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# Evaluating the Conceptions of Public Participation in Environmental Assessments in Alberta: How Proponents and Regulators Understand the Practice

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Evaluating the Conceptions of Public Participation in Environmental Assessments in Alberta:  
How Proponents and Regulators Understand the Practice

by

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A THESIS

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## **Abstract**

The use and encouragement of public participation in policy and decision-making, and in environmental and risk assessment, has increased considerably over the past couple of decades. However, there is a lack of consistency in the justification of public participation exercises to stakeholders and sponsors. This research explores the range of variations that exist in the understanding and implementation of public participation in environmental legislation in Alberta, and how those variations affect the evaluation of success. Proponents and regulators were surveyed and interviewed to examine their understanding and perceptions when dealing with public participation under two dimensions – intentionality and geographic framing. It was found that the success of public participation is constructed from both, but the understanding of how each dimension can guide the results is not fully grasped. Public participation is in danger of becoming a tokenistic practice if the tensions arising between these two dimensions are not addressed. The language and practice that surrounds public participation in environmental assessment needs to be redefined before lack of trust and public confidence become further barriers to development.

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## Chapter One: **Introduction**

Public participation is repeatedly identified as an essential tool in the construction of democracy and for successful decision-making. It is often seen as an unquestionable resource, since by involving the public “it is argued that the quality and durability of decisions is likely to be greater” (Reed, 2008: 2418).

The use and encouragement of public participation in policy and decision-making, and in environmental and risk assessment, has increased considerably over the past couple of decades. In the last 20 years, public participation as a practical field has exhibited a rapid growth as evidenced by the number of case studies and regulatory policies in the literature and government guidelines (Tuler & Webler, 1995; Steelman & Ascher, 1997; NRC, 2008; Reed, 2008). In its evolution, public participation has acquired various meanings, giving origin to typologies to better understand the differences of interpretations, associated methods and context of application (Reed, 2008).

On the other hand, environmental and risk assessment is characterized by conflicting values and interests (NRC, 2008). This has resulted in a decrease of public confidence in assessment and regulatory processes due to criticism around legitimacy of decisions, and the perceived failing in taking public concerns and interests into account.

Public participation has become a way to increase democratic deliberation and legitimacy at various scales. In some instances, public participation exercises are used as a tool to recover trust in the traditional power figures. The assumption is that any public participation represents an improvement over the status quo as it promotes awareness and gives greater confidence in government processes and institutions (Abels, 2007). Overall, there is a lack of consistency in

the justification of public participation exercises to stakeholders and sponsors, even if public participation is solely conducted for tokenistic 'improvement' reasons.

Let's set the stage by looking at a current example. Kinder Morgan's Trans Mountain pipeline expansion is a 1,150-kilometre system between Strathcona County, Alberta and Burnaby, British Columbia that will increase the capacity of the system from the current 300,000 barrels per day to approximately 890,000 barrels per day. The project is said to "increase the value of Canadian oil by unlocking access to world markets where higher prices are paid for a barrel of oil, resulting in greater tax revenue for Canada" (TransMountain, 2016).

Trans Mountain has engaged with Aboriginal groups and the broader public about the project since 2012, with all feedback provided addressed or incorporated into the project's planning, and submitted as part of the approval process. First Nations, municipal governments and local communities have expressed concerns regarding the environmental risks of the project. Overall public opinion showed a majority opposition to the project moving forward. In May of 2016, The National Energy Board issued a report recommending approval of the extension project subject to 157 conditions (NEB, 2016). On November 29, 2016, the Government of Canada granted the approval subject to those conditions. Since the approval, opponents and protests have increased, taking a cue from other high-profile protests around the globe, such as at Standing Rock against the Dakota Access Pipeline, with indigenous and non-indigenous allies empowering the civic stand (McCarthy & Hunter, 2016; Gillis, 2016). This is just an example of the hundreds of energy projects being opposed globally, which raises an important question. If there is a critical infrastructure project needed to boost local economies, and there is rising activism challenging the construction and completion of those projects, where is the middle

ground? Shouldn't some of those tensions and conflicting interests have been addressed during the public participation processes leading to the environmental approvals?

According to the International Association for Public Participation (IAP2), public participation encompasses all the processes by which the individuals affected in a decision-making process are involved (IAP2, 2014). The various stakeholders in the environmental assessment process have a shared interest in working together through their concerns but, presently, real public participation is missing.

Proponents and regulators continue to propose and construct development projects under the assumption that their scientific and technical assessments will be recognized as definitive under regulatory practices. The reality is the public tends to be misinformed, disengaged and, overall, is beginning to distrust the environmental assessment process.

Environmental assessment processes are characterized by their focus on "informing" the public on the project and its effects on the environment. This one-way approach of communication, of paternalistic nature, as Brulle (2010) states, relies on expert knowledge and professional communication support, short-term practical actions that fit within economic and political obligations, existing power relations, and institutional dynamics. This approach is also referred to as the deficit model, where the public is assumed to be deficient, or lacking in understanding and knowledge, and science and technical expertise is sufficient (Sturgis & Allum, 2004).

In comparison, the dialogue approach is built on deliberation and two-way discussion. It bridges the knowledge gap by framing the issues in a way that recognizes scientific content as well as social and political realities (Wooden, 2006). It moves away from being a public relations exercise to offering stakeholders possible alternatives, and giving them the space to weigh the

options in consideration of their beliefs and experiences. Public participation efforts should be built on a two-way flow of information, and actions based upon the gathered material.

Public participation is a process framed and constructed under geographic parameters. Public participation cannot be described and analyzed without consideration of the spatial and political ties that compose and enable it. The practice of public participation in environmental assessments is not passive or immobile, it is based on the dynamism and interweaving of different spatialities and socio-spatial processes. However, the geographical aspects that define the process, such as the characterization of the stakeholders and the spatial strategy for their recruitment, are rarely addressed explicitly in regulations and case studies. Although geographic context has been given weight in many studies (Murdock, Wiessner & Sexton, 2005; Webler & Tuler, 2000), geographic considerations and debates are rarely explored.

Public participation needs to be evaluated to determine whether it accomplished what it truly set out to achieve. The participation processes should clearly state the purpose of its development, the way in which the chosen geography parameters constrain or enable it, and be transparent enough to measure accountability against both aspects.

Public participation as a discourse and sustainability principle extends beyond the boundaries of absolute space and the typical achievements of resource and time-limited processes. Frequently, industries must meet timelines and budgets while regulators must accommodate all affected interests as best as possible. However, the reality is that public participation can be a long and intensive process, knit into various spatial dimensions, if it is designed and implemented under inclusivism, fairness and flexibility criteria.

Individuals and institutions hold different ideas of what constitutes a successful public participation process, in many cases without really giving much thought to the geographic

constitution it has. This research examines the variation that exists in the conceptions of public participation in environmental assessment processes and contrasts its nature, discourse and practice.

### **1.1 Problem Statement**

The Canadian legal framework that surrounds environmental assessment ranges from general guidance to the exact prescription of public participation processes. However, the evaluation of these frameworks in regards to their success appears to be missing. A critical review of the credibility, transferability, dependability and conformability of the regulations and the criteria they establish can assist in judging the results achieved in environmental assessments, and justify public participation in future endeavors. Public participation can also help reframe the environmental assessment process and guidelines to level expectations, increase effectiveness, and meet realistic goals.

The existing variation in the understanding of environmental assessment processes and the implementation and evaluation of public participation is detrimental to the building of a defensible practice and the achievement of successful results. As The National Research Council (2008) points out, differing views about goals can lead to conflicts about how to conduct a process.

There is a broad range of possibilities that exist in the practice of public participation. From a direct to limited pursuit, public participation can be grouped by many understandings and degrees of encouragement (Bishop & Davis, 2002). Approaches can travel between the normative and the descriptive schema, consider different purposes, and portray a variety of viewpoints and perspectives.

Moreover, public participation is always geographically constituted. It is critical to consider the nature of space if we are to really understand the public participation process. The practice and results attributed to public participation for environmental assessments vary with the geographical definition of at least three aspects: the geographical definition of the environmental issue, the definition of the stakeholders, and the strategy used for stakeholder recruitment.

## **1.2 Objectives**

The present research explores the range of variation that exists in the understanding and implementation of public participation (excluding Aboriginal consultation) in Alberta environmental legislation, and how it affects the evaluation of success.

The research will look to:

- Examine the nature and intention of public participation in the regulatory framework for Energy projects in Alberta
- Assess the spatial models and geographic parameters that constitute public participation
- Outline the perception of success in public participation for Energy projects in Alberta.

## **1.3 Hypothesis**

The central hypothesis and organizing principle for this research is that the success of public participation in environmental assessments is affected by the purpose and geographic constitution that guides and regulates it.

Several testable predictions can be generated from this hypothesis:

- Public participation success will be higher where there is a clear regulatory framework that assists in the identification of participants and stipulates the incorporation of the

findings into the project development. If the practice of public participation is presented and treated simply as a regulatory exercise (e.g., a box to check, a radius to comply with) and if participation efforts are limited to the bare minimum necessary for compliance, then public participation becomes an administrative process and adds no value to the environmental assessment process.

- Public participation success will be lower where the conceptualization and understanding of what public participation refers to are not clear to all involved parties. When the reason for a public participation process is not explained, stakeholders' perceptions of the added value diminishes.
- Without a clear intention justifying the design of public participation process, success is attenuated. If the basis for planning and evaluation constantly changes or can be reinterpreted by specific individuals, so does the perception of success.
- Public participation success will be higher when processes are not tied to arbitrary geographic parameters that prescribe implementation. The geographic definitions that frame public participation and establish context are not explicit and can affect project success.
- Public participation effectiveness will be higher when it is treated as a real added value to project development and not as a sustainable slogan maintained for only tokenistic purposes. Effort should be made to include stakeholder input and not only create the appearance of it.

## 1.4 Significance

The research presented in this thesis addresses the gaps observed in the construction of the public participation definition. This study explores how public participation is understood and implemented in environmental assessments in Alberta, and how the lack of clarity in the purpose and geographic elements that frame it contributes to an ambiguous assessment of success. I explore how these two dimensions – intentionality and geographic framing – are interpreted by the various stakeholders involved in the environmental assessment process, and the impact the resulting variations have on the perception of success. My final objective is to present the existing divergence of notions and opinions regarding public participation and the incorrect use of the public participation concept.

By exploring what people understand and perceive when dealing with public participation, this study has the potential to help further explain the gaps and inconsistencies so widely criticized in the disciplinary practice. This study takes a geographic view on the issue of public participation and links it to environmental assessment processes in Alberta. Space, scale and boundary are essential aspects of the formation of the public participation construct. Many studies ignore these geographic aspects and tend to focus on the attributes (e.g. fairness, transparency, inclusivity) that public participation must concede.

More and more we see civic unrest when dealing with environmental assessment projects. There seems to be a disconnect between the various stakeholders, their understanding of the public participation process and their perception of success. By opening the intentionality and socio-spatial discussion surrounding public participation, my hope is to identify the sources of tension around environmental assessments, shed some light on its causes and re-write some of the key questions that frame the practice.

I evaluated the generated predictions using data drawn from environmental regulations, and stakeholder opinions. The choice to focus on two specific stakeholder groups in this research – regulators and proponents – is not innocent. It simplifies the exploration of one of the central propositions of this research: the existing disconnect among the various stakeholders involved in environmental assessment processes shapes the frustrations encountered in public participation exercises. By prescribing the research this way I am inevitably defining a particular perspective with the end goal of highlighting some matters, while excluding others.

### **1.5 Research Design and Organization of the Study**

This thesis builds all analysis on two dimensions – intentionality and geographic framing – and how these can shape the perception of success. In Chapter 2, I examine the dimension of intentionality using Andrew Stirling's (2008) pragmatic discourse on participation and its associated appraisal and commitment processes. Stirling's approach is central to this research to critique the regulation and implementation of public participation in environmental assessment processes in Alberta. For the second dimension – geographic framing – I use David's Harvey multilateral division of the understanding of space (2006). I review Harvey's nature of space, spatial production and cognitive model concepts to develop the notion of “spaces of participation” within the specific environmental assessment context to extract significance to the geographic parameters chosen in this research (environmental issues definition, stakeholder definition and stakeholder recruitment). One of the major weaknesses in the public participation literature is the absence of the geographic elements that frame the practice. Finally, since the concept of success is central to this research, I develop the notions of outcome and impact appropriate for assessing stakeholder opinions.

In Chapter Three, I discuss the research design and methods used in this exploratory study. Three research methods were applied: document analysis, on-line surveys, and semi-structured interviews. The conclusions I draw in this study rest heavily on my interpretation and analysis of data collected through these methods and my professional experience in the environmental assessment field. Many of the arguments in this thesis use sample saturation and not representativeness. The goal was to uncover key perceptions without data redundancy.

Chapter Four presents the results of the study. It provides an analysis of four chosen environmental and energy regulations using Stirling's approach and Harvey's concepts. Chapter Four also assesses the stakeholders' opinions expressed in the surveys and interviews concerning public participation intentionality, geographic framing and perceptions of success.

In the concluding Chapter Five, I discuss the results of the study and explore their implications and significance for paradigm shifts in public participation processes. Further, I highlight future contributions and avenues of research to improve the discipline of public participation. For individuals conducting public participation exercises in environmental assessments, I hope to offer greater understanding of the process fundamentals and deficiencies. My intention is not to just assess the merits and shortcomings of public participation, but rather to provide discussion elements that inspire a critical analysis of the practice highlighting some of the sources of tension and disconnect.

## Chapter Two: **Literature Review**

### **2.1 Introduction**

Environmental public participation has been a topic of increasing interest among scholars (NRC, 2008). Since at least the 1970s, researchers have been working to develop theories of environmental public participation. Additionally, globalization and sustainability discourses have moved the concepts of inclusion, deliberation and engagement into the political realm (Stirling, 2005), making industry-proposed developments subject to social scrutiny.

Public participation finds itself in the middle of expert-based analytical procedures and relatively unconstrained sensitive processes (Stirling, 2005). This dichotomy has created various streams of theoretical and empirical work. Stirling (2005) acknowledges the differentiation between the public participation discourses and suggests assessing the validity and utility of the separation between the analytical and participatory approaches. He proposes the focus be shifted to the rationale and motivation that drives public participation.

Furthermore, the dialectic of public participation must move beyond intentionality into questions and concerns of spatiality and social relations. To continue to avoid this discussion would only further the theoretical shortfalls, methodological vulnerabilities and practical weaknesses of the field. Harvey (2006) identifies a multilateral division in the way space is understood and produced. The division is not exclusive. The various categories of space can exist simultaneously depending on the circumstances, but not necessarily with even influence. Often without noticing we favor certain divisions or definitions of space through our practical actions and in the end “what we do as well as what we understand is integrally dependent upon the primary spatio-temporal frame within which we situate ourselves” (Harvey, 2006:128).

This chapter is divided into five sections. In the first section, I define some key terms used in the context of the research. In the second section, I summarize the fundamentals of public participation using Stirling's pragmatic discourse on participation. I examine the nature and underlying intentions that characterize and prescribe public participation actions and initiatives. In the third section I address one of the attributes often neglected in the study of public participation: the geographic parameters and limitations that delineate public participation initiatives. I explore Harvey's multilateral division of space and the cognitive models that constitute it, to develop the notion of "spaces of participation". I expand on the understanding of space to fill some of the gaps left by the public participation literature. In the fourth section, I evaluate the use (or misuse) of satisfaction as a metric in the public participation evaluation literature. I provide an overview of various metrics and processes used to assess the success of public participation exercises. In the last section, I briefly introduce the legal framework under which public participation is carried out when dealing with environmental assessment processes for Energy projects in Alberta. In this chapter, I build on the argument that by defining a clear rationale, and the spaces in which participation takes place, success parameters can be adequately ascribed.

## **2.2 Key Terms**

The following terms are defined as they are used in the context of this research. As the research moves forward, more key terms will be included and defined as per the nature of the work.

*Decision-making* - the cognitive process resulting in the selection of a belief or a course of action among several alternative possibilities. Every decision-making process produces a final choice that may or may not prompt action.

*Dialectic* – the process of revealing contradictions. Social-spatial dialectics are an interplay between the relational and territorial aspects of a given analysis. It recognizes social production as a nonlinear progression deeply tied to context and time.

*Effectiveness* – refers to how well public participation works under “real world” conditions. It is the degree to which objectives are achieved and the extent to which targeted problems are solved. It means doing the right thing, at the right time, with the appropriate resources.

*Efficacy* – is the capacity or power to produce a desired effect. It refers to how well something works in an ideal or controlled setting.

*Efficiency* – is the ratio of the output to the input of any system. It means doing the thing right.

*Environmental impact assessment* - the formal process used to predict the environmental consequences (positive or negative) of a plan, policy, program, or project prior to the decision to move forward with the proposed action. Formal impact assessments may be governed by administrative rules regarding public participation and documentation of decision-making.

*Epistemology* - the possibility, nature, sources and limits of human knowledge. It is part of the concepts and constructs in the public participation discussion.

*Evaluation* - a systematic process used to assess any aim or realizable proposal using criteria governed by a set of standards. The primary purpose of evaluation, in addition to gaining insight into prior or existing initiatives, is to enable reflection and assist in the identification of changes.

*Evaluation research* - the systematic identification and assessment of effects generated by treatments, programs, policies, practices and products. Formal evaluations are conducted for

various reasons: to inform policy and practice, to inform resource allocation, to hold policy makers accountable, to inform consumers and to inform decisions about program and policy continuation.

*Exclusion / Inclusion* – a form of social geography that combines beliefs with space resulting in forms of hierarchy, social positioning and grouping. It is a power exercise that emphasizes differences often resulting in processes of appropriation and territorialization.

*Legitimacy* - Related to the traditional concept of consent of the governed, whereby something is recognized and accepted as fair, competent and accountable to existing laws.

*Need* - Understood as the requirement to take action and make informed choices about what should be done and how to achieve satisfaction. Need requires the opportunity to participate in society's activities and collective decision-making.

*Ontology* - relates to the existence of, and relationship between different aspects of society, such as stakeholders, cultural norms and social structures; ontological issues are concerned with questions pertaining to the kinds of things that exist within society. It is part of the concepts and constructs in the public participation discussion.

*Parameter* - a characteristic, feature, or measurable factor that can help in defining a particular system. A parameter is an important element to consider in evaluation or comprehension of a public participation project.

*Stakeholder* - an entity that can be affected by the results of that in which they are said to have a stake. In environmental assessment projects it is a person, group or organization with an interest in that specific project. The definition of interest, in environmental assessment legislation, is in many cases neglected. It does not address the geographical issues that occur in public participation and it furthers feeds controversy to the processes (see Section 2.4 for more details).

### **2.3 The Fundamentals of Public Participation**

Projects undergoing environmental assessment can be understood using Smith and Stirling's (2007) governance functions approach. First, stakeholders must identify the problems, issues and concerns affecting the system (project justification). Second, stakeholders must consider the complex and at times uncertain dynamics that surround and define the project (technological, social and environmental constraints). Third, stakeholders must develop a set of shared normative criteria under which the project is appraised. Finally, stakeholders must implement the final decisions by forming commitments around the project and its development. Public participation is part of these governance functions and, therefore, is characterized by what Stirling identifies (2005, 2008) as complementary processes: "social appraisal" and "social commitment."

In environmental assessments, we appraise the best solutions for implementation. Appraisal is an epistemic process (Smith & Stirling, 2007) that looks at the ways we understand the interactions that occur between society's complex structure and human behavior. In the appraisal process, knowledge is constructed and, therefore, is subject to social learning. In this process stakeholders can articulate the merits and shortcomings of the solutions approved and implemented.

Appraisal, according to Smith and Stirling (2007), is about producing substantive understandings, social learning, and cultural meaning. It is what allows us to form more concrete commitments. When we look at public participation appraisal, we see discursive processes, institutional practices, disciplinary approaches and methodological tools.

Appraisal has two important distinctions: the extent to which causal relationships are explored and characterized – inputs – and the way in which appraisal significances are exemplified in the wider social process – outputs (Smith & Stirling, 2007).

Input refers to the range of precaution taken in public participation. It is the degree in which uncertainties and ambiguities are acknowledged (Smith & Stirling, 2007). Input can be broad or narrow, and involves a variety of social, institutional, and disciplinary perspectives in the production of the chosen range of precaution.

Output refers to the degree of reflexivity public participation can have. Outputs that are open have a higher level of reflexivity, meaning open outputs recognize and account for contingencies, context, conditions and perspectives. Closed outputs have a lesser degree of reflexivity and focus more on the merits an individual technology or type of intervention may have.

In addition, in environmental assessment we implement solutions by forming commitments that effect change. Commitment is an ontological process (Smith & Stirling, 2007), where relationships are developed, resources are produced and deployed, and concrete interventions started.

According to Smith and Stirling (2007), there are two types of commitment. The first is material commitments, and includes the resources, stakeholders, and relationships required for a project to function. The second is discursive commitments, and refers to the configuration that supports the public participation practice. Discursive commitments assert the position of the proponent or advocate of the project and public participation activity. Discursive commitments can be articulated for substantive, normative or instrumental reasons.

Appraisal and commitment are co-constituting processes (Smith & Stirling, 2007; Stirling, 2005 & 2008). Appraisal shapes the alternatives of the commitments and, in turn, is conditioned by the commitments it informs. Appraisal is the managerial perspective of public participation while commitment is the political perspective. These two processes are complementary and dependent, and vary according to the perspective attributed to public participation processes.

### **2.3.1 Perspective and Justification.**

Fiorino (1990) distinguishes three types of arguments that exist in environmental risk assessment and public participation: normative, instrumental and substantive. According to Fiorino, the normative argument accommodates democratic theory values within the rational assessment. It does so by recognizing that citizens are the best judges of their interest and, as such, they should be able to participate in the decisions that affect them. The instrumental argument focuses on conflict resolution, public deliberation, organized interests and procedural orientation. It states that non-expert participation in decision-making assigns legitimacy and leads to better results than relegating them solely to experts or administrative authorities. Finally, the substantive argument holds that non-experts can see problems, issues, and solutions that the experts miss, so citizens should be involved in making risk decisions.

Stirling (2005 & 2008) builds on Fiorino's perspectives. Stirling refers to them as the rationale or the intention behind public participation. No rationale is above the other; all three are valid for contrasting reasons under diverse perspectives and can be simultaneously justified. The key lies in recognizing the significantly different power dynamics associated with each one in the scheme and purpose that public participation holds.

### ***2.3.1.1 The Normative rationale – the process and rules view.***

The normative perspective sees public participation as the right thing to do without reference to the end in question (Stirling, 2008). It focuses on the process, the rules, and the criteria. As Stirling (2008) points out, it is sustained by democratic theory values that flow from Jürgen Habermas' (1968, 1975, 1984) ideas and his emphasis on the quality of deliberation as the key to successful decision-making. Under the normative rationale, a well-conducted, criteria-compliant public participation process is in itself a good thing.

Habermas' ideas develop a model of democracy that combines a practical justification of democratic legitimacy with deliberative politics (Flynn, 2004). Deliberation, as a social process, is characterized by the participants being amenable to changing their judgments, preferences, and views during their interactions (Dryzek, 2000). This process of adjustment is developed employing persuasion rather than coercion, manipulation, or deception. Under this view, the authenticity of deliberation, and hence of democracy, is that communication generates the consideration of one's inclination in a non-coercive manner (Dryzek, 2000).

Deliberative democracy theories assume that “the use of political power depends for its legitimacy on its expressing the public good” (Phillips, Carvalho & Doyle 2012:144). Further, legitimacy must comply with three procedural rules:

1. Participation must follow the norms of equality and symmetry - equal opportunity to initiate speech, to question, and to start debate;
2. Participants have the right to question the designated topics for deliberation; and
3. Participants have the right to present reflexive arguments about the procedural rules themselves, including how they are implemented.

Based on the Phillips, Carvalho & Doyle's procedural rules and Stirling's evaluative criteria (2008), principles relevant to the normative intention include scope, resourcing, openness, representativeness, accessibility, facilitation, transparency, and accountability.

Under the normative rational, deliberation is advocated for several reasons. It creates more informed, active and cooperative citizens; it represents all interests and provides political legitimacy by being an objective reasoning process; it encourages participants to develop and discover their individual standpoints. Deliberation promotes deliberative accountability by having participants justify their arguments and decisions (Phillips, Carvalho & Doyle, 2012).

#### ***2.3.1.2 The instrumental rationale – the desired outcome view.***

The instrumental perspective is directed to securing particular ends, favored for specific reasons and outcomes independently of the deliberative social values and process-based norms (Stirling, 2008). The instrumental perspective supports power structures, whether it involves expert or non-expert analysis. It looks for efficacy in realizing particular ends. As such, this rationale can assist in two ways: by providing social intelligence and by managing the proponent's reputation (Stirling, 2006).

As social intelligence, the instrumental rationale highlights the type and nature of public sensitivities for a particular activity or proposed development. This particular use, as Stirling (2006) points out, would help expose the possible adverse or favorable responses to an action, project or development. Social intelligence gives the instrumental rationale a strategic quality, providing the proponents guidance on how to present, shape, implement and mitigate public reactions.

Reputation management is the second motivation under the instrumental perspective, and its focus is on promoting public trust in the institutions and processes putting forward the projects and actions (Stirling, 2006). Using this perspective for reputation management, proponents look to demonstrate commitment to public participation or a track record of implementing public participation.

Criteria relevant to the instrumental rationale include acceptance and trust, regardless of whether outcomes and recommendations are adopted or implemented. The National Research Council (2008) talks about ‘clarity of purpose’, and how processes should be designed with strong goals and meant to meet objectives. They also state “trust can affect the behavior of organized interests that relate strategically to public participation processes” (NRC, 2008:211). Under this rationale, non-adoption of recommendations is interpreted as a failure of the public participation exercise (Stirling, 2006).

### ***2.3.1.3 The substantive rationale – the sustainability view.***

The substantive perspective is also focused on outcomes. The difference with the instrumental rationale is that results are not defined regarding a particular value or interest, but on the outcomes being clear, socially reflected, and openly reasoned (Stirling 2008). These outcomes can be environmental quality, public health or broader human well-being. The substantive perspective is somewhat blind to power and sees citizens as subjects rather than objects of discourse (Stirling, 2008).

Criteria under the substantive rationale include authenticity, social robustness, decision quality and precaution-as-process. When the conditions for authentic public participation are met “genuine learning takes place; trust and social capital can be built; the quality, understanding and

acceptance of information can be increased; jointly developed objectives and solutions with joint gain can emerge; and innovative approaches to seemingly intractable problems can be developed” (Innes & Booher, 2004:429). The second criterion, social robustness, speaks to the extent to which commitments made during public participation are consistent with public values, knowledge, and meanings (Stirling, 2008). Decision quality usually signals the introduction of poor-quality thinking or an incomplete or incorrect application of scientific knowledge in decision-making. In the past, the tendency to give less weight to public participation was sustained by the variable estimation between the value of input provided by public and experts (NRC, 2008). The adjustment is made by clarifying the kind of input requested and how it will be used. As Blue and Medlock (2014) point out, the democratic potential of public participation is that it identifies public concerns that can oppose dominant scientific and technological conceptions. Finally, precaution-as-process looks into the “array of options that are considered, the breadth and depth of issues examined, the range of uncertainties explored, and the diversity of methods and disciplines applied” (Stirling, 2008:271).

All three rationales can be analyzed based on the attitude they take regarding power structures (Striling, 2006):

- Normative - opposes power structure as a way of settling conflict;
- Instrumental - accepts particular ends conditioned by power structures; and
- Substantive - blind to power structures and focuses more on the quality of the decisions.

Rationale is a key dimension of public participation processes, but it is necessary to move beyond intentionality into questions and concerns of spatialities – the framing effects of public participation.

