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Public participation in strategic environmental assessment (SEA): Critical review and the Quebec (Canada) approach

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ABSTRACT

It is widely accepted that public participation must be a part of strategic environmental assessment (SEA) procedures, and yet few studies have been conducted on the implementation of SEA public participation procedures. Accordingly, the theoretical and practical aspects of public participation in SEA remain research priorities for environmental policy-making. This paper presents a review of the Quebec (Canada) model of public participation in SEA through an evaluation of six public hearings on proposed directions and policies concerning, respectively, hazardous waste, forest protection, residual materials, energy, water management and pig farming. First, the authors examine the theoretical dimensions of SEA and public participation in the process. Second, they give a summary of the lessons that can be learned from the few Canadian and international experiences. Third, they outline the Quebec experience. Finally, they conclude by evaluating the opportunities and limitations of the Quebec experience and make some recommendations to improve its application.

Contents

1. Introduction . . . 48
2. Public participation in SEA: theoretical considerations . . . 49
 2.1. Environmental assessment and sustainable development . . . 49
 2.2. SEA, public participation and planning theories . . . 49
3. Critical review of public participation in SEA: lessons from international experience . . . 50
 3.1. Major findings . . . 50
 3.2. Major constraints on implementation . . . 51
 3.3. Key points . . . 52
4. Quebec experience in environmental policy assessment . . . 52
 4.1. Background . . . 52
 4.2. Public hearings on proposed directions and policies for Quebec: characteristics and special features . . . 53
 4.3. Critical analysis elements . . . 57
5. Conclusion . . . 58
Acknowledgements . . . 59
References . . . 59

1. Introduction

For more than 20 years, strategic environmental assessment (SEA) has been recognized as a rapidly developing field of research and application with potential to foster sustainable development (De Boer and Sadler, 1996; Fischer, 2010; Gibson, 2006; Lee and Walsh, 1992; Partidario, 1996; Sadler and Verheem, 1996; Smith and Sheate, 2001; Therivel, 1993; Therivel and Partidario, 1996). Moreover, it is widely accepted that public participation must be integrated in SEA procedures

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because this allows information relevant to the decision-making process to be included and it increases the credibility of the selected programs, plans and policies (PPPs) (IAIA, 2002; Rauschmayer and Risse, 2005; Runhaar and Driessen, 2007; Sadler, 1996; Sadler and Verheem, 1996; Therivel and Partidario, 1996). It is recognized that public participation ensures a more open, democratic and transparent decision-making process in general, increases population representativeness, and makes it possible to identify conflicts and eventually resolve them. These assumptions are predicated on the role and scope of public participation in the traditional environmental assessment of specific projects. For several reasons, however, it may seem difficult *a priori* to transpose this experience of public participation from environmental assessment of projects to SEA procedures. The result is that theoretical and practical aspects of public participation in SEA are still research priorities for environmental policy-making (Sadler, 1996) and continue to present challenges (Lee, 2006). "There are gaps and deficiencies in the literature documenting the practical implementation of SEA including the extent, means and timing of public participation" (Chaker et al. 2006, p. 49).

First, we examine the theoretical dimensions of SEA and public participation in the SEA process in order to set our study in the context of sustainable development and planning theories. Second, we present a summary of the lessons that can be learned from the few Canadian and international experiences of public participation in SEA procedures. Third, we compare the Quebec experience with "international best practices" and its contribution to knowledge on SEA. We outline and analyze the Quebec experience by means of six case studies of public hearings on proposed directions and policies. We conclude by assessing the opportunities and limitations of the Quebec experience and make some recommendations to improve its application[3].

2. Public participation in SEA: theoretical considerations

2.1. Environmental assessment and sustainable development

Environmental assessment is a practice that develops in an evolving world (Sadler, 1996). Accordingly, it was initially considered an additional constraint on production that generated extra costs. The emergence of sustainable development as a concept has completely changed views on this matter. Currently, it is recognized — but not yet fully assumed — that taking into account environmental factors is in fact one of the conditions of production. We are thus moving from a reactive stance, as conveyed by environmental impact assessment (where project design is a technical phase preceding environmental assessment), to a proactive stance, as conveyed through recent forms of SEA (where design incorporates environmental matters from the outset) (Brown and Therivel, 2000; Lee, 2006), even through recent contributions on sustainability assessment (Smith and Sheate, 2001; Pope et al., 2004; Gibson, 2006). Simos (1990) has shown very clearly that the two approaches have different consequences for ways of conceptualizing public participation. In the first case, the technical approach relies on experts who possess scientific objectivity, and the political approach, being subjective by nature, is not really accepted. Here, participation is often limited to a consultation during which the project proponent must convince the public of the merits of the planning exercise. In the second case, the technical and political approaches work together and feed off each other. The experts' scientific approach establishes its legitimacy not because they are supposedly objective but because they convey the underlying values in simple terms and apply a straightforward method. Experts are seen as members of a group of stakeholders searching for solutions.

Brown and Therivel (2000, p. 184) provide a conceptual definition of SEA, highlighting the importance of taking environmental considerations into account as early as possible in the decision-making process, i.e. when PPPs are developed and formulated:

> …a process directed at providing the proponent (during policy formulation) and the decision-maker (at the point of policy approval) with a holistic understanding of the environmental and social implications of the policy proposal, expanding the focus well beyond the issues that were the original driving force for the new policy.

Environmental assessment involves the determination of environmental impacts and it has two essential components: the evaluation of impacts on the environment (or impact study) and the formulation of public participation strategies (Gariépy, 1991). This form of public participation can be defined as public engagement in the decision-making process (Roberts, 1995). "Public participation" is a generic term covering several mechanisms and practices that are different in mode, degree of formality, and timing in the decision-making process. It ranges from the provision of information and consultation to consensus-building, mediation and negotiation.

Canter (1996, p. 587) proposes a comprehensive definition in the context of environmental assessment:

> "Public participation" can be defined as a continuous, two-way communication process which involves promoting full public understanding of the processes and mechanisms through which environmental problems and needs are investigated and solved by the responsible agency; keeping the public fully informed about the status and progress of studies and implications of project, plan, program and policy formulation and evaluation activities; and actively soliciting from all concerned citizens their opinions and perceptions of objectives and needs and their preferences regarding resource use and alternatives development or management strategies and any other information and assistance relative to the decision.

2.2. SEA, public participation and planning theories

Strategic environmental assessment, as a planning approach, is designed to be a process fostering sustainable development and wellness of individuals and communities. In that sense, as Gariépy (1991) has pointed out, it is in line with the conventional rational comprehensive planning of the 1950s and 1960s (Alexander, 1986) and with the view of planning as a decision-making support tool helping communities to make meaningful choices in light of predetermined objectives. From this perspective, SEA strengthens individual freedom by increasing the number of options available to stakeholders and helping them to make an enlightened decision. SEA is based on a comprehensive overview of the situation and provides tools for reaching specific goals; it refers to structural transformations and to collective choices based on scientific knowledge reflecting a positivist, deterministic and linear logic. Communication takes place only between the expert and the decision-maker; no outside communication is deemed useful.

