

HOW TO DECIDE?

Engagement: Information and Capacity

SYSTEM UNDER STRESS - INTERIM REPORT #3

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APRIL 2018

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Sincere thanks to the following individuals for their time and expertise in reviewing and contributing comments and feedback: Rafael Aguirre, Marisa Beck, Stephen Bird, Mike Cleland, Stewart Fast, Monica Gattinger and Patricia Larkin.

A special thanks to Rafael Dezordi and Patricia Larkin for the linguistic revision.

Thanks also to members of the Public Authorities' Project Advisory Group for their review.

All errors of fact or interpretation are the author's.

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EXECUTIVE SUMMARY

As we know, energy decision-making can create controversy, opposition and take longer than originally planned. Many groups and stakeholders are asking for changes. Public confidence is fragile, demands for more engagement and information are recurrent and some processes are questioned or contested.

The Positive Energy paper *System Under Stress* (Cleland and Gattinger, 2017) identified three main stress points in Canadian energy decision-making. Within the Public Authorities research stream of the project, we considered: *Who Decides? Balancing and Bridging Local, Indigenous and Broader Societal Interests in Canadian Energy Decision-Making* (Fast, 2017a) and *The Policy-Regulatory Nexus in Canada's Energy Decision-Making* (Bird, 2018). This interim report is focused on the third stress point, engagement, information and capacity, particularly for both the upstream and downstream levels of decision-making, and notably for both long term policy development and project implementation. This report builds on the multi-stakeholder workshop "*How to Decide - Engagement, Information and Capacity: What Works?*" held October 2017. Readers are also directed to the final report of Positive Energy, *Durable Balance: Informed Reform of Energy Decision-Making in Canada* (Cleland and Gattinger, 2018).

The Positive Energy Research Team does not think the system is broken, but does think that it is in need of 'informed reform' – reform that explicitly takes into consideration the policy, planning, regulatory, market and physical energy systems, along with the rise of municipal and Indigenous authorities in energy decision-making. So, when it comes to engagement, information and capacity, how can we improve the decision-making process? The challenge is to achieve a higher level of public confidence.

Part 1 of this paper is dedicated to engagement. It begins with a definition of the concept of co-construction, and an exploration of principles underpinning best practices in co-construction: 1) Upstream engagement, 2) Inclusiveness; 3) Information, transparency and clarity of rules, 4) Resources and access, 5) Traceability and continuity, 6) Influence, modification of the decision and the "no option", 7) Negotiation and compensation, and 8) Efficiency. The paper then identifies the strengths and the limits/risks of engagement.

Part 2 considers collaborative policies and Strategic Environmental Assessment (SEA) as means to improve upstream decision-making processes and favour clear and shared policy orientations and objectives. Collaborative policymaking is "not just a method which can solve problems when there is conflict in the traditional policy system. It is, even more importantly, a way to establish new networks among the players in the system and increase the distribution of knowledge among these players. This includes knowledge of each other's needs and capabilities and of the dynamics of the substantive problems in society, whether in transportation, environment or housing policy. Collaborative planning, we contend, has emerged as a highly adaptive and creative form of policymaking and action in the Information Age. It is an emerging mode of governance" (Innes and Booher, 2010: 36).

Four main steps of the process and their major elements are presented: 1) Assessment Phase; 2) Convening Phase; 3) Deliberation and Negotiation Phase and; 4) Decision Phase. A concrete tool that can be used to support a collaborative policy approach is Strategic Environmental Assessment (SEA), "a systematic process for evaluating the environmental consequences of proposed policy, plan or programme initiatives in order to ensure they are fully included and appropriately addressed at the earliest appropriate stage of decision-making on par with economic and social considerations" (Sadler and Verheem, 1996: 27).

Part 3 takes a downstream organizational and project perspective and is devoted to implementation and management practices. It addresses co-management tools that help build trust and strong relationships among stakeholders by sharing information, knowledge, interests and values, including (1) Long term general agreement; 2) Multi-level governance capacity; 3) Permanent relations by organizational design; 4) Impact and Benefit Agreements (IBAs) and compensation; 5) Partnership and ownership and 6) Long term conjoint follow-up committees.

All three sections propose avenues to pave the way for greater public confidence and better decision-making processes in the Canadian energy sector.

Although regulatory modernization is underway at the federal level in Canada, regulators are not the entirety of the decision-making system. This paper therefore addresses other decision-making components, including formalizing collaborative policy development based on an ambitious and productive process of identifying and assessing alternative approaches and objectives (inspired by the principles of SEA). Co-management tools should be developed at the meso- and the micro-levels with the aim to harmonize long term relations among stakeholders that share project benefits, information and knowledge (in short, their interests and values). How can we balance the need for meaningful engagement with the imperatives of a representative democracy? This requires finding a workable balance between fully technocratic energy decision-making, on the one hand, and extensive participatory processes, on the other.

Most importantly, all of these avenues must be developed in a way that balances engagement, information and capacity with the Canadian realities of a market-based energy system where investors are looking for timeliness, predictability (in processes if not outcomes) and competitiveness with other jurisdictions.

This will become all the more important as Canada transitions towards a low carbon energy system. As the Positive Energy Research Team has consistently stated, it is necessary to address public confidence challenges by establishing workable balance points among key energy imperatives: (a) market, competitiveness and economic imperatives; (b) environmental, social, local and Indigenous imperatives, and (c) security, reliability and affordability imperatives.

Recommendations

1 Develop formal engagement activities in the energy decision system at different steps of policy and project formulation with a co-construction perspective

- a** Engagement design processes must be more upstream and inclusive
- b** Engagement processes must be informed, transparent and with clarity of rules in order to achieve a balanced approach in terms of formalization and flexibility
- c** Capacity development must be increased, especially for specific stakeholders like Indigenous communities and municipalities
- d** Policies and projects must be open to influence and modification in their formulation
- e** Efficiency or a workable balance must be found between breadth and depth of engagement

2 Develop processes that create a better link between energy policies and projects

- a** Promote a more formal national energy policy process using a collaborative approach with stakeholders
- b** Consider a 10 year cycle for energy policy implementation
- c** Use strategic environmental assessment (SEA) best practices more formally in the policy development processes
- d** Improve capacity and processes to produce, diffuse and share information and knowledge by taking into account the source, diversity and accessibility. Consider the creation of an independent public agency for this purpose

3 Encourage co-management processes at the project level

- a** Promote best practices to support: long term general agreement; multi-level governance capacity; permanent relationships by organizational design; impact and benefit agreements (IBAs) and compensation, partnership and ownership; and follow-up committees

4 Efficiency and acceptable balance must be found in addressing stakeholder perceptions within the Canadian market-based energy system

- a** Limited resources require choices with regard to timeliness, predictability and competitiveness
- b** Key energy imperatives must be taken into account: (a) market, competitiveness and economic imperatives; (b) environmental, social, local and Indigenous imperatives, and (c) security, reliability and affordability
- c** A coordinated assessment process by general agreement between federal and provincial jurisdictions could limit delays and costs

INTRODUCTION

The Positive Energy initiative seeks to strengthen public confidence in Canadian energy policy, regulation and decision-making through research and analysis, engagement and recommendations for action. *System Under Stress: Energy Decision-Making in Canada and the Need for Informed Reform* (Cleland and Gattinger, 2017) zeroed in on three core “stress points” in Canada’s energy decision-making system: (1) how to strengthen and clarify relationships and roles between policymakers and regulators; (2) how to balance local interests with higher-order regional, provincial, and national interests; and (3) how to strengthen engagement, information and capacity in energy decision-making. These stress points were the focus of three senior leaders’ workshops with diverse representation from government, Indigenous organizations, industry, ENGOs and academia. Workshop deliberations were informed by discussion papers and resulted in this and two additional interim reports: *Who Decides? Balancing and Bridging Local, Indigenous and Broader Societal Interests in Canadian Energy Decision-Making* (Fast, 2017a); *The Policy-Regulatory Nexus in Canada’s Energy Decision-Making* (Bird, 2018). Readers are also directed to *Durable Balance: Informed Reform of Energy Decision-Making in Canada* (Cleland and Gattinger, 2018), the final report of Positive Energy.¹

This interim report concentrates on engagement, information and capacity, especially at the upstream and downstream levels of decision-making, and notably for long term policy development and project implementation.²

As we know, energy decision-making can create controversy, opposition and take longer than originally planned. Many groups and stakeholders are asking for changes. Public confidence is fragile, demands for more engagement and information are recurrent and some processes are questioned or contested. The Positive Energy Research Team does not think the system is broken, but does think that it is in need of ‘informed reform’ – reform that explicitly takes into consideration the policy, planning, regulatory, market and physical energy systems, along with the rise of municipal and Indigenous authorities in energy decision-making. So, when it comes to engagement, information and capacity, how can we improve the process?

We need to integrate macro-, meso- and micro-phenomena and find solutions based on *an informed reform*. While questions related to policies, programs and energy projects have been common for many years, they remain and are perhaps more complicated than ever. It could be seen as a cliché to say that we are living during a historic turning point. The rapidity of technical and economic changes, the number and diversity of stakeholders and interests, the plurality of interrelated aspects, the amount of information being produced, and the level of politicisation create a very high degree of difficulty for all sorts of decision-making processes, from policies to projects.

¹ For complete events and documentation related to this project, visit <http://www.uottawa.ca/positive-energy/>

² This report incorporates discussion from the workshop report summarizing participant views expressed at the October 2017 Positive Energy workshop. Special thanks to Marisa Beck. Beck, Marisa, 2017. “What We Heard — How to decide? Engagement, information and capacity”.