## 2.4 The Framing Effects of Public Participation

Framing factors are crucial when determining the results of the appraisal (Stirling, 2006). Framing factors are subjective in nature and tend to be socially constructed. Other authors refer to them as complexities or trade-offs that need to be considered in decision-making exercises. In order to understand public participation process, it is critical to consider the nature and meaning of space, and how it develops into ‘spaces of participation’.

For Harvey (2006) the concept of space highlights variation and choice, because it is created, built, and established based on a given context. This makes space intrinsically complex. Harvey (2006) identifies a tripartite division for the understanding of space: absolute, relative and relational. Absolute space holds a structured meaning, it is easily bound and distinguished through time; this is the space of private property and territorial classification, it is made of countries, cities, towns, plans and grids to name a few. Relative space is understood through the relationship between objects; in this space perspectives are established based on the position of the observer. Past, present, future, internal relations and external influences all play a part in how individuals understand space. Lastly, relational space is contained in objects, it looks at internalized matters and processes and how these shape the relationship to other objects; it is the space of memories, experiences or dreams that become part of the interpretation of space. Space can be one or all three depending of the circumstances, meaning “different human practices create and make use of different conceptualizations of space” (Harvey, 2006:126).

Using this spatial division, let us look at the ‘spaces of participation’ using the same example of the Trans Mountain pipeline expansion mentioned in the previous chapter. In absolute space the pipeline extends over two provinces, Alberta and British Columbia. It includes 980 km of new pipeline and 193 km of existing pipeline being reactivated (Trans

Mountain, 2016). The pipeline follows a right-of-way corridor of approximately 150 metres wide, based on local constraints. Lands traversed by the project include: water bodies, agricultural lands, hay and tame pasture, treed pasture, areas of aspen woodlands and mixed aspen forest, native vegetation, urban areas, industrial areas; and parks (TERA, 2013). In relative space, 73% of the proposed project follows the existing pipeline's right-of-way; 16% follows existing utility corridors and infrastructure; and only 11% of the corridor will be built away from the existing route to accommodate recent residential and commercial/industrial development in the area (Trans Mountain, 2016). Each of the individuals occupying those areas will have a different perspective on the project, not only relative to the space, but also relative to time they have been in the area, whether it is since 1953 (when the pipeline began operations) or as part of those new residential and commercial developments. To add to the complexity, looking at relational space we might encounter people who have worked for Trans Mountain, see the benefits of it and are passionate about the project; others might have experienced one of the 82 spills reported to the National Energy Board over the years. There will be aboriginal peoples with generations living off the land protesting to protect their community's traditional lands.

Without giving much thought to the nature of the spaces under which public participation takes place we might, as Harvey (2006) states, end up favoring one or other without noticing it, and limit the scope and reach of public participation processes. "What we do as well as what we understand is integrally dependent upon the primary spatio-temporal frame within which we situate ourselves" (Harvey, 2006:128). Public participation research tends to focus in absolute and relative space, but rarely accounts for the relational aspect of how experience and information gets internalized and can support a project or process.

Thinking in relational terms and how subjectivities are formed, Harvey (2006) provides another division of the spatial concept using Lefebvre's categories of space production with an 'appropriation' perspective. Lefebvre classifies space as material, the space of perception and experience; the representation of space, the space of conception and depiction; and spaces of representation, the spaced lived and incorporated into our daily routines. Material space can be understood as physical space, deciphered through tactile and sensorial interaction with the material elements making it measurable and mappable – it is the perceived space.

Representations of space come from our thinking and ideas; it is mental space that tends towards signs. It is conceived or conceptualized space that usually can be translated into maps, plans, models and designs; it is, according to Harvey (2006), an abstract-arbitrary representation of the materiality that surrounds us. Spaces of representation are social spaces, experienced, imagined and changed, filled with sensations, emotions and meaning incorporated into everyday life. It is lived and communicated affectively through symbols and images. Just like with the previous categorization, this understanding of space is not exclusive, but in constant debate.

Going back to the Trans Mountain example, how the project space is represented (assessments, maps, figures, pictures) can affect the perception of place even if there is inconsistency between the expectations, and the actual field experience. Regulators must read the proponent's project case and assessment – highly reliant on conceived space – as well as opposing and supporting claims from various stakeholders – mostly highlighting lived space – to make a decision. Furthermore, stakeholders' lived space will affect their direct experience and the way they interpret and understand representations of space, meaning proponents, regulator and public sensations and concepts are tied to their personal history and never truly objective, logical and unchanging.

The ‘spaces of participation’ can be defined (deconstructed) in absolute, relative and relational terms, and interpreted (constructed) with material, conceptual and lived dimensions by all parties involved. The connections and tensions that arise from these categories and divisions of space constructs distinctive geographical parameters that bind public participation processes. Public participation’s appraisal and commitments for environmental assessment projects vary about the spatial definition and interpretation of at least three aspects: the definition of the environmental issues, the definition of the stakeholders, and the strategy used for stakeholder recruitment. Let’s look now at how the variety of spatialities frame courses of action or inaction in the chosen three aspects of public participation.

#### **2.4.1 Defining environmental issues.**

In Canada, environmental protection started in the 1970s with the environmental impact assessment process (Dunkier & Greig, 2006). Environmental impact assessment informs decision makers about the likely environmental impacts of a specific development project. Dunkier and Greig (2006) explain it does this by examining environmental values or Valued Ecosystem Components (VEC).

Individual project assessments focus on a single project and the impacts it has on a specific VEC, the human-generated stresses on the VEC, and the conservation and sustainability of the VEC when stresses are kept within tolerable and acceptable levels. Cumulative Effects Assessment (CEA) became mandatory for all impact assessments in 1995, and look at “changes to the environment that are caused by an action in combination with other past, present and future human actions” (CEAA, 2016). In comparison to single project assessment, CEA considers the effects due to other projects. Dunkier and Greig (2006) explain CEA came in as

people realized that the examination of individual projects and specific VEC was unable to predict VEC sustainability. CEA examines a project's VEC interactions in the context of other human-generated stresses surrounding the project and their impacts on the same VEC.

The authors provide an example suitable for this specific research; the development of a hydroelectric power plant that uses water from a river. From an individual project assessment view, the environmental impact assessment would consider the effects of the hydroelectric plant on the fish population specifically in regards to injuries to the species at the water intake and water temperature increases at the outflow. Looking at cumulative effects, the fish species are also subject to pollutant inputs due to human activities, local and recreational fishing practices, and other recreational activities in the area. In order to understand the long-term sustainability of the fish population, environmental analysis cannot be limited to the effects of the power plant on the river bank, it must account for all stressors that surround the fish habitat conditions.

From an individual assessment standpoint, a project could be well below impact thresholds and have no 'significant' impact by itself. Two or more projects assessed together could have devastating cumulative effects on VEC. Without a cumulative assessment, project impacts could be categorized as inconsequential.

Individual and cumulative environmental assessments tend to focus on the absolute or physical nature. The human component resides in the human activities that give origin to the changes. The human dimension can be understood from a macro scale looking at the social forces that shape power relationships or from a micro scale where historical and contextual factors influence those power relationships (Turner et al., 1990). These scales need not be exclusive; the macro scale illuminates interdependence and interaction processes at play and the

micro shows how the global forces are at play in the specific places and interacting with the culture.

Marston (et al. 2005) points out that the issues of scale have a foundational hierarchy characterized by the verticality of the concept and a local-to-global paradigm. Scale verticality is based on Brenner's work, which states that social processes flow up and down socio-political and territorial frameworks (as cited in Marston 2005:418). The local-global paradigm builds on Massey theories, which focus on politics of connectivity or power geometries that utilize relationships to construct space (as cited in Marston 2005:418-419).

Scale has two operational components: size, which is the horizontal measure also understood as scope or extensiveness; and level, which is the vertical definition or tiered organization of space (Marston et al. 2005). The local-global distinction is the spatial version of micro-macro or atomistic-holistic thought, and it is highly related to agency and structure. These make scale subject to individual experiences, feelings, and actions and disconnected from broad and objective relations and processes (Marston et al. 2005).

The NRC (2008) suggests that based on available evidence the scale of the environmental issue, whether it be local, regional or national, does not affect the success of public participation or, as Marston (et al. 2005) would suggest, scale would have a fluidity and deterritorialization. The NRC further postulates that geographic scales only influence public participation by making it difficult to ensure that the number and range of potentially affected parties have adequate access and appropriate representation. The solution, according to the NRC, falls in the appropriate use of public participation methods with appropriate allocation of resources to achieve representation over large geographic scales. Furthermore, issues that span geographic boundaries and jurisdictions often involve more than one agency or regulatory body. Interagency

projects can present further difficulties in defining the clear purpose of public participation and explaining how results will be used (i.e., commitments).

Perhaps Jonas' (2006) comment on the complexities of geographic scale offers a better approach to public participation. Jonas (2006) explains that scale is fundamental to the organization and presentation of human-geographical narrative; scale can be empowering by identifying significance at a particular level and can examine the way structures and process constitute political and strategic action. Building from Jonas' (2006) interpretation of the local-to-global paradigm, public participation is, in reality, more in tune with the concept of 'inbetweenness'. Inbetweenness refers to the interactive approaches to spatiality where there is not a fixed geographic scale, but a relational and political construct.

#### **2.4.2 Defining stakeholders.**

Under the normative perspective, stakeholders are defined as "any naturally occurring entity that is affected by organizational performance" (Reed et al. 2009: 1934). Instrumentally, stakeholders are the individuals "without whose support the organization would cease to exist" (Bowie 1988 as cited in Reed, 2009: 1934).

One of the key concepts to understand the definition of stakeholders is citizenry. Three ideas help understand the geographic complexity of citizenship: scale, landscape, and mobility (Desforges et al. 2005). Desforges (et al. 2005:440) states "citizenship is formed through scalar configuration and engagement with place, is symbolized by particular landscapes and transgressed by mobile beings."

The authors explain that historically, citizenship has been fixed to a specific place, tying the responsibilities and rights to those specific contexts. From the scale perspective, the first

concept of geographic complexity, the definition of communities has been scaled down by limiting entitlement and active citizenship to the territory, to local institutional infrastructures, and uneven social and economic geographies (Desforges et al., 2005). At the same time, it has been rescaled upwards with the civil society global rights and collective social responsibility view.

Desforges' second concept of geographic complexity, landscapes of power, not only refers to built environments that hold historical importance but also places with ideologies where citizenship is practiced in establishing territorial limits (e.g. custom or immigration points). Rescaling has challenged the rigid nature of these landscapes.

Finally, mobility is the causal channel that has reshaped the geographic notions of scale and landscape. The idea of movement has changed the way people think about belonging and responsibility. Massey (2004) talks about spaces of political practice, where responsibility originates from the relationships that construct identity. Hence, citizenship is spatially bound by continuous negotiation.

Issues of space, place and politics are tied to the definition of stakeholders. They entail thinking about space relationally and looking at elements of identity. Identities are relational, meaning they are constituted in and through practices of interaction (Massey, 2004). This complex formulation is deeply tied to political commitments. These commitments are constituted both materially and discursively (Massey, 2004).

Massey (2004) states that by thinking about space relationally, the aim is to challenge localist and nationalist claims of place that result in exclusive practices. Massey further explores how issues of time and space in identity can go in two directions: inwards, appreciating the multiplicities, decentralization and fragmentation of identity; or outwards, where place is not

only internally multiple, but also a result of the interactions that extend beyond it. The relational construction of space implies negotiation, and this is often of a conflictive nature.

Massey (2004) states that space is the sum of relations, connections, expressions and practices made meaningful across distance. The issue lies in what Massey calls the ‘hegemonic geography of care and responsibility’ that starts with the near and expands outwards – home, then locality, then the nation and so on. Ultimately, identifying and defining stakeholders is an iterative process that necessitates a clear understanding of the relational aspect of geography.

### **2.4.3 Recruitment strategies.**

The NRC (2008) identifies two types of processes for stakeholder recruitment. The first is called bounded processes, and they identify and target specific stakeholders and individuals representing certain interests. In many cases, bounded processes try to ensure that many perspectives are represented in the public participation process. The second type is unbounded, and is open to all parties and constrained only by the stakeholder’s interest and available resources to participate.

The NRC (2008) talks about public participation ‘breadth’ when referring to the choices about who to invite or include as participants. Under the fundamentals of democracy, the normative view, the inclusion of the full spectrum of parties interested or potentially affected by a decision is the only option to guarantee appropriate public participation. From an instrumental perspective, government and agencies in their duty to act in the public interest can qualify a broad public participation process as an impediment to their work. A substantive perspective focuses on an extent that improves decision quality, legitimacy and capacity of the stakeholders (NRC, 2008).

Reed (et al. 2009) explains that the selection of stakeholders is frequently made on an ad hoc basis, potentially marginalizing groups, creating biases and jeopardizing project viability.

Reed et al. (2009:1933) propose the use of the stakeholder analysis method, a process that:

- a) Identifies aspects of a social and natural phenomenon affected by a decision or action;
- b) Identifies individuals, groups, and organizations who are affected by or can affect those parts of the phenomenon;
- c) Prioritizes these individuals and groups for involvement in the decision-making process.

There are three rationales for the stakeholder analysis method: descriptive, normative and instrumental (Reed et al. 2009). The first, the descriptive rationale, focuses only on relating the relationship that exists between a phenomenon and its stakeholders. The descriptive is used to legitimize decisions by involving key participants or by identifying who decision-makers are morally responsible for answering to and including. The normative rationale recognizes there are multiple perspectives on an issue and solutions are socially constructed. Finally, the instrumental rationale is more pragmatic and focuses on identifying, explaining and managing stakeholder behavior to achieve desired outcomes.

Inclusion or omission of stakeholders usually depends on the method used to recognize them and the commitments of the stakeholder analysis. According to Reed (et al. 2009), there are two approaches to classifying stakeholders: top-down or analytical, and bottom-up or reconstructive.

Analytical categorization tends to follow instrumental ends. Methods to classify the stakeholders are based on the proponents' observation of the phenomenon and system function. For environmental assessment, this type of approach has the disadvantage of identifying the

typical stakeholder and promoting under-representation or marginalization and also representing the biases of the proponent rather than the perception of the stakeholders (Reed, et al. 2009).

Reconstructive categorization allows stakeholders to define the parameters so that the analysis accurately reflects their concerns (Reed, et al. 2009). For environmental assessment, this type of approach needs to manage a larger number of stakeholders, making meaningful engagement more challenging. It is also important to note that by having stakeholders define the parameters, the original effort of research or intervention may shift.

Prell (et al. 2009) states that stakeholder analysis often forgets to identify the issues, problems and aspect of the system under study. This omission has as a consequence many top-down exercises where issues are determined by the team leading the analysis. Prell et al. put forward the Social Network Analysis approach, which studies the relationships and structural patterns present in actors' interactions. Social Network Analysis focuses on stakeholder ties. Strong ties talk about stakeholder influence and can enhance shared learning. Strong ties can also affect a project negatively by producing information redundancy. Weak ties are characterized by less frequent communication so tend to show a wider range of information and new ideas. By bridging often disconnected segments, weak ties can be more resilient or adaptive. However, actors within weak ties lack trust and sometimes understanding in each other, making them easier to break.

Recruitment strategies are critical in natural resource management. By restricting or allowing key stakeholders to participate (or not), proponents can influence behaviors and secure outcomes.

#### 2.4.4 Spaces of Public Participation.

The definition and appropriation of public participation in environmental assessment is constructed using the variety of spatialities explained previously. Using Harvey's (2006) divisions of space, Table 2-1 below illustrates how the different spatialities are combined with the chosen aspects of public participation, to suggest associated ideas to each. These are mere suggestions intended to open the geographic discussion of public participation in environmental assessment processes. They are not meant to be comprehensive or exclusive as it holds specific notions and perspectives of spatiality based on my authorship.

**Table 2-1. Public participation spatial ideas.**

	<b>Environmental Issues</b>	<b>Stakeholders</b>	<b>Recruitment</b>
<b>Absolute Space</b>	physical impact, physical element of the environment, size, boundaries, structures	individuals, landscape, fixed space, territorial limits, nature, spatially-bound, locality, nation	available resources, spectrum, natural phenomenon affected, system functions, structural patters
<b>Relative Space</b>	scale paradigm, scope, micro-macro, local-global, atomistic-holistic, affected parties, jurisdictions, significance	scale, uneven-even social geographies, historical importance	open to all, breadth of process, inclusion-exclusion, affected parties, public interest, decision quality, legitimacy, perspectives
<b>Relational Space</b>	social forces, power relations, cumulative changes, social processes, politics of connectivity, group experiences, group actions	support, mobility, communities, civil society, ideologies, causality, negotiation, place, practices of interaction, inclusive-exclusive, connections	group involvement, relationships, stakeholder behaviors, stakeholder ties, shared learning, communication, behavior influences

<b>Perceived space</b>	extensiveness, significance	landscape, nature, place, home, locality	constrains, impediment in the process, decision quality, legitimacy, stakeholder capacity, observations, issue identification
<b>Conceived space</b>	organizational level, representation, allocation of resources, jurisdictions, processes, strategic action	organizational performance, responsibilities, rights, ideologies, political practices & commitments, localist-nationalist, decentralization, fragmentation, iterative process	bounded & unbounded process, specific targeting, invitation to participate, potentially-affected parties, fundamentals of democracy, duty to act, decision quality, legitimacy, project viability, prioritization, decision-making process, key participants, desired outcomes, categorization, stakeholder classification
<b>Lived space</b>	human activities, interaction with culture, individual experiences, individual feelings, individual actions, group feelings, human narrative, constructs	citizenry, entitlement, belonging, constructional identity, place, conflicts, meaningful relations, expressions, meaningful practices, home	identification, stakeholder interest, choices, inclusion-exclusion, affected parties, stakeholder capacity, marginalization, bias creation, relationships, moral responsibilities, stakeholder behaviors, under-representation, meaningful engagement, resiliency

Using the mode of examination that Miller and Ponto (2016) propose in their article's Figure 1 'Spatialities and the production of mobility: Some initial questions', we can further develop Table 2-1 ideas to pose some preliminary queries regarding the understanding and

production of spaces of public participation (Table 2-2). Once more, these questions represent an initial exploration or invitation to think about the aspects and spatialities tied to public participation in environmental assessment processes.

**Table 2-2. Public participation initial questions.**

	<b>Environmental Issues</b>	<b>Stakeholders</b>	<b>Recruitment</b>
<b>Absolute Space</b>	What physical attributes are included in the project area?	Who is located within the bound project? How do you define territorial limits in the locality?	What physical structures support the definition of recruitment?
<b>Relative Space</b>	What is the significance of the chosen boundaries for the affected parties?	How does the historical importance of space affect the definition of the project?	How is public interest and perspective represented in the decision-making process?
<b>Relational Space</b>	How are physical elements modified by social dynamics? What power relations exist in the project?	What is the criteria to include/exclude parties?	How is group involvement perceived in the project area?
<b>Perceived space</b>	What barriers and/or opportunities are created based on the physical attributes of the environment? What is the significance of the project for the locality?	What do stakeholders call home?	What spatial constraints affect the stakeholder capacity for decision making?
<b>Conceived space</b>	How are environmental issues represented and documented?	How do ideologies affect the process' commitment?	How do you define who the key participants are?
<b>Lived space</b>	How is human narrative included in the definition of environmental issues? How do you take into account feelings/experiences in the project?	How is stakeholder identity included in the definition? How do you assure that sense of belonging/identity is kept intact?	How do you keep moral responsibility and representation for meaningful engagement in this project?

## **2.5 Measures of Success**

Success in public participation processes for environmental assessments should be directly tied to notions of purpose and spatiality. However, research shows that is not usually the case. Public participation processes go through many stages during an environmental assessment: formulation and design, through decision-making and implementation, to the effects of those decisions on the environment and society (NRC, 2008). Each of these stages will, by necessity, be driven by different goals and be measured using different metrics. To evaluate the relative objectivity or subjectivity of parameters, criteria and methods, it is important to define evaluation.

Public participation assessments, and the set of criteria chosen on the basis of such evaluations, usually reflect underlying personal values of how the success is measured. In the case of public participation, evaluation can help justify the exercise to sponsors, contributors and the public. However, it is not an easy or straightforward process. Some key issues remain unresolved in the evaluation topic: the participation concept is complex and value-laden; there are no widely used criteria to determine failure or success; there are no agreed upon evaluation methods, and there are few reliable measurement tools (Rowe & Frewer, 2004).

The questions become how do we conceptualize the success of public participation; when should attention be focused on the effectiveness, efficiency, and equity of the decisions that result from different forms of public participation; and is satisfaction a good indicator of quality?

### **2.5.1 The satisfaction focus.**

Satisfaction has been commonly used as a measurement tool: participant satisfaction (Quinn & Rohrbaugh, 1983; Rowe & Frewer, 2004); participant dissatisfaction (Steelman &

Ascher, 1997; Rowe & Frewer, 2000; Webler et al, 2001); criteria satisfaction (Fiorino, 1989; Tuler & Weber, 1995; Webler et al, 1995). However, as Coglianesi (2003) points out, satisfaction is at best an inadequate measure because it excludes those who do not participate. Satisfaction tends to be perceived as conceptually appealing or easily measurable. It is for these reasons many researchers have used it as a direct measure of impact on their public participation exercises and studies. According to Coglianesi, satisfaction does not work as a good measure of success for two reasons.

First, satisfaction does not mean the outcomes are high-quality results. Participant satisfaction does not necessarily equal a good decision. The goal of many policies, regulations and developments is to change the existing behaviors or conditions to support and meet new demands. As such, not all stakeholders will find it very satisfying to have the status quo change.

Second, it depends on the definition of the stakeholders in any given project or decision-making process, as their satisfaction could potentially be only a partial representation of the overall citizenry. Judith Innes noted, when “a group produces outcomes that harm the larger community, this would not be a positive result even if the stakeholders at the table are satisfied” (Innes 1999 as cited in Coglianesi, 2003:14).

### **2.5.2 The process and outcome focus.**

Rowe & Frewer (2004) measure success under the effectiveness notion and mention two approaches toward evaluating it in stakeholder involvement: by measuring the outcome or by assessing the process. Outcome criteria commonly correspond to the impact on the sponsors, their decision-making or attitudes, and the knowledge of the public. Process criteria usually relate to group interaction and how different components lead to successful and fair involvement.

There is no clear consensus regarding which approach is more important; however, there are convergence points in the literature.

#### **2.5.2.1 Outcome.**

The outcome approach is closely related to the concepts of quality, legitimacy, and capacity. The NRC (2008) further defines these three concepts. Quality corresponds to the concepts of substantive quality and competence. Substantive or high quality is characterized by the identification of the values, interest and concerns of the potential stakeholders; the identification of the range of actions that might be implemented; the identification and consideration of the effects of the actions considered for implementation; and the production of results with the best available knowledge and methods, and incorporates new methods. Legitimacy is associated with stakeholder consent in that it is fair, competent and accountable. Finally, capacity points to better-educated and informed stakeholders, skilled in participation processes.

Abels (2007) measures success under what she calls the key normative functions of policy-making: legitimacy and accountability. Legitimacy, for Abels, has an input and an output focus. Input legitimacy addresses who has access and can influence the policy-making process through participation. Output legitimacy covers the functional objective or effectiveness, policy-making process as problem solving in the interest of the general public. Output legitimacy is result oriented and builds on political inclusion and representation; input legitimacy is process oriented and sees inclusion as a means to achieving a better quality of output, with acceptance and compliance. Accountability contributes to the building of legitimacy as an auditing principle ensuring responsibility; however, in Abel's view, this function is mostly used as a buzzword.

The outcome approach and its related criteria have been geared towards the changes the exercise has on the sponsors, their decision-making and the knowledge of the public (Rowe and Frewer, 2004).

#### **2.5.2.2 Process.**

The second approach, process, is closely related to the concepts of fairness and representativeness. For Rowe and Frewer (2000) and Marsh (2004), public acceptance (fairness) and the quality of the decision and process are the two criteria that must guide the evaluation of public participation. The first criterion, public acceptance, relates to the practical construction and implementation of procedure, and inherently includes:

- Representativeness (relative distribution of views);
- Independence (process conducted in an unbiased way, where managers and facilitators are independent);
- Early involvement (stage in which the public should become involved);
- Influence (outputs with actual impact on policies and procedures); and
- Transparency (the public can see how decisions are made).

The second criterion, quality of the decision and process, addresses:

- Resource accessibility (information, human, materials and time resources);
- Task definition (scope of the public participation exercise, expected output and mechanisms);
- Structural decision-making (mechanisms for structuring and displaying decision-making processes); and

- Cost effectiveness (from the proponent's point of view, as money is a significant motivation for them).

Reed's (2008) grounded theory mentions eight essential features that constitute a proper process:

- Empowerment, equity, trust and learning emphasis - achieved by ensuring participants have the power to influence the decision and ensuring that participants have the technical capability to engage effectively in the decisions.
- Early participation - stakeholder involvement should be considered from concept development and planning, through implementation, to monitoring and evaluation of outcomes.
- Stakeholder analysis and systematic representation - understanding the system affected by the decision, individuals and groups affected can be identified and prioritized in the decision-making process
- Clear objectives agreement - clearly articulated goals towards which to work at the outset of the process.
- Context-specific selection and tailoring of methods - once objectives have been clearly articulated, the relevant stakeholders selected for inclusion and the appropriate level of engagement with the objectives is identified.
- Highly-skilled facilitation - sensitive to the manner in which processes are conducted.
- Local and scientific knowledge - integrated to empower communities and monitor and manage environmental change easily and accurately.
- Institutionalized participation - so processes are embedded in organizational structure and culture.

Webler & Tuler (2000) cite fairness and competence as the two evaluation principles in the normative theories of public participation. The first principle, fairness, “is the opportunity for all interested or affected stakeholders to assume any legitimate role in the decision-making process” (Webler & Tuler, 2000:568). To have a fair process, opportunities need to be available for affected parties to attend, initiate discussion, make statements, participate in decision-making and resolve disagreements. The second principle, competence, “refers to the ability of the process to reach the best decision possible given what was reasonably knowable under the present conditions” (Webler & Tuler, 2000: 568). Under competency, there are two necessities: access to information and its interpretation; and the use of the best available procedures for knowledge selection. A good process promotes mutual understanding before an agreement.

The process approach and its related criteria tend to focus on how the exercise can reasonably involve participants, develop appropriate and efficient communication and generally how group interaction happens (Rowe and Frewer, 2004).

### ***2.5.2.3 Mixed approaches.***

Some authors consider both outcome and process in their evaluation approaches. According to Steelman & Ascher (1997), an ideal decision-making structure must be perceived as democratic, open, legitimate, technically competent and timely. When the authors talk about the directness of democracy, they refer to representation. For the degree of openness, they refer to the rulemaking authority and potential for information to enter the process. In the case of legitimacy, it varies depending on the method used and the context in which the decision is made. Technical competency is measured by the potential for manipulation of information presented to the public, the potential for public and experts to exchange information and the

potential for compromise. Finally, timeliness of decision refers to the potential for uncertainty or dependability in timetables or pre-established timeframes.

Webler, Tuler & Krueger (2001) go further into the intangible of identifying successful public participation. The authors explain there is no single definition of what a good process entails either in the abstract (general) or in the context-specific (local). These authors identify five discourses, built upon the principles of fairness, competence and outcome, which can change the focus of public participation exercises depending on which discourses are emphasized.

- The first discourse—legitimacy of process—includes the use of consensual decision-making, openness, focus on evidence, and non-arbitrary cut-off of the process. Qualities of a legitimate process include: consensus emerges and is not forced under deadlines; the evidence and not the elite preferences drive decisions; and processes are transparent from start to finish and avoid secrecy.
- The second discourse states that public participation processes should promote a search for common values. In this case, there is a strong emphasis on the value aspects of policy discussion and the mechanisms to manage it. The discussion looks to promote a sense of awareness and place. Therefore, a consensus is not as important as building the relationships to work together and continue the dialogue.
- The third discourse focuses on the notion that the process should realize democratic principles of fairness and equity under which decision-making is fair and unbiased. It has an iterative emphasis under which reflectiveness, learning, and improvement are key attributes, making the quality of process, and not the implementation or recommendation, the goal.

