UNIVERSITÉ DU QUÉBEC À MONTRÉAL

INFORMATION, TRUST, AND SOCIAL COHESION IN AN ENVIRONMENTAL CONFLICT RELATED TO A WIND FARM PROJECT IN QUÉBEC (CANADA)

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INFORMATION, CONFIANCE ET COHÉSION SOCIALE DANS UN CONFLIT ENVIRONNEMENTAL LIÉ À UN PROJET DE PARC ÉOLIEN AU QUÉBEC (CANADA)

THÈSE

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RÉSUMÉ

S'appuyant sur une étude de cas d'un conflit environnemental lié à un projet de parc éolien au Québec (Canada), cette recherche doctorale traite : 1) des stratégies de diffusion de l'information utilisées par le promoteur et de la façon dont les gens ont réagi à cette information; 2) des différents profils de recherche d'informations des acteurs impliqués et du rôle de la confiance et de la défiance dans la diffusion de l'information; et 3) des changements apportés à la structure sociale de la communauté concernée par le conflit, notamment la détérioration et l'intensification des relations sociales entre les acteurs les plus impliqués.

La méthodologie de recherche mixte inclut une revue de la documentation, de l'observation notamment lors d'événements publics, des entrevues semi-structurées et des questionnaires sociométriques auprès de 93 individus impliqués dans le processus officiel de consultation du Bureau d'audiences publiques sur l'environnement (BAPE). L'échantillon est constitué de 74 opposants au projet et de 19 partisans. Le travail de terrain a eu lien entre les mois d'août 2009 et mai 2010.

La première partie de la recherche vise à répondre aux trois questions suivantes : qui est informé du projet, quand ces gens le sont-ils, et comment cette diffusion influence-t-elle l'émergence et le développement d'un conflit? La littérature scientifique relevait déjà que, lorsqu'un conflit environnemental survient, l'information à laquelle les gens ont accès influence grandement le développement du conflit. Les principaux résultats de recherche montrent que le promoteur a fait des choix stratégiques concernant la diffusion de l'information (confidentialité, exclusion de certains acteurs – notamment les citoyens –, rumeurs, etc.) qui ont contribué à faire émerger une opposition dans les dernières étapes de développement du projet éolien. De plus, la sensibilisation de la population par rapport au projet éolien a été lente, en partie parce que la nouvelle du projet s'est répandue lentement dans la communauté et parce que plusieurs personnes refusaient de croire qu'un tel projet pouvait être réalisé dans leur environnement.

La deuxième partie de la recherche vise à répondre aux deux questions suivantes : qui sont les sources d'information des gens et en qui n'ont-ils pas confiance pour la diffusion d'information pertinente? Selon la littérature scientifique, les communautés concernées par un projet de développement font souvent preuve d'un manque de confiance envers les promoteurs et les décideurs. Les principaux résultats de recherche ont révélé que les partisans et les opposants présentaient des différences

importantes dans leur profil de recherche d'informations, et ce, quant à l'accès à des acteurs en position de pouvoir, mais également quant à la quantité et à la diversité de leurs sources d'information. Les opposants et les partisans faisaient preuve d'une grande confiance envers les membres de leur groupe, mais la défiance à l'égard de l'autre groupe était aussi très importante, particulièrement pour les opposants envers les partisans. La suspicion a servi de stratégie pour discréditer les adversaires qui étaient perçus comme indignes de confiance.

La troisième partie de la recherche vise à évaluer la division sociale dans la communauté concernée par le projet éolien. Cette division sociale avait été observée par le BAPE, mais n'avait pas été évaluée. Le conflit a suscité la détérioration de trois relations par participant en moyenne, ce qui inclut aussi la détérioration de certains liens forts. Avant le conflit, les participants à la recherche étaient liés en moyenne par 14,5 relations. La détérioration concerne presque exclusivement des relations entre opposants et partisans, confirmant du même coup la division sociale. De plus, le conflit a provoqué une diminution de l'entraide entre les citoyens et le projet éolien était un sujet tabou dans plusieurs lieux centraux pour cette communauté rurale. Par ailleurs, le conflit a aussi contribué à créer de nouvelles relations (en moyenne 5 par participant) et à intensifier positivement certaines relations préexistantes. À travers les relations nouvelles et préexistantes, le conflit a suscité une importante quête de soutien social, mais aussi le recours à différentes stratégies d'adaptation pour gérer le stress. Certaines de ces stratégies peuvent être considérées comme négatives et pourraient être liées à la perception d'un soutien social inapproprié.