We must recognize that these issues are all connected and form a complex system that is characterized by the importance of new stakeholders, new dimensions and new expectations. A number of questions are being generated, notably: When, how and which categories of stakeholders must participate in the decision-making process? With what level of influence or how far can their demands and expectations be integrated in the decision? Which elements and topics should be integrated in the decision-making process and to what scale? To what degree can different levels of government work together considering their own competencies? How long should the decision-making process take? Will the decision be valid? For how long will it be applied? What kind of information and knowledge can be mobilised? Do organizations and stakeholders need to develop new capacities? If so, which ones? How can we guarantee that public interest and sustainable development are the final outcomes for the decision-making process? This paper explores and develops some avenues that might lead to answers and to solutions.

The challenge addressed here is how to improve the decision-making process to achieve a higher level of public confidence. Three main concepts are at the centre of this objective: engagement, information and capacity - *more engagement at all levels* (federal, provincial, territorial and municipal), with *the inclusion of Indigenous governments/communities in every step of the process* (development, decision, implementation and follow-up), and *in different activities* (from policy to projects). This is the best option to produce and share more diversified and accessible information and forms of knowledge for a more informed and inclusive decision-making process. In trying to reach this new “ideal type”, multiple forms of capacity must be developed, notably in processes, in organizations and in expertise.

Stating that there is no “one best way” decision and no objective or neutral information, the decision-making process must be approached first and foremost in light of the public interest, understood as being in accordance with the three pillars of sustainable development: meeting the economic, environmental and social needs of the present generation without compromising the ability of future generations to meet their own needs (a definition proposed by the UN World Commission on Environment and Development, 1987). Public confidence in decision-making is directly linked with this approach.

Oriented as much as possible on a “what is working” perspective, the paper explores and develops some processes, tools and practices that illustrate notions through concrete examples. All three sections propose avenues to pave the way for greater public confidence and better decision-making processes in the Canadian energy sector.

Part 1 is dedicated to engagement. After exploring the principles underpinning best practices, this paper identifies the strengths and the limitations/risks of engagement. Part 2 concerns collaborative policies and strategic environmental assessment (SEA) as means to improve upstream decision-making processes and favour clear and shared policy orientations and objectives. Part 3 is focused on a downstream organizational and project perspective and is devoted to implementation and management practices. It addresses well-tried co-management methods and organizational design tools that help build trust and strong relationships among stakeholders, including proponents, public authorities and communities, by sharing the benefits and mitigating the different impacts of activities or, in other terms, by internalizing the externalities in a general co-management approach (Brennan and al., 2017).

These suggested avenues must be developed within the Canadian context of balancing engagement, information and capacity with the realities of a market-based energy system, where investors are looking for timeliness, predictability (in processes, if not outcomes) and competitiveness with other jurisdictions. For example, who should pay for engagement, information and capacity building, especially in Indigenous and lower-tier communities? Some may suggest that proponents have a primary responsibility to support communities (financially and otherwise) in developing the required capacities, thereby putting them on a level playing field in the engagement process. Moreover, the transition to a low carbon energy system is imperious and must instead reflect all stakeholders. As the Positive Energy Research Team has stated, it is necessary to address the challenges by establishing a workable balance between key energy imperatives: (a) market, competitiveness and economic imperatives; (b) environmental, social, local and Indigenous imperatives; and (c) security, reliability and affordability imperatives.

1. ENGAGEMENT AS CO-CONSTRUCTION: PRINCIPLES, VIRTUES, LIMITATIONS, AND RISKS

Things have changed since the 1990s. Public dissent regarding policies and projects is organized and systematic and especially strong in the environmental and energy sectors. We can observe a dynamic “market” of public engagement: a great variety of tools that have, to a certain degree, the objective, at least in appearance, to consult and invite civil society to discuss and influence decision-making for the development and implementation of policies and projects. Some specialists and academics called this the “deliberative turn” (Dryzek, 2000; Chambers, 2003) or “deliberative imperative” (Blondiaux and Sintomer, 2002) and whether we are fans or critics of these tools, they are here to stay. A real professionalization of public engagement (Bherer and al., 2017) is happening, which serves as an indicator of the institutionalization of the phenomena.

A panoply of approaches, processes and tools are now in use. We observe different sorts in different sectors. From town hall meetings to participatory budget, public hearings, follow-up hybrid committees, concertation tables, online consultation, parliamentary commissions or referendums, there is a huge diversity of engagement processes. Typologies can be based on their different characteristics and level concerned; from policy to project; the nature of it, mandatory or voluntary; the location, degree of standardization-adaptation, centralized or decentralized; the statute of the processes and who is promoting it, public or private sector; and the frequency of the processes, permanent or punctual. All those characteristics result from choices and affect the participative experience and outputs.

Realities of public decisions

*Public decision is only a moment in a process and cannot be studied in an isolated way. Public decision, characterized by the notion of **public interest** and representation mechanisms, are linked with a political agenda, with knowledge produced from the public service and several experts, from consultation and negotiation activities and from contingent constraints. Decisions (or no decisions) are not the result of a neutral, autonomous and natural process from disembodied political, economic, social and cultural contexts, but often the result of a **series of small decisions, different logics (personal, organizational, electoral, etc.) and power relations**. In other words, a public decision is the result of a series of compromises to ideally reach a **consensus**.*

1.1 THE RECOGNIZED GENERAL PRINCIPLES OF PUBLIC ENGAGEMENT

Based on numerous works conducted on public engagement during the last 20 years³ on a theoretical or a practical perspective, we have identified a series of general principles which inform the implementation of those different processes. We propose eight (8) principles that in one way or another, and to different degrees, seem to be part of any rigorous process of public engagement. The underlying notion is co-construction, which occurs when a plurality of stakeholders are implicated in the production of a policy, a project, a category, a technical or knowledge dispositive (Akrich, 2013)⁴. Even if the capacity to participate in this co-construction depends in part on pre-existing power relations, which limits co-construction and how different points of view are taken into account (Pestre, 2011), the main idea here is the relative continuity in the expertise and role of implicated stakeholders in articulating the different dimensions of projects and in specifying the possibilities.

From this point of view, co-construction implies a type of engagement that is stronger than what is associated with concertation (cooperation) or consultation (Akrich, 2013)⁵.

1. Upstream engagement: Consultation must start at the very beginning of the policy-making process or project investigation. Early engagement is important to build trust with stakeholders and to ensure that engagement outcomes can influence design.

Screening of the options to resolve a problem or to develop an activity must be planned with the stakeholders and the affected groups/communities.

A necessary first step to support effective engagement is to establish a common definition and understanding of the issue or decision at hand. The problem definition should influence the choice of engagement tools.⁶ However, there are risks associated with initiating engagement processes too early when available information is still incomplete.

2. Inclusiveness: The engagement process must include wide-ranging stakeholders. Exclusion is not well perceived or received and participants must be integrated at different stages, ideally with an open perspective. Imposing restrictions or basing the right to participate on an interpretative evaluation is poor engagement practices.⁷

Some stakeholders may have different status in terms of legality and legitimacy, and qualifications may change over time. For example, the role of Indigenous communities and municipalities is increasing within decision-making for the Canadian energy sector.

3. Information, transparency and clarity of the rules: Access to reliable information is a prerequisite for effective and efficient energy decision-making by decision-makers in industry, policymakers and communities, as well as by individual citizens. The rules of the process should be known in advance and must remain predictable. Opacity and improvisation must be avoided. Adaptability, however, can happen, by planning different options with clear conditions.

³ Notably, Blondiaux (2008), Callon and al. (2009), Deloitte-Samson Bélair / Deloitte & Touche, 2009, Dietz and Stern (2008); IAIA (2002), IFC, (2007); Smith (2009), Rowe and Frewer (2000) (2005).

⁴ Author's translation.

⁵ Author's translation.

⁶ The medium is the message. An online survey as a means of engagement sends a different signal to participants than a personal conversation with a senior official. There is no general rule about what works best, but the challenge is to choose the medium that best fits the specific situation.

⁷ Some decision processes include mandatory consultation activities, and in some cases, it is mandatory to consult specific stakeholders, for example the duty to consult with Indigenous communities

But to what extent should engagement processes be institutionalized and formalized? A greater degree of formalization of energy engagement, both in policy development and project approval, can protect against arbitrariness. Decision-making processes then become more predictable, even in changing political climates. At the same time, a one-size-fits all approach to engagement is unlikely to be effective. Perceived legitimacy is key. It is crucial for the success of energy engagement that participants perceive both the process and the people running the process as legitimate. If perceived legitimacy is low, there is a risk that groups will turn to alternative forums for deliberation and negotiation outside of the decision-making system. Their input to effective energy decisions is then lost.

4. Resources and access: The participants must have the capacity to fully engage. They should have the resources and the time to really contribute to the process. Financing some activities or organizations/groups is an option that must be considered in some cases, even though different mechanisms can be used to assure access and engagement.⁸

5. Traceability and continuity: It is important for the credibility of the engagement process that stakeholders can follow its time-line, retrace its steps and its results. Different syntheses must be produced to keep the process open and accessible in order to allow stakeholders to understand the decision result. It is a question of providing decision rationales – both at the sub-decision level, and at the overall decision level. Continuity in the process with follow-up activities/discussions will reinforce the relations between stakeholders and allow them to stay up to date on monitoring the effects of the policy or project.

6. Influence, modification of the decision and the “no option”: The engagement process has to be meaningful and show that it has some effect on the decision-making. It is a question of trust, for now and for the future. For this reason, it is necessary to be able to see how the policy or project has been influenced and modified to one degree or another by the exercise and how the decision would be without it. Processes are not simply steps to follow or boxes to check, but real exercises in which modification or denial (if appropriate) is still a potential outcome. Expectations for any kind of pre-determined outcome are antithetical to the public trust needed for these processes.

7. Negotiation and compensation: In the last few years, the trend to incorporate negotiation and compensation for negative impacts of a policy or project on specific groups or communities has grown stronger. The challenge here is to maintain the balance between local or regional stakeholders and public and national interest, even at the international level.⁹ Identifying ‘win-win’ solutions is essential. An effective means for garnering support among diverse parties is to identify where goals align.