- The fourth discourse – the process should promote equal power among all participants and viewpoints – shows a high sensitivity to issues of power. The emphasis is in fairness by ensuring decisions are made on evidence and not rhetoric or political power. It protects local interests by allocating power equitably among participants.
- The fifth discourse pertains to responsible leadership. Since consensus among the diverse interest groups is unlikely, the responsibility for a final decision falls to an appointed individual, emphasizing leadership in the decision-making process. “Endorsing leadership, however, is not the same as endorsing oligarchic or autocratic decision-making” (Webler, Tuler & Krueger, 2001:444). Leaders are, at the end, the ones that must weigh all information and take responsibility for making a final decision.

In contrast, Blackstock, Kelly and Horsey (2006) mention four important distinctions to be considered when evaluating public participation processes: the topic, the timing, the purpose and the focus. For them, the first thing any evaluation must clarify is the objectives of both the participation process and the evaluation itself. The degree and inclusion of the involvement of participants may vary not only between projects, but even within the same project at different times; therefore, there can be multiple objectives with various weights given by participants. The second element they consider is the timing of the evaluation. It can be an ex-ante evaluation that looks at the policy, project or program before implementation or it can be ex-post evaluation, which looks at the effects of the policy, project or program to demonstrate outcome. The third element, the purpose, highlights that evaluation criteria need to be chosen based on the type and objectives for which it is being carried out. In some instances, the same criteria could be used to measure both process and outcome. Lastly, focus recognizes and emphasizes the subjectivity of

any evaluation, not only with regards to the criteria selected but also in how different participants construct these criteria as important.

Other authors move away from the criteria focus and establish a series of sequential steps that need to occur to evaluate public participation exercises. This is the case of Rowe and Frewer's (2004) framework approach steps:

- Define Effectiveness: this concept represents the benchmark against which participation exercises need to be assessed (success, quality). The difficulty lies in that effectiveness is not an obvious, one-dimensional or objective concept; it is not easily identified, described or measured.
- Operationalize the Definition: develop detailed and structured processes and instruments to measure the effectiveness and extent of public participation exercises.
- Evaluate and interpret: evaluation should not solely focus on drawing a conclusion on the absolute or relative effectiveness of an exercise, it should develop a theory of "what works best when and where."

### **2.5.3 Perception focus.**

This study explores how public participation is understood and implemented in environmental assessments in Alberta. I evaluate regulatory documents and stakeholders' opinions using (1) the three rationales or intentions Stirling (2008) identifies behind public participation, and (2) the three geographic parameters: the definition of the environmental issue, the definition of the public, and the strategy used for stakeholder recruitment. Evaluation of success for public participation in environmental assessments in Alberta is focused in this

research on the difference between perceptions, specifically looking at outcome and impact.

These two terms can be differentiated by their reach, scope, and nature (Harding, 2014).

Harding (2004) states that outcomes are finite, and often measurable, changes. Their reach and scope tend to be pre-defined or limited. The measurable nature of outcomes tends to be associated with quantitative methods. Impacts refer to broader effects and are often conceptualized as the long-term effects of outcomes. Impacts are related to personal experiences and hence can be of a subjective nature. The subjective and complex nature of impacts is usually connected to qualitative tools.

The reality is that outcome and impact are netted terms and like appraisal and commitment are aspects present in the evaluation of public participation success. The interest lays in which term is frequently associated with success in environmental assessment projects and how does it relate to the overall purpose of public participation.

## **2.6 Introduction to the Legal Framework**

This research examines public participation within environmental assessment processes. Environmental assessment can be conducted, depending on the project, under federal regulations, Provincial regulations or in some cases conjointly.

Environmental impact assessment (EIA) was formally adopted in Canada in 1973 (Couch et al. 1983). Institutionalization of EIA in Canada, took cue from the National Environmental Policy Act in the United States of America in 1969, the United Nations Stockholm Conference on the Human Environment held in 1972, and the several environmental accidents that occurred in the 1960s (like the Torrey Canyon oils pill) in a period of economic expansion (Couch et al.,

1983). The Canadian Federal Department of the Environment was created in 1971, and by December of 1973 the Environmental Assessment and Review Process had been established.

As Couch (et al. 1983) explains, Federal responsibility for EIA applied to activities of federal departments and agencies, projects involving federal lands or federal taxes. Provincial activities, in contrast, were subject to the respective provincial process, involving provincial lands and taxes. Each level evolved autonomously under the idea that the EIA processes should not be muddled in legal battle.

At that time, public participation was recognized as important, in that all assessments made by the panel would be published. But it was in 1976, with the Mackenzie Valley Pipeline Inquiry (the Berger Inquiry) that public participation was brought to light. Mr. Berger was asked by the federal government, before the EIA process began, to assess the impact of the proposed gas pipeline across the Mackenzie River Valley. Berger's assessment went beyond the typical industry and scientific expert inquiry to include affected public in the northern communities. Berger exposed the communities' concerns regarding the proposed pipeline and its potential impacts. The recommendation was to pause the pipeline development project for ten years, given the concerns of the people in the project area. More important for the EIA development, Berger's report introduced a new mode of public involvement to the governmental process (Couch et al., 1983). Public participation in EIA in Canada as de facto became synonym of informed citizens and better informed decisions.

On the provincial level two specific projects are worth mentioning in regards to public participation. The first is the Oldman River Dam project in Southern Alberta, announced for construction approval in August of 1984. Planning and development studies for the project expanded from 1974 to 1978, with the preliminary results being released in 1976. The

conclusions of the preliminary studies cautioned that the “sociological, environmental, economic and technical aspects [of the project] were yet to be determined in detail” (Shpyth, 1991:370). In 1978 before the Phase II studies for the project were completed, in response to public concern, the Government of Alberta order the Environment Council of Alberta (ECA) to hold public meetings to address the management of water resources in the river basin. A total of ten hearings were held and a final report was submitted to the Minister in 1979. The ECA did not agree with the recommendations of the 1978 studies to construct on-stream dams. The project took traction again in 1983 when a new proposal was submitted for a dam at a site downstream of the originally suggested location. The government, announced in 1984 the construction of the Oldman River Dam project under the statement that it better served the interest of Albertans, but made no mention of EIA requirements. Provincial government argued that it had followed an environmental assessment process (using the previous studies and regular environmental collection studies in the basin) when in fact the project had not been reviewed under the EIA process.

A public society was formed in 1987 (the Oldman River Society) and it began a series of actions to repel the construction of the project. The Society contacted federal ministries (Fisheries and Oceans and Environment) in different occasions to ask the project be reviewed under Environmental Assessment Review Process (EARP). In both instances the Minister said they would not intervene in view of long standing administrative arrangements with regards to the provincial management of the resources and the fact that potential impacts were being addressed (Shpyth, 1991). The Society decided to challenge the project in the Court of Queen’s Bench of Alberta. One of the court’s ruling contradicted the Federal Court ruling for the Rafferty-Alameda Project a few months earlier, which stated a dam in Saskatchewan could not

be built until the public was satisfied it would not affect the environment. This ruling challenged the federal committee accountability and decision to not hold public review, by stating the project was deemed to have little environmental impact in Alberta.

The Oldman River Dam project gained national attention as it was the first successful application of the Rafferty-Alameda decision to another development (Shpyth, 1991). But more importantly the judge for the Oldman project noted that, the federal process unlike the provincial process, allowed the public for full opportunities to participate in the environmental assessment and review process. In Alberta, while public input was received during the various studies, the regulation under which it was conceded gave less value to the role of the public addressing environmental implications (Shpyth, 1991).

The second provincial level project worth mentioning is the Alberta-Pacific Forest Industries (Alpac) kraft pulp mill in the Athabasca county. In December of 1988 the premier of Alberta announced the approval in principle given to Alpac to construct the world's largest single line bleached kraft pulp mill. The approval was granted with cursory review of its impact or no public input (Gismondi et al., 1995). Given the public pressure after the announcement the Government of Alberta offered 'open houses' for the public to meet one-on-one with Alpac members, learn about the project, and voice their concerns. Due to criticism of the open houses and town hall meeting, the government set up a partial public review of the Alpac proposal in 1989. During the review, it became apparent the company was unable to respond to many questions posed by various stakeholders, and the federal government in light of increased public pressure and potential litigation decide to get involved.

Federal and provincial government jointly established the Alpac Review Board to assess the Alpac proposal (Gismondi et al., 1995). The review included and examination of cumulative

effects and a total of 11 public hearings with testimony from 750 individuals. As Gismondi (et al., 1995) states, public participation in the public hearings looked to challenge the quality of the expert testimony and impact science in the EIA documents. Individuals participating in the hearings presented testimony from counter-experts, and showed that impact science needs to be complemented by community knowledge. The Alpac EIA was presented as scientific fact, free of value or expressed as scientific conventions that were above political and ethical analyses (Gismondi et al., 1995). In many testimonies, local knowledge deflected Alpac's claims and as Gismondi (et al., 1995: 241) states "operated as a feedback and evaluative check on official/expert knowledge", it revealed the experts' lack of experience on the project area and how it affected their calculations.

Alpac's EIA showed how experts, using their authority, decide what impacts are worth measuring and addressing using a 'legitimate' value-free excuse. The public worked to gather to show that those specialists had made measurements and calculations based on faulty assumptions, which resulted in a poor estimation of impacts (Gismondi et al., 1995). Alpac identified that, there are ethical and moral issues embedded in environmental decision-making.

In both provincial cases presented above, development of the projects moved forward. This shows how political resolve can override environmental concerns in favour of development agendas. As Richardson (et al., 1993:11) states, "there is an inherent power imbalance between project proponents and members of the public... before a project gets to the stage at which a public hearing will be held, the proponent must have committed a great deal of money to the project, and secured backing from the government."

In the next couple of sections I briefly introduce the legal framework under which public participation is carried out today, and list the documents that will be later analyzed using the document analysis methodology.

### **2.6.1 Federal.**

The *Canadian Environmental Assessment Act* (CEAA, 2012) and its regulations establish the legislative basis for the federal environmental assessment process. Efforts under CEAA, 2012 ensure that the environmental effects of various projects are reviewed before action is taken, to avoid significant adverse environmental effects. One of CEAA, 2012's purposes is to ensure that opportunities are provided for meaningful public participation in an environmental assessment by:

- Allowing for a comment period in the initial steps when the Canadian Environmental Assessment Agency is determining whether an environmental assessment is required.
- Providing opportunity for public participation in the conduct of all environmental assessments.
- Providing opportunities for the public to comment on the draft environmental assessment report for projects assessed by the Canadian Environmental Assessment Agency.
- Requiring review panels to hold public hearings during which interested parties can participate. Panels must also consider all written comments from the public.
- Providing funding by the Canadian Environmental Assessment Agency to facilitate the participation of the public. Funding is received through the Canadian Environmental Assessment Agency's Participant Funding Program.

(CEAA, 2014)

CEAA is the only federal regulatory document considered for this research.

### **2.6.2 Provincial – Alberta.**

The Alberta *Environmental Protection and Enhancement Act* (EPEA) is the primary legislation that “supports and promotes the protection, enhancement, and wise use of the environment” in Alberta (Alberta Energy Regulator [AER], 2014). One of the primary goals of the Provincial Environmental Assessment process is public involvement. The process provides an opportunity for people who may be affected by a proposed activity to express any concerns and provide advice to proponents and regulators.

Two Ministries work with the EPEA to address development projects and their environmental effects assessments:

- Alberta Energy is responsible for the aspects of EPEA related to energy development. Alberta Energy manages the development of the province’s non-renewable resources including coal, minerals, natural gas, petrochemicals, conventional oil, oil sands and renewable energy.
- Alberta Environment and Parks (AEP) is responsible for setting policy around the Province’s environment. Environmental assessment is required where “the complexity and scale of a proposed project, technology, resource allocation, or siting considerations create uncertainty about the exact nature of environmental effects, or result in a potential for significant adverse environmental effects” (ESRD, 2014).

Alberta Energy has two regulatory departments. One is the AER, which is primarily responsible for hydrocarbon resources. On March 29, 2014, the AER assumed some of the powers, duties and functions under EPEA and the Provincial *Water Act*. Environmental Impact

Assessments (EIA) are submitted to both AEP and the AER for review. The AER and AEP work together when processing such applications in a coordinated fashion. The AER addresses public participation under Directive 56.

The other regulatory department is the Alberta Utilities Commission (AUC), which is primarily responsible for utilities, natural gas, and electricity markets. The AUC addresses public participation under Rule 007.

EPEA, Directive 056, Rule 007 and AEP regulations are the documents considered for this research under the Provincial dimension.

## **2.7 Conclusion**

In the public participation field, typologies have been developed to understand the approaches and methods and context under which activities and initiatives take place. According to Reed (2008), there are four distinctive typologies. The first focuses on different degrees of participation on a continuum; it is based on the degree in which stakeholders are involved (e.g., Arnstein's ladder, 1969; Davidsons' wheel of participation, 1998). The second typology emphasizes the direction in which communication flows between stakeholders, whether it is passive, two-way, by dialogue or negotiation (e.g., Rowe and Frewer, 2000). The third typology is based on the theoretical distinction and the process versus outcome view (e.g., Thomas, 1993; Beierle, 2002). The last typology highlights the objectives for which participation is used; research is driven, development-driven, people-centred, planner-centred (e.g., Okali, 1994; Michener, 1998). No one typology is better; their objectives are to provide the basis for public participation and help in the selection of the most appropriate methodology to conduct initiatives and activities.

The participation concept is complex and value loaded; there are no widely used criteria to determine failure or success, there are no agreed upon evaluation methods, and there are few reliable measurement tools (Rowe & Frewer, 2004). Furthermore, public participation is always geographically constituted, and while context is regularly acknowledged in environmental assessment process, the variety of spatialities that define it and construct it are rarely addressed.

Public participation success depends on the underlying perspective that formulates it. Social gains are hard to quantify and even harder from which to remove biases. The key is first to be clear on the objective under which public participation is formulated. Second, ask geographic framing questions to address the various spatialities that naturally exist in the process and, lastly, be transparent in communication over the length of project to clarify stakeholder expectation and reduce the potential tensions that will undoubtedly occur as the project moves forward through the various stage of environmental assessment.

## Chapter Three: **Methodology**

### **3.1 Introduction**

The present research is structured as a mixed-methods study combining quantitative and qualitative research techniques. This chapter is organized into three sections. The first section, the study context, focuses on the geographic setting that defines this analysis on public participation. It provides the argument for the selection of the energy industry as the focal point and the logic in recruiting only proponents and regulators as research subjects. The second section introduces the chosen methods for data collection and points to their advantages and disadvantages. Of the three methods, one – Document Analysis – is a secondary research method; its primary function is to expand the legal framework briefly presented in Chapter 2. The final section expands on the data structure used throughout the study and the gathering and analysis methods applied.

The data structure chosen for the analysis springs from the research objectives. Questions for the surveys and interviews were designed to probe research subjects on the topics of public participation fundamentals, public participation's geographic construction and individual perceptions of success. All collected data have been triangulated among the chosen methods in order to corroborate it and reduce potential biases.

As Harvey (2006:120) eloquently points out “the entry point we choose for an enquiry is not innocent ..., since it inevitably defines a particular perspective that highlights some matters while occluding others”. How I chose to define my research certainly sets the stage for the type of outcomes and tensions I look to emphasize.

### **3.2 Study Context**

In Chapter 2 I briefly introduced the legal framework under which public participation is carried out when dealing with environmental assessment process for energy projects in Alberta. In this Chapter, I focus on the choice of the energy industry and specific stakeholder groups to examine fundamental questions about how public participation is understood and implemented.

#### **3.2.1 Geographic delimitation: the energy industry in Alberta.**

The energy industry directly employs more than 280,000 Canadians, and hundreds of thousands more are employed indirectly (Canada's Premiers, 2015). Almost 10% of Canada's Gross Domestic Product (GDP) is from the energy sector. In Alberta, energy is the single largest contributor to the Province's GDP, income, employment and government revenues (Energy Alberta, 2015). For 2014 the Alberta Government reported: annual production of 2.3 million barrels per day (BPD) of crude bitumen, and 590 thousand BPD for conventional oil; 9.4 billion cubic feet per day for natural gas production; 5,478 oil and gas wells completed; 412,555 kilometres of oil and natural gas pipelines; 30 million tonnes of Coal per year; and 16,237 megawatts of installed generating capacity (Alberta Energy, 2015). Alberta leads the Canadian Energy Strategy's (2015) focus area of 'Delivering Energy to People'. This focus area includes the improvement of "timeliness and certainty of regulatory approval decision-making processes while maintaining rigorous protection of the environment and public interest" (Canada's Premiers, 2015:9).

In 2008, the Government of Alberta published the Provincial Energy Strategy (Government of Alberta, 2008a). In this strategy, one of the three desired outcomes established was sustained economic prosperity. The government recognized the need to create a better

understanding among stakeholders about the management of the environmental footprint of energy development. However, the Alberta system has a history of applying a project-by-project basis view when it comes to the assessment of environmental impacts of new developments.

As stated in the Land-use Framework (Government of Alberta, 2008b), the division of the province into White and Green areas has shaped land-use decision-making in Alberta since 1948. The White area corresponds to privately owned land, and it covered approximately 39 percent of Alberta for 2008. For the White area, generally, ownership rights are limited to land surface and do not include subsurface non-renewable natural resources. The Green area corresponds to forested lands, nearly all publicly-owned, and it covered about 61 percent of Alberta for 2008. The Green area is primarily reserved for renewable and non-renewable resource development, limited grazing, conservation and recreational use.

Both the Energy Strategy and the Land-use Framework acknowledge the involvement of many provincial government departments and boards in their execution and policy responsibilities. Among them are: Alberta Energy, Alberta Environment and Parks, the Alberta Utilities Commission, the Alberta Energy Research Institute, the Energy Resources Conservation Board (now replaced by the Alberta Energy Regulator) and the Alberta Electric System Operator.

The Alberta setting has many players, sometimes with complementary and overlapping roles when it comes to environmental assessments for energy projects. Over the years, the Alberta government has restructured in what appears to be an effort to go past the project-by-project view to a more comprehensive regional vision. Policies and regulations point to a cumulative effects management approach for the Province that identifies targets and thresholds and attempts to incorporate the impacts of existing and new activities in the environmental

assessments. Monitoring, evaluation and reporting activities increasingly show public participation pieces; however, although individual departments have developed workable internal systems, there is little cross-departmental consistency.

By focusing on the general application of legal frameworks in the energy sector, this research looks to examine the level of shared understanding when implementing public participation processes in the province and what defines success for the various parties.

### **3.2.2 Research subjects: stakeholders.**

There are many definitions and categorizations used for the different stakeholders associated with a project (PMI, 2015). The definition of stakeholders for this study follows the distinction made in the Provincial *Environmental Protection and Enhancement Act* (EPEA) in one of the purposes of the environmental assessment process. The Act states in Division 1 Article 40 that environmental assessment must provide for the involvement of the public, proponents, the Government and Government agencies in the review of the proposed activities. As such, there are three distinct groups involved in the environmental process: the proponent, the regulator, and the public.

- Proponent: the person, group or agency that undertakes a proposed activity or project for which approval is being sought or requested. The proponent conducts the necessary studies for the environmental assessment and reports back to the regulator for acceptance.
- Regulator: the agency or organization responsible for environmental assessment decision-making. It approves or rejects development projects and evaluates the public participation programs as part of the decision-making process.

- Public: the population likely to be impacted by the project in question or that is otherwise taken to have a legitimate stake in a particular decision-making process (Catt & Murphy, 2010). Due to the *Personal Information Protection Act* (PIPA), the details of stakeholders affected and consulted on environmental assessment and regulatory processes are mostly confidential.

The third group is the most complex as its definition can be interpreted under inclusion and exclusion practices, meaning there could be different reasons for which individuals of the public should or should not be included. For this research, I surveyed and interviewed only representatives from the proponent and the regulator groups. Catt and Murphy (2010) refer to this approach as government selection, where representatives from specific target groups or a community of experts are sought out for input. Emmel, (2013, citing Patton 1990,2002) refers to it as pragmatic and purposeful sampling. In this type of sampling, judgements are made about “who or what to sample with reference to the purpose of the study, its context, and the specific audience for the research” (Emmel, 2013: 34).

This research started as a professional frustration encountered working as a consultant dealing with both proponents and regulators. The choice of purposeful sampling has two reasons:

- On a personal level, to reflect (quoting Patton, 2002) on what I think is real, question what I think I know, and inquire how come I think I know it; with regards to public participation processes in environmental assessments for energy project in Alberta;
- On an academic level, to select subjects that provide insight to the research objectives and will convince readers of the research significance.

According to Patton (1990), this type of sampling is based on evaluation, the overarching goal of this study. “Evaluation persuades rather than convinces, argues rather than demonstrates,

is credible rather than certain, is variably accepted rather than compelling. This does not mean that it is mere oratory or entirely arbitrary ... once the burden of certainty is lifted, the possibilities for informed action are increased rather than decreased” (House, 1977 quoted in Patton, 1990: 490). Purposeful sampling allows in depth evaluation of what I believe to be information rich stakeholders, associated to issues I consider of central importance for my research.

Patton (1990) observes that purposeful sampling is not only constrained by the purpose and questions asked on the research, but also by the resources available and constraints faced at the time of the research. The choice to exclude the public stakeholders was made based on the following considerations:

- This research is focused on the general application of legal frameworks in the energy sector, with no particular focus on geographically defined projects (e.g. a specific transmission line project, SAGD facility, natural gas generation plant). Without geographically-defined projects, the research looks at the whole Province of Alberta and sampling from the public group becomes extensive and cumbersome.
- To have a representative sample of the public, random sampling in the study area is suggested as a mean to ensure no segment of society is systematically excluded (Catt & Murphy, 2010). Without limiting the research to a specific number of projects or geographic areas, the process of selection and sampling from the public group becomes untenable as it would introduce more variables that could be accounted for in this study.
- There are legal implications (e.g., PIPA, release permissions) that would make the research labor intensive and potentially expensive as proponents and regulators would need to make contact information for private citizens available to perform the research.

The above-stated reasons were made for pragmatic reasons, and follow Patton's (2002, as cited by Emmel 2003) common themes for purposeful sampling. As the researcher, I made judgements "before, during, and after sampling about what to sample and how to use the sample in making claims for the research" (Emmel 2013:35). Those judgements were made with reference to what I knew about the research topic. Sampling was chosen to generate the most credible results for the various research audiences (not just academic, but also considering the professional readers). Finally, I considered resource constraints and made practical choices in reference to time to do data collection and data analysis.

This purposeful sampling carries political implications, as the study was in part designed to grab the attention of a potential audience, the professional readers. The choice was a strategic one, hoping the information could be used to reframe some of the existing conversation surrounding public participation, highlighting the disjoint in even a limited number of stakeholders. By limiting the subject selection to proponents and regulators, there is a smaller range of variation as subjects are already constrained by the legal framework. These constraints will allow the research to focus on the consistency of the smaller sample.

The exclusion of the public is a conscious and purposeful one, and not without bias, but instead of looking at it as a weakness it is turned as a significant strength. If the research points to inconsistencies in the understanding, implementation, and evaluation of public participation in environmental assessments with only the proponent and regulator groups, then the addition of the public group in future studies could potentially strengthen the results. On the contrary, if there is a shared understanding of public participation in environmental assessment in Alberta, the addition of individuals in the public category may be a fruitful line of future inquiry.

### **3.3 Data Gathering Techniques**

#### **3.3.1 Document analysis.**

“Documentary analysis is the systematic scrutiny of the content of documents to identify patterns of change or development on specific issues” (Dahlberg & McCaig, 2010:124).

Document analysis is a logical method for reviewing and evaluating printed and electronic records, and involves the examination and interpretation of data to draw meaning, gain understanding and develop experiential knowledge (Bowen, 2009).

According to Bowen (2009), documents can serve various purposes as part of a research undertaking. He focuses on five specific functions:

1. Documents provide context under which the research operates, providing background information and historical insight. For this, research data obtained from document analysis can contextualize data collected during the survey and semi-structured interviews.
2. Documents can suggest new or additional research questions to ask, or situations that require observation. For this research document analysis helped to generate and refine the survey and semi-structured interview questions.
3. Documents provide complementary research data. The information and understandings derived from the document analysis added to the knowledge base and complemented the findings of the surveys and semi-structured interviews.
4. Documents can provide a means of tracking change and development when the various versions or updates are available for comparison. It can be the comparison of the draft and final versions or superseded versions of a given document.

5. Documents can be examined to corroborate findings from other sources and methods. In many studies, document analysis helps in the verification of the findings. If the findings are contradictory the expectation is to investigate further. If the different sources provide a convergence of information, the research typically has a greater degree of confidence.

Document analysis involves an iterative process of skimming (superficial examination), reading (thorough examination), and interpretation (Bowen, 2009). Bowen also points to the method's content and thematic analysis approach. The first look serves to organize information into categories that relate to the research questions to identify relevant information and text. The second look supports recognition of patterns within the data to uncover themes pertinent to the research that will later become the categories for analysis. When document analysis is used as a supplementary method to others employed in the research, predefined code, themes and categories may be applied.

This method has both advantages and disadvantages (Table 3-1) and, therefore, it is important to consider how documents reviewed serve a particular research purpose.

**Table 3-1. Advantages and disadvantages of the document analysis methodology.**  
**(Source: Bowen, 2009)**

Advantages	Disadvantages
<p><b>Efficiency</b></p> <p>It can be less time-consuming and less costly as it requires data selection instead of data collection. Dates, references, and details are readily available for the researcher</p>	<p><b>Purpose bound</b></p> <p>Documents are created for a specific use and are tied to different agendas that might not coincide with the research, which might result in insufficient details. Documents may not necessarily be precise, accurate or complete</p>
<p><b>Availability</b></p> <p>Many documents are of public domain and are obtainable without additional permission</p>	<p><b>Irretrievability</b></p> <p>Some documents are not available to the public or can be hard to retrieve</p>
<p><b>Categorical nature</b></p> <p>The researcher's presence does not alter what is being studied. For instance, an event might develop differently because it is being observed or the researcher may contribute to social interactions without knowledge</p>	<p><b>Biased selectivity</b></p> <p>Documents are likely aligned with the source organization principles and, therefore, may reflect a single side or point of view</p>

When conducting document analysis the following must be considered in order contribute to the research:

- Relevance of the document to the research question and purpose;
- Completeness of the document – whether it is comprehensively covering the subject broadly, or selectively covering only some aspects of the subject topic;
- Biased or balance view on the subject topic – in many instances attached to the purpose of the document and target audience; and
- The use of primary or secondary sources of information in the development of the documents.

For this research, document analysis was used to offer context, provide insight relevant to the research problem, and complement the other methods used in the study.

### **3.3.2 Surveys.**

Surveys are methods of data collection and measurement characterized by the quantitative or numerical description of a fraction of a population using questions and answers form (Fowler, 2014). In this study surveys were used to establish a benchmark for the research and recruit individuals for the semi-structured interviews.

Surveys, unlike document analysis, are a primary source of information; the data are collected directly by the researcher. Surveys can be used to gather information about behaviors, needs, and opinions. The type of survey conducted can vary along many dimensions, but it can be differentiated according to seven criteria (Guideon, 2012):

1. The target population and sampling;
2. The research topic;
3. The funding and executing agency or organization;
4. The mode of administration;
5. The frequency of implementation;
6. The geographical scale and scope; and
7. The purpose of the data collection.

Surveys are composed of three elements: sampling, question design and data collection (Fowler, 2014). Sampling involves the selection of a subset of the population representative of the whole. Question design refers to how the research topic is presented to provide measurable results. Lastly data collection relates to the mode in which researchers decide to gather the

information. Survey research has changed partly due to societal (time and communication expectations) and technological changes (wider range of tools to sample, contact, administer and transmit data) (Engel et al., 2015).