Source d'information – Confiance – Division sociale – BAPE – Énergie éolienne

ABSTRACT

Through a case study of an environmental conflict related to a wind farm in Québec (Canada), this doctoral research focused 1) on the information strategies used by the developer and on the way people react to this information; 2) on the information-seeking profiles of involved actors and on the role of trust and distrust in the diffusion of information; and 3) on the changes induced to the social structure of the community by the conflict, notably the deterioration and intensification of relationships between the most involved actors.

The methodology consisted in a documentation review, field observation during public events, semi-structured interviews, and sociometric questionnaires with 93 individuals involved in the official public hearing process of the Bureau d'audiences publiques sur l'environnement (BAPE). The sample was comprised of 74 opponents to the project and of 19 supporters. The fieldwork was carried out between August 2009 and May 2010.

The first part of the study aimed at answering the following questions: who is informed, when are these people informed, and how does it impact the unfolding conflict? Scientific literature already reported that when an environmental conflict occurs, the information people have access to plays a crucial role in how the conflict develops. The main findings showed that the developer made strategic choices regarding information diffusion (confidentiality, exclusion of some actors – especially the citizens–, rumours, etc.) that spurred on opposition in the latest stage of development of the wind farm project. The population's awareness was also slow to grow, mainly because the news of the project was slow to spread in the community and because many people refused to believe this kind of project could take place in their environment.

The second part of the study aimed at answering the following questions: To whom do people turn to get information, and who they do not trust to provide relevant information? Lack of trust in planners is observable in communities concerned by a development project. The main findings are that supporters and opponents showed high variability in their information-seeking profiles in terms of access to powerful actors and of quantity and diversity of sources of information. Opponents and supporters showed high levels of trust within their own group. Distrust regarding the other group was very high, especially from opponents toward supporters. Suspicion was used as a strategy to discredit adversaries who were perceived as untrustworthy.

The third part of the study aimed at assessing and quantifying the social divide in the community concerned by the wind farm. This social divide had already been observed by the BAPE, but not assessed. The conflict brought about the deterioration of 3 relationships per participant on average, including the deterioration of strong ties. Participants had on average 14.5 reciprocal relationships before the conflict. The deteriorations are almost exclusively relationships that linked opponents and supporters, confirming the social divide. The conflict provoked a decrease in mutual help, while the wind farm was a taboo topic in a number of central places for this small rural community. Many new relationships were also created (on average 5 per participant) and pre-existing ones intensified. The conflict encouraged an important pursuit for social support through existing and new relationships, but also the use of various coping strategies to deal with stress. Some of these strategies could be considered maladaptive ones and may have been due to the perception of inappropriate social support.

Source of information – Trustworthiness – Social divide – BAPE – Wind energy

INTRODUCTION

Information, confiance et cohésion sociale: trois concepts « tricotés serrés ». Nous les pensions ainsi avant de commencer cette démarche scientifique, mais nous nous imaginions à peine leur interdépendance, que vient révéler cette recherche de bien belle façon. Dans le contexte d'un conflit environnemental, la forte cohérence entre ces trois mots est encore plus grande : dans ces situations stressantes, l'information provient de gens en qui on a confiance et de gens avec qui on partage un sentiment d'appartenance. Ceci pourrait être (en 25 mots!) le résumé pas vraiment innovateur de cette thèse. Si cette tentative de résumé n'a rien d'exceptionnelle, c'est qu'il manque plusieurs niveaux de complexité et de raffinement dans l'analyse, et c'est justement dans ces niveaux que se trouve la contribution significative de cette thèse. C'est pourquoi, en réalité, ce document se déploie en plusieurs chapitres et en quelque 200 pages, et non en 25 mots.

Avant de commencer, vous vous demandez peut-être « pourquoi l'énergie éolienne? » Une réponse (trop) facile serait : pourquoi pas? Une réponse pragmatique se lirait plutôt comme ceci : question de *timing* et d'opportunités. En effet, au début de cette recherche doctorale, nous étions en quête de projets de développement ayant des impacts potentiels sur l'environnement que nous pourrions suivre à travers le processus de consultation du Bureau d'audiences publiques sur l'environnement. Nous ne tenions pas nécessairement à ce que le projet relève d'un domaine précis; cela aurait pu être un projet de port méthanier, de grand barrage, d'exploration gazière, de mine à ciel ouvert, etc. Les projets controversés en raison notamment de leur impact sur l'environnement et la santé sont malheureusement légion, et pas uniquement au Québec. En bout de piste, le projet de développement qui tombait pile dans notre horaire de recherche et qui concordait avec les intérêts de départ était celui d'un parc éolien et pas n'importe lequel : un projet éolien qui