However, according to several authors, environmental assessment is entering a postclassical rational planning phase (Fisher, 2003; Lawrence, 2000) and is now strongly influenced by the interactive planning stream. Interactive (joint or communication-centred) planning relies on interactive dynamics involving dialogue, sharing opinions and arguments and emphasis on a holistic, constructivist approach focused on merging knowledge and action (reflective thinking in action) (Fischer and Forester, 1993; Forester, 1989; Forester, 1999; Healey, 1997). It refers to structural transformations and to collective choices based on integrative negotiation of issues with innovation in mind (confrontation being perceived as revealing differences from which imaginative solutions emerge). Vincente and Partidario state:

[3] For the first study of this research program, see Gauthier et al. (1999).

> It is time to link technical approaches to socio-political debates, increasingly prominent in the multiple negotiations that are at the core of decision-making processes (…) It has long been argued that SEA must be shaped by the needs of decision-making to enhance its role in improving the environmental quality of decisions. Investing on the communicational aspects in the linkage of SEA with strategic decision-making is critical and can be seen as a key condition for the achievement of this role, so that SEA can be accepted as relevant because of the added value it brings to decision-making. In other words, communication should aim at creating conditions for an intuitive integration of environmental values with decision values. (Vicente and Partidario, 2006, p. 703–704).

With respect to SEA, authors generally agree to divide approaches into two broad categories (Partidario, 1996; Sadler, 1996; Pope et al., 2004). The first category, which corresponds to the standard model, extends practical knowledge of environmental impact assessment (EIA) of projects to the evaluation of PPPs by applying not only its principles but also the legal procedures and requirements applicable to each step. The second category reflects a policy planning and evaluation perspective in which environmental assessment principles are integrated in the formulation of PPPs through the identification of development needs, issues and options and their assessment against sustainable development criteria. Under this integrated environmental management model, SEA is part and parcel of a global process of PPP development.

Under the classical rational planning model (Alexander, 1986), public participation comes into play in the later stages of the planning process, after the environmental impact assessment. Public participation essentially performs a validation function, opening up the decision-making process to the public and at the same time serving to verify social acceptability and negotiate mitigation or compensatory measures. In this context, the environmental assessment process allows only for the establishment of public eligibility requirements for proposed initiatives by determining the means by which the projects will be made to fit in with the environment, such as mitigation or compensatory measures.

However, this model has encountered not only the limitations of scientific knowledge but also the difficulty of taking into account the complexity of human systems. Moreover, the process ends up being time-consuming and costly, producing major disparities between initial intentions and the end result (implementation gaps). This model has also been shown to be unsuitable for finding common ground between multiple, diverging and even conflicting interests and for taking into account the multiple interests involved in the environmental decision-making process.

After more than 30 years of environmental assessment and related experiences, it became evident that we needed to adopt an integrated and negotiated environmental management model based on an open process for all stakeholders, an appreciation of issues, flexibility and adaptability (Lang, 1986; Sadler, 1986; Taylor et al., 1995). This model, which is focused on participation and cooperation of all stakeholders, is more closely aligned with the current interactive or communicational planning approach. Margerum (1999, p. 151) refers to integrated management of the environment in action in these terms: "A diverse group of stakeholders comes together, shares information and perspectives, fosters mutual understanding, and develops a collaborative approach to managing an environmental system." Ever-greater emphasis is placed on introducing flexible procedures and keeping all options open. This allows for ongoing modifications based on learning processes (Bina, 2007; Simard et al., 2006; Sinclair and Diduck, 2001) and development of various forms of knowledge (e.g. vernacular). Public participation facilitates the analysis of all the options, including "non-action" and the best option from a strictly environmental point of view, which is the one usually articulated by environmental protection groups. In short, this approach focuses on issues of collective action, i.e., on relationships between the stakeholders (local elected representatives, planners, experts, interest groups, citizens, etc.) with a view to resolving problems based on intersubjective understanding (role of representations) as a basis for action.

Under the emerging integrated model, public participation takes place continuously during the planning process in order to facilitate sustainable development. In anticipation of this emergence, the environmental assessment process is seen as a prime tool for local communities to take ownership of their own development and to manage their future. It is also seen as a powerful tool for tiering political, spatial and temporal issues relevant to different levels.

3. Critical review of public participation in SEA: lessons from international experience

A literature review focusing on the importance of public participation in SEA in Canada and in some of the countries with the most experience in the field[4] has yielded major findings and some original guidelines on the subject and enabled us to determine the main constraints on the development of public participation in SEA. Moreover, the characteristics identified will shed light on the Quebec model and help us gain a better understanding of it.

3.1. Major findings

After close to twenty years of existence in the countries under study, SEA has evolved from a fairly restricted practice before 2000 into a more widespread one over the last few years. SEA theory and practice has gained in popularity (Brown and Therivel, 2000; Chaker et al., 2006). At the same time, application of SEA is becoming increasingly widespread. Even when SEA is a statutory requirement, as is the case with the United States, Eastern Australia and Canada, the preliminary screening phase to determine the need for SEA relies on a discretionary mechanism — that is, it is subject to individual case studies. Decisions reached generally depend on a significant or major impact of a PPP rather than on lists of inclusions or exclusions.

In general, SEA is practised more frequently when related to plans and programs, as in the case of European Commission countries governed by the European Directive on SEA (Risse et al., 2003) than when related to policies and laws, because the scope of the assessment is more closely connected to traditional, projected-oriented practices. Whenever public participation takes place at the strategic level, even if it is unofficial, it starts right from the evaluation or scoping phase of the impact study and from external examination through public hearings.

The practice of SEA in the United States, Western Australia, New Zealand and the Netherlands shows a broad range of examples of public participation in the development of plans and programs that can foster citizens' involvement in setting objectives and conducting a comparative evaluation of options. In that context, a recent study suggests that two factors contribute to SEA success: (1) flexible SEA that fits into the decision-making framework; and (2) stakeholder participation (Runhaar and Driessen, 2007). According to some authors, public participation in SEA presents several benefits when it is carried out upstream in the process, including early identification of possible problems and thus avoidance of delays due to public opposition (Fisher, 1999; Sheate, 1994). Other possible benefits according to Brown and Therivel (2000) and Rauschmayer and Risse (2005) are: increasing transparency in decision-making; enabling third parties to review the analysis and conclusions of the public representatives; proposing alternatives and mitigating measures; requesting explanations on environmental impacts; helping to avoid controversy, confrontation and delays in the decision-making process due to public opposition; fostering expertise

[4] The literature review is based mainly on an analysis of studies focusing on the United States, Eastern Australia, New Zealand, the Netherlands and European Commission experiences that seem to involve the countries or political institutions that are the most advanced on the issue.

sharing; reinforcing adherence to PPPs before they are adopted; and ensuring better application.

However, ensuring public participation in SEA is often limited to informing the public or consulting a few concerned groups. Contrary to the practice in Quebec, public participation often takes the form of a *selective consultation* of invited interest groups, local community representatives and other groups directly concerned by government PPPs (Sadler and Verheem, 1996). Moreover, little effort is made to extend public participation to all phases of the decision-making process.