Fowler (2004) further states that survey design involves a series of decisions that have the potential to increase or detract from the accuracy of the estimates. In many instances, precision and accuracy can be resource intensive, so survey design involves the optimization of those resources in the best possible scenario. Internet surveys have increased in popularity in part due to available research budgets and the need for social science data to inform decision-making (Vaske, 2011). Internet-based surveying, whether as an alternative or a complement to the conventional phone, face-to-face or mail surveys, offers new capabilities (Fricker & Schonlau, 2002).

In comparison to the traditional mail alternative, Internet-based surveying offers several advantages and disadvantages (Table 3-2).

**Table 3-2. Advantages and disadvantages of internet based survey methodology.****(Source: Fricker & Schonlau, 2002)**

<b>Advantages</b>	<b>Disadvantages</b>
<p><b>Timely Distribution</b></p> <p>Faster than conventional survey modes in regards to the delivery by potentially eliminating some of the more labor-intensive tasks, such as survey package preparation and mailing</p>	<p><b>Average Fielding</b></p> <p>Shorter overall retrieving period may only be possible for pre-recruited panels or specialized subsets of a population</p>
<p><b>Geographic Reach</b></p> <p>With convenience sampling, Internet-based surveys can reach geographically-diverse respondents</p>	<p><b>Segmentation and Oversaturation</b></p> <p>It may not reach all population segments due to access, or respondents maybe overloaded with other forms of commercial surveys</p>
<p><b>Cost-efficiency</b></p> <p>Internet-based surveys implemented correctly can result in low data entry and manipulation costs</p>	<p><b>Technological Requirements</b></p> <p>They may require additional effort to program and have them run properly across various software platforms, and involve extensive pre-testing to ensure that the questions elicit the desired information</p>

For this research, the survey is: designed with a quantitative focus, to produce ordinal data and compare across groups; restricted in size and scope, to concentrate on specific situations; cross-sectional, to collect data from multiple people at the same time. The unit of analysis is the individual, with the goal of identifying how individuals differ in their opinions about key public participation issues. I built the survey to be a self-administered Internet-based questionnaire that simplified the data collection.

### 3.3.3 Semi-structured interviews.

Interviews are conversations where one person is seeking responses from another person for a particular purpose (Gillham, 2005). Whatever the purpose, interviews are characterized by building managed relationships. Interviews are differentiated by the degree to which the interviewee is allowed to lead the content (Gillham, 2005). They can be structured, unstructured or semi-structured. Semi-structured interviews are a type of interview of largely qualitative nature that falls between the open every-day conversation and the closed questionnaire without aiming at quantification (Kvale, 2008). Interviews were used for two purposes: first, to expand, clarify and provide context to the survey opinions; second, to establish linkages and patterns in the data.

Research interviews focus on the views, experiences, beliefs and motivations of the interviewees on the specific research topic (Gill et al., 2008). Interviews as qualitative research tools can provide a deeper understanding of social phenomena and supplement the data obtained from quantitative methods like surveys. Interviews can be used when there is limited knowledge about the research topic or when detailed insights are required (Gill et al., 2008).

There is no single protocol to follow when developing qualitative interviews, but there is sufficient commonality among techniques to make a generic account of the interview development process (King & Horrocks, 2010). Interview design involves (Turner, 2010):

- Participant selection to obtain qualified candidates that can provide credible information;
- Question design that allows the interviewer to focus on the participant's knowledge to gain maximum data;
- Piloting to determine any flaws, weaknesses and limitation to the tool design;

- Implementation to examine pace, neutrality, transition and control and probing when necessary; and
- Data interpretation to make sense of the recorded information and compile data into themes and codes.

As with all techniques, the use of interviews has its advantages and disadvantages (Table 3-3).

**Table 3-3. Advantages and disadvantages of the interview methodology.**

(Source: Gillham, 2005)

Advantages	Disadvantages
<p><b>Data Richness</b></p> <p>Interview data is often rich and vivid, and it allows seeing and understanding connections and correlations that other kinds of data may not be able to provide</p>	<p><b>Time-Cost</b></p> <p>Time-cost is under-estimated but it becomes apparent when looking at the various steps: developing and piloting the instrument, travel time, to and from, to conduct the interviews, transcribing and analyzing the data</p>
<p><b>Depth</b></p> <p>Interviews provide in-depth, insightful information and understanding of the specific individuals that conform the research</p>	<p><b>Breath</b></p> <p>Because of the effort it involves, samples tend to be smaller and, therefore, less representative</p>
<p><b>Response Rates</b></p> <p>People are more willing to participate in interviews that require longer periods of time than to complete a short questionnaire. This is fundamental because interviews fulfill the needs individuals have of being heard, getting attention and having their opinions considered</p>	<p><b>Anonymity and Confidentiality</b></p> <p>Because of the potentially sensitive nature of the data collected, trust and confidence between interviewer and interviewee become an essential requirement. There needs to be a clear process and explanation regarding the collection, analysis, and storage of the information</p>

For this research, interviews were conducted with a subset of the survey population as part of purposeful sampling, seeking to maximize the depth and richness of data to address the research question.

### **3.4 Data Structure, Gathering and Analysis**

#### **3.4.1 Data structure.**

The three selected methods were designed using interconnection logic between constructs, variables, dimensions, and indicators in order to have consistency. Abreu (2012) explains that constructs are concepts formulated under scientific research objectives and as such they can (1) correlate with other constructs and (2) can be observed and measured. In this research, public participation is the central construct. The three dimensions of public participation within this study are intentionality, geographic approach and judgement of public participation.

Complex dimensions can be further specified into aspects, which are the angles or intentions of the dimensions. Aspects can help take the abstract constructs and dimensions to a concrete operational level. Eight aspects of importance have been identified in the hypothesis and predictions (Table 3-4).

Finally, indicators are comparative indexes or evidence that can help classify the properties and characteristics of the aspects. Indicators tend to have mathematical expressions and allow the measurement of the aspects.

**Table 3-4. Data Structure**

<b>Dimension</b>	<b>Aspect</b>	<b>Indicator</b>	<b>Objective</b>	<b>Item</b>
Intentionality	Appraisal	Discursive Process	Examine the nature and intention of public participation in the regulatory framework for Energy projects in Alberta.	Document analysis Survey questions: 2, 4, 9, 12 Interview questions: 2, 3, 4, 8, 9, 10
		Institutional Practices		
		Disciplinary approaches		
		Methodological tools		
	Commitment	Material needs		
		Discursive needs		
	Justification	Normative		
		Instrumental		
Substantive				
Geographic Approach	Environmental Issue	Absolute space Relative space Relational space Perceived space Conceived space Lived space	Assess the geographic parameters that constitute public participation.	Document Analysis Survey questions: 5, 6, 7, 8, 12 Interview questions: 5, 6, 7
	Stakeholder			
	Recruitment			
Success	Perceived outcomes	Measurable change	Outline the perception of success in public participation for Energy projects in Alberta.	Survey questions: 3, 10, 11, 12, 13, 14, 15, 16, 17 Interview questions: 10, 11, 12, 13, 14, 15, 16, 17, 18, 19
	Perceived Impact	Long-term effect		
	Justification	Normative		
		Instrumental		
		Substantive		

### **3.4.2 Data gathering procedure.**

#### **3.4.2.1 Document analysis.**

- Regulatory and government documents were reviewed to confirm and complement the dimensions, aspects and indicators obtained from the literature review. Four documents were examined with focus on the dimension and aspects listed in table 3-4:
- The *Canadian Environmental Assessment Act* (CEAA),
- The Provincial *Environmental Protection and Enhancement Act* (EPEA),
- The Alberta Energy Regulator's Directive 056 (D-056), and
- The Alberta Utilities Commission's Rule 007 (R-007).

#### **3.4.2.2 On-line survey.**

Sampling for this research follows qualitative purposes. It was designed to obtain insight about public participation as a social phenomenon and show different perceptions. It was not intended to develop an empirical generalization from the sample to the population.

Generalization is "possible in large-scale physical systems where invariant laws operate" (Payne & Williams, 2005:296), but social systems are complex and have feedback mechanisms that make them dynamic and changing. In social research, moderate generalizations can be made, but these are not intended to hold true for extended periods of time or across ranges of cultures and geographies (Payne & Williams, 2005).

The aim of this research was to achieve saturation in the sample, meaning no new perceptions were obtained for the continuous collection of data. "Qualitative samples must be large enough to assure that most or all of the perceptions that might be important are uncovered,

but at the same time if the sample is too large data becomes repetitive and, eventually, superfluous” (Mason, 2010:2).

Saturation can be difficult to assess, as there are no set guidelines to determine appropriate sample sizes in qualitative research. Mason (2010) conducted a study comparing various PhD researches and concluded that the appropriate sample size varied depending on the topic: 30 to 50 individuals for ethnography and ethnoscience, 30 to 50 individuals for grounded theory methodology, five to 25 individuals for phenomenology and a minimum of 15 individuals for other non-defined qualitative research. The study found that within 2,533 PhD studies using qualitative interviews the sample size ranged from 1 to 95, with a bi-modal distribution in which 20 and 30 subjects were the most frequently observed sample sizes.

The present study attempted to achieve the higher of the two sample size modes (30 responses) to improve the ability to generalize from the results. Invitation to participate was extended to regulators and proponents, looking to have a balanced view of both groups.

The online survey consisted of seven pages or online screens that included the researcher’s contact information, research introduction approved by the University’s Ethics Council, electronic consent form and a total of seventeen questions (Appendix A): thirteen close-ended and three open-ended. The thirteen close-ended questions included multiple choice and ranking.

For the ranking questions an ordinal scale of four with only the end points labeled (Strongly Agree – Strongly Disagree), often called a Likert scale, was used to provide explicit descriptive analysis based on percentages of agreement (Dahlberg & McCaig, 2010). A fifth option coded ‘Don’t Know’ was also provided to accommodate the possibility that a respondent might not be able to answer a question. Questionnaires were made available online using

SurveyMonkey. The desired response was 20 to 30 fully answered surveys with a balanced approach of half proponents and half regulators.

*Recruitment.*

Individuals were approached to participate in the online survey using my existing contact networks. This existing contact network was the result of personal connections obtained through my consulting work, and individuals referenced by co-workers. Working in the environmental engineering consulting business for over four years at the time of the data collection, allowed me to reach out to existing and past clients and inquire if they would be interested in participating. Many of my contacts were in the electric generation and transmission side of the energy business. Coworkers specialized in oil and gas assisted by introducing me to their clients or previous employees that now worked in the industry and could make the connection. Regulators were the hardest to contact. Coworkers provided limited regulatory contacts, many with no response. The best way to approach regulators was in person during professional and networking events.

To ensure a high response rate a pre-notification of the survey was emailed to the potential participants with a brief explanation of the purpose and significance of the research study. The email used was not associated with my employment company to differentiate the research as academic. This introductory also explained to approached individuals that the survey could be shared or referred to colleagues. Most referrals occurred when the initially-contacted person, after reading the description of the survey, felt unqualified to answer on the topic. The sharing capability allowed for several individuals within the same organization to provide their understanding of public participation. For example a project manager, an environmental

specialist and a stakeholder engagement professional within the same company were able to offer diverse opinions on the same questions.

As a secondary method of recruitment, the study description and survey link were advertised through additional means: a monthly newsletter for public participation professionals who were members of the International Association of Public Participation (IAP2) in Alberta (IAP2 Wild Rose Chapter), a general announcement during a public participation professional's event (IAP2 Wild Rose Chapter) and as postings in the social channel LinkedIn, with the particular target as public participation professionals (IAP2 Canada – 807 members) and energy professionals in the study province (Alberta Energy Professionals – 1088 members).

The survey recruitment ad was viewed by over 100 users through LinkedIn, and by 116 individuals through the IAP2 monthly newsletter. The online survey was ultimately accessed by 38 individuals, but only fully answered by 30. Of those 30 responses, 25 were proponents and 5 were regulators.

#### ***3.4.2.3 Semi-structured interviews.***

Interviews were semi-structured and designed to last approximately 30 minutes. Interviews were conducted in person or by telephone, according to interviewee preference and availability, and recorded if consent was obtained.

The script contained 20 standard questions of a non-directive nature designed to avoid leading the interviewee's opinion while allowing me to prompt the subject to elaborate on their responses where clarification was needed. Ambiguity in interview answers was not seriously problematic as the intent was not to arrive at unequivocal and quantifiable meanings around

public participation but to show the existing variation surrounding the research questions. The complete interview instrument is included as part of Appendix A.

The interviews were not intended to be representative of the larger population, but rather useful tools to understand individual perceptions and their role in public participation. The target sample size for this stage of the project was 10 to 15 interviews, with the goal of maintaining a balanced approach of half proponents and half regulators.

#### *Recruitment.*

As part of the online survey thank you page, individuals were asked if they would be willing to participate in a follow-up interview of approximately 30 to 45 minutes in length. For the semi-structured interview recruitment, I contacted the individuals that indicated a positive response (12 total) or that required more information in order to decide (12 total). Interviews were scheduled after work hours and the option of in-person (for Calgary subjects) or over the phone was provided, to fit the interviewees time and availability.

Unfortunately, not all individuals that had indicated they would be willing to participate in the follow-up interview were available in a timely manner, and only 11 participants (nine proponents and two regulators) were interviewed.

#### **3.4.3 Data analysis.**

Qualitative analysis lies in the description, classification and interconnection of data (Dey, 2005). Ritchie (2013) refers to it as an analytic process that includes: (1) data management – review, labelling, sorting and synthesis of raw data; (2) descriptive account – identification of

key dimensions, mapping of range and diversity of phenomenon and development of typologies; and (3) explanatory account – interpretation of the data findings.

The surveys were examined using a quantitative approach and provided an initial exploration into the perceptions of the proponents and regulators. Close-ended questions were analyzed looking at the difference in the distribution of the responses along the set ordinal scale. Two different assessments were conducted with the tabulated responses to understand and interpret the three data dimensions:

- Comparison of the responses received to each question between the two groups; and
- Examinations of the aggregate responses to questions in the same ‘family’ to uncover similarities and inconsistencies between questions that address similar predictions.

For the document analysis and the interviews, data were examined using an adaptation of the framework method developed in the 1980s by the National Centre for Social Research. The Framework method is a matrix-based approach that “allows the back and forth movement between different levels of abstraction without losing sight of the raw data” (Ritchie & Lewis, 2003:220). The Framework method classifies and organizes data into key themes, concepts and categories. It is based on the indexing principle, showing “which theme or concept is being mentioned or referred to within a particular section of the data” (Ritchie & Lewis, 2003:224). Indexing allows the researcher to build a conceptual framework. Data is then summarized through thematic charting to begin extracting the meanings for discussion and developing explanations.

For this research, only the summary and explanatory aspects of the framework method were used. The conceptual framework that results from indexing was defined a priori using the data structure explained in section 3.4.1. Regulatory documents and interview questions were

categorized using the mentioned data structure, so sorting and grouping into themes and topics was not required.

A matrix was created for each reviewed document and interview question. Legal framework documents and individuals (in the case of document analysis and semi-structure interviews respectively) were allocated on rows while the indicators were assigned to columns. Once the matrices were complete, interpretation began concentrating on finding links or connections, detecting patterns and identifying clusters.

### **3.5 Conclusion**

This research aims to provide an explanatory analysis of the quantitative and qualitative data collected looking for linkages and relationships between the various levels of the data structure, the two stakeholder groups selected, and the various regulations and guidelines that frame energy projects in Alberta. These linkages and connections respond not only to the objectives of the research but also to the hypothesis assumptions.

## Chapter Four: **Results**

### **4.1 Introduction**

The present chapter is structured in three sections. The first section evaluates the intentionality and geographic approach of the four chosen regulatory documents. Section two presents the survey results as percentages and graphs, and finally, section three expands on the interview responses. A copy of the survey and interview instruments is included in Appendix A.

### **4.2 Document Analysis**

The four documents addressed in this research – *the Canadian Environmental Assessment Act* 2012 (CEAA), the *Alberta Environmental Protection and Enhancement Act* (EPEA), the Alberta Energy Regulator’s Directive 056 (D-056), and the Alberta Utilities Commission’s Rule 007 (R-007) – are not stand-alone documents. There are regulations, policies, and guidelines that complement each of the acts, directives, and rules. For the purpose of this research when referring to any of the four statutes, complementary documents are also considered and addressed.

The results of this section are presented first by summarizing the findings for each of the regulatory documents and second by using a comparative matrix to contrast the dimensions of intentionality, geographic approach, and perception of success observed in each.

#### **4.2.1 The Canadian Environmental Assessment Act.**

CEAA establishes the legal and governmental foundation for environmental assessment at the federal level. Among its purposes, relevant to this research, are:

- Protecting environmental components under federal authority from significant adverse environmental effects triggered by a project; and
- Ensuring that there are opportunities for meaningful public participation.

(CEA Agency, 2016)

Not all projects are subject to CEAA; only certain physical activities considered “designated projects” require an environmental assessment. Designated projects have the greatest potential for significant adverse environmental effects in areas of federal jurisdiction (Government of Canada CEAA, 2015 March 31). Designated projects are usually listed under the *Regulations Designating Physical Activities*, but the Minister of the Environment may designate a project below the prescribed thresholds when the characteristics or location of a project may have potential to cause adverse environmental effects in areas of federal jurisdiction (Government of Canada CEAA, 2015 March 31). During CEAA-triggered environmental assessments factors such as environmental effects, the significance of those environmental impacts, and public comments are considered.

#### ***4.2.1.1 The intentionality of public participation in CEAA.***

##### **Justification**

CEAA states that the responsible authority must ensure that the public and interested parties are provided with opportunities to participate in the environmental assessment of a designated project. CEAA shows a normative rationale in their approach to public participation. This rationale is evidenced by the inclusion of the wider public as stakeholders in the process as the mechanism to mitigate inequalities.

### Appraisal

Appraisal deals with the managerial view of public participation and the “how to” of the process. CEAA rationalizes public participation as a way to guarantee an “open, balanced process that strengthens the quality and credibility of a project’s review” (Government of Canada CEAA, 2014 July 29). According to CEAA (2012, July 06) there are a number of opportunities to participate in federal environmental assessments:

- Checking the Canadian Environmental Assessment Registry for information on projects and opportunities to participate;
- Applying for funding to assist with the individual’s, organization’s or group’s participation;
- Submitting comments at key points of the environmental assessment process; and
- Participating in information sessions and public hearings associated with the environmental assessment review.

### Commitment

Commitment looks at the political aspects of public participation, the “why” of the process. In CEAA, public participation is positioned as the mean to “identify and address potential environmental effects at the early stage by incorporating local and traditional knowledge about a project's physical location” (Government of Canada CEAA, 2014 July 29). Environmental assessments under CEAA support decision-making and provide opportunities for public participation by considering environmental effects and mitigation measures early in the project planning cycle (Government of Canada, CEAA, 2015, March 25).

#### ***4.2.1.2 The geographic approach to public participation in CEAA.***

##### Environmental Issues

CEAA looks at environmental effects or changes that occur:

- On fish, shellfish, crustaceans, marine animals and their habitat; marine plants, and migratory birds;
- On federal lands;
- Cross-provincial or international boundaries;
- In regards to Aboriginal peoples, effects to the environment on health and socio-economic conditions; physical and cultural heritage; current use of lands and resources for traditional purposes; or any structure, site or thing that is of historical, archeological, paleontological or architectural significance; and
- To the environment as a result of federal decisions as well as associated effects on health and socio-economic conditions, matters of historical, archeological, paleontological or architectural interest, or other matters of physical or cultural heritage.

(Government of Canada CEAA, 2014 July 29)

The CEA Agency assesses the above mentioned on a case-by-case basis using a five-step framework that involves (1) scoping, (2) analysis, (3) mitigation, (4) significance, and (5) follow-up. The first four include geographic parameters and stakeholder input.

In the scoping phase, value components are identified, along with potential environmental effects and their spatial and temporal boundaries. Value components are environmental features that hold ecological and societal value, and which have been designated as a concern by the proponent, the regulator or the public. In the analysis step, data are collected and generated using tools like surveys, literature reviews, on-site testing, and stakeholder knowledge. After data

collection and analysis, proponents are asked to predict the potential environmental effects of their proposed project throughout its entire life cycle (i.e., construction through decommissioning). The third step, mitigation, identifies the feasible measures to avoid, minimize, or mitigate the predicted environmental effects; if necessary, compensation actions are also established. Proponents next characterize the residual effects (i.e., the potential effects remaining after application of mitigation) based on, among other things:

- Magnitude – amount of change in a measurable parameter relative to baseline conditions;
- Geographic extent – spatial area over which the environmental effect is predicted to occur (i.e., site specific, local, regional, provincial, national or global);
- Timing – seasonal aspects of the land and resources use;
- Duration – length of time that an environmental effect is discernible before it returns to baseline conditions;
- Frequency – how often the environmental effects occur on a given period; and
- Reversibility – potential for recovery from the environmental effects caused by the project.

Once characterized, the proponent must evaluate the significance of the residual effects. Key components of the significance determination, in addition to the mentioned criteria, are likelihood (i.e., the probability that a residual effect will occur) and consequence (i.e., how important the effect might be). After the environmental assessment has been submitted, the regulator makes its conclusions in the determination of environmental effects and presents it to the Minister for the final decision.

CEAA looks at environmental changes that occur in absolute (e.g. birds, fish, federal lands), relative (e.g. matters of historical or archeological interest) and relational space (socio-economic conditions, cultural heritage). However, the framework used to define the effects and issues is highly reliant on relative and perceived spatialities. Relative space is observed in the scoping phase, which includes changes in temporal boundaries, as well as in the characterization of residual effect by magnitude, timing, duration, etc. Perceived space is present in the evaluation of significance, which looks at likelihood and consequences. Lived space is only present in the references to stakeholder knowledge.

#### Stakeholder definition

CEAA uses two terms in reference to stakeholder definition: public and interested party. In essence, stakeholders are anyone and everyone with concerns and interests in the project and willingness to use the online submission tools on the CEA Agency web page to express them. Stakeholders must be provided with an opportunity to participate in the environmental assessment of a designated project. This translates into opportunities to get involved at various stages in the review process: highlighting particular issues of interest, providing feedback on the impact statement guidelines, and commenting on the sufficiency of the environmental impact statement submitted by the proponent.

With the reference to stakeholders as public, CEAA appears to use absolute spatial definitions, however the participation spaces could be said to be perceived, as individuals must identify themselves as ‘interested’ and have the resources and capabilities to engage in the discussion.

## Recruitment

CEAA states that the responsible authority must ensure that the public and interested parties are provided with opportunities to participate in the environmental assessment of a designated project. Because the definition of stakeholders is a broad one, there are no specific recruitment practices established under this regulatory document.

It is worth highlighting that the previous version of the Act (2010) had a Public Participation Guide that expanded on the determination of whether or not public participation was appropriate, the criteria to consider and how to identify key interested parties. This document is available, according to the Government of Canada, CEA Agency (2016, February 11), to accommodate projects with environmental assessment that commenced before the enactment of CEAA, 2012 and also as an additional reference for new submissions. The guide is for information purposes only and has not been updated to reflect the changes of CEAA, 2012.

As with the definition of stakeholders, it appears that recruitment spaces are perceived as relying on individuals identifying themselves as interested parties.

CEAA is the foundation for environmental assessments in Canada. It is worth noting that by creating categories – designated projects – it is ‘awarding’ a perceived relevance that sets the stage for the next steps.

The regulation has somewhat a holistic view of environmental issues in terms of the divisions of space that Harvey (2006) discusses. When looking at some of the suggested questions of Table 2-2, the first four phases of the review framework that include stakeholder input – scoping, analysis, mitigation and significance – would appear to address the multilateral division of space. Without really understanding the level of input stakeholders have in the

process, it is difficult to grasp how perceptions and conceptions overrun the definition of environmental issues. The level of dissent in some of the CEAA results for various energy projects in recent years would indicate that lived space is perhaps the least of the spaces explored.

The definition of stakeholders and their recruitment appears to supplement this supposition. Is making the definition too broad a limitation in itself? By having no guideline as to ‘who is a stakeholder’ does it deter people from identifying themselves as ‘belonging’ in the project space?

#### **4.2.2 The Environmental Protection and Enhancement Act.**

Alberta Environment and Parks is the department in charge of administering the environmental assessment under EPEA. The purposes of the environmental assessment process, relevant to this research, are to:

- Predict the environmental, social, economic and cultural effects of a proposed activity and to assess planned mitigation strategies, and
- Provide for the involvement of the public, proponents, and regulators in the review of proposed activities.

(EPEA, 2000)

The EPEA describes three types of activities: ones for which the assessment is mandatory (e.g., a hydroelectric power generating plant with a capacity of 100 megawatts or greater), ones considered exempt (e.g., a transmission line) and the ones called discretionary for which the regulator decides if an assessment is needed or not (e.g., the proponent requests a decision on the need for an environmental impact assessment). For most large energy development projects, the

environmental impact assessment report forms part of the joint application submitted to the applicable board (AUC or AER).

Environmental impact assessments include information related to the potential environmental, health, social, economic and cultural effects of the proposed activity; and information on public participation programs undertaken and actions taken to resolve public concerns.

#### ***4.2.2.1 The intentionality of public participation in EPEA.***

##### Justification

The environmental assessment process, conducted under EPEA and the responsibility of Alberta Environment and Parks, provides an opportunity for people who may be affected by a proposed activity to express any concerns and give advice to proponents and regulators. The EPEA regulations show a normative rationale in their approach to public participation. This is evidenced by the inclusion of the wider public as stakeholders in the process as the mechanism to mitigate inequalities.

##### Appraisal

Public participation under EPEA involves a series of notices published by the proponent (intended to collect feedback and input) or the regulator (designed to provide information) at various stages in the process. The public can provide input in the form of concerns and comments at two stages: when the regulator decides a project requires an environmental assessment and when the proponent submits the proposed terms of reference that will guide the environmental impact statement report. The EPEA rationalizes public participation as a way to

make opportunities available for citizens to provide advice on decisions affecting the environment.

### Commitment

Under the political view, public participation is presented as reciprocal action executed by the regulators and proponents throughout the environmental assessment process in the form of public notices. The social commitment aspects of public participation are not clearly portrayed in EPEA. The three stakeholder groups – proponent, regulator and public – have set responsibilities and timelines with each other (e.g., agenda and timetables for notice publications and responses). Obtaining authorization under EPEA only means the information requirements have been met, and the project can move to the next regulatory stage, which usually involves submission to the applicable board (AUC or AER).

#### ***4.2.2.2 The geographic approach of public participation in EPEA.***

### Environmental Issues

The EPEA includes three elements of geographic nature: the study area (scale), the assessment scenarios (temporal) and the assessment methodology (parameters selected and their significance).

Like in CEAA, the study area includes the Project Area, the Local Study Area, and the Regional Study Area. These are defined by the proponent, with rationale, and are not restricted to political boundaries. This differentiation of areas is meant to address direct disturbance, the potential for immediate impact due to ongoing activities, and the potential for cumulative and socio-economic effects respectively.

Assessment scenarios establish the conditions before development (baseline case), with the effects of the project added to the baseline (application case), and considering conditions as the result of the interaction with other existing or proposed projects in the area (planned development case). While the scenarios tend to show the physical world, individuals and societies transform and integrate the physical elements in different ways stressing certain aspects or areas over time.

Finally, the methodology looks at valued ecosystem components (environmental elements of the ecosystem identified as of importance) or key indicator resources (parameters identified using social scoping). These components and indicators are the attributes to be assessed by the proponents using an impact rating system to quantify the spatial, temporal and cumulative significance of the project effects. The evaluation of significance relies in expert knowledge and, while this is not necessarily an issue, if the regulator only makes the assessment results available to the public to ask for feedback before making its determination, it turns individuals into environmental subjects and not participants.