8. Efficiency: What is the ‘workable balance’ between the appropriate breadth and depth of engagement? Limited resources require choices to be made. The costs and time of the process, including avoiding content repetition, are still important principles for engagement design. Available technologies must be mobilized in order to achieve efficiencies.

The International Association for Public Participation (IAP2) is an international reference that reflects levels of engagement compared with the goals of the process. Please find on the next page their Public Participation Spectrum.


⁸ For recent application of no. 3 and 4, see the Supreme Court decisions in *Clyde River* and *Chippewas* cases.

⁹ This point takes different forms depending on policy or project level.

IAP2'S PUBLIC PARTICIPATION SPECTRUM



The IAP2 Federation has developed the Spectrum to help groups define the public's role in any public participation process. The IAP2 Spectrum is quickly becoming an international standard.

		INCREASING IMPACT ON THE DECISION 				
		INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
PUBLIC PARTICIPATION GOAL		To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.
	PROMISE TO THE PUBLIC	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.

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Source: https://c.ymcdn.com/sites/www.iap2.org/resource/resmgr/foundations_course/IAP2_P2_Spectrum_FINAL.pdf

1.2 VIRTUES OF A BETTER AND STRONGER ENGAGEMENT WITH CIVIL SOCIETY

How can we balance the need for meaningful engagement with the imperatives of a representative democracy? Representative democracy requires finding a workable balance between fully technocratic energy decision-making on the one hand, and extensive participatory processes on the other. Open and transparent decision processes increase the level of engagement, as the recommended approach that fits with the kind of issues that we currently face. Problems are complex. Diversity and pluralism are here to stay and the citizens want to be part of the process.

The split delegation, by delegating decision-making to politicians and science to scientists, has faced some important limitations whereas reflexive society is a model for our time. Citizens have the right and the means to participate, with three main outcomes associated with best practices in public engagement (Blondiaux, 2004; 2008).

1. *New and different forms of information and knowledge for better policies and projects:* Civil society engagement using participation tools in policy or project review and approvals will produce new forms of information and knowledge and new approaches to the decision-making process.

There are multiple reasons why public engagement in energy decision-making—both upstream and downstream—is important, including (a) to achieve better decision outcomes, (b) to increase the social acceptance of decisions, and (c) to identify trade-offs associated with energy decisions. The ultimate goal of engagement processes is to support a clear decision rather than a ‘maybe.’

There is a clear need to know when and how different forms of knowledge are to be integrated and/or considered. Indigenous forms of knowledge and approaches and colloquial information and practices, for example, contribute to a multidisciplinary approach and an integrated process.

By incorporating these, it will be possible to integrate dimensions and anticipate different situations, producing a larger perspective for decision-making and better policies and projects. The result will be a better informed decision-making process even if some dissent and arbitration is also required. Furthermore, social media holds potential for governments, regulators and project proponents who want to reach a large number of people and disseminate information quickly.

2. *Easier implementation:* While engagement is a political process and political feasibility can be a key determinant of a final decision, effective engagement can make the decision-making process more transparent and legitimate. Engagement promotes the sharing of different points of view and listening to others who need to justify and explain their positions. By giving the opportunity to express different opinions and to understand the issues and the options, engagement contributes to legitimizing not only the decision-making process but also the decision itself (policy or project). If engagement is in place and it is well-done, the implementation of policy or project has a better chance to being accepted by the groups or communities.

3. *Improved democracy and trust:* Engagement must be treated as a risk-management tool. The costs of engagement pay off in the long run. While engagement is expensive and time-intensive, it reduces the social risks associated with the investment in an energy project or the introduction of a new policy. Engagement leads to the acknowledgment of stakeholders, their forms of knowledge and new conceptions in public affairs, for an improved democracy and the conditions to develop a higher level of trust in institutions.

It is not sufficient for government to use authority in achieving project approvals as this requires stakeholders to justify and counter perceived expertise. Instead, stakeholder experiences contribute to a more engaged, more responsible and better-informed society.

1.3 THE INHERENT LIMITATIONS OF PUBLIC ENGAGEMENT

1. *Inclusiveness, representation and emotions:* An important constraint to engagement is the question of representation. Depending on the subject/object, policy/project and the moment in the decision-making process, who must and who should participate is an important issue. It is very difficult to agree in advance on the different stakeholders that should or must participate. Some stakeholders have different status; some are elected and are representing provinces, municipalities or groups. Some have rights and should be consulted and also accommodated, such as Indigenous communities, while others are directly concerned by a project or indirectly affected by a policy. Some have direct interests and some are 'just' interested as concerned citizens.

On one hand, full open engagement is not always possible or useful. On the other hand, engagement by invitation can face criticism: favoritism may happen. One more issue that arises is who is exactly represented by the participants? With what mandate? Even if the question of engagement is more about ideas and arguments, the question of representation will still be an issue and a potential concern in all processes. Further, there is a challenge to take into account stakeholder emotion within energy decision-making; and/or how to incorporate storytelling into engagement processes. A greater role for social scientists may be helpful; but some suggest the influence of emotion on engagement processes should be minimized.

2. *Time and resources:* Engagement has to happen in the real world, where stakeholders have their own busy schedule and interests. The process can be limited by lack of time and lack of resources. Some procedures are planned, while others can be added later. However, in all cases, compromises will have to be made. The chosen tools also have limits. Some are more

or less interactive (asymmetrical), more or less transparent, more or less inclusive. Information needs must be balanced with the limitations of resource availability.

3. Information: The availability of scientific evidence and data are necessary but insufficient conditions for successful policy creation or project approval because we live in a democracy, where decisions also require public support. Scientific evidence is not always effective in changing people's views. Although Canadians' trust in the objectivity of science is low, public engagement cannot fully replace the role of technical expertise in decision-making. While provision for open dialogue, in providing questions and answers, is an important part of the engagement process, some questions will not receive an answer.

Moreover, some questions will not receive a final and definitive, non-contested answer because the knowledge-base on the matter remains unclear. Controversies and uncertainty persist. As well, communities may lack the capacity for meaningful participation in energy decision-making. Representative citizens often lack the necessary understanding of: (a) the relevant regulations and review processes and (b) the trade-offs involved in the decision. While a certain degree of energy literacy is a prerequisite for successful public engagement processes, regulatory agencies are not usually adequately equipped to educate the public because of their own time and resource constraints.

In part, this turns on the fact that public outreach and education are usually not part of regulators' legislated mandates. Furthermore, regulators' obligations to remain neutral may prevent close communication with the general public or intervening groups.

Other difficulties include both the significant gaps in the availability of energy information in Canada (e.g., with regard to electricity and the social/environmental impacts of energy production) and the challenges users face in trying to find information even when it does exist. This is because of the multiple public agencies and private organizations involved in the production and dissemination of energy information. Moreover, Canada's constitution often generates problems of comparability of energy information across jurisdictions. On the other hand, information overload is facilitated by social media whereby citizens can make decisions increasingly quickly and based on heuristics rather than in-depth research, neither true information nor useful for achieving cooperation.¹⁰ Indeed, social media can often exacerbate polarization because it allows people to self-select their sources of information according to their preconceived views and inherent biases.

4. Global vs local: challenges for large and complex issues: The international and global dimension of a complex issue is a challenge for stakeholder engagement, at least at the citizen level. Climate change is a perfect example. Large issues that include a myriad of dimensions and require transversal solutions are more difficult to operationalize from the perspective of efficient engagement processes. When the strategic policy decision is far removed from citizens, the interest or the capacity to participate are not easy to design.

5. Integration, trade-offs and decision: Not all the information included in the process, nor the expressed preferences or points of view, can be integrated in the final decision.

¹⁰ How can Canada provide credible energy information in a 'post-truth' world? At multiple points in the in the Fall 2017 workshop participants raised the question of how to deal with the vast influx of 'alternative energy facts' into the public discourse but this question ultimately remained unanswered.

While consensus is the ideal, compromise is a lesser evil and trade-offs will always be made in order to arrive at a decision. In other words, participatory democracy is a must, but if representative democracy, based on our political system still has a role to play, and we all agree on this, elected representatives have the legitimacy and the responsibility to make decisions in the end. For this reason, it is important to explain and justify the decision taken.

1.4 THE POTENTIAL RISKS OF ENGAGEMENT

1. Strategic use: Engagement can be used by different stakeholders, especially government and the proponent but also by interest groups, essentially as a strategic tool to gain time for public relations purposes, as a platform to achieve adhesion or as an obstructive mechanism. Especially for the latter, the temptation (Blondiaux, 2008) may be to sabotage the process or revisit a decision already taken. Manipulating the rules, choosing the participative tools, fixing the calendar, adjusting the invitations, planning spectacular activism stunts for the media, etc. are examples of specific practices that contribute to denature the participative ideal and conduct it in a non-serious way (Callon et al., 2009).

2. Popular tyranny: Also known as the proximity pitfall, the participative process could appear as an obstacle to the public interest, by blocking the perception at a more general level and giving an over representation to the local or specific interests. In other words, engagement may exacerbate local and social egoisms (ex. NIMBY phenomena) and jeopardise representative democracy. As an example, a kind of a cognitive dissonance could be observed between Canada's commitment to climate change mitigation and its energy choices.

3. Inequity and power relations: Engagement implies time, resources and specific expertise. One of the risks is for an engagement process to increase inequities and power relations that already exist. In that sense, nothing will change in a democratic perspective and engagement could stay in the hands of the elite, far from minorities or marginal groups (Hendriks, 2009; Lee and al., 2015; Sanders, 1997).

Taking the floor and speaking in public is not an easy task, since it involves time, expertise and aptitudes. Limited engagement can reinforce exclusions and renew the dominant structures. In that sense, engagement processes often suffer from a missing middle ground. Many workshop participants noted that the loudest voices are not necessarily the ones that deserve the greatest weight.