Lastly, the variety of PPP development processes in governing bodies complicates the task of implementing an SEA procedure that can serve as a model throughout the organization concerned. The literature shows that research tends to focus on the creation of PPPs, SEA typologies and customized approaches (Therivel, 1998). It also shows that civil servants fiercely resist implementation of a uniform, mandatory framework for the conduct of SEA. Accordingly, there is often a preference for the voluntary nature and flexibility of SEA (Devuyst et al., 2000). In most administrations, the prevailing context in recent years has been partly reflected in cutbacks in human and financial resources, and government officials often refer to the additional workload generated by an SEA as a major constraint.

In Canada, the Commissioner of the Environment and Sustainable Development (CESD) from the Office of the Auditor General of Canada on the implementation of the SEA drew the following conclusion in her 2004 report:

> Overall, our audit found a low level of commitment in departments and agencies toward conducting strategic environmental assessments, despite the Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals, which was first issued 14 years ago. The results of our audit, taken together, suggest that most departments have not made serious efforts to apply the directive. In fact strategic environmental assessment is far from meeting its promise in guiding policy, plan, and program development. (…) We found insufficient commitment by senior management in some departments, which impedes the development of necessary management systems to implement the directive. (…) No department or agency in particular has been tasked with the responsibility and authority for the overall monitoring of compliance with the Cabinet directive. Nor has a department or agency been tasked with the responsibility and authority for quality assessment and continuous improvement of the assessment process (Canada, 2004, p. 1 and 28).

Few SEAs were conducted by the 12 departments and agencies included in this audit even for the three departments that the CESD evaluated in detail in the years examined (2000, 2001, and 2002) and "few of the assessments reported on the need for, or the results of, the consultations relevant to the strategic environmental assessment" (Canada, 2004, p. 15). The Commissioner made the following recommendation:

> Deputy heads, of all departments and agencies included in this audit, should ensure that their organization is fully implementing the Cabinet Directive… on the Environmental Assessment of Policy, Plan and Program Proposals. They should ensure that their organization has a management system in place for the proper application of the directive. This system should include the following steps: (…) establish quality control, consultation, communication, follow-up, and evaluation procedures (Canada, 2004, p. 17–18).

Since January 2004, the 1999 Cabinet[5] Directive on SEA of PPPs includes a requirement for a public statement of environmental effects. For the Government of Canada, "(…) this will assure stakeholders and the public that environmental factors have been appropriately considered when decisions are made."[6]

In the most recent audit (2008), the Commissioner of the Environment and Sustainable Development states that progress since 2004 has been unsatisfactory:

> "Most of the departments we examined are not preparing public statements of their detailed environmental assessments, as required by the Cabinet directive. When public statements are released, they are generally difficult to locate and often do not contain sufficient information to assure stakeholders and the public that environmental factors have been integrated into the decision-making process — the stated objective of the requirement" (Canada, 2008, p. 2).

A recent research project on SEA practices involved comparing 10 Canadian cases, and the researcher's conclusion is similar to that of the Commissioner:

> "Most cases provided an opportunity for some level of public involvement and public review of the completed assessment document; however only one case, the Capital Regional District's RGS, clearly demonstrated an opportunity for formal appeal of the process or decision output. In those cases were separate, public review panels were established *[sic]* for the assessment, they were either not involved in the development of the terms of reference or establishing the scope of the assessment (AECL), or served only an advisory role (British Columbia Salmon Aquaculture Review)" (Noble 2009, p. 73).

3.2. Major constraints on implementation

Numerous constraints or threats can be added to the list of explanations for the difficulties encountered in implementing public participation in SEA (Risse et al., 2003; Chaker et al., 2006). As already pointed out by Therivel and Partidario (1996) and Rauschmayer and Risse (2005), the first set of difficulties concerns the confidentiality and the complexity of the PPP planning process, constraints that are often invoked to justify the lack of, or insufficient openness to, public participation.

For reasons of confidentiality and complexity, few SEAs have involved a concerted effort to seek and respond to public opinion. The PPP may be considered too sensitive for public debate prior to approval, or consulting the public on a nation-wide or region-wide issue may simply be too complex an undertaking. Often the general public does not comment on strategic decisions, even in cases where its input is actively sought. Instead, the public is often represented by pressure groups and elected representatives. A related difficulty is that of targeting the affected groups because of the very broad span of the PPP evaluation in terms of regions, jurisdictions and activities.

In short, even in the most democratic systems, opening up the SEA process to public participation faces many constraints (Partidario, 1996). The government officials responsible for designing the process are not always able to make the information available to the public and to create the appropriate climate for discussion and public participation, because some aspects are under the control of relatively closed, external decision-making authorities. Interest groups somehow manage to influence the information and consultation flow process and to restore some balance but, as Partidario explains, the constraints are still significant:

[5] The executive of government.

[6] "Departments and agencies shall prepare a public statement of environmental effects when a detailed assessment of environmental effects has been conducted through a strategic environmental assessment." http://www.oag-bvg.gc.ca/domino/reports.nsf/html/c20041004se01.html.

> However, a certain degree of influence by interest groups through critical analysis and political pressure is necessary to ensure collective responsibility in the development and adoption of policies that aim to be environmentally sound and sustainable. Questions of confidentiality and constitutionality may also arise, determining severe constraints to an open and accountable assessment and decision-making process. This raises quite complicated constraints to effective SEA, sometimes even in more open political systems (Partidario, 1996, p. 37–38).

In short, for political or commercial reasons, the production or disclosure of data needed for Public participation in SEA can face opposition from a variety of private and public stakeholders. In fact, despite the recognition and relevance of public participation in the decision-making process, most planners and administrators see it as being problematic. They often think that participation decreases the efficiency of the decision-making process because it lengthens performance timelines, adds costs and imposes constraints on the planning process. According to a study conducted in Belgium, government officials are the stakeholders who are the least in favour of public participation in SEA (Devuyst et al., 2000). On the other hand, some authors claim that public participation upstream in the decision-making process prevents blockages that produce much longer delays (Fisher, 1999; Sheate, 1994). Thus public participation is often seen as a supplement to the conventional planning approach and as a means of validating it, rather than as an integral component of the administrative planning process. Generally, rational planning and public participation have often been perceived as being at opposite extremes.

Other major constraints on the implementation of public participation in SEA found in the literature include the following:

- civil servants' lack of awareness and training (Canada, 1998; Bass, 1990; Devuyst et al., 2000);
- the lack of expertise within the general public on PPP issues when PPPs are proposed well upstream in the development process (McCarthy, 1996);
- the lack of public interest in the rather abstract character of PPPs when proposed well upstream in the process (Verheem, 1992; Sippe, 1996);
- the fact that SEA does not exclude EA of projects and does not foster strong participation by various public groups with limited capacity to invest time and resources;
- the absence of impact statements for the evaluation of PPP proposals and comparison of options — these statements could serve as reference documents to better prepare the general public for participation in SEA.