EPEA has various spatialities in its definition of environmental issues. What is interesting is the assessment process looks at relative (before development), absolute (project in area), and relational (interaction with other projects) spaces in a systematic way. These definitions are later appropriated into perceived notions of importance and translated into conceived impact rating systems.

### Stakeholder definition

The EPEA itself does not define public, interested party or any other stakeholder term. It is the Alberta Environment and Parks Glossary (Government of Alberta, 2010) that refers to

“Directly-Affected Party” and “Public Interest”. The first term indicates individuals that experience changes as a consequence of the proposed actions, and the second denotes a benchmark for decision-making that looks to balance societal interests. Stakeholders, just like with the CEAA, include anyone with a concern and comment concerning the proposed project interested in submitting them for the Department’s consideration.

The spatiality of stakeholders in EPEA appears twofold: it is conceived, as proponents must classify directly-affected individuals, but it is also lived as it looks at societal relations.

### Recruitment

There are no specific recruitment practices established under this regulatory document because the definition of stakeholders is a broad one. The only requirement in the notices process is to include at least one newspaper with general circulation in the area where the proposed activity is to be located. EPEA does not specify if the circulation must cover the project, local and/or regional area. In the case of recruitment, space appears as absolute, bound to the circulation area of the chosen print outlet.

EPEA, much like CEAA, categorizes projects giving them a perceived relevance and space. In the definition of environmental issues, the scoping (beginning) and review (end) include stakeholder input, however significance is conducted by the experts. This means proponents’ perceptions of space get translated into conceived representations that get presented for review back to stakeholders. It shouldn’t be a surprise when lived and even stakeholder perceived space does not match.

Looking at the definition of stakeholders, the fact that the regulation does not address it – it is necessary to dig it from a glossary – is a fault in itself. It is worth noting that the two conceived categories found in the glossary – directly-affected and public interest – seem to balance the various types of spaces that Harvey (2006) proposes. The first category appears more connected with the absolute, relative and relational division; while the second category connects more with perceived, conceived and lived spaces.

Recruitment in EPEA is somewhat contradictory to the definition of stakeholders. If the goal is to be inclusive – and it would appear so by the balanced definition of stakeholders – why exclude based on something as ordinary as newspaper coverage?

#### **4.2.3 The Alberta Energy Regulator's Directive 056.**

The AER came into existence in June 2013 and is responsible for upstream energy resource development (e.g., oil, natural gas, oil sands and coal) in Alberta. The AER is legislated by the *Responsible Energy Development Act*. This Act is authorized to enact environmental laws for energy resources activities. Of specific interest to this research is the enactment of EPEA, usually enacted by AEP.

In regards to public participation, the AER's responsibility is to: post a public notice of the application, open a period for the public to submit statements of concern on the applications, decide whether or not to conduct a public hearing, make a decision in regards to the application and notify stakeholders (Government of Alberta AER, 2011). The regulation also states that the AER may not consider a statement of concern if the individual cannot demonstrate to be directly or adversely affected by the application.

The AER requires applicants meet the notification and consultation requirements as stated in the AER Rules of practices, which are further explained in the Directive 056: Energy Development Applications (D-056). D-056 sets the requirements and procedures for applications related to the construction and operation of any petroleum industry energy development.

#### ***4.2.3.1 The intentionality of public participation in D-056.***

##### Justification

D-056 provides the minimum consultation and notification requirements and expectations for the various energy developments for proponents to develop their participant involvement program. It is expected that the proponent will assess the level of public interest and increase the minimums if necessary to include individuals and groups who have expressed interest in the project area. D-056 refers to “Participant involvement” as an umbrella term that encompasses all aspects of stakeholder interactions and communications. D-056 shows an instrumental rationale by establishing specific goals in the approach.

##### Appraisal

The participant program under D-056 includes: distribution of information packages; required publications; responding to questions and concerns; discussing options, alternatives, and mitigating measures; and seeking confirmation of non-objection through cooperative efforts. D-056, when appraised from a managerial perspective, sets well-defined expectations for communication and interaction with the public.

### Commitment

From the political point of view, D-056 asserts participation as the means to continuously identify issues, solve problems and for the public to have a greater influence on project planning and impact mitigation.

#### ***4.2.3.2 The geographic approach of public participation in D-056.***

### Environmental Issues

D-056 can enact the EPEA requirements concerning environmental assessments. The detailed requirements for defining and assessing environmental issues are as per the EPEA regulations and guides.

### Stakeholder definition

D-056 has three parameters regarding stakeholder definition:

- Inclusion of parties whose rights may be directly and adversely affected by the nature and extent of the project;
- Inclusion of all parties with a direct interest in the land, such as landowners, residents, occupants, other affected industry players, local authorities, municipalities, and other individuals who have a right to conduct an activity on the land; and
- Inclusion of individuals known to have a concern regardless of whether they are inside or outside of the consultation and notification radius, which ranges from 0.1 km to 1.5 km (defined in D-056's tables 5.1, 6.1, 6.2 and 7.1).

D-056 uses absolute spatialities (e.g. boundaries, radius) to conceive categories of individuals (e.g. landowners, residents), however it also accounts for perceived notions of space by including individuals regardless of their location.

### Recruitment

Recruitment for public participation under D-056 is differentiated for two purposes: personal consultation and confirmation of non-objection, and notification. Recruitment minimums for each purpose change depending on the category type of project (determined by criteria such as hydrogen sulfide content and release, sulfur content, pipe diameter and proximity to the public) and the type of individual rights (landowner, resident, occupant, crown disposition holders, authorities, and airports). The regulation cautions that it is the responsibility of the proponent to assess the area potentially affected by the project and determine whether the guideline minimums are sufficient or if they should be altered to include additional stakeholders. Some of the key elements to highlight for the D-056 recruitment are:

- Personal consultation and confirmation of non-objection refer to the stakeholders having been personally consulted on the project, having understood the details, having no outstanding concerns or objections, not opposed to the AER granting the license to the proponent for the project.
- Notification simply involves the distribution of project-specific information to stakeholders.
- Regarding individual rights:
  - Landowners are individuals with a certificate of titles on the land.

- Occupants refer to a person on title other than the owner that has rights to the land.
- Residents are persons occupying a residence on a temporary or permanent basis.
- Crown disposition holders have been assigned use of public land under the *Public Lands Act*.

Recruitment in D-56 also uses absolute elements of space (e.g. pipeline diameter, release of emissions) to define conceived categories of individuals and types of public participation needed for each.

Just looking at the AER's responsibilities – informing stakeholder what the project is, when they can express their concern, if their concerns are 'valid', and the end result of the review process for a given project – it is possible to see regulator's notions of perceived space. Because D-56 enacts EPEA, the definition of environmental issues shows that same perception flow. Stakeholders provide input at the beginning and end of the environmental assessment process, but significance remains with the 'experts'.

In D-56 absolute spatialities are very much present in the definition of stakeholders as these are physically tied to the land traversed by the project (direct interest). The regulation also acknowledges lived space when it recognizes individuals with concerns regardless of their location, however as stated before, the regulator validates the concerns.

The somewhat comprehensive definition of stakeholders is contradicted by their recruitment. If we look at recruitment, the assignation of conceived categories – consultation vs. notification – weights the importance of not only the stakeholder but also the input they can provide. It is easy to see how individuals not 'directly affected' and their perceived and lived

space could feel excluded or why individuals may end up expressing discontent with the assessment results if they consider themselves mis-classified.

#### **4.2.4 The Alberta Utilities Commission Rule 007.**

The *Alberta Utilities Commission Act* regulates Alberta's energy resources and utility sector through various pieces of legislation. Among these is the *Hydro and Electric Energy Act*, which looks at the development and operation of hydro energy, and the generation and transmission of electric energy in Alberta, keeping in mind the public interest. It considers among other things, the conservation of the environment when developing projects. Any construction and alteration of a hydro development, power plant, and transmission line requires a permit issued by the AUC.

The AUC can make rules within its jurisdiction including procedures and processes applicable to the location, building, construction and operation of infrastructure. Rule 007: Application for Power Plants, Substations, Transmission Lines, Industrial System Designations and Hydro Developments (R-007), is of particular interest to this research. Under R-007, any application for the construction, alteration, operation, and the discontinuation, dismantling and removal of hydro developments, power plants, substations and transmission lines must follow the participant involvement program guidelines and obtain any required approvals or sign-offs from other entities before filing with the AUC. R-007 notes that depending on the magnitude of the project and its impact, an environmental assessment from AEP may be required, at their discretion.

#### ***4.2.4.1 The intentionality of public participation in R-007.***

##### Justification

R-007 sets guidelines for the proponent to consider in their participant involvement program. The program, which must be conducted before submitting the application to the AUC, allows for individuals whose rights may be directly and adversely affected by the project to be informed, have an opportunity to express their concerns and be heard. R-007 shows a normative rationale in the definition of its inclusiveness, but also an instrumental perspective by establishing specific goals in the approach.

##### Appraisal

Under R-007, the participant involvement program includes three elements: project-specific information; response to questions and concerns; and discussion of options, alternatives, and mitigation measures. Each of these elements has recommended minimum targets and suggested tools and methods. From a managerial point of view, R-007 sets parameters for proponents to communicate and interact with stakeholders.

##### Commitment

From the political point of view, R-007 emphasizes the vital role the participant involvement program holds by effectively communicating with stakeholders and allowing concerns to be raised, properly addressed and, if possible, resolved.

#### ***4.2.4.2 The geographic approach of public participation in R-007.***

##### Environmental Issues

R-007 lists as part of its requirements the preparation of an environmental assessment. The assessment must have a level of detail appropriate to the size and type of potential effect(s) of the project and must be signed-off by AEP. The purpose of the environmental evaluation is to inform the public and regulator about the potential consequences of the project and help the AUC determine if the project is in the public interest.

The environmental evaluation includes:

- The baseline environmental conditions;
- The specific ecosystem components (e.g., terrain and soils, surface water bodies and hydrology, groundwater, wetlands, vegetation species and communities, wildlife species and habitat, aquatic species and habitat, air quality and environmentally-sensitive areas) that may be adversely affected by the project;
- The potential adverse effects of the project on the ecosystem components during the life-cycle of the project;
- The proposed mitigation measures to reduce the potential adverse effects;
- The predicted residual adverse effects and their significance; and
- The methodology used to identify, evaluate and rate the adverse environmental effects and determine their significance.

If the project has federal or provincial environmental assessment requirements, AEP may waive the R-007 environmental evaluation requirements.

R-007 shows absolute (ecosystem components), relative (during the project's lifecycle) and perceived (adverse and predicted effects) spaces in its definition of environmental issues.

### Stakeholder definition

Under R-007, stakeholders are defined as individuals “whose rights may be directly and adversely affected by the nature and extent of the proposed project. These stakeholders include the public, local authorities, agencies, industry, and government and may also include other groups that have a stake in electric facility projects, should such groups make themselves known to the applicant” (AUC, 2016).

R-007 shows conceived spaces in its definition of stakeholders when it looks to identify them based on individual rights, but allows for individuals to self-proclaim under perceived space notions.

### Recruitment

For R-007, recruitment for public participation is differentiated into notification and consultation. Additionally, depending on the type of project (e.g., new transmission line, new substation, replacements, changes to existing facilities, power plants, decommissioning), and their setting (urban or rural), the recruitment minimum requirements change. The regulation cautions that it is the responsibility of the proponent to assess the area potentially affected by the project and determine whether the guideline minimum is sufficient or should be altered to include additional stakeholders that express interest. Any variations on recruitment guidelines need to be justified to the regulator in the application. Some of the key elements to highlight for the R-007 recruitment are:

- Notification involves providing basic information about the project, at a minimum, to a wider range of stakeholders. Notification to the postal code addresses is considered sufficient to satisfy the requirement.

- Consultation involves one-on-one dialogue with occupants, residents, and landowners directly adjacent to the project. Directly adjacent properties are deemed to be 100 metres from the project excluding properties across major divided highways.
- Urban is defined as communities within the municipal boundaries of cities, towns, and villages where subdivision development exists within 800 metres of the project.
- Rural is defined as communities outside the municipal boundaries of cities, towns, and villages or inside the municipal boundaries where no subdivision development exists within 800 metres of the project.
- Some urban setting projects only require notification within the first row of occupied properties surrounding the project, depending on the circumstances. This includes the first row of houses surrounding, or other developments facing, the project that are also within 200 metres.

Similar to D-056, R-007 uses absolute elements like urban setting, physical boundaries (e.g. highways) to establish categories of individuals and a modified radius of participation making them conceived spaces.

The regulation states that the environmental assessments must have a level of detail appropriate to the project size and its potential effects. But how is this determined and by whom? Determination is usually done by the proponent, highlighting once again how perceived space sets the stage for the environmental assessment process.

In the definition of environmental issues, the evaluation of valued components (expert knowledge), assists the regulator in the determination of public interest, but without stakeholder

input it is obvious that the assessment is biased with perceived and conceived notions of space of one party.

The stakeholder definition in R-007 is broad, which appears contradictory when looking at the recruitment practices. Similar to D-056, categories are assigned, notification vs. consultation, giving weight and importance to certain individuals based on absolute and conceived spaces. Stakeholder input is restricted based on radius and determination of ‘adjacent’ individuals. While recruitment for projects depend on its type (transmission line, power plant, generation) is worth asking the question of whom and when were the specific parameters for each assigned.

#### **4.2.5 Comparative assessment.**

The Document Analysis points to different understandings and applications of public participation in regulations that tend to be complementary (Table 4-1). CEAA and EPEA approach public participation from the normative perspective through the repeated application of institutional practices without much theory behind the use. D-056 and R-007 approach public participation from the instrumental use by establishing methodological tools (minimums) that need to be achieved. The provincial regulations all show material commitments making reference to resources and actors to satisfy the process while the federal regulation talks about public participation more in terms of discursive commitments that support the environmental assessment process.

Looking at the geographic parameters in the regulations, it is the proponent, with regulator direction, who defines the environmental issues. While these parameters show the majority of spatialities, it is worth highlighting that lived and relational are the least obvious. In many cases documents are created to explain the environmental issues and provided to the

stakeholders for comment and input. Space is appropriated and conceived by proponents, to later be presented to regulators and public for their interpretation; which in many cases is constructed with higher notions of lived space. Stakeholder definition tends to rely mostly on self-identification and perceived notions of space. This appears contradictory to the recruitment practices, specifically for D-056 and R-007 that use absolute elements to create conceived categories and a ‘flexible’ radius for public participation.

**Table 4-1. Comparative assessment of regulations.**

Regulatory Document	Intentionality			Geographic Approach		
	Appraisal	Commitment	Justification	Environmental Issue	Stakeholders	Recruitment
Canadian Environmental Assessment Act	Institutional practice	Discursive	Normative	Absolute, relative, relational	Absolute, perceived	Perceived
Environmental Protection and Enhancement Act	Institutional practice	Material	Normative	Absolute, relative, relational	Conceived, lived	Absolute
Directive 056	Methodological tool	Material (non-objection) Discursive (Influence)	Instrumental	(EPEA enactment)	Absolute, perceived, conceived	Absolute, conceived
Rule 007	Methodological tool	Material (communication tools)	Instrumental	Absolute, relative, perceived	Perceived, conceived	Absolute, conceived

### 4.3 On-line Surveys

The on-line survey tool was used for exploratory purposes. Answers helped establish a general benchmark for the follow-up semi-structured interviews. For the results, percentages and graphics are presented for each question.

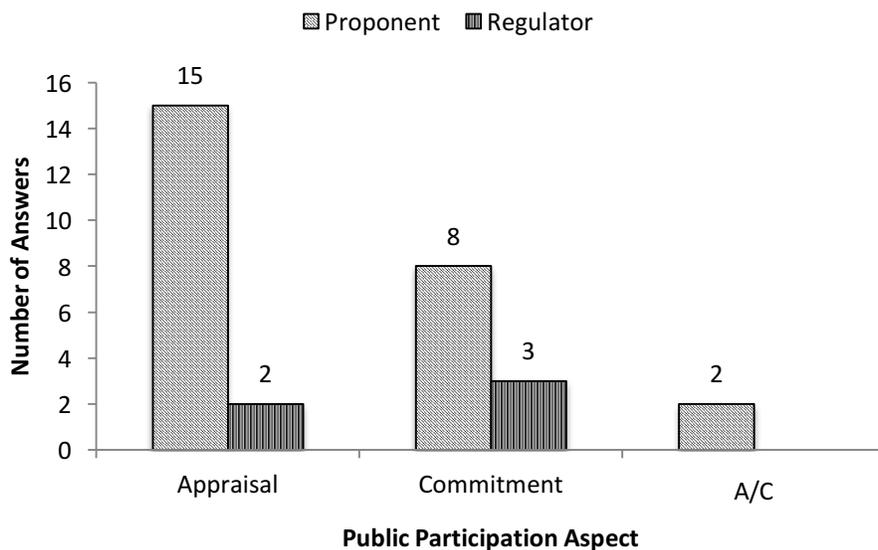
#### **4.3.1 Question 1: Are you a proponent or a regulator?**

While the desired result was to obtain a balanced representation between the two groups, of the 30 respondents, 25 were proponents and 5 were regulators.

#### **4.3.2 Question 2: What does “Public Participation” mean to you?**

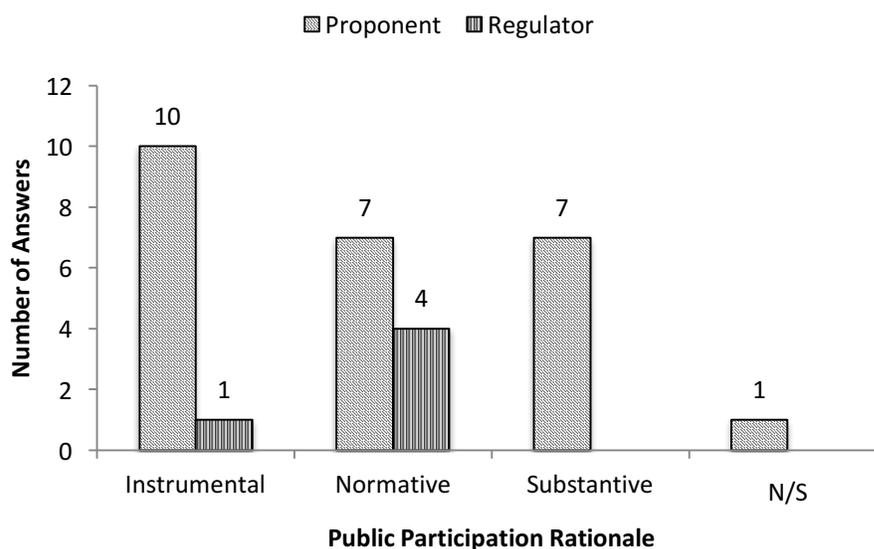
Appraisal and commitment processes are always present and operating in public participation activities and initiatives. For this reason, responses for this question are presented according to how the public participation definition is constructed – from an appraisal or commitment perspective – and the general rationale perceived.

While sample size differences makes the comparison between the two groups challenging, proponents appear to construct public participation from the social appraisal perspective, while in the case of the regulators it is not as clear. Over half (57%) of the respondents envision public participation from a managerial perspective (i.e., appraisal) (Figure 4-1). When asked to define public participation they tend to highlight it as a process, practice, approach, and award merit to tools and methods used. 37% of respondents see it from a political perspective (i.e., commitment). They define public participation based on relationships, resources, interventions that are required for a system or project to function. Only two respondents, both proponents, consider management and political elements in their definition of public participation.



**Figure 4-1. Public participation aspects perceived in the understanding of the concept**

A second interpretation of the responses can be framed according to the perceived justification or rationale. The distribution shows that regulator's definitions are more in line with the normative while proponents have a wider distribution in their choice of words and phrasing. Normative and instrumental justification have an equal amount of responses, 37% each, while substantive has 23% (Figure 4-2). For the proponents the instrumental perspective is slightly higher, 33% in comparison to 23% for both normative and substantive. Only one answer from a proponent captured elements of both the normative and the substantive rationale. The predominance of the instrumental rationale, in the case of the proponents, points to public participation being conceived to support specific ends. The normative view, with high regulator percentage, focuses on mitigating inequalities and making sure affected individuals have a say.



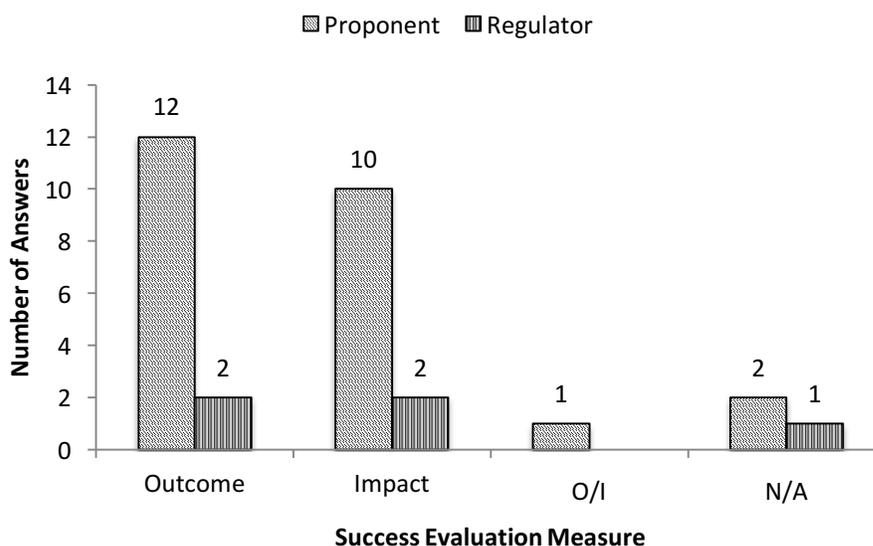
**Figure 4-2. Public participation rationale perceived in the understanding of the concept**

**4.3.3 Question 3:** Thinking specifically about environmental assessments for energy projects that you have been involved in, how do you define a successful public participation process?

Public participation success for this research is measured based on outcomes and impacts. These two concepts are not exclusive; just like appraisal and commitment they are complementary and always present in evaluation processes. Responses to this question are presented according to how the success definition is constructed – from an outcome or impact perspective – and the general rationale perceived. Looking at the rationale allows the comparison between the existing state of the public participation practice and the ideal.

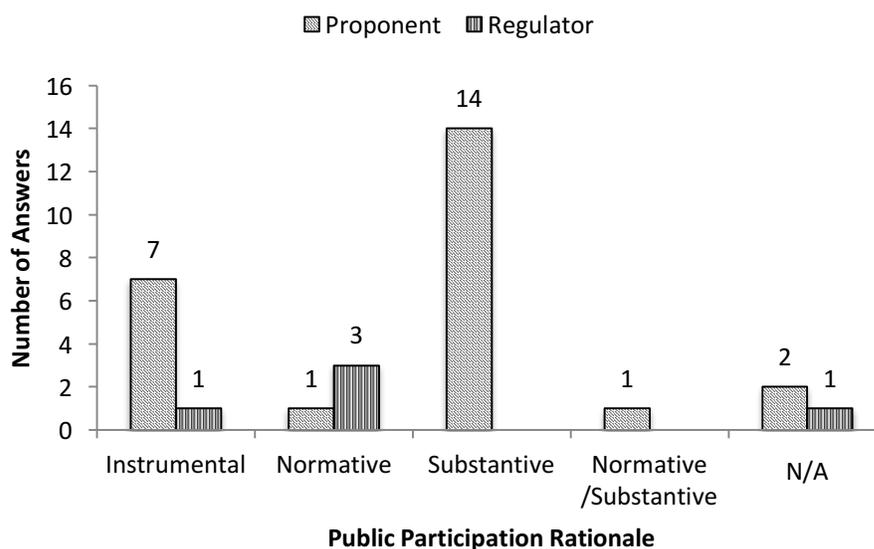
Proponents and regulators exhibited slight differences, between outcome and impact, 47% and 40%, respectively (Figure 4-3). The outcome perspective was identified by the highlight of measurable changes and objectives by the respondents. The impact perspective was

more focused on the big picture, broader scale, and long-term effects. Only one respondent had an all-inclusive view, and three did not provide an answer.



**Figure 4-3. Evaluation measure perceived in the definition of public participation success**

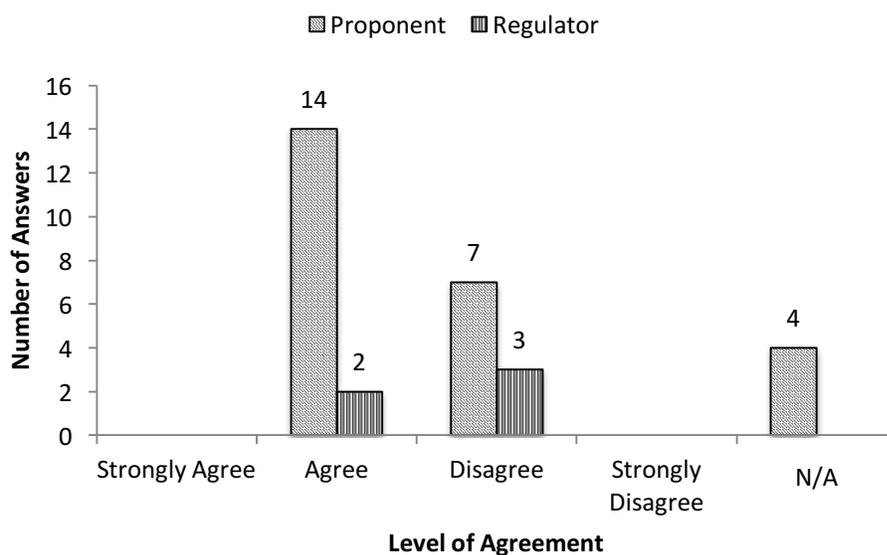
For the second analysis of question 3, responses were again framed under the justification or rationale perceived. The distribution shows that regulators phrased success in normative terms meaning they are more concerned with public participation being an inclusive practice. Proponents, on the other hand, phrased success using words like candid, honest, meaningful and open. 47% of the sample phrase the definition of success under the substantive justification, this indicates a predominance of abstract and ideal qualities in the phrasing of the responses (Figure4-4). The instrumental justification is 27% and the normative 13% of the sample population. One proponent (3%) captured elements of both the normative and the substantive rationale and three individuals (10%) did not provide an answer.



**Figure 4-4. Rationale perceived in the definition of public participation success**

**4.3.4 Question 4:** The concept of Public Participation was clearly understood by all parties.

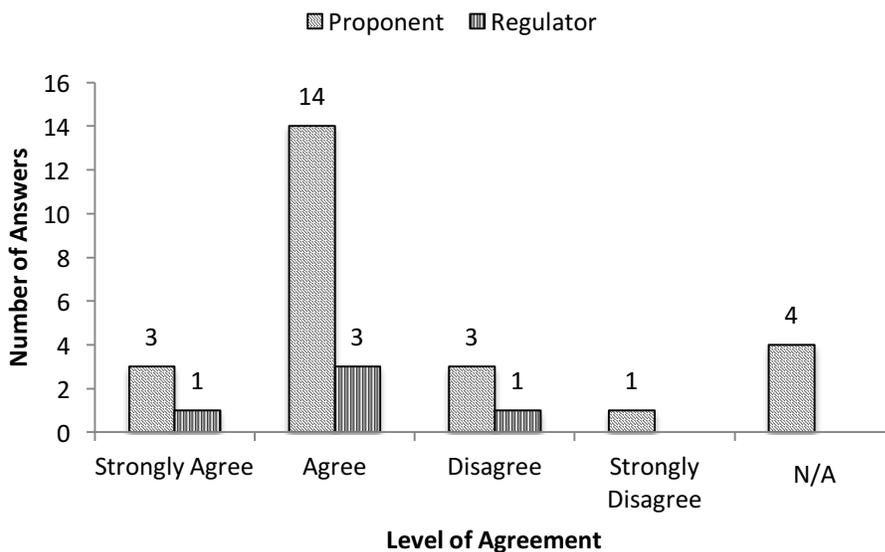
Question 4 focused on probing around the shared understanding of the public participation concept. This query was presented to surveyed individuals to see if all involved stakeholders in the projects agreed upon the purpose behind public participation. It would appear that while proponents feel the concept is widely shared, regulators do not. Looking at the results we see 53% agreed there was a shared understanding of the public participation concept, 33% disagreed and 4% did not provide an opinion (Figure 4-5). If we were to remove the “N/A” respondents we see a 62-38% distribution of agree-disagree respectively. It is difficult to ascertain whether or not the regulators and proponent views are at variance due to the sample size difference between the two groups.



