technical decisions • Including at least one Indigenous person on the Board of Directors and have one Indigenous commissioner. <p>APRIL - Positive Energy prepares response to the federal government's proposed reforms to energy decision-making.</p>

- Rafael Aguirre

REFERENCES

- ¹ Diversifying provincial and territorial energy products will require continued innovation, support for value-added processing, and the enhancement of public trust and confidence in energy development. The Council of the Federation, 2015, Canadian Energy Strategy, p. 30. Accessed from: https://www.gov.mb.ca/jec/energy/initiatives/cdn_en_strategy.html
- ² International Energy Agency, 2016, Energy Policies of IEA Countries. Canada (Page 33). Accessed from <http://www.iea.org/>
- ³ <https://www.uottawa.ca/positive-energy/positive-energy-inaugural-conference-march-2015>
- ⁴ Nanos Research, Positive Energy Conference- National Opinion Survey. Available at http://www.uottawa.ca/positive-energy/sites/www.uottawa.ca.positive-energy/files/positive_energy_survey_research_2015-03-04.pdf
- ⁵ Indigenous and Northern Affairs Canada, 2016, <https://www.aadnc-aandc.gc.ca/eng/1498765671013/1498765827601>
- ⁶ The Globe and Mail, August 15 2015, “Which Party is Right on Pipelines?”
- ⁷ <https://pm.gc.ca/eng/minister-environment-and-climate-change-mandate-letter> and <https://pm.gc.ca/eng/minister-natural-resources-mandate-letter>
- ⁸ Prime Minister of Canada, 2016, “Prime Minister Justin Trudeau delivers a speech on pricing carbon pollution”, <http://pm.gc.ca/eng/news/2016/10/03/prime-minister-trudeau-delivers-speech-pricing-carbon-pollution>
- ⁹ http://www.uottawa.ca/positive-energy/sites/www.uottawa.ca.positive-energy/files/nrp_fairenough_report_11apr2016-1_0.pdf
- ¹⁰ <http://www.cpac.ca/en/programs/in-committee-from-the-senate-of-canada/episodes/47402881>
- ¹¹ <http://www.uottawa.ca/positive-energy/public-confidence-energy-decision-processes-role-public-authorities-june-2016>
- ¹² <https://www.youtube.com/watch?v=D5Cl2tYwG1Y>
- ¹³ Monica Gattinger, 2016, Public Confidence in Energy and Mining Development: Context, Opportunities/Challenges and Issues for Discussion, available at http://www.uottawa.ca/positive-energy/sites/www.uottawa.ca.positive-energy/files/public_confidence_in_energy_and_mining-discussion_paper_gattinger_1022468.pdf
- ¹⁴ <http://www.uottawa.ca/positive-energy/engage-canadian-communities-and-energy-decision-making-october-2016>
- ¹⁵ http://www.uottawa.ca/positive-energy/sites/www.uottawa.ca.positive-energy/files/secondversion_mattertrust_report_24nov2016-1_web.pdf
- ¹⁶ Expert Panel for the Review of Environmental Assessment Processes, 2017, Building Common Ground. A New Vision for Impact Assessment in Canada, accessed from https://www.canada.ca/en/services/environment/conservation/assessments/environmental-reviews/environmental-assessment-processes/building-common-ground.html#_Toc061 and Government of Canada, 2017, Environmental and Regulatory Reviews. Discussion Paper. (Issued on June 29 2017). Accessed from https://www.canada.ca/en/natural-resources-canada/news/2017/06/discussion_paperreleasedonreviewofenvironmentalandregulatoryproc.html?wbdisable=true
- ¹⁷ Expert Panel on the Modernization of the National Energy Board, 2017, Forward, together. Enabling Canada’s Clean, Safe and Secure Energy Future, accessed from <https://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/pdf/NEB-Modernization-Report-EN-WebReady.pdf>
- ¹⁸ Clyde River (Hamlet) v. Petroleum Geo-Services, SCC 40 (2017) <https://www.canlii.org/en/ca/scc/doc/2017/2017scc40/2017scc40.html#par47>
- ¹⁹ Chippewas of the Thames First Nation v. Enbridge Pipelines Inc., [2017] 1 SCR 1099, accessed from <https://www.canlii.org/en/ca/scc/doc/2017/2017scc41/2017scc41.html>
- ²⁰ Newman, 2017, “Changing Duty to Consult Expectations for Energy Regulators: Broader Implications from the Supreme Court of Canada’s Decisions in Chippewas of The Thames and Clyde River”. Energy Regulation Quarterly, December 2017. Volume 5, Issue 4. (<http://www.energyregulationquarterly.ca/>).
- ²¹ <https://news.gov.bc.ca/factsheets/factsheet-site-c-hydroelectric-project>
- ²² National Energy Board, August 23 2017, “Expanded focus for energy assessment”, accessed from https://www.canada.ca/en/national-energy-board/news/2017/08/expanded_focus_forenergyeastassessment.html
- ²³ National Energy Board, 2017, “Energy East and Eastern Mainline Projects”, accessed from <https://www.neb.gc.ca/pplctnflng/mjrpp/nrgyst/index-eng.html>
- ²⁴ Office of the Premier of BC, December 11 2017, “Government will complete Site C construction, will not burden taxpayers or BC Hydro customers with previous government’s debt”, news release accessed at <https://news.gov.bc.ca/releases/2017PREM0135-002039>
- ²⁵ http://www.uottawa.ca/positive-energy/sites/www.uottawa.ca.positive-energy/files/2_positive_energy-system_under_stress-cleland_and_gattinger.pdf
- ²⁶ <http://www.uottawa.ca/positive-energy/who-decides-balancing-and-bridging-local-and-higher-order-interests-canadian-energy-decision-making>
- ²⁷ <http://www.uottawa.ca/positive-energy/best-practices-next-practices-policy-regulatory-relations-energy-decision-making-june-2017>
- ²⁸ <https://www.youtube.com/watch?v=aAgCAzF-EGl&feature=youtu.be>