soulève une opposition. Déployant une carte du Québec, nous connaissons à peine les lieux. Comme plusieurs, nous nous sommes demandée pourquoi ce projet éolien suscitait une opposition. Dès les premières démarches pour nous familiariser avec le dossier, nous avons constaté que tous les ingrédients recherchés y étaient : un groupe d'opposants, l'argument du manque d'information, des incertitudes exprimées par des citoyens concernant l'environnement, la santé, la qualité de vie, etc.

D'un point de vue scientifique et froid, ce cas était parfait. Maintenant, nous savons que ce contexte de départ scientifiquement parfait est aussi – et surtout – la dure réalité de nombreux citoyens. Après avoir étudié ce conflit de près sous de nombreuses coutures, nous pouvons rapporter des résultats rigoureux et inédits qui ont, à nos yeux, une grande portée sociale. Certains de ces résultats seront dérangeants, parfois pour les partisans du projet, parfois pour ses opposants, et parfois même pour les deux à la fois. Nous croyons qu'ils sont par conséquent d'autant plus importants.

Le projet éolien à l'origine de cette étude de cas est évidemment unique en soi. Il est donc important de ne pas généraliser les observations et conclusions tirées de cette thèse à l'ensemble du développement éolien québécois. Cela dit, en même temps, il présente probablement des ressemblances avec d'autres projets du même genre. De plus, parce que l'énergie éolienne est un secteur industriel en pleine croissance dans plusieurs pays, parce que cette forme d'énergie a une image verte presque vertueuse qu'il est particulièrement difficile de contredire, et parce que l'énergie éolienne suscite de plus en plus d'opposition un peu partout dans le monde, nous pensons aujourd'hui, comme d'autres chercheurs, que les conflits dus au développement de cette énergie renouvelable seront de plus en plus fréquents à l'avenir. Pour cette raison, il est de plus en plus pertinent de mieux comprendre les enjeux des conflits reliés au développement de projets éoliens, tant au niveau des processus informationnels que des impacts sociaux, comme nous l'avons fait dans cette thèse.

Dans son détail, cette thèse porte premièrement sur l'information dans le contexte d'un conflit environnemental. Lors de ce genre de conflits, et particulièrement quand les tensions entre les différents acteurs impliqués sont vives, un manque d'information est fréquemment dénoncé. Cependant, au même moment, surtout quand il est question de risques environnementaux ou de risques à la santé, les parties prenantes sont aussi souvent submergées d'information; elles en ont plus qu'elles ne pourront jamais en lire et s'approprier. Ce constat, en soi paradoxal, est le premier élément qui a retenu l'attention de la chercheuse : où se trouve la « vérité » entre cette perception de manquer d'information et un contexte de surabondance d'information? L'information est-elle rare ou, au contraire, surabondante? Que disent les gens exactement quand ils dénoncent un manque d'information et plaident en faveur de leur droit de savoir? Ces questions demandaient à être mieux comprises, mais dans un contexte réel, ce qui ne s'annonçait pas comme une tâche facile – et qui fut en effet loin de l'être!

Pourtant, le rôle important que joue l'information dans les conflits environnementaux est connu depuis longtemps. En Amérique du Nord et en Europe, notamment, de nombreuses lois, conventions et règlements sont le résultat de cette connaissance. Ainsi, plusieurs processus de participation publique ont été mis en place dans le but d'encadrer le droit de savoir des citoyens et leur capacité à participer de différentes façons aux processus décisionnels. Il s'agissait alors des premières batailles menées au nom de l'environnement : donner aux citoyens l'accès aux informations dans le but de les aider à protéger leur environnement et leur santé. Sans information, la population voit sa capacité à participer au processus décisionnel de projets de développement qui peuvent avoir des impacts sur la santé ou sur l'environnement grandement diminuée. Ainsi, en même temps que le droit de savoir naissait le devoir d'informer. Malheureusement, aujourd'hui encore plusieurs promoteurs et décideurs ont besoin de se familiariser avec de meilleurs moyens pour bien informer et consulter la population.