**Figure 4-5. Level of agreement regarding the understanding of the public participation concept**

**4.3.5 Question 5:** There was a clear legal framework stipulating how stakeholders or affected individuals are defined.

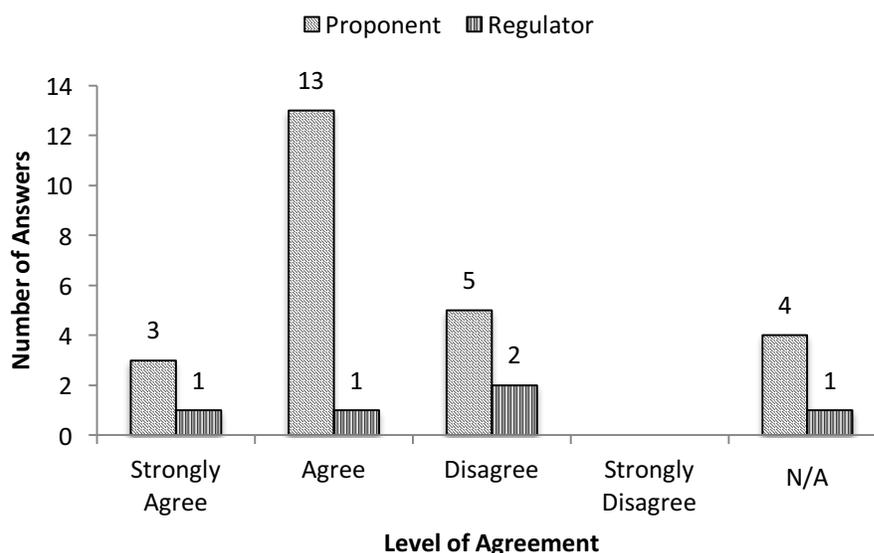
Question 5 builds on the geographic parameters that constitute public participation, specifically the definition of stakeholders. According to the respondents, the societal complexities that characterize public participation are clearly outlined in the Alberta regulations. The results show that there is a general agreement – 70% (81% if “N/A” responses are removed) – that the legal framework provides a clear definition of who the affected individuals are (Figure 4-6). There is 17% of the sample that disagrees and 13% that provided no opinion. Based on the document analysis, the legal framework definition covers the general public and affected parties.



**Figure 4-6. Level of agreement regarding the definition of stakeholders in the legal framework**

**4.3.6 Question 6:** There was a clear legal framework stipulating how stakeholders are recruited or included in the process.

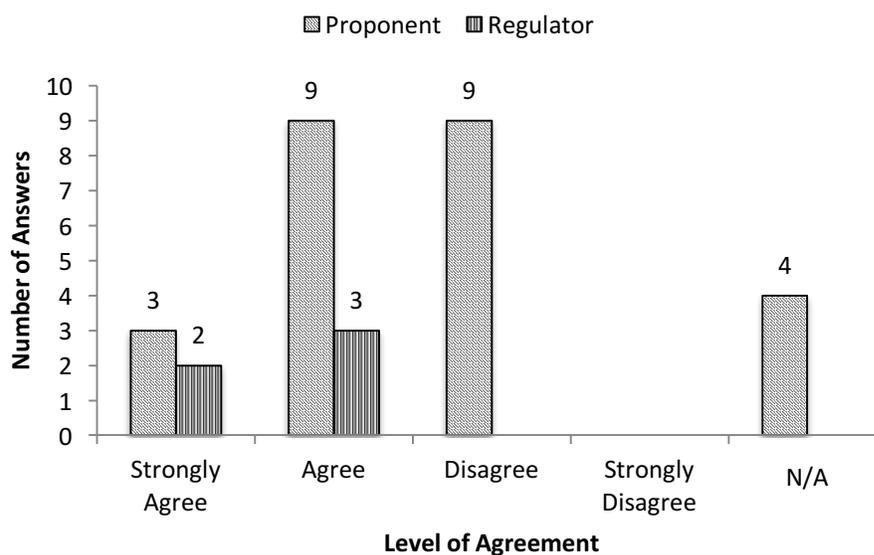
Question 6 is also centred on the legal framework and how it is geographically constituted, specifically whether there is an established stakeholder recruitment process. The results for this question show that inclusion/exclusion practices are clearly outlined, for proponents and regulators, in the legal framework for energy projects in Alberta. Similar to the previous question, we see a considerable percentage of the sample in a level of agreement – 60% (72% if “N/A” responses are removed), in comparison with a 23% (28% excluding “N/A” responses) in disagreement (Figure 4-7).



**Figure 4-7. Level of agreement regarding the recruitment of stakeholders in the legal framework**

**4.3.7 Question 7:** There was a clear legal framework stipulating how environmental issues are defined.

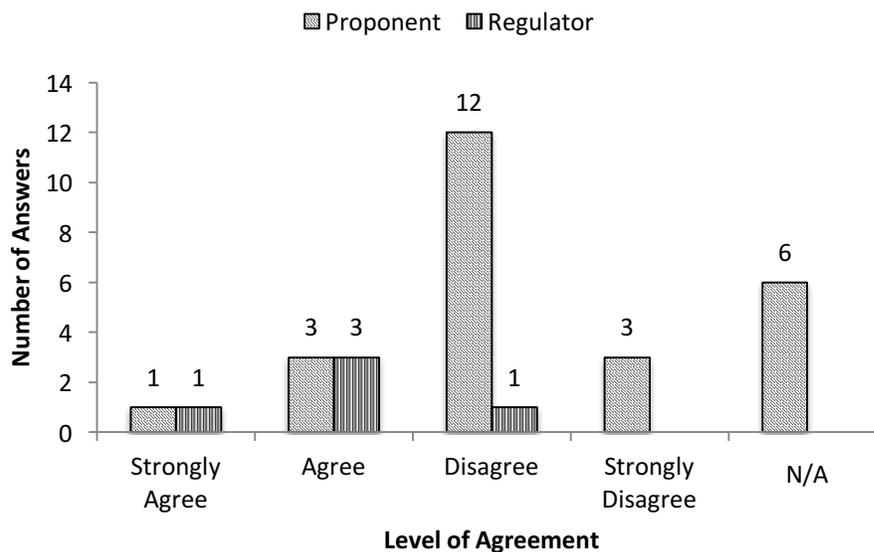
Question 7 continues to probe for the understanding of the legal framework, this time asking if there is a clear definition of environmental issues. The results show that while regulations are clearly understood by the individuals reviewing the energy projects in Alberta, it is not the case for proponents. 100% of regulators agree there is a clear definition, for a total of 17% of the sample (Figure 4-8). However, the proponent results show a divided opinion; 10% strongly agree, 30% agree, 30% disagree and 13% did not provide a view. The results observed could be potentially attributed to the specific regulatory framework used by the proponents and the level of details of the documents in this matter (see section 4.2 for document analysis details).



**Figure 4-8. Level of agreement regarding the definition of environmental issues in the legal framework**

**4.3.8 Question 8:** There was a clear legal framework stipulating how risks and level of effect are determined.

Question 8 focused on probing around the determination of risk and effect. It appears that while proponents feel the risk is not clearly defined, regulators do. Looking at the results we see 53% disagreed there is a clear framework ruling on risk, 27% agreed and 20% did not provide an opinion (Figure4-9). If we were to remove the “N/A” respondents we see a 67-33% distribution of disagree-agree respectively. Because of the sample size difference, it is difficult to ascertain whether or not the regulators and proponent views are at variance. Environmental issues tend to be directly related to risk, so the observed variation in question 7 and 8 could point to a lack of shared understanding, as there are fewer proponents in agreement.

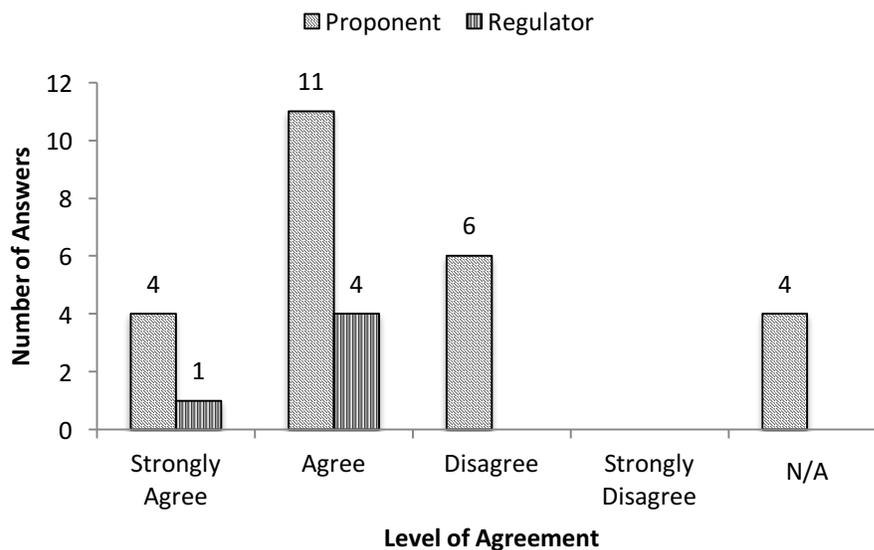


**Figure 4-9. Level of agreement regarding the identification of risk in the legal framework**

**4.3.9 Question 9:** There was a clear legal framework stipulating how gathered information is included in project/decision.

Question 9 focuses on the incorporation or integration of the information collected from potentially affected stakeholders in the projects or decisions. There is a higher level of agreement in this respect with 67% and only 20% in disagreement (Figure 4-10).

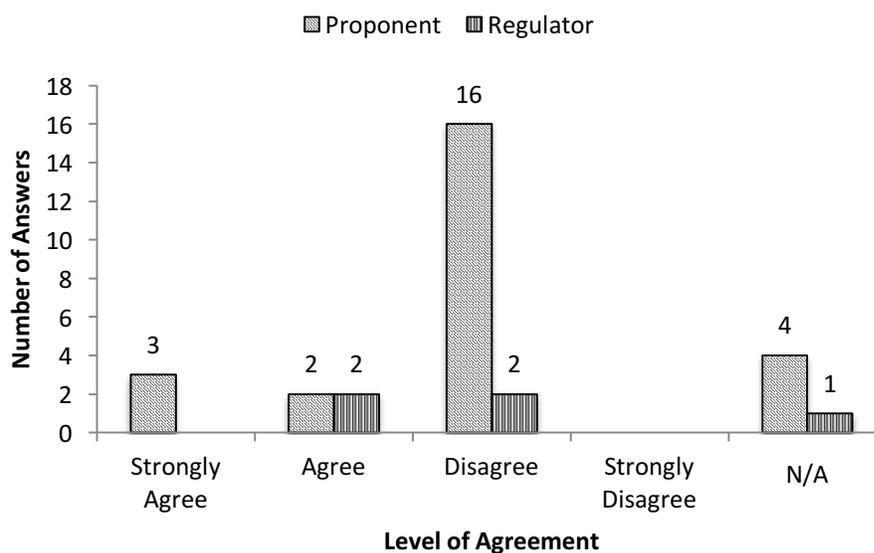
Based on the document analysis, regulations stipulate stages or steps where public participation is warranted. However, the actual use of stakeholder input is not addressed.



**Figure 4-10. Level of agreement regarding the use of gathered information in the legal framework**

4.3.10 **Question 10:** There was a clear legal framework stipulating how success is evaluated.

Question 10 is the first query about the measurement of success. Given the size of the regulator sample, it is difficult to establish a prominent opinion in the matter of success evaluation. The graphic shows a high level of disagreement among the proponents, 53%, and a split in opinion from the regulator group, 7% in agreement and 7% in disagreement (Figure 4-11). Further testing in this specific subject would be beneficial from the regulator's point of view to assess potential divergences and inconsistencies. A preliminary analysis of question 9 and 10, points to the lack of relation between success and the inclusion of information received from the public for the project design/decision.

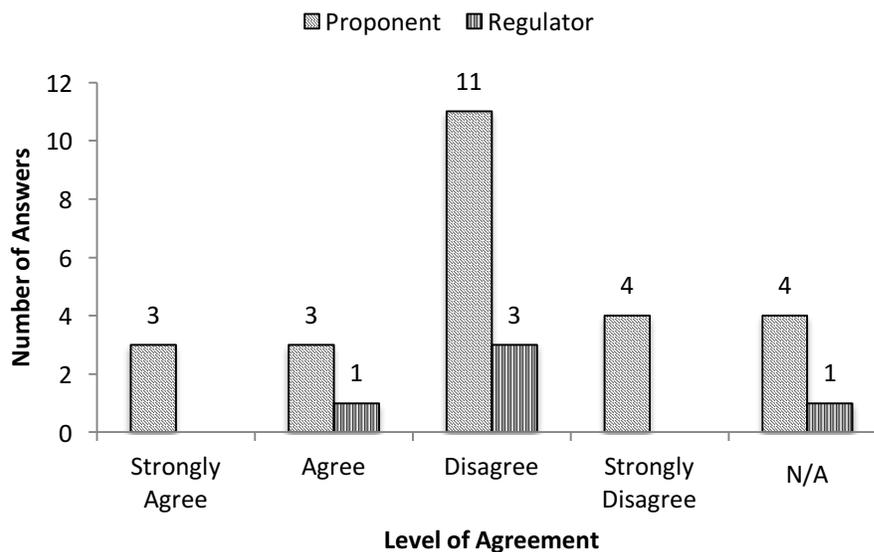


**Figure 4-11. Level of agreement regarding success evaluation in the legal framework**

4.3.11 **Question 11:** There was a clear legal framework stipulating how lessons learned are made public.

Question 11 focuses on the publication and general disclosure of lessons learned for public participation exercises for energy projects in Alberta. Here the survey continues the probing on the matter of evaluation of success. Results show a higher percentage of general disagreement – 60% of the sample population (Figure 4-12). Only 23% of respondents consider lessons learned to have been publicly shared. Just as noted in question 6, we observe the presence of a regulator in the N/A scale.

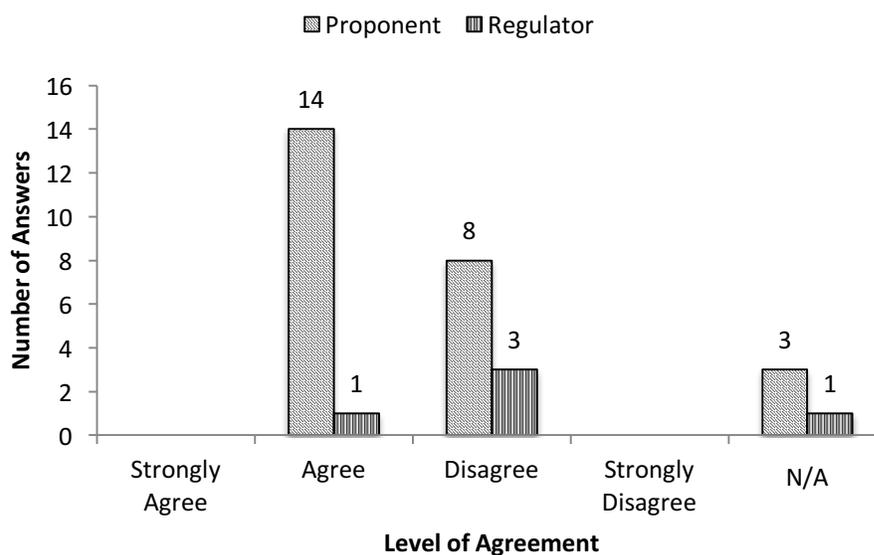
The response distribution for questions 10 and 11 is similar, reinforcing the lack of shared understanding when it comes to public participation success. If lessons learned are not publically shared, individuals have less access and knowledge of tools and references to build effective public participation processes.



**Figure 4-12. Level of agreement regarding lessons learned in the legal framework**

**4.3.12 Question 12:** The basis for planning and evaluating Public Participation processes changes frequently.

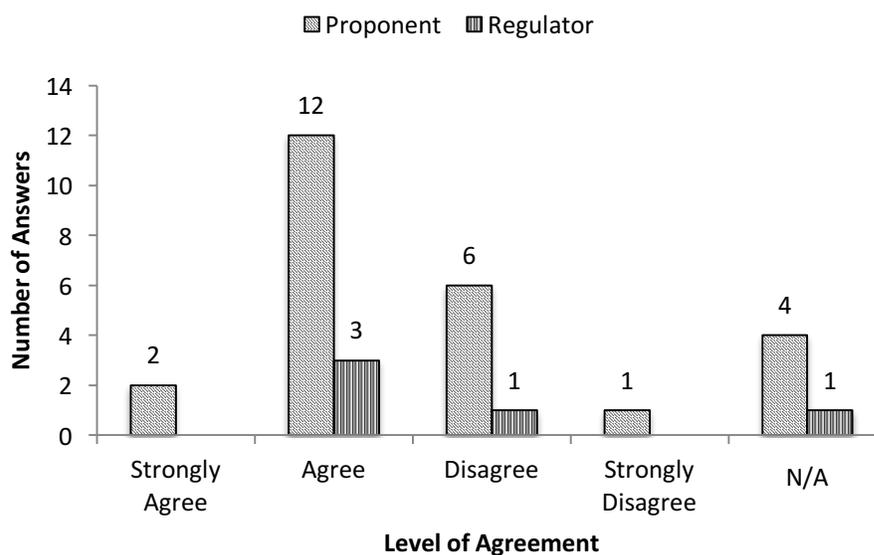
Question 12 can be analyzed from both the intentionality and the success evaluation dimensions. It specifically addresses the consistency in public participation. Half (50%) of the sample is in agreement that the basis for planning and evaluating public participation processes frequently change while 37% is in disagreement (Figure 4-13). Most of the regulator group show disagreement with the statement; this could be attributed to the fact that regulations establish specific stages and steps for public participation, making it an institutional practice. In the proponent group we see a 47% agreement - 27% disagreement range of responses.



**Figure 4-13. Level of agreement regarding the changes in the public participation process**

**4.3.13 Question 13:** The allocated time and resources were sufficient for the Public Participation processes.

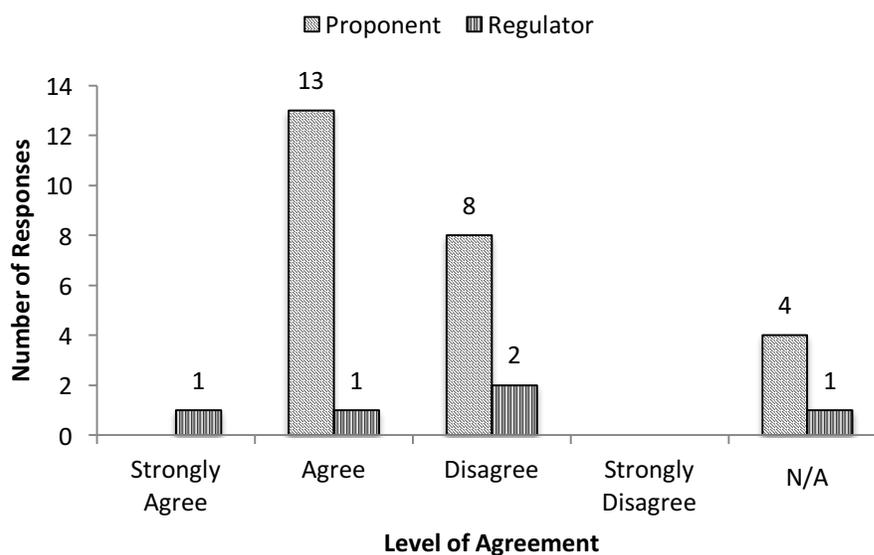
Question 13 asks about resource allocation for public participation exercises for energy projects in Alberta. The responses highlight the disconnect between the measurement of success and the common practice of public participation. Over half (57%) of the respondents considered the resources assigned were appropriate (Figure 4-14). Only 27% disagreed, and 17% did not provide an opinion. These responses contradict the results of the three previous questions. If there is a shared perception that the success and evaluation of public participation are not clear, and these change frequently, time and resources allocation cannot be considered sufficient.



**Figure 4-14. Level of agreement regarding the allocation of time and resources**

**4.3.14 Question 14:** The results of the Public Participation process match my expectations.

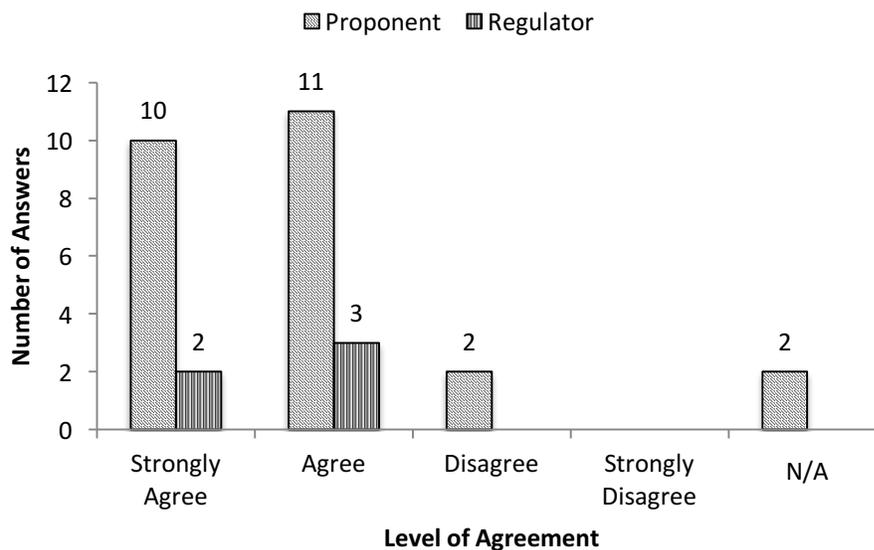
Question 14 continues probing in the matter of evaluation but, in this case, specific to the individuals' expectations. Responses show that the majority of the surveyed individuals expressed acceptance of the end results of public participation exercises. 50% of the respondents agree that the results of the public participation process matched their individual expectations, 33% disagree and 17% provided no opinion (Figure 4-15). In comparison, question 12 showed a general admission to the ambiguity and change that typifies public participation. Further probing on the matter of expectations is addressed in the semi-structured interviews.



**Figure 4-15. Level of agreement regarding the results matching the individuals' expectations**

**4.3.15 Question 15: Public Participation adds value to the environmental assessment process.**

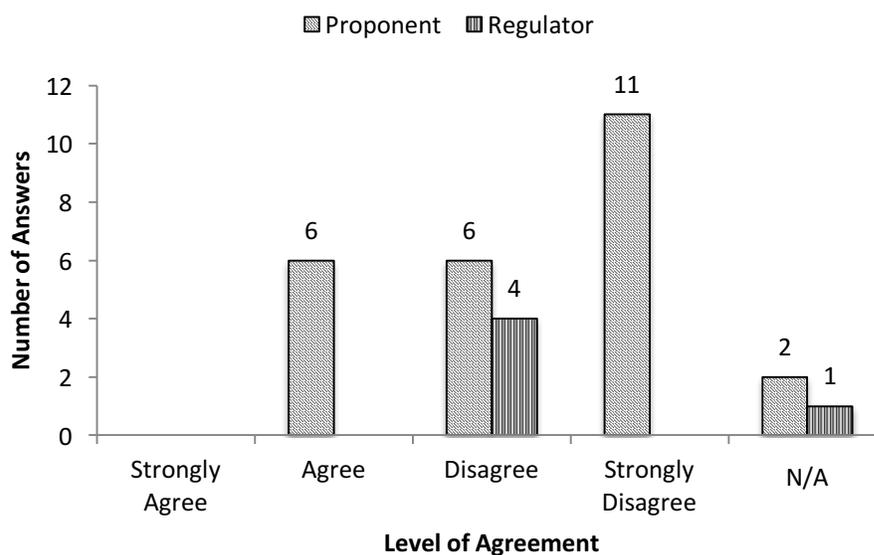
Question 15 builds on the evaluation of the previously expressed expectations (question 14) and points to the general perception of public participation exercises for energy projects in Alberta. The results show that while many elements of the public participation process remain unclear, there is still a strong belief that its incorporation advances the environmental assessment practice. 87% of the surveyed individuals say public participation improves environmental assessment processes (Figure 4-16). 7% disagrees and 7% provided no opinion. Responses show a strong endorsement for public participation. Taking into consideration the previous answers, it would seem the validation is sustained more on thinking about the rationale and justification and not as much on the implementation and practices of public participation.



**Figure 4-16. Level of agreement regarding the added value of public participation in environmental assessments**

**4.3.16 Question 16:** Public Participation is just a symbolic action to prevent criticism and give the appearance that people are being treated fairly.

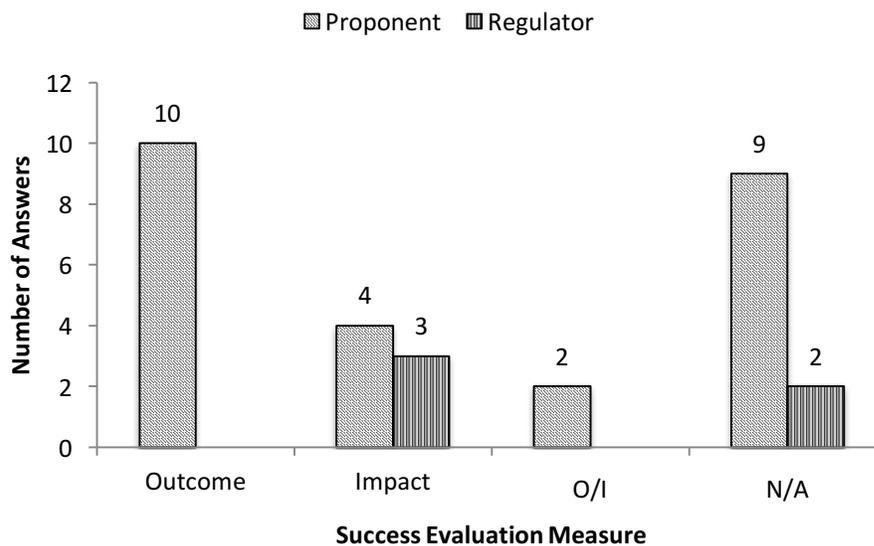
Question 16 was included to test if there were contradictory answers to question 15 and inquire into the potentially perceived tokenistic intentions of public participation. The results are somewhat contradictory to the previous question. While 70% of the sample disagrees and say public participation is not a mere symbolic action (Figure 4-17). There is a 17% difference in opinion from question 15 (87% agreement public participation adds value), which translates to about five individuals. 20% of the individuals surveyed believe public participation might be used as a pretense. For this question there was an increase in the N/A respondents (10%) with the inclusion of a regulator.