4. Polarisation, fatigue and cooptation: The other risk is the possibility that engagement brings us to a deadlock. First, the opportunities could polarize the position of stakeholders instead of reconciling them. In Canada, there is polarization of opinions on energy issues and a professionalization of advocacy activities on all sides. The dominant paradigm in the energy discourse is one of "good vs. bad" energy sources. As a consequence, there is a risk that engagement processes are quickly captured by extreme positions, while lacking input from the "silent majority". Secondly, the proliferation of participative processes and multiplication of tools could produce consultation fatigue or an over-consultation effect. Thirdly, engagement could result in a cooptation of the participants for the long term, such as support for one camp in exchange for material consideration.

This section has discussed principles of engagement, the virtues of a strong engagement process, potential limitations, and related risks. As mentioned, these considerations have to be integrated within the Canadian energy context, modernization schemes, and within the reality of a market based system and the globalized competition between countries. The next sections contemplate how engagement can be improved and with what degree of institutionalization in energy policy development and project implementation -- two circumstances that could benefit from increased public confidence and improved decision-making processes.

2. THE UPSTREAM OF THE DECISION-MAKING PROCESS: REVISITING POLICY DEVELOPMENT

In a perfect world, the intervention of the state and the need for public policy would not be necessary.

However, that is not the case in the real world.

Economic, social and environmental failures demand public action. Pressure from interests groups, citizens and corporations push issues onto the state's agenda, and public policies are created in response. The energy sector is particularly complex. As noted in Bird (2018):

"Energy policymaking and regulation have unique characteristics that make them more politically challenging and complex than many other areas of regulation. Energy operates under a "triple" constraint of market and economic imperatives, environmental protection, and concerns for differing forms of security. Further, recent scholarship and public responses have added the imperatives of social acceptance or equity. These are politically contentious and complex tensions that have to be resolved through democratic processes" (p.5).

As the interim report on the policy-regulatory nexus suggests (Bird, 2018), the regulation phase faces important challenges to assess and decide on projects when the upstream portion, i.e. the policy choices, are not clear. It is a thin and fragile line that divides the policy and regulation dimensions. Clear political orientations and policy objectives are necessary to protect the independence of regulators and prevent conflicts in their roles. In that context, an integrated approach based on collaboration and openness could be a key for better acceptance of results and a stronger coordinated system of policy-making decisions. Best practices could be studied and diffused.

Regarding governance and accountability, the Organization for Economic Cooperation and Development (OECD) has offered a variety of suggestions to improve regulation (Bird, 2018). Several of these apply to the policy level, with clear articulation of policy goals and principles of open government: transparency, clarity, engagement, public interest, and plain language.

2.1 CO-CONSTRUCTION AND COLLABORATIVE POLICY

The main notion that can justify the increased use of the word "governance" in the last 20 years is collaboration. Problem complexity, limited resources and time, the omnipresence of the media and the plurality of perspectives and interests command collaboration. There are different ways to collaborate and collaboration takes different forms. Co-production refers to the engagement of the civil society and the market for the implementation of public policies (Vaillancourt, 2008). Co-construction is the engagement of all those same stakeholders for the development of public policies. The organization of this collaboration is governance that includes engagement at different moments of a decision-making process, with a goal to pursue the public interest and sustainable development.¹¹ In a changing world, the importance of certain stakeholders in decision-making is evolving. We argue that reforms are needed to achieve public interest in a co-construction perspective. The traditional approach, "decide, announce and defend" still exists but faces stronger opposition. Moreover, co-construction occurs in an evolving legal context. It is informed by constitutional rights of Indigenous peoples and a legal tradition of procedural fairness for those who are directly affected by energy projects. This general principle of co-construction can be embodied through collaborative policy.

Collaborative policymaking is "not just a method which can solve problems when there is conflict in the traditional policy system. It is, even more importantly, a way to establish new networks among the players in the system and increase the distribution of knowledge among these players. This includes knowledge of each other's needs and capabilities and of the dynamics of the substantive problems in society, whether in transportation, environment or housing policy. Collaborative planning, we contend, has emerged as a highly adaptive and creative form of policymaking and action in the Information Age. It is an emerging mode of governance" (Innes and Booher, 2010: 36).

¹¹ In this quest, the state is not a partner like the others. Because representative democracy still exists and is the base of our political system, elected people and the state will ultimately decide (Pierre and Peters, 2000).

We observe a proliferation of literature on this approach, both from academics and practitioners especially at the local level and from the U.S. west coast. Collaborative process brings engagement and public involvement a degree farther on a series of points (Cormick and al., 1996, Handbook, 2000). In the collaborative process, the objective is to search for a single voice, rather than only hear from all parties involved, in order to focus on interests and not only take positions.¹² The primary focus is to find common ground, more than advocate for a point of view. Participants act more as decision-makers, and negotiation, as a standard practice, is usually in open sessions and not behind closed doors. Finally, the outcome is reported in one decision or in a document (principles, orientation, and policy) and the timing is adapted to the object and the challenges.

Changing leadership models is an imperative within this approach. A current trend is to listen and design forums by using “soft political power” (Sorensen and Torfing, 2017). More interactive political leadership is a new way to conceive the democratic mandate through a permanent dialogue with civil society and stakeholders.¹³ A recent initiative, *Generation Energy - Moving Canada Forward*, is an interesting and concrete example of important dialogue activities with civil society in proposing new policy. This kind of initiative must be recurrent, formalized, planned in a cyclical fashion and linked directly to energy decision-making processes.

As Ansell and Gash (2007) emphasize, collaborative governance is formal, public, multilateral and consensus-oriented, including stakeholder responsibilities.

For collaboration to happen, a series of conditions must be in place: a complex problem, major implementation challenges, face-to-face interaction, representation/diversity, trust building, horizontal power structure, embeddedness, commitment to the process, shared understanding of issues and intermediates outcomes (Ansell and Gash, 2007; Emerson, Nabatchi and Balogh, 2011; DeLeon and al, 2009; Innes and Booher, 2010). Relationships are key, whereby building long-term relationships between decision-makers, communities and other groups is crucial to creating the ‘safe space’ that is necessary for the various parties to come together and openly discuss their views. Time, trust, legitimacy¹⁴ and interdependence are the most recurrent factors.¹⁵ Innes and Booher (2010) pertinently recall that, in the end, not the best but the feasible policy solutions are the ones targeted.

Usually, collaborative policies are elaborated in different steps. Depending on the approach, we observed three to six steps which overlap to a certain degree (Susskind and Cruikshank, 1987, Gray, 1989, Edelenbos, 2005). Based on the model developed by *Collaborative Approaches: A Handbook for Public Policy Decision-Making and Conflict Resolution* (2006), we describe four (4) main steps of the process and their major elements¹⁶, as were discussed during the leaders’ workshop and based on participants’ different experiences, institutions and processes. For example, the development of the energy-policy cycle in Quebec includes selected steps every ten years. The *Bureau d’audiences publiques sur l’environnement du Québec (BAPE)*, an independent environment-related consultation agency, is responsible for a diversity of processes that can be compared with the collaboration steps.

12 Like Weible and Sabatier (2009) have shown, collaborative policies increase the convergence of beliefs from rival coalitions.

13 An example of governance typology proposed in our first pre-workshop discussion paper (Fast, 2017b: 9)

14 As we mentioned earlier, both the process and the people running the process must be perceived as legitimate.

15 If collaboration sometimes fails or faces important limitations, most of the authors insist collaboration is a continuous learning process and point to the positive aspects for both substantive discussion and networking.

16 This model is enriched in the paper by other recent models. In general, we find the same phases more or less developed, one phase can be divided into two others and so on. Since it is only a model, it has to be adjusted in all cases to the policy issues, the context and the stakeholders.

The **Assessment Phase**, at the outset, is ideally conducted by a neutral agency or commission. The assessor will identify the stakeholders, the issues, the resources and the time, and the potential conflicts that a public policy exercise could face. Sharing control is a condition that the sponsor must accept for the collaborative process to be successful.

Sometimes, the sponsor (agency or department(s)) can prepare a written interest statement, to clarify the intent and reassure stakeholders. The model proposes an exploratory exercise using interviews with stakeholders to identify major issues, interests and any need for more information, openness to a collaborative process, the next steps, snowballing to identify additional participants to engage, etc. Early engagement is important to build trust with the community and to ensure that engagement outcomes can actually influence project design. As noted previously, early engagement is important to build trust with the stakeholders and to ensure that engagement outcomes can actually influence policy design. Effective engagement starts with a common definition of the problem. A necessary first step in the engagement process is to establish a common understanding of the issue or decision at hand. The established problem definition should influence the choice of engagement tools. The result of the assessment phase is a report summarizing the key findings.

The **Convening Phase** uses a facilitator (the assessor or a third party or even a hybrid committee that represent different interests) who will plan the process, provide a statement of purpose, an agreement on ground rules, and the need to gather information. Sometimes, this gathering of information means educating one another or bringing more facts to the dialogue. However, in our case, with complex issues and a multifaceted sector, this phase will produce information.¹⁷

Agreement on the information to be produced is important and a joint “fact finding” approach can be adopted. Studies by expert committees can also be done on specific topics. International expertise or visits to sites, infrastructure and institutions can be arranged.¹⁸ Programming budgets or specific budgetary envelopes to help engagement are other options to consider.

The **Deliberation and Negotiation Phase** begins once the information is available (studies, reports); different forms of consultation and engagement processes can be organized. Deliberation operates as a forum, a space where issues are defined and knowledge may be explained through various epistemologies; a spectrum of possibilities¹⁹ is discussed. Tools are mobilized and public debate is documented: from open and inclusive public hearings organized across the country, diffused by the Internet, live and podcasted to electronic exchanges, to presentations from expert panels, by themes or by region. When positions are known, negotiations can start with an integrative bargaining perspective, a “positive-sum” exercise. Negotiations can be set as an arena where interests are arbitrated, with proposed adjustments and priorities, orientations and objectives for the policy development. The result of the negotiation is tested and refined in draft agreements, eventually binding the parties to their commitments and ratified by the representatives. To bridge the gap between communities and other stakeholders, non-governmental organizations may in certain particular circumstances act as intermediaries between the public, regulators, governments and project proponents (e.g., Pollution Probe’s Energy Ambassadors program).