3.3. Key points

In addition to the difficulties of implementing public participation in SEA, we have identified several original proposals or specific "innovations" in the literature that foster public participation or mesh with the principle of transparency in general and with the openness of the decision-making process and SEA in particular. Here are the main points:

- Participation mechanisms during the examination or scoping phase: public meetings, thematic workshops, selective consultation, public hearings (in the United States: Berdoulay and Soubeyran, 1996, Webb and Sigal, 1992 and 1996; in New Zealand: Partidario, 1996).
- Obligation for the responsible authority to hold a public consultation and to produce a summary of comments and questions from the public (United States: Webb and Sigal, 1996; Western Australia: Sadler, 1996) that can be validated after the fact by the people concerned (New Zealand: Partidario, 1996).
- Particular incentive measures for specific categories of the population (Western Australia: Sadler, 1996).
- Existence of legal grounds for or specific rights to public participation: appeal procedures at various stages of the decision-making process, right of access to information and participation (Western Australia: Sadler, 1996), and appeal to the Environment Court (New Zealand: Dixon and Fookes, 1995).
- Creation of independent expert commissions that facilitate exchanges and production of information through their questions and opinions (Netherlands: Verheem, 1998).
- Existence of a financial aid program to support stakeholders during public participation, as is the case under Canadian legislation on environmental impact assessment (for project only).

The study of international cases shows that there is still only limited public participation in SEA. From a theoretical point of view, it is strongly encouraged for both the practitioner in the field and for the university researcher (Hedo and Bina, 1999), but the literature shows that, even though it occasionally takes on interesting, innovative forms, public participation faces several major constraints, is conducted in a piecemeal fashion, and too often occurs downstream in the decision-making process.

The implementation of SEA and public participation is thus a victim of the times. In the context of widespread environmental deregulation in Western countries, reflecting an increasingly "fuzzy" formulation of the legal framework (Horton and Memon, 1997; OECD, 1997) where governments vacillate between "must" and "can" and where responsibility and accountability of processes are lost because of poor governance, SEA and public participation end up being swept away by misinterpretations of the relevance and intensity of the actual application of SEA and public participation, and by the establishment of ad hoc, forced relationships between SEA and public participation requirements.

4. Quebec experience in environmental policy assessment

4.1. Background

In 1978 Quebec modified its *Environment Quality Act* (L.R.Q., c. Q-2), which led to the establishment of the Procédure d'évaluation et d'examen des impacts sur l'environnement (PÉEIE), or Environmental impact assessment and review procedure, under the responsibility of the Ministère de l'Environnement (MENV-Department of the Environment)[7] and to the creation of the Bureau d'audiences publiques sur l'environnement[8] (BAPE), or Public hearings office, which was given responsibility for managing the public participation part of the procedure.[9]

Contrary to the situation in a number of industrialized countries, the scope of the environmental assessment process in Quebec is still restricted to the review of large-scale development projects such as power plants or lines, highways and major industrial projects. Accordingly, the Quebec Environmental impact assessment and review procedure does not include specific provisions for strategic environmental assessment. However, the *Environment Quality Act* and the

[7] The official title of this department has changed several times over the years. In the interest of consistency and clarity, we have used "Department of the Environment" throughout the article.

[8] "The Bureau d'audiences publiques sur l'environnement is an independent agency that reports to the Minister of Environment and Parks. Its mission is to enlighten government decision-making in a sustainable development perspective, which encompasses the biophysical, social and economic aspects. To carry out this basic mission, the BAPE provides information, makes inquiry and consults the public on projects or questions related to the quality of the environment submitted to the BAPE by the Minister. The BAPE then prepares inquiry reports on these files. A government agency entrusted with an advisor role, the BAPE has no decision-making power". <bape.gouv.qc.ca/sections/bape/organisme/eng_organization_ind.htm>.

[9] For a history of the institution and various experiences, see Gariépy et al. (1986), Gariépy (1991), Simard et al. (2006), Gauthier and Simard (2007).

Regulation respecting environmental impact assessment and review explicitly provide for consideration of two types of programs that are subject to the same assessment procedure as projects are: (1) dredging, digging, filling, straightening-out or filling-up programs for watercourses, and (2) pesticide-spraying programs for non-agricultural purposes. A total of 10 programs have been referred to the BAPE. Its investigations and public hearings are general-purpose and serve to establish general rules and principles for particular categories of projects.

In 1988, however, a committee[10] tasked by the Quebec Minister of the Environment with re-examining the Environmental impact assessment and review procedure recommended making environmental assessment a more widespread practice by considering especially the strategic planning and decision-making steps, incorporating the various measures to better inform the public, and increasing its opportunities for taking action (Québec, 1988). Referring to a study published by the BAPE (Gariépy et al., 1986), the committee expressed its regret that, unlike several other environmental assessment procedures, including the Canadian and American ones, the Quebec procedure did not provide for public consultation as part of the strategic step of reviewing the scope of an EIA. The committee therefore recommended the establishment of a mechanism to promote public involvement from the moment work on the ministerial order for an EIA began.

A second review of the environmental assessment procedure was conducted in 1992 by a parliamentary committee called the Commission parlementaire de l'aménagement et des équipements de l'Assemblée nationale (Québec, 1992). At the time, environmental groups criticized the government's slowness in involving citizens in the process, the lack of access to information, and the fact that policies, plans and programs were not examined under the procedure. Project proponents asked for relief from regulations, for a faster and more predictable procedure, for business confidentiality and, above all for debate to be limited to the proposal itself rather than to government programs and policies.

In December 1992, following these reports on procedure review, the Quebec government tabled a bill amending the *Environment Quality Act*.[11] The main thrust of the bill was to integrate environmental assessment of policies and programs in the procedure. However, the bill was not enacted and was never enforced, mainly because of irreconcilable points of view on SEA. But in June of 1995, the Quebec Department of the Environment issued a new proposal for reforming environmental assessment, triggering the concept of SEA (Québec, 1995a). In December 1997, the Comité interministériel sur le développement durable (CIDD), or Interdepartmental committee on economic development, operating within the Department of the Environment, which is responsible for coordinating government action on sustainable development matters, recognized "the development of instruments for environmental assessment of policies and program as a priority" (Risse, 1998). In a working document, the committee proposed an approach for Quebec (Québec, 1999) involving recognition of the principle of public consultation, proposals for targeted participation during the scoping phase, and broader and more open participation of the general public in exhaustive SEA cases. Since the early 1990s, like most industrialized countries (OECD, 1997), Quebec had embarked on a reform of its environmental policies, shifting the focus towards regionalization, deregulation and accountability of local and regional stakeholders, including corporations, municipalities, associations and citizens (Québec, 1996a, 1997a). In this context of restructuring environmental policies and management methods, environmental assessment procedures and practices were likely to be revised. Specifically, the Groupe de travail sur l'allégement réglementaire, or Working group on deregulation (Québec, 1998a), which was responsible for advising the Quebec government on policies and methods to reduce the burden of administrative requirements for corporations, recommended that the government "move quickly to reform the environmental assessment program, especially in order to streamline the procedure, applying it only to major public or private investment projects, and to significantly reduce associated costs and delays for corporations" (p. 28) [our translation]. Thus, from the point of view of those who perceived strategic environmental assessment as a process alleviating regulatory constraints on projects, the introduction of strategic environmental assessment seemed to be a promising line of attack for rationalizing the environmental evaluation process with sustainable development in mind. Since then, an interdepartmental consultation on a reform proposal has been launched with the goal of proposing an administrative approach geared to the Quebec context. However, no statutory amendment has yet been passed. This is quite astonishing in light of the fact that, in 2005, the new (Ministère du Développement Durable, de l'Environnement et des Parcs (MDDEP), or Department of Sustainable Development, Environment and Parks, tabled a bill on a "Quebec sustainable development strategy" providing for SEA as a tool for implementing sustainability. The bill was passed, but without the SEA provisions.