**Figure 4-17. Level of agreement regarding the tokenistic nature of public participation**

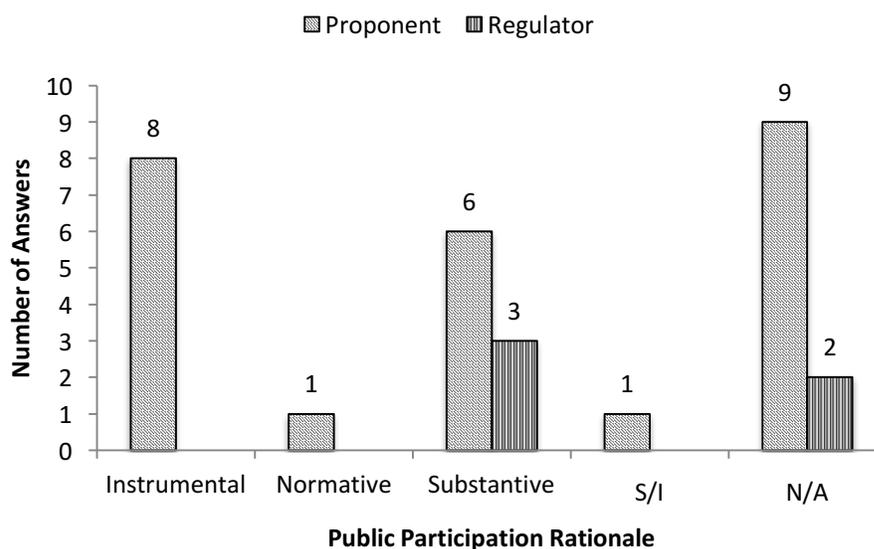
**4.3.17 Question 17:** How would you improve Public Participation for energy projects requiring environmental assessments?

Question 17 was interpreted, like question 3, using the success dimension looking at the construction of the concept and the justification perceived. 37% of the respondents did not provide an answer (Figure 4-18). Improvements mentioned in the answers were more related to outcomes (33%) than to impact (23%), but only marginally. This means that suggestions for improvement were phrased as measurable changes, with defined reach and scope. With the high 'N/A' frequency, it is difficult to generalize how the sampled individuals construct the definition of success and how it compares to question 2 and 3 of the survey.



**Figure 4-18. Evaluation measure perceived in the improvement suggestions for public participation**

The second analysis to the response points to a split of opinion. Improvements are phrased from the substantive rationale (30%) highlighting the ideal qualities of public participation, but also from the instrumental rationale (27%), which responds to specific goals (Figure 4-19). Once again the high 'N/A' frequency makes generalization and comparison with questions two and three unachievable.



**Figure 4-19. Rationale perceived in the improvement suggestions for public participation**

#### **4.3.18 Survey results summary.**

The survey results highlight the following findings:

- Public participation is understood mostly from the instrumental rationale, but when asked about what defines it as successful, answers veer to the substantive rationale.
- Regarding the geographical elements of public participation, the closed-ended questions indicate that:
  - Stakeholder definition and recruitment practices are clearly stated in the legal frameworks according to both groups.
  - The definition of environmental issues and determination of risk appears to be clearly defined according to the regulators, and unclear for proponents.
  - The discrepancy between groups regarding the definition of environmental issues and determination of risk, could point to a lack of shared understanding.

- In the success dimension, respondents expressed that public participation matched their expectations. However, the majority was uncertain about how success is evaluated.
- Overall public participation is perceived as adding value to the environmental assessment process but, unfortunately, lessons learned are not shared publicly.
- Because public participation is a geographically-constructed process an additional review of the open-ended question 2, specifically looking at the divisions of spatialities, shows that the concept of public participation as expressed by respondents contains different spatialities. However, absolute space is the least expressed – elements like structure and boundaries distinguished through time are rarely mentioned. Relational and lived spaces are present in responses like ‘voice concerns’, ‘impact on daily lives’, ‘inviting to take part in the process’ but these are still somewhat understated. The most interesting space present in the responses is the perceived/conceived dichotomy. A good example of this is observed in proponent’s 17 answer to question 2: ‘Providing project information to members of public in project vicinity that might be affected and allowing them opportunity to provide feedback / input on project plans’. The contrast is interesting as stakeholders must identify themselves as ‘affected’ (perceive themselves that way) and provide input on information conceived by the proponents.

#### **4.4 Semi-structured Interviews**

The third tool of data collection for this research is the semi-structured interviews. Questions were designed to build on the survey answers and findings and show the existing

variation surrounding the research topic. While the desired result was to obtain or have an approximately balanced representation between the two groups, of the 11 respondents 9 were proponents and 2 were regulators. The interview sample distribution between the two groups was similar to the survey distribution.

#### **4.4.1 The intentionality of public participation.**

With the increase of public participation initiatives and activities in environmental assessment, regulations, as seen in section 4.2, have recognized the importance of acknowledging the public interest. Standards, guidelines and parameters are in place to address public participation, but the underlying justifications and perspectives remain unstated. The on-line survey results show that there is a level of assumption that frames the public participation discussion. The interview questions looked to further probe on the identified assumptions.

##### ***4.4.1.1 The interviewees' understanding of public participation.***

As mentioned previously, appraisal and commitment process are always present and operating in public participation activities and initiatives. These two processes are co-constituted; however, interview respondents tend to phrase their understanding of public participation highlighting one of the two processes. From the managerial perspective – appraisal – respondents highlighted methodologies, phases, approaches and practices as demonstrated by the following example: “Public participation is about the determination of value components and the evaluation of mitigation strategies to achieve public interest” (Proponent 8). From a political perspective – commitment – respondents' definition emphasized the importance of the

application or practice of public participation. In describing the understanding of public participation Proponent 4 said:

“I would understand public participation as the public’s ability to become informed about a project. To be engaged in a project, to potentially influence a project all the way to perhaps be collaborating or being empowered with respect to the project decisions and the control over a project.”

The majority of respondents also phrased their answers from the instrumental rationale, either entirely or combined with the other two perspectives (normative and substantive). As one respondent stated; “We have a mandate and that is what we need to make decisions in the public interest... public participation in our hearing process is absolutely crucial for us to make a good decision at the end of the day” (Regulator 1). In comparison with the survey responses, the instrumental rationale was more noticeable. The discernible instrumental perspective shows that public participation’s purpose is seen as supporting specific ends and goals.

#### ***4.4.1.2 The internal team’s understanding of public participation.***

When discussing the shared understanding of public participation most respondents acknowledged it was a common language within their internal teams, mostly because these teams had met to agree on the process, and regulatory expectations. Responses tended to highlight once again the appraisal aspects of public participation: “Usually for any project we have kind of a preparatory or preparation meetings to make sure everyone is on the same page with the messaging around our public involvement program” (Proponent 6). This shared meaning, as explained by Proponent 9, was sometimes limited to the departments that directly dealt with public participation and did not have a wider reach (e.g. engineering departments):

“...before we had established this [stakeholder] group, that is cross departmental, many people were under the impression that you just do public participation to sell something or because it's required by the government before we can get permits. So for instance, you know years ago, and this is common to many companies even today, engineering teams would largely approach a stakeholder engagement or aboriginal relations at the last minute to make sure that you get the permits, you know, instead of involving the public at the beginning” (Proponent 9).

The responses regarding the shared understanding of public participation were predominantly phrased from an instrumental perspective. This shows that the concept of public participation is worded in terms of goals and objectives that must be accomplished and complied with.

#### ***4.4.1.3 The public's understanding of public participation.***

Interview respondents showed uncertainty regarding the shared understanding of public participation by the project stakeholders, “I'm not sure of, if everyone everybody has the same understanding of what it means to, of what public participation in a project is or means” (Proponent 6). Proponent 6 further elaborated on the measures taken to assure a common language:

“We do try to address that during our engagement process and, you know, explaining to stakeholders their role in the project when there seems to be some uncertainty but I don't know for sure if everybody's experience gives them that insight into, you know, what their real role is.”

Other respondents were more certain in the lack of shared understanding. This proves contrary to the survey responses (see 4.3.4), where respondents indicated agreement when asked

if the public participation concept was clearly understood by all parties. Proponent 4 offers the following,

“I think as a proponent we have a pretty good understanding of public participation and best practices. I think that from a stakeholder standpoint every stakeholder has a different understanding of what public participation means to them and terms like consultation can be fraught with a lot of misunderstanding about what exactly that means.”

When asked to elaborate on the issue and some of the measures to address the difference in understanding, regulators and proponents emphasize the “how?” (e.g., processes, tools, steps, stages), showing again the predominant appraisal aspect and instrumental rationale for public participation in environmental assessment processes.

#### ***4.4.1.4 Public participation criteria.***

Criteria identified by respondents as key in the successful design and evaluation of public participation process provided an additional means to scan the nature and intention underlying the main concept of this research and its understanding. The majority of interviewees phrased criteria under the appraisal aspect. This shows that respondents consider process and method properties, and focus less on the reasoning behind public participation. In many cases, this is a direct result of referring back to the guidelines and requirements, as criteria tends to be perceived as being established by the regulator:

“We try to be guided by whichever statute governs the environmental assessment that we are engaged in. If I have or if I am granted the leeway by either my clients or the regulator with which were operating I tend to develop custom criteria that are designed to be maximally effective for the given geography, given stakeholder composition, and the potential environmental effects for a given project” (Proponent 19).

From the regulators perspective we see that appraisal aspects and instrumental justification continue to be present:

“[Criteria] is actually a difficult question... that is one we are kind of struggling with right now especially since we have been moving to more online platforms we have been looking more at those and those we find a little easier to measure because you can tell how many people phoned in and we tend to get a lot higher participation if we host an online information session versus if we actually go out to the community” (Regulator 1).

The intentionality of public participation throughout the interviews emphasized the instrumental rationale. Respondents tended to talk about processes, practices, legal requirements and maximum and minimum expectations. Most agree that having public participation as a legal requirement is positive, not just because it guarantees public interest is included, as Proponent 6 points out:

“Any project that can potentially affect [rights]...should inform and involve [stakeholders] in the development of the project.”; but also because it sets expectations, “If there is no guideline whatsoever I have no idea what is expected of me, other than maybe looking at history, which can be done, but I would like to know what is expected” (Proponent 16).

#### **4.4.2 The geographic approach to public participation.**

While public participation is a geographically-constituted concept, the interviews showed that proponents and regulators do not tend to think in those terms. The interviews included three questions to specifically address the definition of environmental issues, the definition of stakeholders and the recruitment practices. In the majority of the responses there was no reference to any of those elements. Answers tend to refer back to regulatory guidance. A closer look at the various spatialities described by Harvey (2006) sheds some additional light on each question and the responses received.

#### ***4.4.2.1 Definition of environmental issues.***

In this question elements of absolute space are clearly present. When proponents and regulators address environmental features and valued components they tend to refer to tangible ‘things’ and structures:

“...things like anything we have to identify impacts to soils, ground water, surface waters, wildlife, wildlife habitat, fish, fish habitat, drainage; like that's a lot of it but there's a few more things. It's Rule 7. What you have to do is, sort of on a kilometre by kilometre basis, look at or identify all those environmental features along those potential routes and identify potential impacts...” (proponent 16).

An interesting aspect for question 6 was identifying the responsibility to define those environmental issues. Regulator 1 provides an example of this:

“As far as issue identification, we will look at a project and we may identify concerns of our own, like maybe around species at risk. We will ask information requested around those and those issues will be addressed publicly...but a lot of the issues too, are identified by participants or by landowners, or Aboriginal groups, or some of the environmental non-governmental organizations, so that we can get that information about how it will affect an individual or groups in that area.”

This response moves from conceived space – regulator provides the guideline of environmental element to review – to perceived space – asking information be collected – to lived space – where the public identifies how a project may affect their daily routines with emotions and meaning incorporated into that everyday life.

Perhaps the best example of the various spatialities present in the definition of environmental issues is provided by proponent 19, who really touches on the unavoidable aspect of perspective:

“That [identification of environmental effects/risks] really depends on the project. We are involved in a range of situations, in which one extreme is we are tasked collecting the data

that identifies the risks...that's from our standpoint the most powerful way to identify the risks. In other situations, we are invited to review data collected by others and identify risks based in that context. And in other contexts, we are brought in after the fact to address risks identified by a regulator. And those regulators will have generated those risk lists either through public consultations or on their own or their own internal environment environmental experts.”

This response points to the notion that who you are, and when you are brought into the public participation process makes a difference in the outcome.

#### ***4.4.2.2 The definition of stakeholders.***

The posed question for this geographic parameter is worth refining in future research and inquiries as most responses only acknowledge the inclusion of public participation as a regulatory requirement in the process. The specifics about ‘who?’ as Proponent 19 identified “depends on the statutes under which the environment environmental assessment is being conducted.” This response is further exemplified by Regulator 1:

“There are two parts of the regulation that kind of determine this. If a pipeline is over 40 km in length, that falls under a section in the act and that requires a public hearing. If it is less than 40 km it falls under section of the act and that does not necessarily require a public hearing...all the information is still public but we're not required by law to hold a hearing. If there's quite a bit of interest in the project and if people request a hearing, then we will consider holding one.”

While responses tend to lean to absolute and conceived space, the matter of ‘who needs to be included’ remains unclear. Proponent 4 highlights how external influences can get internalized in the environmental assessment process bringing relational spaces into the discussion:

“If we happen to be going into a community or an area where the company has not previously been operating, we would really do our stakeholder mapping to really seek to understand who are the key players and what are some of the key issues and key risks that we might be facing in respect to that of the proposed project.” (answer to question 5) “We would look at anything that could impact stakeholders or in some cases, how stakeholders could impact our projects....” (answer to question 6).

Perhaps the most telling response is from Proponent 9, who probes into the true spatial complexity of the stakeholder definition issue:

“Anything that we do is for the public so we always include the public. The public... I mean how do you know otherwise that there is maybe no lost stakeholder there that you were not able to identify.”

#### ***4.4.2.3 Recruitment practices.***

For this question the different spatialities of public participation are evident, moving from conceived guidelines in absolute terms, to elements perceived during field visits, to a relational awareness of the project area:

“We sort of default at a minimum to the guidelines, so that would be notified at 200 metres and consult with anyone who is directly adjacent. On top of that, based on experience or maybe desktop analysis or site visits, we might say well, even though this person is not within 200 metres or maybe this person is not directly adjacent, we will include them. So in some areas we do not have to consult with communities but we decide to because we know that they are active. We are accountable to that so when we want to do a project we have to apply to the Regulator and, ...[when] we have not done our job well enough in terms of consultation, you know that will come out in [hearing] proceedings” (Proponent 16).

This play between spatialities is further reinforced by Proponent 8:

“To make sure that the affected parties are included in our consultation program... which may be a little bit separate from the public interest... but the affected parties are identified through detailed land searching and working with regulators and local agencies. We also identify further directly affected stakeholders by nature of the first line of contact so once the first line of contact is made often further directly-affected stakeholders are identified as leaseholders or nontitle residents. Now as far as identifying non-spatial stakeholders or non-directly affected stakeholders but still stakeholders in the public perception process, they are typically identified either directed by the regulator or identified with agencies, so if we were looking at non-spatially referenced special interest groups, those are identified by agencies seeking to ensure that we have input from the right stakeholder groups and also they make themselves known through open lines of communication that we have on our website.”

The differentiation between affected parties and public interest mentioned above brings a whole different set of spatial questions to the discussion and that further add complexity to the public participation process. In Regulator’s 5 response we see how this demands further review:

“Statements of concern, which again are not part of what I do, look at everyone's comments and kind of, you know, just look at the merit of them and do they make sense ...there's another whole separate Aboriginal consultation aspect of the terms of reference able to comment and we look at all the comments equally.”

During the interviews respondents kept making reference to the regulations; however, in the surveys, a greater percentage indicated disagreement when asked to comment on whether there was a clear legal framework stipulating how risks and effect were determined. These findings indicate a potential gap in shared understanding.

#### 4.4.3 The perception of success in public participation.

Interview questions meant to probe in the subject of success focused on three aspects: outcome, impact and justification. When talking about public participation expectations, respondents usually referred to measurable outcomes:

“I am always curious whether there will be some interest and there will be people providing what I would like to call useful comments rather than people just writing to say they do or do not like the project” (Regulator 5).

A smaller proportion of respondents talked about broader scale effects on the stakeholders’ lives:

“I want to make sure that there is no or minimal adverse social impacts and if there are adverse social impacts there, I want to know what they are and if there is anything I can do about them” (Proponent 16).

These responses are further confirmed when looking at the justification aspect. When respondents talk in terms of impacts, their understanding of success tends to show a substantive perspective looking for an unbiased, impartial, fact-sustained process. When interviewees talk about outcomes, their answers tend to be phrased from the instrumental rationale making reference to regulation compliance and data acquisition.

This outcome/instrumental perspective was maintained through the majority of the interview questions focused in the evaluation of success. When probing about the added value of public participation to the environmental process, respondents spoke about access to background information, tailored terms of reference, and the determination of value components:

“I think it adds quite a bit of value and something we started to do...is to try to understand the importance of different components or factors or areas to the public so we will ask them sort of on a scale of 1 to 10 how they rank different criteria. So it really can help us

determine what the big concern is with in regards to environmental components on a proposed project” (Proponent 25)

Rarely, respondents phrased the public participation added value in terms of impact (e.g. transparency, trust, harmonious projects). An example of this was provided by Proponent 19:

“The only way for it to add value is if we start to do it sooner in the design process. That is the only way I think we will get to the level of transparency and trust that we need with stakeholders for a given project so that they understand how the process works [and] the decision making process.”

The recommendations and suggestions provided by respondents to improve the public participation process also followed the outcome/instrumental pattern. The majority of interviewees provide measurable recommendations such as early engagement, creative methods, consistent messaging and clear expectations: “So it's kind of a consistent message, early engagements, regular engagements and milestones-based engagement, but as well, not focusing on the data but focusing on the method” (Proponent 20).

When asked to judge their experience with public participation, the majority of respondents considered their projects successful. They spoke in terms of outcomes and how they were able to identify the right stakeholders, get the needed feedback, inform the intent and process to the stakeholders and meet their timelines. A smaller proportion of interviewees phrased their success experiences in terms of impact and the trust and relations they formed with stakeholders,

“We ended up selling a number of our wells, probably two thirds of our wells in the field, and I have been getting calls from landowners ever since we sold; it has been almost a year since the sale went through and I still get calls from landowners saying we really miss you, and we wish you would come back because we developed a great partnership with you” (Proponent 2).

Public participation, based on the interview results, primarily contributes to a project's success by removing objections and addressing regulatory compliance: "for every single project that we look at, if we decide to approve it, it will include conditions...those conditions, a lot of them are a direct result of public participation" (Regulator 1). Public participation success is less frequently phrased in terms impact, and proponents tend to point to some of the challenges they typically encounter:

"Our work has become better because of [public participation]. With input from the communities we are actually able to have a much more productive relationship with our neighbors in the area that we operate and I think that we are one of the most successful operators in those areas because we have good relationships with their landowners and we really worked hard and we came in very genuinely [way] wanting to learn and improve our system. [Public participation] is a lot easier to do in a great price market and harder to do in a tougher price market but, yeah, it does improve how we do our work. But it sure slows us down" (Proponent 2).

#### **4.4.4 Interview results summary.**

The interviews highlighted the following findings:

- Public participation is understood from the instrumental rationale. Even when asked about internal and external understanding of the concept, this perspective is maintained.
- Public participation is not instinctively seen as a geographically-bound process, although all responses show the different spatialities mentioned by Harvey. Some of the space notions, like conceived and perceived, are more present than others, like relational and lived. The perspective of public participation, observed in the definition

of environmental effects (highlighted by proponent 19), appears a key point to move forward the practice of public participation in environmental assessment processes.

- Public participation success was assessed looking at respondents' expectations, judgment and improvements. All pointed to the instrumental perspective and perceived measurable outcomes.
- The majority of respondents agree to have public participation as a legal requirement and see its value in both outcome and impact terms, with the first being slightly more prominent.

#### **4.5 Conclusion**

Based on the three methodological tools applied, public participation processes for energy projects in Alberta tend to be phrased under the instrumental rationale, under mostly conceived notions of space, with success defined as measurable outcomes.

## Chapter Five: **Discussion**

### **5.1 Introduction**

This research constitutes an exploratory view of the public participation process in Alberta with a specific interest in environmental assessments for energy projects. The previous chapters have outlined some of the qualities and intentions that I considered key in the formulation of the public participation concept and understanding, as well as providing a benchmark from where to evaluate performance and start building best practices. This chapter explores the impacts and implications some of the findings have in the successful application of public participation and potential areas of further research.

### **5.2 Testable predictions**

#### **5.2.1 Prediction 1.**

I expected the perception of public participation success would be higher where there was a clear regulatory framework that assisted in the identification of participants and stipulated how the findings needed to be incorporated into project development. In environmental assessment for energy projects in Alberta, a clear framework that sets minimum standards for public participation is considered successful under the instrumental rationale.

The majority of respondents (60%) agreed the public participation project results matched their expectations, and 6 out of the 11 interviewees clearly stated their projects were successful. A majority (70%) of respondents agree there is a clear legal framework that defines stakeholders, and 67% of respondents are in agreement that there is clear framework stipulating how the gathered information is used. These findings are supported by the interview results where the majority of individuals referred to regulations and legislation when asked about when to conduct

public participation and the legal requirement for its application. The data supports the prediction that, for regulators and proponents, project success is positively related to the existence of a clear regulatory framework.

The identification of participants in the regulatory documents varies significantly. It goes from unbounded, like CEAA and EPEA, which have a wider and more inclusive definition (i.e., open to all the public through their online registers), to prescriptive, like D-056 and R-007, which make their stakeholder differentiation based on notification and consultation radius. Spatially, both approaches are complex and very much dependent in the perspective of the involved party. It could be said that unbounded process like CEAA and EPEA rely on self-identification of stakeholders, meaning you must have a concern and be willing to voice it; this also means we are talking about perceived and lived spaces of public participation. Individuals will not only bring their physical and experiential interpretation of the space, but changes based on imagination and appropriation of that space. This last one was rarely acknowledged in the interview answers. Bounded processes on the other hand, like D-056 and R-007, tend to use absolute spaces and elements (e.g. kilometres, subdivisions, first row of houses) to develop conceptions of space (e.g. radius of notification, radius of consultation). This approach also tends to overlook the relational and lived spaces of public participation. So it is not a surprise that when looking at stakeholders' commentary on processes of public participation for environmental assessment there tends to be a certain level of dissatisfaction.

How the results of public participation are to be incorporated is not clear in any of the regulatory documents. The biggest indicative can be found when looking at the commitments of each regulation. CEAA and D-056 use public participation and information incorporation as a way to mitigate project effects; EPEA focuses on meeting information requirements by the

various parties involved; finally, R-007 covers different stages in the process as it stipulates public participation allows concerns to be raised, properly addressed, and if possible, resolved. EPEA is an interesting document in this regard, as its commitments to public participation are vague. Perhaps this is because projects that undergo environmental assessments under EPEA are not necessarily approved. Obtaining authorization under EPEA only means the information requirements for that stage have been met, and the project can move to the next regulatory stage. Once a project receives EPEA authorization it must be submitted to the applicable board (AUC or AER) in order to get approval for development.

Public participation for proponents and regulators is treated as compliance in environmental assessments for energy projects in Alberta. The process is framed under an instrumental rationale that looks to fulfill regulatory requirements. All individuals surveyed and interviewed mentioned public participation adding value to the process. Only one interviewee noted the difference of public participation adding value for the proponent rather than for the public. If mitigation is the end goal, public participation in the eyes of the proponent and regulator will likely always be successful, as constraints will be identified and rarely not mitigated. The public might not necessarily agree with how mitigation is conducted, and sometimes even how the assessment would arrive at some of its conclusions in effects and significance. This dissention points to a lack of shared understanding of the public participation concept, deeply rooted in what the intentionality is or should be. Furthermore, this dissention points to the variety of spatialities present in the process and how the chosen approach for consultation processes, and the matter of who does the choosing, has a real influence in the end result and the potential tensions that arise during and after all is said and done.

If public participation were to be framed by normative or substantive perspectives the likelihood of it being successful would likely decrease. Under the normative rationale, public participation would look to guarantee the participation of all potentially-affected parties, with more focus on the process itself and not the results. Under the substantive rationale, public participation would look for decision quality where the public is actively engaged providing a level of social authenticity. Both rationales would likely include relational and lived spatialities, and require a higher and more intensive use of resources, and that might not be desired by proponents and regulator, especially if there is no guarantee of achieving their organizational goals.

### **5.2.2 Prediction 2.**

I expected the perception of public participation success would be lower where the conceptualization and understanding of what public participation refers to were not clear for all involved parties. In environmental assessment for energy projects in Alberta, the limited reach of the shared understanding of public participation to the internal stakeholders characterizes success under the instrumental rationale serving particular power structures.

The data suggests that there is a shared understanding of the public participation concept among regulators and proponents. Also, the majority of respondents considered their projects as successful. Therefore, it would appear that the prediction is supported; project success is directly related to a shared understanding of the concept of public participation.

The survey results show that 62% of respondents agreed that the concept of public participation was clearly understood by all parties involved. These responses are also present in the interviews, specifically in answers to question 3, where the majority of individuals referred to

internal groups with a defined structure and common language. In the interview responses, it was observed that this shared understanding may be limited to individuals that have a direct relation to public participation processes. One proponent highlighted that individuals within the same company approached stakeholder engagement at the last minute as a requirement to obtain permits, more as an afterthought. This statement would indicate that confined groups share the concept. However, public participation understanding may vary outside of the immediate nucleus. Furthermore, when comparing the understanding of public participation as a concept and public participation success, regulators maintain a normative perspective, while proponents move from the instrumental understanding to the substantive ideal of what success should represent.

During the interviews a second question about understanding was posed to respondents. Its purpose was to gather their perception on the public's understanding of the public participation concept. While some respondents answered positively that the public shared their understanding, there was a larger number of respondents that indicated uncertainty. Many respondents, when asked about how to improve the participation process, suggest better educational materials, or using simple and accurate language; these mentions highlight the conceived notion of space in the consultation process, and point once again to the automatic practice of trying to communicate a specific perspective of the project, environmental effects and associated risks.

While proponents and regulators focus on instrumental compliance, their phrasing of the concept of public participation and success ranges between the three rationales. This points to the shared understanding of public participation becoming institutionalized and diagramed. This is not flawed under an instrumental justification, but it does point to a gap in the ideals expressed by respondents in the environmental assessment process specific to energy projects in Alberta.

### 5.2.3 Prediction 3.

I expected the perception of public participation success would be lower when there was not a clear intention justifying the design of the process. In environmental assessment for energy projects in Alberta, a clear design that sets process criteria and focuses commitments around mitigation is considered successful under the instrumental rationale.

Over half (58%) of survey respondents expressed that the bases for planning and evaluating public participation processes frequently change. Furthermore, only 28% of survey respondents agreed there was a clear legal framework stipulating how success was evaluated. When asked about design criteria, respondents highlighted the appraisal aspects of public participation or the managerial view of the process by constantly referring to the regulations or quoting methods and processes.

With 90% of survey respondents judging their projects as successful and considering public participation adds value to the environmental assessment process, it would appear there is no relationship between success and the design of the public participation process.

This disconnect highlights once more the predominant instrumental rationale in the environmental assessment process for energy projects in Alberta. While some interview respondents mentioned normative and substantive criteria when talking about process design, phrasing throughout the interviews tended to focus around the "how to" of public participation and not the "why" or reasons that support its intentionality. Public participation continues to be surrounded by mitigation terminology, very much focused around compliance, without much thought to the motives and purposes behind the public participation process. Exploring the motives and purposes would require embracing the true complexity of the public participation process as an intrinsically spatial practice. Further analysis and additional research projects

would need to be conducted to look at other geographic elements that frame it, and all the forces and relations that shape these in order to determine requirements to fulfill normative or substantive design criteria.

#### **5.2.4 Prediction 4.**

I expected the perception of public participation success would be higher when the process was not tied to arbitrary geographic parameters that prescribe its implementation. Of the three geographic elements assessed, environmental issues definition is the most context-dependent, but it seems to be largely defined by proponents with regulator guidance and only validated by the public as part of mitigation practice. This makes effect determination highly related to technical and expert knowledge, conceived notions of space and successful under the instrumental rationale.