17 Could correspond to the SEA process that will be presented in the next section.

18 This kind of activity, such as generic public hearings, conducted in the process of the development of future policies, is usual for the BAPE.

19 This might include important distinctions for centralisation or decentralisation of energy production and coordination issues that this kind of choice implies. Some think that the Canadian energy sector suffers from institutional inertia. The increasing rate of local ownership of energy facilities causes a decentralization of power in the energy decision-making system away from large companies and toward (Indigenous and other) communities. The changing ownership structure is understood by many to promote democracy in the energy system.

Lastly, the **Decision Phase** connects the agreement and the formal decision. The official policy content could differ from the agreement for some elements or detailed formulations. Trying to identify ‘win-win’ solutions is the objective, where goals align and where interests overlap. If collaboration is desirable, trade-offs implicate the responsibility and the legitimacy of elected representatives in our representative democracy. That said, it is important to keep contact with the participants, to inform, communicate and explain the choices made by the public authority in the final formulation of the policy. Planning a committee or some tools and resources to monitor and evaluate the policy in line with the agreement may also occur.²⁰

Indeed, documenting best practices in energy engagement is critical to making improvements in this regard and to facilitate learning. Keeping track of ‘what works’ in energy engagement in Canada can help to identify a set of best practice principles. Courts and governments have provided some direction as to what good standards of engagement are, but concrete principles are still lacking and reliable measurement of the effectiveness of engagement efforts is extremely challenging. The production of high-quality information (on substantive and procedural aspects) is costly and due to resource constraints, it is unrealistic to assume that full information will ever be available on all aspects of a decision. Rather, different information needs must be balanced with the limitations of resource availability.²¹

Real experiences and institutions can be compared with this ideal-type model of collaborative policy. Table 1 provides examples of institutions devoted to information, science and public engagement in Quebec (Canada), the United Kingdom, and Denmark.²²

The important question that remains is how far should we go concerning the institutionalization of collaborative approaches? Are ad hoc initiatives sufficient? Should we encourage permanent, cyclic and compulsory processes and institutions? This issue is fundamental to important reforms happening in Canada now. Engagement could help formalize the policy development process, to inject more collaboration, predictability, transparency and accountability and identify clear orientations and concrete objectives for the energy system. Collaboration in particular is also discussed in Positive Energy's Interim Report #2, *The Policy-Regulatory Nexus in Canada's Energy Decision-Making* (Bird, 2018).

20 Some stakeholders would be members of the committee. Meetings must be planned to monitor the implementation of the agreement/policy, tied with the production of public reports by the committee. A formal process must be part of the agreement on this subject. Moreover, it could be necessary, on the basis of new findings, to revise the agreement and the policy. This is also part of the process of a collaborative policy.

21 Concerns about commercial confidentiality represent an additional challenge to Canada's energy information system as companies can be hesitant to disclose certain kinds of information. Some workshop participants noted that there are also concerns about personal privacy when household data is considered (e.g., smart meter data) yet these concerns may sometimes be overstated.

22 See also the “What works centers” initiative <https://www.gov.uk/guidance/what-works-network> and the recent study conducted by the Mowat Center: https://mowatcentre.ca/wp-content/uploads/publications/155_bridging_the_gap.pdf.

TABLE 1

Examples of information oriented institutions

<p>The Bureau d’audiences publiques sur l’environnement du Québec (BAPE)</p>	<p>UK Sciencewise Expert Resource Centre for Public Dialogue in Science and Innovation</p>	<p>The Danish Board of Technology Foundation (DBT)</p>
<ul style="list-style-type: none"> • BAPE is an independent agency that reports to the Quebec Minister of Sustainable Development, Environment and the Fight Against Climate Change. Its mission is to enlighten government decision-making in a sustainable development perspective, which encompasses the biophysical, social and economic aspects. • As an advisory agency the BAPE has no decision-making power. The BAPE provides information, makes inquiry and consults the public on projects or questions related to the quality of the environment, as submitted by the Minister. The BAPE then prepares inquiry reports. • The BAPE vision is one of a Québec where the citizens of all regions are better informed about environmental questions and important projects submitted for public consultation. Citizens know they have the possibility of being consulted by an independent and impartial organization which has a role to consider concerns and opinions in the governmental decision-making process. • The BAPE is committed to supporting its work on ethical values such as respect, impartiality, fairness and vigilance. Its members adhere to a Code of ethics and professional conduct founded on these values. • http://www.bape.gouv.qc.ca/sections/bape/organisme/eng_organization_ind.htm 	<ul style="list-style-type: none"> • Funded by the Department for Business, Innovation & Skills, Sciencewise assists policy makers in completing two-way dialogue with members of the public to inform decision-making on science and technology issues. Such dialogue will inform, rather than determine policy and decision-making by those empowered to do so. • The objectives are to facilitate more informed policy in science and technology and to build confidence in decision-making related to development and overall governance of science and technology; to build on the public’s generally positive views of science; and, to both maximise the opportunities offered by new areas of science and technology and minimise potential downsides. • Both aspirations and concerns of the UK population for the development of new areas of science and technology are elicited. Decision-making is enriched by gathering and analysing broad intelligence on the full range of issues (technological, scientific, environmental, social, ethical, legal and economic) related to emerging new areas of science and technology and their governance. • http://www.involve.org.uk/wp-content/uploads/2017/03/Guiding-PrinciplesSciencewise-ERC-Guiding-Principles.pdf 	<ul style="list-style-type: none"> • DBT is a non-profit corporate foundation working for the common good. Their mission is to ensure that society’s development is shaped by informed and forward-looking cooperation between citizens, experts, stakeholders, and decision-makers. The DBT is recognized as a global leader in participatory technology assessment, participatory foresight, and public engagement, Responsible Research and Innovation (RRI), and new forms of governance. • In 2010, the DBT was awarded the Jim Creighton Award by the International Association for Public Participation (IAP2), recognizing its ‘enduring and significant contribution to the practice of public participation and for innovative and creative approaches’. • The DBT initiated the development of the World Wide Views (WWViews) methodology and has coordinated its implementation to facilitate citizens’ participation in UN decision-making on global warming, biodiversity, and climate and energy. • http://www.tekno.dk/about-dbt-foundation/?lang=en

2.2 CO-CONSTRUCTION OF INFORMATION AND KNOWLEDGE SHARING: STRATEGIC ENVIRONMENTAL ASSESSMENT

A functioning energy information system should be lean and adaptive with several important features. An efficient system should minimize redundancies in data collection and analysis; it should be responsive to changes in users' needs; and it should be able to deliver information in a timely fashion. Information about information is also key. Users need to know: what information is available? How was it produced? Where can it be found? Workshop participants suggested that before initiating a reform of the Canadian energy information system, we need to know what the most important questions are that currently remain un-answered. It is also important to define the criteria by which the success of any information system should be measured.

Different types of energy decisions require different types of information. For example, energy project decisions require highly localized data that is often provided by consultants. For linear projects, the scope of data collection can be overwhelming. In contrast, energy policy-making requires aggregate information at the national, provincial, regional or local levels. In addition, citizens require information as taxpayers and consumers, and communities that are potentially affected by energy projects require specific information about a project's consequences for their lives. However, for different reasons that go beyond the scope of this report, science, an important source of information, is regularly contested throughout the decision-making process (Cleland and Gattinger, 2017). Science and formal expertise therefore have limitations because credible information is essential but credibility is difficult to establish.²³

Judgments of whether a piece of information is credible or not are based on various criteria, including authority of the source, the applied research methods, and who funded the study. Ultimately, credibility is a value judgment and only information that is perceived as credible can support effective decision-making. Credibility is not inherent to research and evidence but it is ascribed by the audience.

Indigenous, vernacular, citizen groups, and individuals' knowledge and information also have relevance and must be part of the decision-making process.²⁴ Inclusion of these forms of knowledge raises a number of questions: Where do these forms of knowledge overlap? Where is there congruence? Where is there divergence? How should divergence be managed for sustainable development and public good? Accessibility and diffusion of knowledge therefore create some challenges. It is possible to achieve more independence with co-production of information for upstream policies and downstream projects with a diversity of stakeholders and institutions that produce, accumulate, synthesize, vulgarize and diffuse information and knowledge in a credible way.

A concrete tool that can be used to support a collaborative policy approach is the Strategic Environmental Assessment (SEA).²⁵ For more than 25 years, the SEA has been recognized as a field of research and application to foster sustainable development (De Boer and Sadler, 1996; Fischer, 2010; Gibson, 2006; Lee and Walsh, 1992; Partidario, 1996; Sadler and Verheem, 1996; Smith and Sheate, 2001; Therivel, 1993; Therivel and Partidario, 1996).

23 *Canadians' trust in the objectivity of science is low. A poll among 1,514 from August 2017 shows that 43 percent of the respondents believe that scientific findings are a matter of opinion (Source: Legerweb.com. Legerweb online survey, August 15-16, 2017). As a result, communication of scientific information requires building relationships with various audiences. Often, information has to be translated and communicated differently to reach these various audiences.*

24 *See also the companion Interim Report #1, Who Decides? Balancing And Bridging Local, Indigenous and Broader Societal Interests In Canadian Energy Decision-Making (Fast, 2017a).*

25 *The environment must be understood here in its large sense, not only the restricted biophysical dimension. Economic, social and cultural dimensions are included as sustainability development includes the three pillars.*

It is the “natural extension” of the more diffused and institutionalized “Environmental Impact Assessment” (EIA) for projects, where SEA extends assessment to policies, plans and programs. The SEA has been defined as

“a systematic process for evaluating the environmental consequences of proposed policy, plan or programme initiatives in order to ensure they are fully included and appropriately addressed at the earliest appropriate stage of decision-making on par with economic and social considerations” (Sadler and Verheem, 1996: 27).