Pendant plusieurs décennies, il a été commun de s'inspirer de modèles autoritaires dits « top-down » pour informer les citoyens. Ces approches sont encore

fréquemment utilisées. Toutefois, non seulement ces modèles excluent la population et l'empêchent d'avoir une réelle influence sur le processus de décision, mais ils peuvent aussi conduire à des iniquités et susciter des réactions négatives quant au projet proposé. Bien qu'elles soient reconnues dans la littérature scientifique, les piètres stratégies de communication de nombreux promoteurs de projets de développement demeurent malgré tout mal comprises et peu étudiées, comme si elles étaient tout simplement naturelles, comme s'il ne s'agissait que d'une prémisse avec laquelle les chercheurs, les décideurs, les promoteurs, les citoyens, etc. devaient apprendre à travailler.

L'information fournie et reçue par les différents acteurs impliqués dans le processus de consultation publique du Bureau d'audiences publiques sur l'environnement (une organisation que nous verrons plus en détails dans le Chapitre I) est donc le premier chemin que nous avons choisi d'explorer dans cette thèse.

Cette thèse porte aussi sur la confiance, un élément essentiel dans un contexte où les sources d'information sont parfois plus importantes que l'information qu'elles véhiculent. Dans les conflits environnementaux, le besoin d'information semble infini; plus les gens sont inquiets en raison d'un enjeu qui peut avoir des impacts sur la santé ou sur l'environnement, moins ils seront satisfaits de l'information qu'ils reçoivent ou trouvent. Les nouvelles informations génèrent à leur tour de nouvelles questions; c'est le processus incessant de création de sens.

Pour la population inquiète, différentes sources d'information sont disponibles. Certaines d'entre elles sont familières, comme les voisins et les amis, mais d'autres le sont moins. Aussi, certaines sources sont perçues comme dignes de confiance – notamment celles qui sont familières – alors que d'autres ne le sont pas, ce qui est souvent le cas des promoteurs et des décideurs. Plusieurs personnes n'auront recours qu'aux sources faciles d'accès, alors que d'autres feront des efforts pour aller chercher plus loin. Chez ces personnes aux comportements de recherche d'information pourtant différents, la croyance que des choses sont cachées est généralement répandue. Ce qui est caché est parfois difficile à identifier, mais la perception que certaines sources d'informations ne sont pas dignes de confiance

est, elle, très réelle pour la population inquiète. Cette perception teintera toutes les informations auxquelles les personnes auront accès; celles provenant de sources indignes de confiance seront regardées d'un mauvais œil, tandis que celles provenant de sources en qui elles ont confiance seront prises pour acquises, avec souvent peu ou pas de vérification.

Qu'est-ce qui motive ce qui semble être des besoins d'information différents et des démarches de recherche d'informations différentes? Bien sûr, il y a probablement plus d'une seule réponse à cette question, mais nous nous sommes attardée davantage à la question de la confiance puisque la perception qu'une information est crédible est étroitement liée à la perception qu'une source est digne de confiance.

La confiance et le manque de confiance ou la défiance exprimés par ou envers les acteurs impliqués dans un conflit environnemental sont donc le deuxième chemin que nous avons choisi d'explorer dans cette thèse.

Finalement, cette thèse porte sur la cohésion sociale dans le contexte particulièrement stressant où un projet proposé – dans ce cas, un projet éolien – divise la population en deux groupes : les opposants et les partisans. Il y a un « nous » et il y a un « eux ». Il y a aussi évidemment des gens qui ne se revendiquent d'aucun des deux groupes, mais quand les tensions sont vives, ceux-ci demeurent généralement silencieux ou se rallient au groupe le plus sûr pour eux, c'est-à-dire qu'ils choisiront le camp qui suscitera le moins de colère à leur égard.

Malheureusement, cette division peut modifier profondément les relations d'une communauté et la façon dont celle-ci se perçoit; les « nous » se serrent les coudes, s'entraident, et se procurent du soutien, tandis que les « eux » font la même chose, mais avec des gens différents. Entre les deux? Un fossé, qui se creuse si le conflit prend de l'ampleur, mais surtout, un fossé qui n'était pas là avant l'arrivée du projet. Ceci signifie que le projet a aussi des impacts sociaux importants, comme des modifications à la structure sociale, surtout dans une petite communauté rurale, et ce, avant même la première pelletée de terre. Ces modifications peuvent avoir des impacts sur la cohésion sociale et sur le capital social de ces communautés, et donc indirectement, affecter la santé de certains des acteurs, notamment les plus

impliqués. Elles ne sont donc pas à prendre à la légère par les décideurs. En effet, les impacts d'un projet sur l'environnement biophysique sont généralement bien documentés et, lorsque nécessaire et applicable, des mesures d'atténuation sont prévues. Cependant, l'étude des impacts sociaux d'un projet donné, c'est-à-dire les impacts sur l'environnement humain où le projet sera implanté, demeure le parent pauvre des études des impacts environnementaux et d'une manière générale, de tout le processus de planification d'un projet.