4.2. Public hearings on proposed directions and policies for Quebec: characteristics and special features

In Quebec, there is no formal procedure for the environmental assessment of PPPs. However, since the beginning of the 1990s, the BAPE has held five public hearings on proposed directions and policies[12]: hazardous waste (Québec, 1990); forest protection (Québec, 1991); residual material management (Québec, 1997b), water management (Québec, 2000); and pig farming (Québec, 2003a,b). In 1995, a public hearing was also held on the Quebec Energy Policy under the stewardship of the Table de consultation du débat public sur l'énergie, or Public consultation table on energy (Québec, 1996b). Table 1 shows the major characteristics of these public hearings on proposed directions and policies. In a summary analysis of the hearings, Genest (1996a, p.1) defines the BAPE experience in the following way:

> From those experiences, it is possible to define environmental and social assessment of policies and programs as a public review process consisting in the evaluation of biophysical and socio-economical impacts of a policy or program, the evaluation of its pertinence on the basis of benefits and drawbacks and, where appropriate, the search for alternative solutions better adapted to the needs, expectations and requirements of the population.

The characteristics and special features of BAPE public hearings on proposed directions and policies are presented here under in nine points.

1. Project proponent
   Two cases involve the voluntary initiatives of sectoral departments (forestry and energy). The other cases involve mandates assigned by the Department of the Environment following a catastrophe (hazardous waste), a controversy (water management), or claims by individuals (waste management and pig farming). The MENV mandate appears to be typical of the SEA experience in Quebec.[13]
2. Mandate, costs and duration
   In the majority of cases (hazardous waste, residual materials, water management and pig farming), the reviews conducted are the result of explicit mandates given to the BAPE by the Quebec Minister of the

[10] Mr. Paul Lacoste, former president of the Université de Montréal, chaired the committee.

[11] Bill 61 amending the Environment Quality Act.

[12] Mandates assigned under BAPE authority to investigate pursuant to Section 6.3 of the *Environment Quality Act*.

[13] An SEA program aimed at providing a framework on offshore oil and gas exploration and development is going on under the responsibility of the Ministère des Ressources naturelles et de la Faune (MRNF) or the Department of Natural Resources and Wildlife <http://sea.gouv.qc.ca/index.asp>.

Environment under Section 6.3 of the *Environment Quality Act*, specifying the scope and the range of the review, setting the duration of the evaluation process, and clearly stating that the results of the consultation will be taken into account in policy-making. However, the scope and range of the consultation on forest protection strategy, which the Minister of the Environment assigned to the BAPE at the request of the Minister of Forestry, were not specified. In 1989, the Ministère de l'Énergie et des Ressources du Québec (MER), or Department of Energy and Resources of Quebec, introduced its policy on the use of pesticides in the forest environment, reflecting the findings of several BAPE investigations and public hearings on airborne insecticide spraying programs against the spruce budworm and on the use of herbicides in forests. The policy included a formal commitment by the Department to prepare a forest protection strategy and to submit it voluntarily to a public consultation process. The consultation on energy was assigned to two independent groups: (1) an expert and information committee and (2) the Consultative table on energy. This mandate was assigned by the Minister of Natural Resources to make good on commitment by the governing party in its election program. The consultation objective was clear: to adopt a new policy on energy with directions and content to be directly influenced by the public.

The costs of the public consultations were between $735,000 and $2,038,000.[14] The total duration of the hearings varied from eight months to almost two years, and they were held in two stages in every region of Quebec.

3. Approach and procedure
   The overall BAPE approach for public hearings on proposed directions and policies was to conduct a social and public investigation, which means that it attached a great deal of importance to public participation, as opposed to expert or legal commissions of inquiry. The procedure was essentially the standard BAPE procedure for project assessment: a framework comprising an information phase and a two-step public hearing phase including a question period and a period for the hearing and submission of position papers. For the public debate on energy, the procedure comprised information and consultation phases, based on the standard BAPE format but slightly modified to speed up the process. The first phase was referred to an information and expert committee, while the second was held under the authority of the Consultative table on energy and involved the participation of key private, public and association sector stakeholders active in the energy field. According to some, this is a unique model that allows for the integration of environmental and social considerations in the policy development process, and the consensual nature of the procedure lends a great deal of legitimacy to the reports submitted to decision-making bodies. According to others, the consensual procedure does not facilitate the accurate and detailed analysis needed to generate the required comparative assessment of the different options, their costs and their benefits.
4. Documentation
   Public consultation is conducted on the basis of public information and consultation material prepared mostly by the department promoting the proposed policy. The material takes the form of a guidance document or a policy proposal. The documents are widely available, are high-quality, and are supported by regional updates and other documents on issues and directions. However, they do not actually constitute environmental impact assessments comparing the different options. In certain cases they are policy proposals that include objectives and priority actions (e.g. residual materials). In other cases, they are general documents that illustrate the situation very broadly and raise many questions likely to be of public concern (e.g. water management). The Commission of inquiry on hazardous waste (The Charbonneau commission) was the only one not established to deal with a policy proposed by a specific department. Accordingly, the commission produced two information and public consultation documents needed to carry out its mandate: an information and public consultation document and a guidance document. With regard to the public debate on energy, the promoting department produced eight information booklets. In the case of pig farming, the design of the decision-making process was an issue. Most of the reference documents were produced after the thematic sessions and the first provincial tour undertaken by the four departments for the purpose of developing regional profiles.
5. Financial support
   Funding support for participation was available for most consultations (energy, residual materials, water management and pig farming), and the purpose of the funding support program was to foster and facilitate public participation during the information phase, the public hearings and the production of briefs. Eligible organizations were non-public, non-profit (NPO), legally constituted local, regional and national bodies with a mandate, objectives and activities related to the problems under study. Band councils and regional environment councils were eligible too. The support covered expenses for the preparation, writing and submission of a public consultation brief. The maximum amount of financial aid was $1500 for a local or regional agency, $2000 for agencies in isolated regions, and $3000 for national agencies. The total budget for the program was $250,000. The Department of the Environment tasked a selection committee with evaluating applications.
6. Specific consultations with Aboriginal communities
   Different formats were applied for specific consultations with Aboriginal communities. They ranged from the inclusion of a dedicated chapter (e.g. on water management) to the holding of a consultation session (e.g. on hazardous waste), the participation of a delegate in a working group (e.g. two representatives on energy), and even BAPE and JBACE (James Bay Advisory Committee on the Environment) joint hearings documented through specific reports (e.g. BAPE report in collaboration with the Kativik Environmental Advisory Committee on residual materials). Those specific consultations resulted in descriptions of the Aboriginal communities' particular situation and in targeted recommendations. With respect to forest protection, no specific consultation was held with the Aboriginal communities, and as a result the strategy that was introduced did not take Aboriginal concerns into account. It was the same for pig farming, essentially because the Aboriginal communities were not directly concerned by pig farming operations. This issue is an evolving one. Since 2004, Supreme Court of Canada has recognized the government's duty to consult with Aboriginal peoples and accommodate their interests.
7. Investigation and public hearing reports
   Once the BAPE has completed its work, it submits an investigation and public hearing report to the Environment Minister, who will make it available to the public before making a final decision. A public hearing report includes a synthesis of collected opinions, an analysis, a conclusion and some recommendations. It also includes a general description of the proposal under study (directions, objectives and principles); a situation overview (scientific knowledge, roles and responsibilities of major stakeholders, regional features, issues, etc.); the most important concerns raised by participants (comments and proposals); and the commission's stance (recommendation, strategies, action plan). The consultation on water management stands apart from the others because of the scope of the strategic issues to be evaluated. For example, should Quebec export its spring water on a massive scale? Should we expand the exploitation of groundwater? Should water services be privatized?
8. Policies
   Despite the investigating committee report of 1990 that proposed an integrated hazardous waste management plan for Quebec for the period 1990–1996, the government has adopted no policy on