While the SEA concept was formally established at the end of the 1960s in the U.S. National Environmental Policy Act (Tetlow and Hanusch, 2012; Jones, 2005), the term SEA first appeared in the late 1980s with adoption of the principle of sustainable development after publication of *Our Common Future: Report of the World Commission on the Environment* (the Brundtland Report). This instrument developed steadily on a global basis through the 1990s and 2000s, especially in Europe. Canada was among the main countries to plan its institutionalization, alongside the United States, Western Australia, New Zealand, the Netherlands and the European Commission, i.e., countries governed by the European Directive on the SEA. “The SEA is being used, both formally and informally, in an increasing number of countries and international organizations” (Sadler et al. 2011, p. 1), in several fields such as fisheries, forestry, waste management, town and country planning and of course in the energy sector (Caschili and al., 2014; Tetlow and Hanusch, 2012). At the same time, there is an institutional and mythological pluralism for SEA (Noble, 2009): “Indeed, some of the better examples (in Canada) have neither carried the SEA name tag nor occurred under its formal requirements” (p. 66).²⁶

The SEA process follows a number of steps from screening to follow-up activities. “Even when the SEA is

a statutory requirement, as is the case in Canada, the preliminary screening phase that determines the need for a SEA relies on a discretionary mechanism. Decisions generally depend on a significant or major impact of a policy, plan or program (PPP) rather than on lists of inclusions or exclusions” (Gauthier and al., 2011; 50). If the policy, plan or program implies some significant or potentially important environmental impacts, the screening phase will identify the terms of reference - the reasons for the SEA and scale of considerations.²⁷ The scoping phase then identifies what the SEA must take into account. This phase considers the context, the environmental, social and economic objectives, and the limitations of the SEA. Different options are framed and analysed, the implications for the projects linked with the PPP, and the methodology to follow (data, epistemologies and consultations). The third phase consists of the evaluation of these options, their comparison and the solutions intended to reduce negative impacts and increase benefits. After that, the revision phase evaluates if the SEA aligns with identified goals, and may include consultation to validate the information, the advice and findings to be sure the report and conclusions are well understood. Once conclusions are made and explained, the SEA report is sent to the public authority and usually released to the public.

From a good practices point of view, a successful SEA process must respect a number of criteria like the ones established in 2002 by the *International Association for Impact Assessment*. A good quality SEA process must be (1) integrated, (2) sustainably led, (3) focused, (4) accountable, (5) participative and (6) iterative (IAIA, 2002).

²⁶ Noble precises: “SEA type practices are ongoing in Canada, many of which carry no SEA label but are based, purposefully or not, on relatively sound principles and methodology. This suggests that there must be some real benefits to the SEA; the problem is that very little is known about such applications as SEA exists nowhere in a formal context outside of the federal Directive” (p. 73).

²⁷ This general process is based, notably on Crowley and Risse (2011) and Bidstrup and Hansen (2014).

The SEA, as a strategic and planning tool, involves a number of advantages and has the potential to contribute to a collaborative policy process. “The SEA can facilitate a proactive approach by ensuring that environmental and sustainability considerations are taken into account during early stages of strategic decision-making processes” (Tetlow and Hanusch, 2012: 15) by trickling-down sustainability and capturing large scale and cumulative effects (White and Noble, 2013) and with better consideration for alternatives (Crowley and Risse, 2011; Chaker and al. 2006). The SEA can improve planning transparency, including engagement of stakeholders, by sharing information and interests to potentially decrease the risks of litigations, avoid delays and facilitate the acceptance and implementation of future projects (Crowley and Risse, 2011). Cashmore et al. (2008) also identified important benefits: learning outcomes – both social and technical; governance outcomes – e.g. stakeholder engagement; and development outcomes – design choices, consent decisions; and attitudinal and value changes. Some authors also believe SEA helps to sensitize decision-makers and enhance governance capacity (Stoeglehner, 2010).²⁸ In the current context of complex problems, pluralistic society and systematic dissent, the SEA appears more relevant than ever. As Lobos and Partidario (2014: 38) suggest: “it is believed that the dialogues enabled by the SEA could contribute to improve the quality of decision processes, leading stakeholders to work together collaboratively when making decisions” (Partidário and Sheate, 2013).

With respect to energy policy, despite certain constraints in its application (such as availability of scientific evidence and monitoring data; role of public and technical expertise in decision-making), many authors foresee a future for this instrument. Global challenges, World Bank requirements, transition in the energy sector, creative solutions in a resource-limited context, are all in place to reinvigorate it. Engagement, information and capacity are essential dimensions for this to occur, especially at the

policy level. The SEA is a framework in which to develop an integrated analysis of all aspects of complex and long term policies and can be an important dimension of the policy development process. In other words, the SEA should be envisaged as a concrete and essential framework for policy-development/decision-making processes, with an improved information and knowledge platform that considers the options and their implications for all stakeholders, but especially for elected representatives and senior public managers. Furthermore, a coordinated SEA process with other levels of government (provinces, municipalities and Indigenous communities) can contribute to fill significant gaps in the availability of energy information given the way Canada’s constitution often generates problems of comparability of energy information across jurisdictions. In particular, energy future visioning should be considered important information. Several workshop participants spoke of the importance of future energy system ideas as a type of needed information. Better foresight is also crucial to dialogue.

Is a new energy information agency needed to collect energy data and/or produce information products upon which energy policy could be developed? On the one hand, some may emphasize the need for a single ‘go-to’ agency for official energy information, as a national data repository. On the other hand, the establishment of a new agency may be too risky and and costly. Would this new agency be able to establish the necessary expertise and trust among users quickly enough to safeguard the continuous supply of high-quality information? Those opposing a central agency at our workshop suggested that instead, improved cooperation between the organizations that are currently involved in energy information management would help overcome identified shortcomings.

28 The implementation of SEA has faced some difficulties around the world. Resistance from politicians, public servants and practitioners, cutbacks in human and financial resources, perception of additional workload and delays from government officials and ministers (Gauthier and al., 2011) are among some issues facing the SEA.

3. THE DOWNSTREAM DECISION-MAKING PROCESS: PROJECTS AND CO-MANAGEMENT

At the other end of the state's decision-making, we find the governance of individual projects. How can this part of the system be improved and as a result raise public confidence? Energy transition is a complex sociopolitical process and there are some management structures that seem to be more efficient than others (Newell and al., 2017). Reinforcing information and capacity development, engagement and co-management can help tackle these issues. In this section, we define co-management at both the micro- and meso-levels in a long term perspective for the downstream decision-making processes.²⁹

Co-management is a notion that has been the object of a considerable research over the past few years, in different disciplines and on different subjects. Co-management is usually defined as

“a situation in which two or more social actors negotiate, define and guarantee amongst themselves a fair sharing of the management functions, entitlements and responsibilities for a given territory, area or set of natural resources” (Borrini-Feyerabend et al., 2000: 1)³⁰

Based on Vien-Walker (2016), principal characteristics attributed to co-management.

-
- A power sharing process
 - A bridge between different types of stakeholders
 - Integration of different forms of knowledge
 - Ongoing problem-solving process through a complex structure
 - Evolving process that implies negotiation and learning
 - Public confidence
 - Formulation of agreements
 - Time and resource consuming, taking longer to reach consensus
 - Certain disequilibrium of resources between parties
 - Adaptive communication tools and infrastructure
 - Third party “regulation”
 - Historical relations

Carlsson and Berkes (2005) state that co-management can be situated on a continuum, from information exchange among the parties to full partnership. Let's take a look at some of these tools - those more general and not directly linked with specific and individual projects, conceived here as a long term perspective; followed by others directly linked with each project and therefore possibly reflecting a shorter term perspective.

The first three tools count on long term relations with different kinds of stakeholders. These activities that provide an opportunity to share information, knowledge and expertise contribute to improved understandings, interests and values: long term general agreements; multi-level governance; and permanent relationships through organizational design. These must be considered as an investment and not as an expense or a waste of time, signaling a cultural shift in the way we conceive relations between resources, communities, time and decisions. They require time and resources, and develop on the basis of rich and sometimes difficult experiences. Lessons can be learned for how to deal with challenges in the energy sector.

Three other co-management tools are project-related and based on engagement: impact and benefit agreements; partnership and ownership; and joint follow-up committees. They require production of information and imply capacity development. They have the potential to stimulate the learning process for stakeholders and could contribute to the project's acceptability and raise public confidence.

29 In other words, this section does not address the formal regulation phase of the decision-making process.

30 This definition can also and will be applied to project management.

3.1 LONG TERM GENERAL AGREEMENT

This tool specifies the creation of a general agreement between the proponent and a specific group, a region, a territory or a large municipality. This long term option underpins a specific project, with a series of settlements associated with projects or specific activities. Examples include the general principles for a compensation grid for farmers and landowners, agreed with the union of farmers or forest owners. This kind of tool results from negotiation and solidifies better long-term relations between the proponent and a specific group of stakeholders. Subjected to review on a regular basis, a long term general agreement also informs future negotiations during a particular project.

A general agreement can also be made with a territory. For example, Indigenous communities may agree to general rules for the proponent's activities on a number of projects, for decades to come. Another example is sponsorship and/or consistency for financial activities not linked with specific projects but which could indirectly facilitate relations between specific groups, such as acting as a partner in different environmental projects. Examples of these those co-management avenues are found in activities of Hydro-Québec.

The Farmers Union (Québec)³¹ have a long term general agreement concerning powerlines, including compensation, principles and directives. There is an active permanent coordination committee which produces reports yearly. Secondly, there is agreement for a new relationship between Hydro-Québec and the Crees. The agreement addresses differences and clarifies misunderstandings, includes economic and social arrangements between the two parties, and facilitates the engagement of the Crees in hydroelectric development (partnership, jobs and contracts) (Baba and al., 2016).