L'existence d'une division sociale dans les conflits environnementaux a souvent été reconnue par les acteurs impliqués ou par des observateurs extérieurs, comme les instances responsables d'évaluer ou de faire le suivi des impacts environnementaux de différents projets. Cependant, la division sociale a rarement été étudiée. Il y a donc un besoin de mieux comprendre comment un projet modifie la structure sociale d'une communauté et si ces modifications sont un bénéfice pour la communauté ou un coût relativement élevé à payer.

La cohésion sociale –ou plutôt son corollaire : la division sociale– et ses impacts sur une communauté aux prises avec un conflit environnemental sont donc le troisième et dernier chemin que nous avons choisi d'explorer dans cette thèse.

1. Plan de la thèse

Après cette courte introduction, la problématique (Chapitre I) est présentée. À la fin de ce chapitre, se trouvent les objectifs et les questions de recherche, une présentation de la trame de la thèse, et la justification de la pertinence sociale et scientifique de cette étude. Ce chapitre est suivi du cadre théorique (Chapitre II) et de la méthodologie (Chapitre III). Outre le cadre théorique intégrateur, le second chapitre présente aussi l'approche et la posture de recherche mises de l'avant dans cette étude.

Les trois chapitres suivants (Chapitres IV à VI) rapportent les contributions scientifiques les plus importantes de cette thèse. Ainsi que nous l'avons présenté dans ce qui précède, cette thèse est porteuse de trois grands thèmes étroitement liés. Toutefois, par souci de clarté et afin de permettre une analyse plus fine de chacun des thèmes, nous avons décidé de présenter les résultats, ainsi que la discussion qui les accompagne, en trois sections séparées : la première sur les stratégies de diffusion de l'information (Chapitre IV), la deuxième sur l'information cachée et la défiance (Chapitre V), et la troisième sur la division sociale (Chapitre VI). Une conclusion générale clôt le document; elle souligne les apports les plus importants de cette thèse, les limites de la recherche, mais également les pistes de recherche qu'elle ouvre.

Avec l'accord du Sous-comité d'admission et d'évaluation de la Faculté de communication de l'Université du Québec à Montréal, cette thèse est en grande partie rédigée en anglais (chapitres II à VI). De plus, pour que tous les membres du jury de la thèse puissent évaluer l'entièreté du document, une traduction anglaise des sections en français est fournie en annexes (à partir de l'Annexe B), dans l'ordre dans lequel ils apparaissent en français dans la thèse. L'Annexe A, quant à elle, contient un exemplaire (en français) de la grille d'entrevue et du questionnaire sociométrique utilisés pour mener les entrevues.

CHAPITRE I

PROBLÉMATIQUE

Les conflits environnementaux sont le contexte d'étude dans lequel est né le projet de recherche présenté dans cette thèse. Dans la problématique, nous présenterons ce contexte selon cinq grands thèmes : 1) les conflits environnementaux; 2) la division sociale causée par les conflits environnementaux; 3) l'information et la participation publique; 4) le Bureau d'audiences publiques sur l'environnement ou BAPE, et 5) les conflits environnementaux liés aux projets de développement éolien dans le contexte énergétique spécifique québécois. Puis, l'objectif général de recherche ainsi que les questions qui ont guidé les trois chapitres de résultats et discussion seront présentés. Le fil conducteur liant ces trois chapitres suivra. Cette problématique se terminera par la justification de la pertinence sociale et scientifique de la recherche réalisée.

1.1 Le conflit environnemental

Les questions environnementales, entre autres parce qu'elles sont porteuses d'incertitudes, sont sources de conflits (Beauchamp, 1997; Blackburn et Bruce, 1995; Burgess et Burgess, 1995; Daniels et Walker, 2001; Lewicki, Gray et Elliott, 2003; Simard *et al.*, 2006). Ce sont des conflits entre les acteurs, entre les usages et les intérêts ou entre les différentes visions du développement. Dans cette section, différents courants de littérature utiles à la compréhension des conflits

environnementaux seront abordés. Ils ont tous pour objet ce que nous avons choisi de nommer le conflit environnemental, même s'ils parlent de controverses sociotechniques, de conflits ingérables ou de conflits de territoire, par exemple. La définition du conflit environnemental qui a guidé l'analyse est présentée à la fin de la section. Elle découle de ce qui est présenté dans les pages qui suivent. Nous aborderons également la question de la difficulté de la résolution des conflits environnementaux, mais pour commencer, nous nous attarderons un instant au conflit –tout court.