[14] All amounts are in Canadian dollars.

Table 1
Public hearings on proposed directions and policies.

	Hazardous waste (1988–1990)	Forest protection (1991)	Residual materials (1995–1997)	Energy (1995–1996)	Water management (1998–2000)	pig farming (2002–2003)
1. Proponent	No identified proponent	Quebec Forestry Department (MFO)	Quebec Environment Department (MEF)	Quebec Natural Resources Department (MRN)	Quebec Environment Department (MENV)	Quebec Environment Department (MENV)
2. Mandate, costs (in $CDN) and duration	BAPE (s. 6.3 EQA, December 19, 1988) $1,905,000 21 months (Dec. 19, 1988, to Sept. 14, 1990)	BAPE (s. 6.3 EQA, January 22, 1991) $735,000 8 months (Feb. 1 to Oct. 1, 1991)	BAPE (s. 6.3 EQA, November 30, 1995) $2,038,000 14 months (Jan. 1, 1996, to Feb. 14, 1997)	Initiative by office of Energy and Natural Resources Minister Expert and information committee, and issue table of 15 representatives from various sectors supported by a departmental team. (Feb. 7, 1995) $1,517,000 12 months (August 21, 1995, to September 21, 1996)	BAPE (s. 6.3 EQA, Oct. 29, 1998) $2,000,000 12 months (March 15, 1999, to March 15, 2000)	BAPE (s. 6.3 EQA, July, 2002) $1,600,000 12 months (September 15, 2002, to September 15, 2003)
3. Approach and procedure	Regular BAPE procedure Information period: – Sessions – Consultation centres Public hearings First part: – 16 public sessions – 12 regional workshops Second part: – 151 position papers	Regular BAPE procedure Information period: – 20 sessions – 75 Consultation centres Public hearings First part: – 21 public sessions (1500 persons) Second part: – 21 public sessions (800 persons) – 203 position papers	Regular BAPE procedure Information period: – 57 sessions – 86 consultation centres Public hearings First part: – 50 public sessions – 11 thematic sessions Second part: – 63 public sessions – 416 position papers	Exceptional procedure: Secrétariat du débat public sur l'énergie [Secretariat for public debate on energy] Information phase: March 1995 to June 1995 Public hearings (August 21, 1995, to September 21, 1995): – Sessions in each of the 10 administrative regions – 300 position papers (August 11, 1995) – 22 working meetings (March 1, 1995, to March 3, 1996).	Regular BAPE procedure Information period (17 consultation centres) and public hearings 6 working sessions to determine situation and collect information First regional round: Identifying needs and expectations 11 thematic expert meetings Production and broadcasting of 11 TV shows Second regional round: Total of 143 public hearing sessions	Regular BAPE procedure 20 consultation centres Information period Thematic sessions (summary produced for each session) and tour of Quebec regions (regional profiles) 16 municipalities 6100 people 70 public sessions Consultation period: 18 municipalities 380 briefs 3000 people 62 sessions
4. Documentation	Information and consultation document (situation and issues) prepared by BAPE Guidance document prepared by BAPE.	Information and consultation document prepared by Quebec Forestry Department (MFO): Forest protection strategy	Information and consultation document (regional basis) prepared by Quebec Environment and Wildlife Department (MEF)	Consultation document prepared by Quebec Energy and Resources Department (MER) 20 papers (8 thematic contributions) 13 information letters Opening of documentation centre	Information and consultation document prepared by Quebec Environment Department (MEN) 11 thematic contributions prepared under Commission authority to support 11 expert meetings	Production of regional profiles based on thematic sessions during first tour by Environment Department, Agriculture, Fisheries and Food Department, Health and Social Services Department, and Société de la Faune et des Parcs du Québec [Quebec Corporation for wildlife and parks] Over 1000 documents submitted
5. Financial support (in $CDN)	None	None	Participation support program funded by RECYQ-Québec ($250,000)	(First) Participation support program funded by Department ($300,000: $50,000 for information phase and meetings, $250,000 for hearings) (Québec, 1995b)	Participation support program funded by MENV ($250,000)	Participation support program funded by MENV ($225,000) For environmental agencies and citizen committees

(continued on next page)