This research focused on three geographic aspects of public participation: the definition of environmental issues, the definition of stakeholders and the stakeholder recruitment practices. The survey results show that: 65% of respondents considered the legal framework as clearly defining environmental issues, 81% of respondents thought the legal framework clearly defines stakeholders, and 78% believed there are clear recruitment stipulations. When interview respondents were asked about environmental effects, 55% did not make a direct reference to geographic approach elements; their responses simply referred to regulatory guidance. During the interviews, the aspect of recruitment showed a higher percentage of respondents (55%) making direct reference to geographic elements. However, 63% referred to regulations. A closer look at the responses and a broader understanding of the concept of space shows that geographical elements are present in almost all the answers. The true issue is that public

participation discussion does not tend to probe this geographical side of the analysis often. Many discussions surrounding public participation verge towards implementation using subjective terminology and criteria, when the gap lies in the spatial definition of that criteria and the later evaluation at the time of results. Public participation has become a methodology that complements the scientific and economical assessments and helps verify the findings.

When looking at the regulatory documents in more detail, it is observed that CEAA and EPEA follow a more normative rationale for the definition of stakeholders and their recruitment as they look to include all the affected in the process. On the other hand, D-056 and R-007 are very prescriptive and are more aligned to the instrumental rationale by differentiating levels of public participation, individuals by their relation to the land, and radius for the affected. The issue lies in that the bounded public participation opposes the geographic principle that physical conditions are transformed by individuals and societies. By limiting the reach, social relations and stresses are ignored in the public participation process, even if the goal is to identify project constraints that help develop mitigation measures.

The analysis of the documents also pointed to the perceived/conceived dichotomy that seems to surround the public participation process in environmental assessments. One party, whether it is the proponent or the regulator, identifies the environmental element of value – based on a perceived understanding of the project and the space it occupies. This perception is then translated into reports, analysis, maps, brochures, levels of significance – all of this is a conceived understanding of the project and the space it occupies. Finally these ‘materials’ are provided to the public for comment and input, with the apparent expectation that they will mostly agree and, more importantly, understand the information presented.

With 90 % of survey respondents judging their projects as successful and considering that public participation adds value to the environmental assessment process, it would appear there is no positive relationship between perception of success and geographic parameters. Geographic elements were generally not re-evaluated on a project-by-project basis; rather, the elements were stipulated as part of the regulations and since then have been complied with by individuals subject to the environmental assessment process for energy projects in Alberta.

As Marston (2003:227) notes, “space is central to understanding the complex political, cultural, social, and economic processes of contemporary globalization.” Public participation is one of those processes where space can be shaped or ignored to draw out politics and power structures. As Marston states, speech, or in this particular case public participation, is produced ‘somewhere’, and that somewhere defines the public right to have input in environmental decision-making. Spatial definition of where participation is allowed (e.g. radius of consultation) and who gets to participate (e.g. directly affected individuals) changes the nature of public participation.

Mitchell (2013) says geography can censor and even silence opposing views and protestors. Public participation in environmental assessment has been encapsulated to an ‘effective forum’, where debate and dissent can be regulated to maintain order. As Mitchell (2013:62) notes, over the years government has established rules in order to regulate “the time, the place, and the manner of speech” but not the content. However, can that content truly be effective if it is imposed spatial restrictions that answer to specific development interests?

This point once more to the instrumental purpose that frames the process and how it is tied to institutional practices and methodologies. Knowing that the nature of public participation is a geographically-bound one, the point to make here is that the spatial discussion of the process is

missing. It has become mechanical, not questioned by proponents or regulators, but evidently put under the microscope by the public, which highly disagrees with the decisions to approve the projects.

### **5.2.5 Prediction 5.**

I expected the perception of public participation success would be higher when it was treated as a real added value to project development and not as a sustainable slogan maintained for tokenistic purposes only. Under the instrumental rationale, public participation adds value to project development, and can be regarded as successful (and was by most respondents).

Based on the research, 93% of survey respondents agreed that public participation adds value to the environmental assessment process. Furthermore, 78% of survey respondents disagreed with the statement that public participation is just a symbolic action to prevent criticism and give the appearance that people are being treated fairly.

The use of stakeholder input is not addressed in the reviewed government documents, even if 77% of respondents considered the legal framework clearly stipulates it. The fact that 72% of respondents feel lessons learned are not made public could contribute to the shared understanding disconnects observed throughout the study.

Media reports and stories surrounding pipelines, and energy project in general, would contradict the survey responses in this regard. There are evident sources of tensions present in the public participation process that, if not addressed in a timely manner, will permanently cost the practice its standing, and damage its justification and validation into the future.

### **5.2.6 Evaluation of research predictions.**

Public participation for environmental assessments for energy projects in Alberta is considered successful under the instrumental rationale from the proponents' and regulators' point of view. This would reinforce Abel's (2007) statement that the assumption is that any public participation represents an improvement over the status quo as it promotes awareness and it gives greater confidence in government processes and institutions.

Both Stirling (2005 & 2008) and Harvey (2006) coincide, in that no one rationale (normative, instrumental and substantive), or spatiality (absolute, relative, relational, perceived, conceived, lived) respectively, is above the others, they are not exclusive, and all are valid for contrasting reasons. Phrasing around the public participation concept responses shows not one rationale or understanding of space, but all of them. The problem lies in trying to enforce a certain view or approach, advertising justifications and spatialities that differ from the actions, without the proper adjustment of expectations, especially where there is little to no discursive process or reasoning to conclusions when thinking about the public participation process.

## **5.3 Evaluation of Research Objectives**

### **5.3.1 The nature and intention of public participation.**

Public participation in environmental assessment for energy projects in Alberta is characterized by the following of instrumental goals. The review of the regulations highlighted aspects of the normative discourse while the surveys and interviews showed some substantive expectations. The study showed that public participation is mostly understood and implemented from the instrumental perspective. The dialogue that tends to surround the public participation processes is disconnected from the praxis observed.

Looking at the language variation in the regulatory documents reviewed it is possible to recognize barriers limiting the public participation process and practice. For instance, the motivation in environmentally-focused regulations (CEAA and EPEA) is of a normative nature. It is, as Stirling (2008) points out, a moral obligation with the very broad ambition of predicting and protecting the environment from adverse project effects. In comparison, energy-focused regulations (D-056 and R-007) have a more precise instrumental perspective as they are directed to securing particular ends (i.e., non-objections).

This disjuncture is also evident in the adjudication of public participation responsibilities. Environmentally-focused regulations establish institutional practices or stages where public participation is pursued. After proponents have developed their data collection and environmental assessment methods, public participation is used as a validation tool while ensuring public interest is appropriately addressed. On the other hand, energy-focused regulations establish methodological instruments for the proponents to collect stakeholder data and provide concrete results. The regulator's responsibility is to verify compliance and ask for additional details if efforts seem insufficient.

The democratic and sustainability goals imposed by the term 'public participation' are disconnected from the application in the process. Over the years, the effort surrounding public participation in environmental assessments has been on expanding the implementation and methodologies that surround the concept and requirement. Online registries, clear radius definition, differentiation of stakeholders, type of participation, notices; all have become more detailed as years have passed. However, the justification and reasoning behind those choices and parameters appear to be missing.

Public participation has become a tool to mitigate public concern. It is structured in such a way that it can inform the public about a project and its potential effects, and gather feedback and input that modifies and adjusts details. What is missing is the rationalization of the process itself.

Surveyed and interviewed individuals agreed that public participation adds value, and it is not done for tokenistic reasons. However, when the intentions of applying public participation in environmental processes are not explained upfront, we will find a lack of understanding and shared meaning. In the interview responses, proponents and regulators agree that the public does not necessarily understand public participation the same way they do.

Public participation in environmental process seems to be surrounded by assumptions. Proponents and regulators expect everybody involved to understand the processes. In recent years, there has been an endeavor to explain the stage of the project and the level of detail and input being asked. Proponent 25 provides an example: “We commonly state in our notification material and the consultations what the regulator prescribes, [that explains] how we complete consultation and public engagement and participation.” However, there is a lack of examination about the process itself and whether it is needed and useful at the various stages. If public participation commitments are not clearly communicated, assumptions take the place of shared understanding and the likelihood of success expectations and reality not aligning becomes higher. Public participation becomes a mechanical process trying to prove inclusiveness, transparency and legitimacy, but not recognizing the context in which it exists. Public participation is treated as an institutional practice by the regulators and proponents. It is understood and implemented as a methodological tool. What is missing is a critical review of the justification of the process in order to provide a more comprehensive evaluation of success.

### **5.3.2 The geographic parameters that contextualize public participation.**

It is interesting that while public participation is fundamentally framed and constructed under geographic parameters, the process in environmental assessments for energy projects in Alberta noticeably lacks a framework that justly addresses these geographic aspects.

This study focused on three aspects: the geographical definition of the environmental issue, the geographical definition of the public, and the geographic strategy used for stakeholder recruitment. These aspects have been addressed by guidelines and methodologies, some more than others, but they have rarely gone beyond mere tools to focus on their discursive processes or disciplinary approaches.

Looking at the level of detail in the regulatory documents reviewed it is possible to recognize geographic limitations in the public participation process and practice. Environmentally-focused regulations (CEAA and EPEA) are more descriptive of the processes that involve the definition of the environmental issues, while dealing with stakeholders as participants in the definition of valued components. Energy-focused regulations (D-056 and R-007) are more descriptive of the processes that involve the recruitment of stakeholders by establishing how a particular type of activities require a set recruitment radius. By setting a specific radius, the effect and impact is indirectly defined (extension based on project characteristics) without true consideration of the geographic context. This predefined impact overlooks the importance of "thinking about and acting upon contemporary economic, political, social and environmental changes" (Jonas, 2006:399), or what Harvey (2006) refers to as relational space.

Survey and interview responses further showed the lack of understanding of the geographic elements, the complexity of spatialities and their relevance to the public participation process.

Respondents would simply answer yes or no, and when asked to elaborate they would tie back to regulatory requirements or quote projects or examples where certain tools and methods were applied. Public participation is viewed as an identification and confirmation process (mitigation), while not necessarily considered part of environmental issues definition.

Thinking about space is critical to public participation because geographical framing factors are subjective in nature and tend to be socially constructed. How the public is defined matters in public participation processes. By treating the public as a target population, regulations and policies are automatically setting an agenda, behavior and style of participation (Schneider & Ingram, 1993). Environmental Assessment regulations are not only outlining what proponents are supposed to do, but also which citizens are eligible to provide an opinion and the acceptable participatory patterns in the process.

This social construction of the public is further rooted by geographical construction. When regulators and proponents define study areas and space is delimited, often to local scales, the public involved in the participation process is indirectly determined. The reality of environmental issues is that effects extend beyond immediate boundaries (e.g. greenhouse gas emissions) and the globalization discourse makes this more evident. The current environmental assessment process does not really address this. Regulations and policies are designed to achieve goals and mitigate problems. In that process it identifies the individuals whose behavior is linked to achieving those goals. As Schneider & Ingram state (1993): “By specifying eligibility criteria, policy creates the boundaries of target populations.” In other words, citizens are engaged as objects rather than as subjects of discourse (Stirling, 2008).

Even under the instrumental rationale, mitigation needs to consider the sources and connections between individuals and environmental issues. Public participation needs to think

critically about spatial issues. Public participation debate will change depending on the individual's spatial understanding of the project and issues (absolute, relative, relational) and their spatial appropriation (perceived, conceived, lived) to build strategic actions. Public participation in environmental assessments needs to be flexible and clear; it needs to recognize and communicate when a particular spatial solution is being imposed on a different spatial interest. The difficulty surrounding space lies in not only how we define it, but also what we implicitly and explicitly leave out because of that definition. Public participation needs to consider the processes, sites, agencies and flows that are acknowledged and overlooked in the definition of project areas.

Defining and maintaining radius of notification and consultation establishes fixed geographic spaces and overlooks the importance of the relational and political construction that are intrinsic to human dynamics. Public participation needs to acknowledge what Jonas (2006) refers to as a "site-and-scale-in-the-process-of-becoming." Public participation processes require proponents and regulators to think about space relationally. Some of the established guidelines in environmental assessments assume that space and locations are static, and overlook how social interactions can transform and change them.

"If space is a product of practices, trajectories, interrelations, if we make space through interactions at all levels, from the local to the global, then those spatial identities such as places, regions, nations, and the local and the global, must be forged in this relational way too, as internally complex, essentially unboundable in any absolute sense, and inevitably historically changing" Massey (2004:5).

What the public participation process appears to be doing is enforcing a certain view of the space expecting positive results, stakeholder support, and the successful completion of projects in their proposed timelines. If the public participation process does not acknowledge the

importance and validity of spatial relations, and begins to open the discussion surrounding them, we will soon find ourselves in a cemetery of ‘best practices’ with no support for the discipline.

### **5.3.3 The perception of success in public participation.**

Regulators and proponents share a perception that public participation in environmental assessments for energy projects in Alberta is successful, even with the previously identified uncertainties and gaps. The survey results showed that 72% of respondents agreed success was not clearly stipulated in the legal framework. However, 60% considered the results of the public participation processes were meeting their expectations. This points to uncaptured measures of success. During the interviews, there was an opportunity to ask respondents to elaborate on their judgment of success; answers highlighted the best and worst aspects of public participation processes. It was interesting to note that the positive characteristics were phrased in terms of measurable and tangible outcomes while the negative characteristics were phrased in terms of long term and subjective impacts. This shows that the public participation process, while it is implemented successfully, answers the specific goals set by the regulators and proponents and becomes a must-have. On the other hand, if implemented incorrectly the repercussions are permanent and deeply rooted and can set a precedent moving forward (e.g., issues of trust).

Regulatory environmental assessment policy in Alberta considers public participation as an essential component in decision-making. However, its administration is strongly influenced by liberal democracy (Fluker, 2015). This means the various statutes provide opportunities for public input, and/or the obligation for proponents and regulators to hear those individuals that have a claim and are directly affected by the proposed development. For regulators and proponents, applying the regulations and guidelines and implementing a public participation

program before they submit an application for approval, is considered successful. Regulators and proponents control who participates by their interpretation of “directly affected”. Individuals of the public, on the other hand, must demonstrate that the proposed project has a direct personal impact on them, or have been invited to participate by the regulator or proponent.

Proponents and regulators implement public participation and get the required information to mitigate the potential project impacts, essentially safeguarding private development interest – public participation in environmental assessments is then considered successful. Public interest groups and members of the public at large who are not able to demonstrate a direct personal impact with the project decision are excluded from participating, or their input is given lesser value. For example, as Fluker (2015:580) notes, “a public interest environmental group will have significant difficulty demonstrating it may be directly affected and accordingly has the right to participate”. Furthermore, there are no legal requirements compelling government to abide by the outcomes of the public processes (e.g. hearings findings). For the public, participation in environmental assessments may be precluded or, in effect, meaningless.

Public participation in environmental assessments for energy projects in Alberta is instrumentally prescribed and implemented; filling the checkboxes is the norm and benchmark. Having public participation as a legal requirement has rooted this instrumental rationale to the process. Public participation as a mitigation strategy works in environmental assessments from the proponent and regulator point of view. Conducting public participation for instrumental reasons is not inappropriate, but it does support ends conditions by power structures and, as such, it cannot be part of the sustainable discourse.

Clarification to the public about intent is needed. It is erroneous to assume that public participation purpose is tacitly understood. Public participation evaluation is based on a high

level of assumptions regulators and proponents hold of the practice and spatial processes. If further studies were conducted including the public, it is guaranteed that the assumptions and gaps would only increase, as the public holds an equally high number of assumptions. There is a lack of shared understanding, and I believe this is because public participation has been treated as a practice and not a discipline. By this I mean public participation has focused on the repeated application of methods and tools to achieve outcomes, as opposed to analyzing the problems and reaching to solutions for complex situations through reasoning.

Public participation is characterized by its production in the context of application. It needs to be socially accountable not only in the interpretation and diffusion of results but also in the definition of the problems and setting of research priorities. Public participation cannot be solely oriented to implementation criteria focused on process and outcome; it must address purpose aspects that respond to the impact of the process and justify its continued exercise for the various stakeholders.

#### **5.4 The Variation in the Understanding and Implementation of Public Participation**

It is clear that public participation in environmental assessments for energy projects in Alberta is a process characterized by Fiorino (1990) and Stirling's (2005 & 2008) instrumental rationale. This research suggests that the success of public participation is affected by the purpose and the underlying geographic parameters assigned that guide and regulate it. Success is dependent on perspective. The chosen rationale and spatial definition support some stakeholders and groups, and may be potentially disempowering others.

Advocacy for public participation has become increasingly popular. The public is now more educated about the issues that surround the process – technical jargon, legal requirements,

and measurements. Maintaining the instrumental rationale in environmental assessment processes might not be feasible for much longer. Sustainability concepts have been pushed into the definition and construction of public participation, but its practice might be found contradictory as it tends to reflect dominant power structures. The language and practice that surrounds public participation in environmental assessment needs to be redefined, before trust and public confidence become further barriers to development.

The research findings point to a number of key geographical questions that must be addressed in the public participation discipline, and that have a direct impact on the fundamentals around its discursive process. This study explores the nature of public participation through the analysis of environmental and energy policies and regulations, and the personal experiences of individuals that employ them regularly. Further, while previous research tended to focus on analyzing specific cases and methodologies conducted, this study focused on the examination of two essential dimensions under which public participation occurs. My opinion is that the intention under which public participation is formulated can alter the understanding of its success.

Equally important is the finding that public participation research needs to start linking geographic aspects to its conceptualization. Specifically, I have exposed the lack of direct geographic elements and criteria that guide public participation, while it should structure it. This absence hinders the production of knowledge surrounding the process and disempowers particular groups of stakeholders. For instance, the definition of radius of notification and consultation assume static spaces and condition them, rejecting their dynamic and developing formation.

Public participation formulation, application, and evaluation need to be critically reasoned and redefined. The stipulations set in regulations and the choices made by proponents and regulators can define a biased "success", sometimes contradictory to sustainable principles and expectations. It is not enough to simply comply, collect feedback and repeatedly apply tools and methods of public participation. Rather it is imperative that we seriously consider the direction, functionality and expectation behind public participation so we can build a socially-accountable and reflexive discipline and knowledge base.

Projects like the Trans Mountain expansion exemplify the existing tensions in the public participation process for environmental assessments. This is not specific to Alberta. Globally we continue to see opposition to infrastructure claimed to be critical for development. All projects go through the government functions of project justification, consideration of constraints, project appraisal, and formation of commitments. These functions are spatially constructed and must be analyzed under that light. Public participation must question its own construction if it wants to remain a key tool in the decision-making processes.

#### **5.4.1 Practical Implications of the Research Findings**

Under the instrumental perception of public participation, the current way of doing things is not incorrect. The problem lies in that public participation continues to be advertised as the panacea of environmental assessments when the reality is that it is being conducted in an automatic, mechanical fashion.

While in theory environmental assessment is about the protection of environmental components and the safeguard of public interest, in practice it is about project approval. It is not that environmental sustainability is not an honest concern, it is just not the central objective.

Proponents' goals are to make profit through development and production, while regulators' goals are to allow development that serves the public need of goods and services. Dunkier and Greig (2006) explain cumulative environmental assessment, which considers human generated stresses surrounding the project and their impacts, is difficult to adopt when proponents are focused on project approval and regulators want to make sure the impacts of the project are acceptably small.

Yet it is unfair to generalize that environmental impact assessment and the associated public participation processes are only seen as a regulatory hurdle that must be minimally met to achieve project approval. In many cases proponents and regulators look to design and approve environmentally-respectable projects, however the reality of tight business margins and public fiscal controls result in implementation of processes characterized by the 'minimal effort required'.

The three distinct groups involved in the environmental assessment process – proponents, regulators and the public – do not necessarily grasp the unintended consequences that come into play when choosing parameters and practices. They look at inclusion but not necessarily what gets excluded by what might seem a seamless application. Because of this, it should not be surprising that people rebel or protest project approvals, conditions and overall end results.

Public participation continues to be discussed in 'big aspirational' terms, and under the microscope it is not coming close to meeting those standards. We continue to communicate to all stakeholders the notion of public participation in environmental assessments and expecting them to be calm and accept the fact that their comments are only solicited at the very beginning and end of the process and further more are being validated for their 'appropriateness' and 'value'. Environmental assessment lacks the transparency and firmness to admit the true disposition and

feasibility of its public participation process. The purpose and any weighting assigned to the assessment categories need to be clearly stated to all involved. By making a choice on how to proceed and how to focus on assessment we look to simplify the process and inevitably highlight a particular perspective while excluding others. Proponents and regulators need to acknowledge and come to terms with this.

There is no exhaustive public participation process, there is only a chosen way of doing it, and that is why it is so difficult to replicate, and why the disciplinary practice relies so much on lessons learned from past experiences. In order to really advance Public Participation and make it defensible, it is necessary to:

- Acknowledge and discuss the geographical elements that frame public participation; the various spaces that define it and limit in the specific context of each project.
- Understand that public participation is resource intensive. Money, people and time are needed in order to get a level of ‘acceptance’ from the public.
- Not doing public participation is a valid choice, if we are willing to take the criticism and consequences that come with it. Or calling the process by what it is really is and looks to achieve – mitigation of concerns/reputation.
- Bring the public participation discussion to the realm of its constitution – geography – by looking at other avenues like Public Participatory Geographic Information Systems (PPGIS) and community mapping.

Public participation is highly criticized and it is losing public trust as a valid practice. Professionals in the field continue to focus on definitions, levels, methodologies, tools and failing to see how all of these get constructed as part of socio-spatial discussions. We need to shift the conversations towards ‘spaces of participation’, where social appraisal processes include

perceptions and lived spaces translated into shared concepts (understanding of space), and where social commitment is formed with absolute, relative and relational notions (production of space).

## **5.5 Conclusion**

Energy and resource decision-making is made at the provincial level. This matter. As the research showed, provincial statutes, particularly the energy related ones, are more prescriptive when it comes to public participation. The restrictions imposed by these regulations set the stage for power structures, and development and private interests to be safeguarded and maintained.

There is an historical component to where we find ourselves today in public participation for environmental assessment projects in Alberta. Public criticism and pressure made the courts and the federal government take notice and action to address the obvious lack of ‘no-go’ decisions on projects. However, loopholes continue to resurface taking us back to a reality where there are no rejected projects, and where all concerns can be mitigated in order to move forward with development.

The geographical parameters that constitute public participation can effectively create restrictions. By defining the space in which public participation takes place it is possible to render it meaningless. Whether conscious or unconsciously, public participation for environmental assessments in Alberta is continuously limiting the geography of proposed projects to the local, and by doing so it defines the individuals that are involved in the process. The reality is environmental issues extend beyond immediate boundaries, this has become more apparent under the globalization discourse. However, regulations only address this under a somewhat limited cumulative effects approach. An approach built on expert and technical

knowledge that is not value-free but in reality, value-laden with ethical and moral issues, effectively closes off debate under a science expertise standard.

This also brings to question whose views are considered legitimate or of importance in the process. It goes beyond the typical question of ‘who may participate?’, to the right to public participation in decision-making processes, or in other words who gets to determine public interest. As it stands right now regulators and proponents have no obligation to hear the public at large, concerns can be dismissed if individuals and groups cannot demonstrate how a project may personally affect them. Relational claims built on spatial dynamics and relationships are essentially excluded from public participation processes.

For the public to effectively participate in the environmental assessment process and hold the government accountable for the direction and science of policy and regulations, public participation must be accepted as means to influence decisions of public interest. The inclusion of public participation in environmental assessments, as it stands today, only answers to views of efficiency and efficacy. Public participation has moved to the political realm, where power structures are protected and obviously at play. For public participation to be effective, the right thing at the right time and space, it must be capable of producing change and making a difference.

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**APPENDIX A: METHODOLOGICAL TOOLS**

## APPENDIX A: METHODOLOGICAL TOOLS

### On-line Survey

#### Purpose of the Study

The present research looks to characterize the range of variation that exists in the conceptions of public participation requirements (excluding aboriginal consultation) and their fulfillment in Alberta environmental legislation, and how it affects its effectiveness.

The research will look to:

1. Compare the regulatory frameworks for energy projects requiring environmental assessment in Alberta;
2. Evaluate the theories of public participation that, either explicitly or implicitly, underlie these framework;
3. Compare and contrast the methodologies used to evaluate public participation; and
4. Examine the gaps and pitfalls of Public Participation

*THANK YOU FOR PARTICIPATING IN THIS SURVEY ON PUBLIC PARTICIPATION*

*Your consent will be implied by your completion of this survey. To convey that you understand and agree to participate, please press I CONSENT to continue.*

0. *Please provide your name and contact information (only for follow -up and clarification purposes - Surveys will be confidential)*
1. *Are you a proponent or regulator?*
2. *What do you understand by Public Participation?*

***From the scale from 1 to 4. Being 1 Strongly Agree and 4 Strongly Disagree, answer the following:***

3. *Would you say that the concept of public participation for the environmental assessment you participated in was clearly understood by all parties?*
4. *Do you think there was a clear legal framework stipulating how stakeholders or affected individuals are defined?*
5. *Do you think there was a clear legal framework stipulating how Stakeholder are recruited or included in the process?*
6. *Do you think there was a clear legal framework stipulating how Environmental issues are defined?*
7. *Do you think there was a clear legal framework stipulating how Risks and level of effect is determined?*
8. *Do you think there was a clear legal framework stipulating how Gathered information is included in project/decision?*
9. *Do you think there was a clear legal framework stipulating how Meaningfulness/success is evaluated?*
10. *Do you think there was a clear legal framework stipulating how Lessons learned are made public?*
11. *Do you think the basis for planning and evaluating public consultation processes changes constantly?*
12. *Do you think the time and resources allocated for the project regarding public participation where sufficient?*
13. *Did the results obtained match your expectations?*
14. *Do you think public participation adds value to environmental assessment project?*

15. *Would you say public participation is just a symbolic action to prevent criticism and give the appearance that people are being treated fairly?*

16. *Who would you improve Public Participation in environmental Assessments?*

## **Semi-structured Interview**

Before the interview starts

- 1.- Make sure interviewee is aware the session is being recorded and consent is verbally given
- 2.- Remind interviewee that

Data will be confidential

Analysis will not attribute statements to individuals

They are free to speak "off the record"

They can end the interview at any time

- 3.- Give the interviewee the handout with all the questions and briefly outline the structure of the interview. Prioritize questions if they have to leave

*Thank you for participating in this research. As it was explained to you the research aims to:*

*Review the process of public participation in environmental assessment projects*

*Review the outcomes of those projects*

*Nature of your involvement*

1. *Are you a proponent or a regulator in the environmental assessment process?*

*Clarifying the term*

2. *What do you understand by public participation in environmental assessments? Please explain*
3. *Were you explained the meaning of public participation in the projects you were involved in order to have a common language? Please explain*
4. *Did all the stakeholders in the projects you were involved understand the same as you did by public participation? Please explain*

*Implementation*

5. *How are the environmental effects/risks identified in a project? Please explain*
6. *How do you know you must include public participation in your project? Please explain*
7. *What tactics and methods do you employ to ensure affected parties are included? Please explain*
8. *How are the timelines/resources managed on public participation exercises? Please explain*
9. *What criteria do you follow/include when designing/evaluating public participation exercises? Please explain*

*Impact*

10. *What are your opinions about having public participation as a legal requirement? Please explain*
11. *What are your expectations when initiating a public participation process? Please explain*
12. *How does public participation affect a project/decision? Please explain*
13. *How does public participation add value to environmental assessment project, in your view? Please explain*
14. *How would you improve public participation if it doesn't add value? Please explain*

15. *Do you think there is a relationship between public participation process for developing the projects and their success? Please explain*

*Benefits*

16. *What were the best aspects of the public participation process of the projects where you were involved?*

17. *What were the worst aspects of the public participation process of the projects where you were involved?*

18. *How would you judge the projects you were involved in terms of public participation? Please explain*

19. *Would you say that the findings in public participation affected the original project design? Please explain*

*Other Comments*

20. *Do you have any further comments or questions?*

Notes: Thank the interviewee for time and opinions. Inform a short summary of findings will be sent. The inputs will be used as part of the research.

Total interview time:

Switch the recorder off