Le conflit a généralement une image négative (Daniels et Walker, 2001); qui pense conflit, pense affrontement, violence et même guerre (souvent rebaptisée conflit armé). Plusieurs éléments contribuent à cette image négative. Lewicki et ses collègues (1997) en ont identifié huit : 1) les conflits impliquent des processus compétitifs où les adversaires ont l'impression qu'un seul d'entre eux peut l'emporter; 2) les stéréotypes et les biais minent l'argumentaire des acteurs; 3) ceux-ci sont en proie à l'émotion (notamment la colère et la frustration); 4) on assiste à une diminution de la communication entre les acteurs qui n'ont pas la même vision de l'enjeu du conflit; 5) ce même enjeu devient parfois flou et prétexte à toutes sortes de récriminations qui n'ont au premier abord rien à voir avec le conflit; 6) au fur et à mesure que le conflit avance, les acteurs campent sur leur position et refusent d'en changer de peur de perdre la face; 7) à ce point du conflit, les acteurs ont tendance à maximiser les différences et à minimiser les ressemblances dans leur discours, ce qui diminue les possibilités de résolution du conflit, et 8) l'escalade du conflit mène les acteurs à mettre toujours plus de pression sur leurs adversaires dans l'espoir de l'emporter pour de bon.

Plusieurs auteurs depuis des décennies se sont penchés sur le conflit et l'ont défini de différentes manières (Daniels et Walker, 2001), comme en témoigne le Tableau 1.1. Certains éléments essentiels se dégagent de ces définitions : l'opposition (évoquée par les termes lutte, incompatibilité, interférence, tension, compétition), l'interdépendance des acteurs, l'importance de la perception de la situation par ces mêmes acteurs, la nécessité de la communication (évoquée

également par les termes négociation, coopération et interaction) et la question de la rareté des ressources. Ces concepts sont importants et reviendront dans la définition du conflit environnemental.

Tableau 1.1
Définitions du conflit (Inspiré par Daniels et Walker, 2001, p. 29)

Auteurs	Définition	Mots-clés
Coser (1956)	Social conflict is a struggle between opponents over values and claims to scarce status, power, and resources.	Lutte Opposition Rareté
Schelling (1960)	Conflicts that are strategic are essentially bargaining situations in which the ability of one participant to gain his ends is dependent on the choices or decisions that the other participant will make.	Stratégie Négociation Dépendance Choix
Deutsch (1973)	A conflict exists whenever incompatible activities occur… one party is interfering, disrupting, obstructing, or in some other way making another party's actions less effective.	Incompatibilité Interférence Efficacité
Wall (1985)	Conflict is a process in which two or more parties attempt to frustrate the other's goal attainment… the factors underlying conflict are threefold: interdependence, differences in goals, and differences in perceptions.	Objectif Interdépendance Perception
Pruitt and Rubin (1986)	Conflict means perceived divergence of interest, or a belief that the parties' current aspirations cannot be achieved simultaneously.	Perception Intérêt Aspiration Croyance
Conrad (1990)	Conflicts are communicative interactions among people who are interdependent and who perceive that their interests are incompatible, inconsistent, or in tension.	Perception Communication Interdépendance Tension
Tjosvold and van de Vliert (1994)	Conflict – incompatible activities – occurs within cooperative as well as competitive contexts… conflict parties can hold cooperative or competitive goals.	Objectif Incompatibilité Coopération Compétition
Folger *et al.* (1997)	Conflict is the interaction of interdependent people who perceive incompatible goals and interference from each other in achieving those goals.	Perception Interaction Interdépendance Incompatibilité
Wilmot and Hocker (2001)	Conflict is an expressed struggle between at least two interdependent parties who perceive incompatible goals, scarce resources, and interference from others in achieving their goals.	Lutte Interdépendance Perception Rareté