Table 1 ***(continued)***

	Hazardous waste (1988–1990)	Forest protection (1991)	Residual materials (1995–1997)	Energy (1995–1996)	Water management (1998–2000)	pig farming (2002–2003)
6. Consultations with the Aboriginal Communities	Specific consultation sessions for Aboriginal communities held in Montréal (May 8 and 9, 1988) Snapshots of situation in each community	None	BAPE-CCEBJ joint public hearings Specific chapter on James Bay region State of residual materials management in Nunavik	Aboriginal representatives (2 of 15) at issue table	1 thematic session devoted to First Nations (Mashteuiatsh) Public sessions in 3 Cree and 2 Inuit communities Special session at Betsiamites and Montréal One chapter of report devoted to Aboriginal communities	None
7. Report	Integrated management plan for hazardous waste (Québec, 1990)	BAPE special report on healthy forests (Québec, 1991)	BAPE report on waste management (Québec, 1997)	About 200 recommendations on proposed directions for future energy policy, targeting integrated resource management and sustainable development (Québec, 1996b)	BAPE report on water management (Québec, 2000)	BAPE report on incorporating pig farming in sustainable development (Québec, 2003b) Volume 1: State of pig farming in Quebec Volume 2: Public concerns and proposals regarding pig farming
8. Policies	Enactment and implementation of regulations on hazardous waste Enactment of regulations on biomedical waste Amendment to regulation on pulp and paper plants Financial support program fostering R&D for reduction and recycling of hazardous waste BPC-Québec approach	Government policy on forest protection (Québec, 1994)	Quebec action plan on waste management (Québec, 1998b) Quebec policy on waste management (Québec, 2003a)	Quebec energy policy (for an energy-efficient Quebec) (Québec, 1997c) based on four principles: – provide energy at the lowest possible cost; – promote new economic development mechanisms; –maintain or restore environmental balance; –guarantee equity and transparency. Creation of Quebec energy board, and Quebec energy efficiency agency Flexible Creation of energy development based on diversified and complementary approaches Market development: exports, private sector market shares (<50 MW)	National water policy (Québec, 2002)	Action plan for sustainable development of pig farming in Quebec (Québec, 2004) Legislation (May 2004) including three key measures: – introduction of mandatory local public consultation mechanism – option for municipality to attach conditions to permits for construction of hog barns – option for municipality to set hog production quotas in agricultural areas Amendment of government regional development policy (protection of agricultural land and operations) giving municipalities greater flexibility Tools for municipalities to manage pig farming development
9. Specific characteristics	10 research projects Site visits Foreign missions Preliminary investigations on specific files Consulting group	3 research mandates Field visits	3 research projects Site visits	9 visits and technical meetings	Prerequisite sessions for first part (consultation on conduct of public hearings)	Visit to 5 hog barns 3 missions outside Quebec

this matter. However, the Department of the Environment and BPC-Québec[15] have taken a variety of concrete measures (see Table 1). For example, the forest protection commission report of 1991 led to the expansion of some initial government projects (e.g. elimination of pesticides before the year 2000, integration of public participation in the development of five-year plans) and to the 1994 government strategy on managing forests for better protection. In addition, after the BAPE public hearings on residual materials management, the Quebec government made good on its initial commitment and adopted the "Plan d'action québécois sur la gestion des matières résiduelles: 1998–2008," the Quebec action plan on the management of residual materials. The plan was improved through public consultation, even though debate caused dissension among pressure groups. A similar situation also developed with respect to the policy on. Some groups of ecologists refused the proposed consultation format, which was then imposed by the Minister. Here too, the consultations that took place subsequently made a significant contribution in that they led to the adoption of an energy policy and to the creation of the Régie de l'énergie (Quebec energy board). The government undertook its own examination of the proposals in the consultation group report. Strategic directions were identified for the implementation of a sustainable water management framework in Quebec based on six lines of action (policy on water as a resource, quality control of drinking water, environmental management of farming, urban sewerage systems, watershed management and dam's safety). Finally, in the case of pig farming, an action plan was adopted the year after the consultations and various legal provisions concerning the decision-making process were amended for the purpose of giving municipalities a larger role and planning a public participation phase.

9. Special feature related to agent's role
   Except for the debate on energy, public participation was generally characterized by the very active role played by the organization responsible for leading the consultation, i.e. the BAPE. Its investigative powers and research budgets ensured access to and publication of all information needed for the analysis of PPPs. In the case of the forestry policy, for example, the commission was able to fulfill the three following research mandates: (1) an environmental report on Quebec forests, (2) an inventory of the sources of supply for the Quebec forestry industry, and (3) a review of forestry information from specific Scandinavian countries, Canadian provinces and U.S. states. Moreover, the BAPE fully carried out its responsibility for exhaustively researching questions under debate and facilitating access to information through thematic workbooks, focus groups with experts, television productions, study papers, Web sites, etc.

According to Beauchamp (1999, p. 49), "the BAPE procedure is likely to sink into an oppressive sclerosis…" because "it appears to be the only legitimate consultation format."[16] In the public debate on energy, the collaborative format favoured by the Minister led to opposition and dissension among ecologists regarding the credibility and legitimacy of the approach. In fact, the BAPE is an independent agency, and with 30 years of experience it enjoys considerable public credibility.

4.3. Critical analysis elements

The purpose of this article was to examine, in light of a review six public hearings on Quebec environmental, agricultural and natural resources policies, the linkages between planning processes and the issue of public participation in environmental assessment. The shift toward communication and consultation in planning theory is predicated on the assumption that interaction between stakeholders is the best way of combining knowledge and action. Following this approach, which according to its proponents is based on participative democracy and communication as action (Habermas), planning must be undertaken as an interactive, political process the goal of which is to establish shared values through dialogue and discussion among the stakeholders. In this context, the interactive planning model is based on the assumption that it is possible to reintroduce rationality into collective decision-making by using a variety of strategies promoting exchanges between stakeholders: consultation, negotiation, deliberation, etc. Thus planning is considered a collective process of continuing learning, the objective of which is to negotiate a shared interest ("what we agree to do") and the success of which is measured by the achievement of an agreement or consensus. In light of this theoretical planning model, what can we learn from the Quebec experience of public hearings on environmental policy? What are the scope and limitations of the Quebec experience for environmental assessment in practice? The review of the six case studies (Table 1) provides some answers to these questions.

The Québec's experience of SEA largely conducted through a public hearings before the BAPE suffer from a number of limitations when compared with the best practice described above. The first limitation is related to the fact that the BAPE approach to environmental assessment is not based on a structured, exhaustive environmental impact assessment (impact study) in the context of SEA. The impact assessment is based on concerns raised by citizens, expressed opinions and investigations conducted by the BAPE commissions. The public consultation is conducted on the basis of a guidance document or proposed policy that does not refer to a comparative assessment of several options including the "zero-option" or "non-option" as a benchmark. Moreover, there is generally no justification for the choice of the preferred option (the one that is adopted). For example, with regard to public hearings on the forest protection strategy, the consultation exercise was not based on an impact assessment identifying environmental factors, anticipated impacts of the strategy and mitigation measures. The hearings focussed on a strategy supported by scientific and specific reports, without stating the impacts of the strategy. In this case, one of the main consequences of the lack of an impact assessment was that there was no assessment of social impact, including the impacts on Aboriginal communities; yet such an assessment would be a critical component of strategic environmental assessment in a sustainable development context.

With respect to the Commission on hazardous waste management, a BAPE commissioner contended that the public hearings did not allow for sufficient evaluation of the cumulative impacts of the proposed government policy (Genest, 1996b). According to the commissioner, the Commission did not have the methods, the measuring instruments or the professional expertise to make a list of the cumulative impacts. Thus the lack of a formal environmental impact assessment report (impact study) that would compare options and evaluate not only the direct impacts but also the cumulative, synergistic, induced and global impacts represents a major shortcoming in the existing practices, given the strategic environmental assessment objectives. Since then cumulative impact methodology is still a worrying research issue.