- ²⁹ <http://www.uottawa.ca/positive-energy/how-decide-engagement-information-and-capacity-what-works-october-2017>
- ³⁰ Expert Panel. Review of Environmental Assessment Processes, 2017, Building Common Ground. A new Vision for Impact Assessment in Canada. Accessed from <https://www.canada.ca/content/dam/themes/environment/conservation/environmental-reviews/building-common-ground/building-common-ground.pdf>
- ³¹ Government of Canada, 2017, Environmental and Regulatory Reviews. Discussion Paper. (Issued on June 29 2017). Accessed from https://www.canada.ca/en/natural-resources-canada/news/2017/06/discussion_paperreleasedonreviewofenvironmentalandregulatoryproc.html?wbdisable=true
- ³² <https://www.canada.ca/en/services/environment/weather/climatechange/climate-action/pricing-carbon-pollution/output-based-pricing-system.html>
- ³³ <https://www.transmountain.com/news/2018/kinder-morgan-canada-limited-suspends-non-essential-spending-on-trans-mountain-expansion-project>
- ³⁴ Natural Resources Canada, 2016, Key Facts on Canada's Natural Resources, accessed from http://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/files/pdf/10_key_facts_nrcan_2017_en.pdf (Capital expenditure in energy amounted to \$ 74 bn. Minerals, metals and forestry amounted to \$15 bn and all together represented 38% of non-residential capital investment).
- ³⁵ Quest, 2018, Role for Municipal and Indigenous Authorities (Participation in PE Trust in Transition workshop). Accessed from: http://www.uottawa.ca/positive-energy/sites/www.uottawa.ca.positive-energy/files/quest_positive_energy_2018.pdf
- ³⁶ B.C. First Nations Clean Energy Working Group, 2017, First Nations and Renewable Energy Development in British Columbia, accessed from https://dspace.library.uvic.ca/bitstream/handle/1828/7919/Shaw_Karena_First_Nations_Renewable_Energy_BC-2017.pdf?sequence=1&isAllowed=y
- ³⁷ Nanos Research, 2017, Canadians more negative than positive about energy decision-making, poll commissioned by Positive Energy (1000 respondents surveyed between 23 and 26 of September 2017). Accessed from: http://www.uottawa.ca/positive-energy/sites/www.uottawa.ca.positive-energy/files/2017-1058_positive_energy_sep_omni_-_populated_report_with_tabs.pdf
- ³⁸ Nanos Research, 2017, Canadians more negative than positive about energy decision-making, poll commissioned by Positive Energy (1000 respondents surveyed between 23 and 26 of September 2017). Accessed from: http://www.uottawa.ca/positive-energy/sites/www.uottawa.ca.positive-energy/files/2017-1058_positive_energy_sep_omni_-_populated_report_with_tabs.pdf
- ³⁹ Government of Canada, 2018, A Modern, new and world-class federal energy regulator for the 21st Century. The New Canadian Energy Regulator Handbook, accessed from <https://www.canada.ca/content/dam/themes/environment/conservation/environmental-reviews/neb-handbook-e.pdf>