Further, and in a different approach, Hydro-Québec created a Foundation for the Environment³² that provides support to local initiatives in domains such as lands and forests, rivers and lakes, wetlands education and awareness. Potential partners are municipalities, regional governments, Indigenous communities and non-profit organisations.

3.2 MULTI-LEVEL GOVERNANCE CAPACITY

In this co-management option, a variety of jurisdictions gather as a permanent standing committee to plan or perform activities at the regional level or on a specific territory, thereby creating a structure that regularly connects stakeholders. This tool could be particularly effective in sharing understandings, interests and values and conducive to reaching compromises or consensus (Ruggiero and al., 2014; Heritz, 2017, Milot, 2009). In Quebec, for example, we find a series of regional "concerted spaces" on water resources or the environment that gather different categories of stakeholders at the regional level.

Regarding natural resources, this approach could produce a regional integrated management plan³³. In the Canadian Northern context, we find good examples in the Evaluation Committee (COMEV)³⁴. The James Bay and Northern Québec Agreement (1975) established an environmental and social protection regime for the James Bay territory (Eeyou Istchee). The COMEV is composed of 6 members: two from the government of Quebec, two from the federal government and two from the Cree Indigenous authorities. Its mandate is to recommend (or not) the use of environmental and social impact assessment, also creating the potential to integrate Indigenous knowledge in the decision-making process.

31 <http://www.hydroquebec.com/affaires-municipales-regionales/pdf/amr-entente-upa.pdf>

32 <http://www.hydroquebec.com/fondation-environnement/>

33 *The Commission régionale sur les ressources naturelles et le territoire (CRRNT).*

34 <http://www.mdelcc.gouv.qc.ca/evaluations/comev.htm>

3.3 PERMANENT RELATIONSHIPS BY ORGANIZATIONAL DESIGN

As mentioned for upstream policy development, downstream project development also benefits from long-term relationships between decision-makers, communities and other groups. The crucial 'safe space' is created that is necessary for the various parties to come together and openly discuss their views. In the perspective of organizational design, the proponent can create structures to stay in touch with the interests and concerns of different community organizations. The idea is to be present and aware of the issues and appear as a full partner for regional stakeholders. In that sense, the organization is not only the proponent of a project that could face acceptability issues, but a development actor. The knowledge acquired by this indirect and long term co-management approach is very valuable, especially with time constraints. Hydro-Québec has developed, in the last three decades, specific regional structure with the goal of being more involved in the territory and to establish better long-term relationships with the stakeholders.³⁵ To improve long term relationships, non-governmental organizations may, in specific contexts, act as intermediaries between the public and project proponents.

3.4 IMPACT AND BENEFIT AGREEMENTS (IBAs) AND COMPENSATION

IBAs are usually defined in a document (agreement, convention protocol) between the project proponent and individuals or groups affected by new infrastructure (windfarm turbines, powerline pylons) and located in an Indigenous community, a municipality or a region. The IBA may be required by law or agreed on a voluntary basis.³⁶ IBAs can be designed based on financial benefits, on contributions for specific projects (environmental protection, economic development) or on employment created directly and indirectly by the project. Other possibilities include a decrease in the price of electricity or municipal taxes or the municipality taxes (Walker and Baxter, 2017a).³⁷

IBAs are seen nowadays as good practice (Lüdeke, 2017) and an integral part of projects, also helping improve acceptability (Cowell and al., 2011). The perception of inequality by civil society is an important factor that must be considered (Christidis and al. 2017) and, in that sense, amounts of compensation and its fair distribution are sensible elements. For this reason, IBAs imply procedural justice issues (Walker and Baxter, 2017a), such as who is receiving the compensation and how much it is. As Walker and al. (2014: 46) state, "Ensuring and communicating that community benefits offer a 'good deal' to communities, rather than focusing on individual benefits, may be the most viable avenue to increase support for renewable energy developments through community benefits".

³⁵ <http://www.hydroquebec.com/affaires-municipales-regionales/>

³⁶ For Indigenous communities, the Crown has the duty to consult and accommodate. See Fast (2017a, 2017b) concerning the differences between the Indigenous communities and municipalities.

³⁷ MiningFacts.org (Fraser Institute) identifies six types of IBAs in the mining sector, signed with Indigenous communities: labour provisions, economic development provisions, community provisions, environmental provisions, financial provisions and commercial provisions. [http://www.miningfacts.org/Communities/What-are-Impact-and-Benefit-Agreements-\(IBAs\)/](http://www.miningfacts.org/Communities/What-are-Impact-and-Benefit-Agreements-(IBAs)/)

Olsen (2015, web abstract) points out that “local opposition must be approached with caution, as financial incentives to promote local acceptance can be seen as buying consent or even ‘bribery’, stirring up further opposition”. Acceptance will in a large part depend on the perceived risks and benefits, as shaped by values (Axsen, 2014), where values shape perceptions of risks and benefits (Axsen, 2014). The influence of the community is also an important factor. Questions of environmental justice and long-term sustainability values can, in spite of benefits, appear as main challenges for projects (Cowell and al., 2011). In other words, IBAs could help with acceptance, but it is not enough when the general attitude towards the project remains negative (Walter, 2014).³⁸

The assistance of a knowledge broker or trusted third-party can help negotiate IBAs (Jami and Walsh, 2017). A good example of an IBA from a proponent’s point of view is the Hydro-Québec Integrated Enhancement Program (IEP) for power transmission facilities (lines and substations).³⁹ The program “aims to offset the residual impacts of transmission projects by allocating 1% of the initially authorized value of power lines or substations to the communities that host them. The funding is used for local community initiatives that enhance the environment or improve municipal, community or recreational infrastructure, or for regional, tourism or Aboriginal community development”.⁴⁰

An IBA can be a powerful tool for relationship building. Long-term co-benefit agreements can help engage communities in decision-making processes and, at the same time, build community capacity. Successful agreements can require project proponents to follow through on all of their commitments to the community in order to maintain trust.

Some limitations or negative aspects usually attributed to IBAs concern the opacity, as agreements are often confidential; perception of inequity or lack of accessibility, a distributive justice issue; limitations in the local employability; and the capacity of the communities to develop some of the activities. A downside of benefit agreements may also be that the community becomes vulnerable to market risks because the project’s wellbeing directly affects the community’s economic situation. Those limitations explain in part why IBAs can evolve towards partnership and ownership (Munday and al., 2011).

3.5 PARTNERSHIP AND OWNERSHIP

Another co-management tool consists of sharing the project ownership. In partnership with one Indigenous community or one or more municipalities, the proponent will approach the community as a full partner of the project, by sharing the benefits in a variety of ways. This is a higher level of co-management compared with IBAs. Does it mean that the acceptance from the community will be higher? In the windfarm sector, research findings have been related to the level of public acceptance (Rand and Hoen, 2017; Christidis and al. 2017; Jami and Walsh, 2017; Walker and Baxter, 2017a; 2017b).

38 Based on the results of a large survey conducted in Switzerland, Walter (2014) mentions that we should keep in mind that a cognitive position does not imply a specific behavior or the will to act.

39 <http://www.hydroquebec.com/affaires-municipales-regionales/environnement-societe/pdf/affaires-municipales-regionales-pmvi-guide-en.pdf>

40 <http://www.hydroquebec.com/sustainable-development/collective-choices/integrated-enhancement-program.html>

When local ownership is encouraged, there is a better perception towards the projects, due mainly to community engagement (Jami and Walsh, 2017). The ownership permits communities to get a better control of the decision-making process as they are included in the planning activities; trust, the basis of a co-construction model, is generated (Krupa and al., 2015). Ownership appears to be the desirable way to enable a better use of project benefits that sometimes are dwarfed in the IBAs approach (Munday and al., 2011). Still, some authors disagree on the fairness of the process, again, a procedural justice issue. The nature of the project (private or community-based) is not always the independent variable.

The expectations and the views are not the same for all stakeholders (Simcock, 2016). However, research finds that policies should support different models of ownership (co-operative, community) (Slee, 2015) notably because there is a better impact on local development (Okkonen and Lehtonen, 2016). In Denmark and in some European countries such as Germany and Austria, more than a third of projects are owned by local and regional citizens (Schreuer, 2016). The Nova-Scotia model, more oriented to a shared ownership, received better feedback than the Ontario model. A good example of this co-management approach is the third call for tenders for windfarm projects in Québec. Launched in 2009, it was reserved for community projects (250 MW for municipalities and regional county municipalities and 250 MW for First Nations). Local ownership can be a powerful tool for capacity building and provides (Indigenous) with economic prosperity, energy security, and the capacity to influence energy decision-making.

Indigenous ownership of energy project development has also become a force of reconciliation. However, Canada's energy institutions are sometimes unable to accommodate the shift toward greater energy democracy, effectively slowing it down. Without institutional support, communities may lack the capacity and incentive programs to successfully become energy producers. This observation raises questions regarding the capacity of governments and institutions to adapt to the potentially rapid changes in the energy market associated with a low-carbon transition.

3.6 JOINT FOLLOW-UP COMMITTEES

A joint follow-up committee can create a space for regular meetings and activities of stakeholders to implement and monitor follow-up programs regarding the environmental, economic and social impacts associated with a project. Committees may be established on a voluntary basis or because of conditions set forth by the public authority in authorizing the project. The members of the committees exchange information, knowledge and concerns. In Canada,

"Although the Act [Canadian Environmental Assessment Act] does not require the establishment of a follow-up monitoring and management unit, such units would help to bridge the gap between data collection and decision-making. The "management" dimension of the unit's mandate would make explicit its role as a catalyst for adaptive management" (Devlin, 2011: vi).

Issues related to this co-management option include stakeholders' representation; the agenda definition; access to information; confidentiality; transparency; internal and external communication; and the freedom and resources at the disposal of the committee (Gagnon and al., 2000). The role of third parties is an interesting and real option to manage the relationship between the proponent, the community and the regulator.