The second major limitation of Québec's SEA practices relates to the timing of its involvement in the PPP assessment process. The best practice highlights the importance of public participation upstream in the decision-making process and in line with the PPP development process. The BAPE public hearings are held downstream after the development of PPPs and directly upstream from the adoption of a policy, action plan or major statutory and legal amendment. Thus the hearings allow only for revision of major directions in light of the values, interests and concerns of the various stakeholders. In any event, they are not conducted concurrently with the PPP development process, and they come too late to influence the major strategic

[15] BPC-Québec has been created to manage the destruction of the PCB (biphényle polychloré).
[16] Our translation.

directions to any significant degree. For example, in the case of work done by the Commission on management of residual materials, most issues had already been documented and discussed as part of environmental assessments of specific projects, and a number of major strategic directions had already been adopted.[17]

In *a posteriori* PPP environmental assessment, there is a risk of undermining the credibility of the assessment approach. Besides, public concerns expressed during BAPE hearings for policy projects indicate that citizens are concerned not only with the environmental impacts of proposed policies but also with the decision-making process itself. Indeed, citizens and stakeholders often complained that they did not have the opportunity to participate in the policy development process, and they often expressed doubts as to whether the government would take action on their representations. Many believed that points won and opinions and arguments accepted at previous consultations did not seem to be taken into consideration by the proponents of new programs and policies.

In each and every analysis by the BAPE commissions (for PPP or projects), citizen participation is mentioned as being a major issue. Moreover, the BAPE commissions' recommendations on policies regarding citizen participation focus on the development of permanent regional consultation and consensus-building mechanisms, bringing together various users, including regional issue tables, regional environment councils, and follow-up and monitoring committees.

5. Conclusion

The various theoretical approaches to planning provide focus on a few major characteristics enabling us to flesh out a tentative definition of public participation in SEA.

First, participation is considered increasingly from the perspective of the communicational or interactive planning stream and that it is incorporated in jointly planned and negotiated environmental management, which is now based not on the control of nature and society, as it used to be, but on the determination of conditions for the joint development of nature and society (Margerum, 1999). Bina (2007, p. 601) states:

> Assessment is becoming more participatory, not only in terms of involving representatives of civil society, but also in seeking greater cooperation and coordination between government agencies, development sectors and sources of expertise that have a direct or indirect interest or contribution to make.

In this context, information plays a key role especially because of an increasing openness to the various types of knowledge, involving a comparison of scientific and vernacular knowledge, stakeholders' representations, etc. The use of this information extends beyond the somewhat passive notions of "comprehensive understanding" or of "being fully informed." For their part, stakeholders play a more active role than simply being asked to produce information for the use of experts. Instead, they are called upon to build negotiated solutions, thus confirming the tendency to use SEA as a tool for developing PPPs in a more collaborative, transactive or deliberative way (Armitage, 2005). The expert is then considered as one of many types of stakeholder. In addition, participation is seen as a forum for exchange and interactions requiring communication strategies based on a communication ethic that is itself predicated on intersubjective understanding. Note that these strategies will probably not be sufficient to reach social compromises, given the complexity of PPPs (Runhaar, 2009), and that arbitration will probably still be required to resolve conflicts between individual and societal interests (Richardson, 2005) — hence the important role and advantages of representative democracy for legitimizing and taking responsibility for decisions.

The postmodern vision of planning leads us to suggest some improvements to the communication-centred approach. Fundamentally, it opposes the modernist vision to which one could be tempted to continue to attach communication-centred planning and according to which the ultimate goal is to control nature and society. Thus postmodern criticism is justified in devoting time to content and values and enhancing communication (Lee, 2006; Vicente and Partidario, 2006). However, this does not diminish the importance of procedural questions related to building a relation-based consensus through discussion. The ethic of discussion is not the ultimate goal: experience shows the difficulties spawned by social compromise. Rather, it is an approach that generates solutions and that includes the objective of exercising responsible citizenship, not legitimizing the dominant point of view. Thus, even though inevitable tensions between individual liberties and civic participation are a key outcome, the planning exercise positions itself as a locus for the emergence of societal realities that define the conditions for joint development of nature and society and are more than the sum of individual interests.

Public hearings are generally recognized as facilitating critical review, validation and improvement of environmental policies. Public hearings that provided for free expression of concerns and opinions by all the affected stakeholders would therefore contribute to the social construction of environmental problems by promoting interaction between actors. However, the added value of public hearings remains difficult to evaluate. Beyond raising the awareness of the various stakeholders and contextualizing problems, issues and government policies, some authors mention the "cathartic effect" of this approach in documenting irritants, scandals, abuses and inequities (Genest, 1996a). Public hearings would then be instrumental in improving the decision-making process by helping to modify policy proposals; clarify of policy proposal objectives, issues, solutions and consequences; and enhance the credibility and acceptability of government decisions. Thus the Quebec experience appears to be interesting and innovative and could contribute significantly to SEA in practice. This means that Quebec should not restrict its own practice to a single format aligned with the BAPE method (Beauchamp, 1999), even though the BAPE had and still has great influence and is generally considered to be the only benchmark or model. The five case studies highlight different characteristics of the Quebec SEA experience. On the one hand, there was strong public participation (qualitatively and quantitatively, and especially with Aboriginal bands), with a financial support program for (more the rule than the exception), in two efficient, distinctive phases all over Quebec, under the leadership of an organization (BAPE) that had acquired a great deal of experience (30 years), enjoyed credibility with all stakeholders, and used its investigative authority to produce rigorous reports on both scientific and social issues. On the other hand, SEA was not a requirement, it was conducted on the initiative of the Environment Minister, usually no impact assessment was prepared for SEA — only a brief status report or a guidance document on future policy and public participation, if it happened, occurred only at the end of the process.

Improvements can be made to public participation in SEA if consideration is given to the level of intervention. That being said, it is difficult to measure the influence of participation on public policy (Fischer, 2010). Participation, subsequent reporting, and presentation of results in the media are some of the influences to which politicians are exposed, and it is they who ultimately take responsibility for making the decision.

Nevertheless, on the basis of the six Quebec case studies, we can make a few recommendations with reference to the four main levels of intervention that are usually taken into account: discussion of the decision-making process, implementation of SEA, decision-making, and follow-up.

[17] Even though some issues had already been documented and discussed as part of environmental assessments of specific projects, this SEA was not more solidly based on a full environmental impact assessment.

In the context of an SEA practice that is flexible and not heavily regulated, the first step required would be to agree on the decision-making process, on the timing of participation, and on the format of the participation. Here, fair representation of stakeholders is a critical success factor. Discussions on the process generally take place between the representatives of major recognized social groups. During the implementation of SEA, attention should be drawn to two phases where participation is particularly important: the scoping and assessment itself. An steering committee could be set up for this purpose. Public participation also occurs during the decision-making phase. Here, it plays two important roles: legitimizing the decision and ensuring its social approval. The public hearings format is usually applied. To ensure better participation, it would also be important to consider two other steps in all cases: (1) production of an IA concerning the various PPP scenarios, and (2) creation of a financial support program for participants. Last but not least, the follow-up phase has often been neglected. Participation during this phase generally takes the form of tracking by a monitoring or watch committee.

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