Le conflit environnemental, quant à lui, est issu de situations qui ont des impacts potentiels ou avérés sur l'environnement (Blackburn et Bruce, 1995), soit un « effet, pendant un temps donné et sur un espace défini, d'une activité humaine sur une composante de l'environnement pris dans son sens large (c'est-à-dire englobant les aspects physiques et humains) » (André *et al.*, 1999, p. 22). Cet impact est dénoncé ou craint quand l'activité est toujours à l'état de projet. Dans ces cas, la réalisation du projet de développement inquiète certains acteurs directement ou indirectement concernés. Le projet de développement implique en règle générale la construction d'infrastructures, par opposition à un projet qui serait davantage immatériel (bien que ceux-ci peuvent aussi entraîner des conflits environnementaux, comme la création d'une réserve naturelle). Le conflit environnemental peut également être causé par les incertitudes associées aux risques et à l'évaluation des risques posés par un projet de développement (Daniels et Walker, 2001; Kraft et Clary, 1991).

Beauchamp (1997) décrit six particularités des conflits environnementaux qui les rendent si complexes : 1) ils émergent de problèmes mal définis et difficilement isolables; 2) leurs protagonistes sont nombreux et leurs intérêts, variés; 3) l'intérêt commun y est souvent invoqué, mais il s'agit d'une notion floue, sujette à discussion; 4) ils dépassent les seules dimensions techniques au profit de représentations symboliques, comme les principes et les valeurs; 5) ils se situent hors du cadre de référence temporel habituel; et 6) ils impliquent un désir de contrôle de la zone d'ignorance. Le conflit environnemental est aussi un conflit de territoire parce que les protagonistes se disputent l'espace et ses différents usages, mais également parce que la notion de paysage entre en ligne de compte (Dziedzicki, 2006).

La littérature sur les conflits environnementaux présente d'importantes similarités avec celle sur les controverses sociotechniques (Callon, Lascoumes et Barthe, 2001; Latour, 1999). McDonald (2007) propose même un modèle hybride composé des deux courants de recherche. Pour qu'il y ait controverse, il faut que les gens qui réfléchissent à la problématique en jeu ne soient pas d'accord et qu'il y ait un minimum de deux points de vue divergents sur l'objet de la controverse (McDonald, 2008). En plus, les protagonistes doivent faire plus que simplement exprimer leurs

opinions, ils doivent argumenter et défendre leur position (McDonald, 2008). Les controverses sociotechniques plus spécifiquement ont quatre caractéristiques : 1) elles portent sur notre avenir dans un monde qui innove au niveau technique et scientifique; 2) elles impliquent de nombreux acteurs qui ont différentes expertises sur la problématique en jeu; 3) elles font appel à plusieurs disciplines en soulevant des problèmes hétérogènes; et 4) elles font appel à une multitude d'objets ou d'artéfacts scientifiques et techniques (McDonald, 2008). De plus, pour Callon, Lascoumes et Barthe (2001), les controverses sociotechniques sont aussi des occasions d'« enrichissement de la démocratie » parce qu'elles forcent la reformulation de certains projets de développement controversés et permettent les apprentissages collectifs (p. 49).

Si les conflits environnementaux sont complexes, leur résolution l'est tout autant. Tout un champ de recherche s'est développé ces dernières décennies pour les analyser et faciliter leur résolution (Blackburn et Bruce, 1995; Daniels et Walker, 2001; Depoe, Delicath et Aepli Elsenbeer, 2004; Lewicki, Saunders et Minton, 1997; Lewicki, Gray et Elliott, 2003; Simard *et al.*, 2006).

Par exemple, Burgess et Burgess (1995) et Lewicki *et al.* (2003) se sont attaqués à ce qu'ils appellent les conflits ingérables (ou « intractable conflicts »), soit des conflits qui perdurent et pour lesquels toute tentative de résolution échoue (Putnam et Wondolleck, 2003). Ces conflits opposent des groupes qui entretiennent des croyances divergentes quant à la relation entre la société et l'environnement naturel (Burgess et Burgess, 1995) ou qui ont des représentations différentes de ce qui constitue un environnement de qualité (Daniels et Walker, 2001). Le débat ingérable se caractérise par 1) une grande division entre ses acteurs; 2) une forte intensité des échanges, notamment émotive; 3) une invasion des enjeux dans les vies sociale et privée des acteurs; et 4) une grande complexité, ce qui peut même mener à une difficulté à trouver les arènes appropriées pour débattre des enjeux. L'impossibilité à gérer ces débats peut tirer sa source 1) des acteurs (en raison d'idéologies ou d'appartenance différentes, par exemple); 2) des enjeux (comme les valeurs morales ou religieuses ou les menaces à la santé et à la sécurité humaine); ou 3) du système

social incapable de fournir une structure adéquate pour résoudre le débat (Putnam et Wondolleck, 2003).