As with other co-management tools, challenges are associated with implementation. It can be challenging to locate information on the matters discussed and previous committee reports are not always accessible to the public. For Lavallée and André (2005) a weak practice is explained by the voluntary aspect of the proponent's participation, the constraints that public administration face to be more engaged on this subject (resources and leadership), and the lack of uniformity in the procedure. Devlin (Devlin, 2011: 30) concludes his report with a call to public authorities:

“On balance, these studies suggest that achieving adaptive management through Follow-up Monitoring and Management Units will be a challenge. The success of such units will depend upon the support given to them by proponents and by responsible authorities. Community engagement and multi-party institutions cannot replace the enforcement function that must remain the responsibility of governmental representatives”.

Additionally, monitoring represents a particular challenge. High-quality information should underpin the entire life cycle of energy decisions. Decision-makers need information about past developments, the current context, and the anticipated consequences of the decision at hand. Importantly, post-implementation monitoring requires information about execution and impacts of past decisions. Multiple workshop participants acknowledged that data collection for monitoring purposes represents a particular challenge and is thus often neglected. But even comprehensive information about the current situation is often unavailable. And future projections are difficult because they typically require numerous assumptions.

This last element rings true to all the aforementioned co-management tools. Some of them are voluntary, others are mandatory. Either way, these tools depend on support of the elected representatives and the public authorities.

CONCLUSION

This interim report explores and develops some avenues that could be used to improve the general energy decision-making process. This process must be seen as a system, with connecting elements in accordance with the goals of sustainable development, with consideration to the attendant economic, environmental and social pillars. This framework should define the national interest in a complex society for decades to come.

The upstream-downstream division within this report could appear artificial to many. However, it helps bring clarity to the decision-making process. As Latour (1999) suggested, the *forum* and the *arena* should not be mixed activities that interlace with each other. On the one hand, the *forum* relates to the power to take into account the main issues; assess the major constraints (screening); and exchange ideas and information concerning general options and possibilities, among multiple stakeholders. On the other hand, the *arena* concerns the power to order constitutive elements of the decision; arbitrate the various interests at play; propose and manage the adjustments and the compensations, the details of the decision and the mitigation of its consequences (scoping).

Both *forum* and *arena* are parts of the process for both policies and for projects. The difference is only a matter of the decision level. Some institutions may do both. Nevertheless, the focal point is that the *forum* precedes the *arena*. If this temporal sequence of events is not respected, a sense of betrayal will set in and public confidence will be low, a main challenge for the energy sector. Moreover, once trust wanes, it is very difficult to go back and repair the damage.

To face current and future challenges, the energy sector should opt for a co-construction perspective, by endorsing principles of engagement while conscious of limitations and possible risks; activities should rely on inclusiveness, transparency and efficiency. Regulatory reform at the federal level is underway and important steps have already been taken. Some major principles have been adopted; some are consistent with a large number of recommendations made during consultation and discussion processes held by the government over the past two years and ones we propose in this report. However, the regulation phase is not the entire system, and is the reason why this paper addresses other components of it.

The energy sector must reinforce the formalization of the policy development process, in a collaborative way, based on an ambitious and productive assessment of possible options, and informed by the principles of SEA to identify orientations and objectives. Finally, it must develop co-management tools at the meso- and the micro-levels to harmonize the relationship among stakeholders with a long term perspective, by sharing not only the benefits of projects but also all gathered information; in short, the interests and the values of stakeholders of the energy system.

Inspired by three main themes, Engagement, Information and Capacity and their redeployment, choices have to be made. Ultimately, it is a question of how to create the political feasibility and trust for decision-making. This will depend on the degree of institutionalization developed for these avenues.

As we have noted, efficiency and an acceptable balance must be found among stakeholders, taking into account current perceptions and the Canadian context of a market-based energy system. What is the ‘workable balance’ between the appropriate breadth and depth of engagement, information and capacity? How can we balance the need for meaningful engagement with the imperatives of a representative democracy? The last requires finding a workable balance between fully technocratic energy decision-making on the one hand, and extensive participatory processes on the other. Limited resources require choices to be made with regard to who should be engaged and to what depth. Assured timeliness, predictability and competitiveness is crucial. Key energy imperatives identified as (a) market, competitiveness and economic imperatives; (b) environmental, social, local and Indigenous imperatives, and (c) security, reliability and affordability imperatives must all be taken into account.

Recommendations

1 Develop formal engagement activities in the energy decision system at different steps of policy and project formulation with a co-construction perspective

- a** Engagement design processes must be more upstream and inclusive
- b** Engagement processes must be informed, transparent and with clarity of rules in order to achieve a balanced approach in terms of formalization and flexibility
- c** Capacity development must be increased, especially for specific stakeholders like Indigenous communities and municipalities
- d** Policies and projects must be open to influence and modifications in their formulation to influence
- e** Efficiency or a workable balance must be found between breadth and depth of engagement

2 Develop processes that create a better link between energy policies and projects

- a** Promote a more formal national energy policy process using a collaborative approach with stakeholders
- b** Consider a 10 year cycle for energy policy implementation
- c** Use strategic environmental assessment (SEA) best practices more formally in policy development processes
- d** Improve capacity and processes to produce, diffuse and share information and knowledge by taking into account the source, diversity and accessibility. Consider the creation of an independent public agency for this purpose

3 Encourage co-management processes at the project level

- a** Promote best practices to support long term general agreement; multi-level governance capacity; permanent relationships by organizational design; impact and benefit agreements (IBAs) and compensation, partnership and ownership; and follow-up committees

4 Efficiency and acceptable balance must be found in addressing stakeholder perceptions within the Canadian market-based energy system

- a** Limited resources require choices with regard to timeliness, predictability and competitiveness
- b** Key energy imperatives must be taken into account: (a) market, competitiveness and economic imperatives; (b) environmental, social, local and Indigenous imperatives, and (c) security, reliability and affordability
- c** A coordinated assessment process by general agreement between federal and provincial jurisdictions could limit delays and costs

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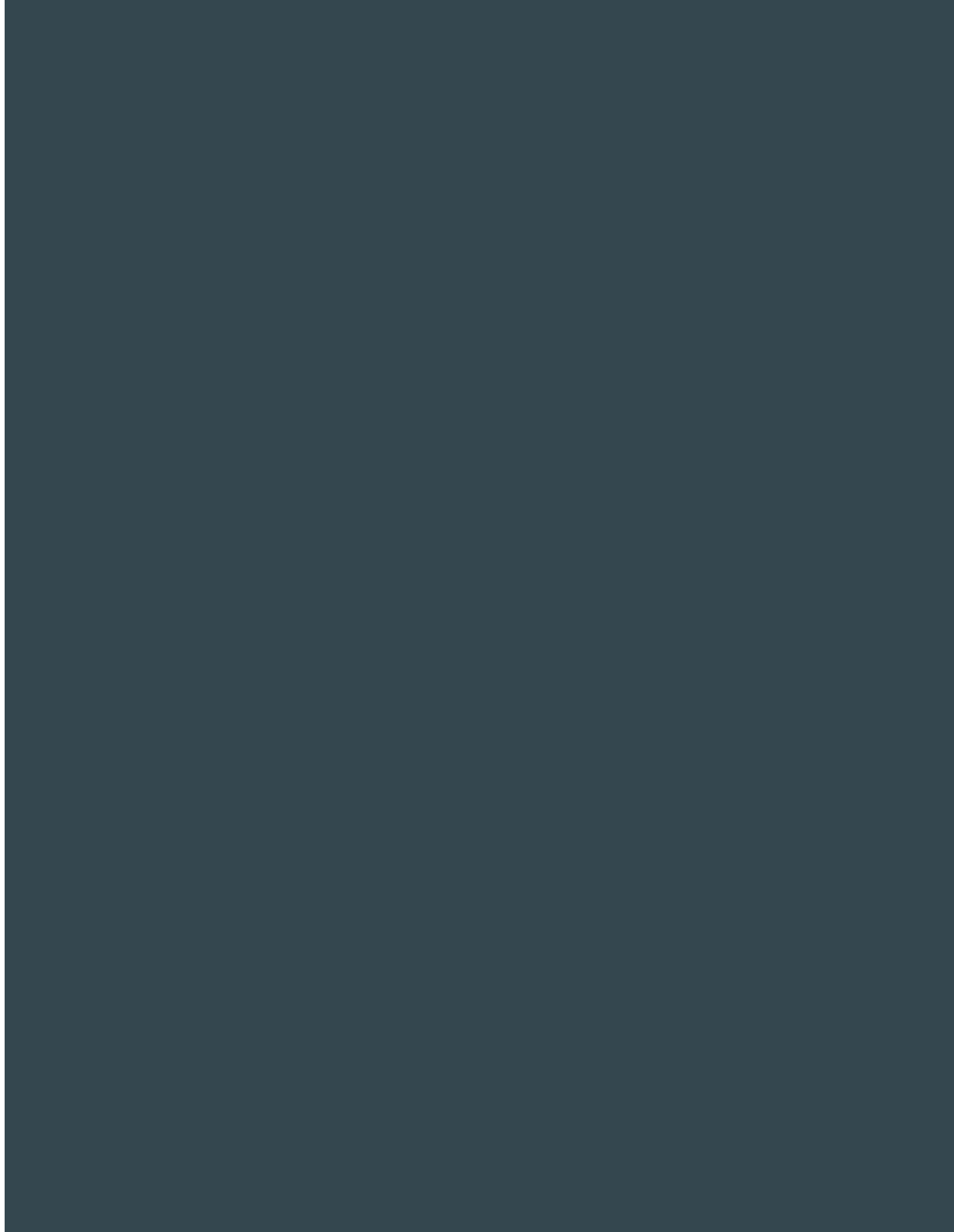
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The University of Ottawa's Positive Energy project seeks to strengthen public confidence in Canadian energy policy, regulation and decision-making through evidence-based research and analysis, engagement and recommendations for action.

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