APPENDIX 2: POSITIVE ENERGY RESEARCH AND ENGAGEMENT – GENERATING DIRECTIONS FOR REFORM OF CANADIAN ENERGY DECISION-MAKING

The directions for reform articulated in this report flowed from several sources, first and foremost three detailed discussion papers:

- *The Policy-Regulatory Nexus in Canada: From Best Practices to Next Practices* (Stephen Bird, April 2018). What are the respective roles of policymakers and regulators in energy decision-making and how can and should policymakers and regulators interact?
- *Who Decides? Balancing and Bridging Local, Indigenous and Broader Societal Interests in Canadian Energy Decision-Making* (Stewart Fast, December 2017). How can municipalities and Indigenous governments be brought into decision systems while remaining mindful of interests at the regional, provincial and national levels?
- *How to Decide? Engagement: Information and Capacity* (Louis Simard, April 2018). What reforms are needed to strengthen engagement, information and capacity in policymaking, regulatory development and energy project decision-making?

The substance of these three themes emerged initially from the Communities Project and were first captured in the *System Under Stress* report (Cleland and Gattinger 2017a). This report provided the framework for a series of senior leaders' workshops in 2017, each of which focused on one of the stresses with a much more granular discussion paper grounding the workshop engagement. Each paper was revised subsequent to the workshop with the input of workshop attendees and other experts in the field to include advice to policymakers and regulators.

This work was complemented and informed by quantitative public opinion research undertaken by Nanos Research on behalf of Positive Energy with the general public and with energy leaders across Canada (Nanos 2017,

2018). Highlights of this research are noted briefly in this report.

Positive Energy's Public Authorities research and engagement also included multiple activities aimed both at 'getting it right' and engaging a wide range of influencers and deciders in Canada, including:

- Drawing on the advice of the Positive Energy Advisory Council and a wide range of external reviewers from industry, NGOs, legal, local, Indigenous, academic, policymaker and regulatory communities;
- Publishing articles in popular media, think tank and academic venues such as *The Hill Times*, the Canadian Global Affairs Institute, and Energy Regulation Quarterly (see, for example, Cleland and Gattinger 2017b, Gattinger 2017a, 2017b);
- Direct engagement in the annual Energy and Mines Ministers Conference, including multiple presentations to ministers, planning and writing discussion papers for stakeholder workshops leading up to EMMC (see Gattinger 2016) and serving on External Advisory committees.
- Contributing to the thinking behind the federal government's reforms to the National Energy Board and to the Minister of Natural Resources' Generation Energy initiative (see Gattinger and Cleland et al 2017a, 2017b, 2017c, 2017d).
- Testifying before multiple parliamentary committees and presenting Positive Energy research to a wide range of bodies for comment and input (e.g., the Ontario Electricity System Operator, the Energy Council of Canada, the British Columbia Utilities Commission, and multiple premiere energy conferences in Canada and abroad).

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