Ainsi, même si c'est le terme conflit environnemental qui a été retenu pour nommer les situations qui servent de contexte à cette recherche, la définition qu'il en est fait intègre des éléments de la littérature sur les conflits en général, sur les conflits environnementaux en particulier, sur les conflits ingérables et sur les controverses sociotechniques. En s'inspirant des auteurs cités jusqu'à maintenant, la définition suivante du conflit environnemental a servi à l'analyse :

> Le conflit environnemental survient quand une action qui a un impact potentiel ou avéré sur l'environnement suscite une opposition entre au moins deux partis interdépendants qui ont des visions de l'environnement et du développement d'un territoire donné incompatibles et qui tentent d'atteindre leurs objectifs ou qui tentent d'empêcher le ou les adversaires d'atteindre les leurs, dans un contexte environnemental, social, politique et économique où certaines ressources sont rares et où persistent des incertitudes quant aux risques sur l'environnement et la santé et quant à l'évaluation et la gestion de ces risques.

1.2 La division sociale causée par les conflits environnementaux

Malgré leur importance, les impacts sociaux sont souvent le parent pauvre des études d'impacts environnementaux; les impacts d'un projet sur l'environnement biophysique sont généralement bien documentés et lorsque cela est nécessaire et possible, des mesures d'atténuation sont prévues. Par contre, les impacts sociaux d'un projet, c'est-à-dire les impacts sur l'environnement humain dans lequel le projet sera implanté, sont, eux, rarement pris en considération (Becker, 2001; Burdge et Vanclay, 1996; Vanclay, 2003).

Les relations porteuses de confiance entre les différents acteurs impliqués dans un projet, y compris entre les membres d'une communauté où sera réalisée un projet de développement, sont bénéfiques pour tous et peuvent éviter la détérioration du

tissu social (Walker *et al.*, 2010). Cependant, dans les conflits environnementaux, les relations ne sont pas toujours harmonieuses. Ces batailles publiques peuvent laisser des marques dans la communauté, des marques qui peuvent perdurer une fois le conflit résolu. En effet, quand une opposition survient, la population d'une communauté peut devenir divisée (Graham, Stephenson et Smith, 2009; Gross, 2007; Walker *et al.*, 2010), le projet modifiant ainsi la structure sociale d'une communauté. Or, quand un projet de développement vient modifier les interactions quotidiennes des gens dans une communauté donnée ou leur sentiment de bien-être, par exemple, il s'agit déjà là d'impacts sociaux (Vanclay, 2003).

Les modifications à la structure sociale d'une communauté peuvent avoir un impact sur la cohésion sociale, et ce, de différentes façons (Forrest et Kearns, 2001; Friedkin, 2004; Hulse et Stone, 2007; James, 1987). Par exemple, ces changements structuraux peuvent affecter l'échange de services ou l'entraide dans une communauté. Dans la littérature, ceux-ci sont normalement associés au capital social, qu'englobe le concept de cohésion sociale (Adler et Kwon, 2002; Brehm et Rahn, 1997; Coleman, 1988; Forrest et Kearns, 2001; Kawachi et Kennedy, 1997; Putnam, 1995; Woolcock, 1998). Selon certains auteurs, ces changements à la structure sociale peuvent même avoir un impact sur la santé des membres d'une communauté, ce qui est de plus en plus reconnu dans la littérature sur la santé publique (Kawachi et Kennedy, 1997; Poortinga, 2006; Szreter et Woolcock, 2004; Veenstra *et al.*, 2005; Ziersch *et al.*, 2005).

La cohésion sociale et le capital social sont des ressources appartenant à l'ensemble de la collectivité pour qu'elle puisse passer à l'action (Floress, Stalker Prokopy et Broussard Allred, 2011; Lin, 2001). Ils sont des signes d'une communauté en santé. Tout devrait être mis en œuvre pour prévenir leur détérioration ou pour les restaurer en cas de stress ou de conflits, bien que ceux-ci soient naturels dans toutes les communautés (Brewer, 2001; Carver, Scheier et Weintraub, 1989; Lazarus et Folkman, 1984; Moser, 2009).

1.3 L'information et la participation du public

Les premières batailles environnementales visaient à permettre aux gens d'avoir accès à l'information (Cox, 2006; Maisonneuve, 2005; Simard *et al.*, 2006; Walker, 2007). Au cœur des conflits environnementaux, l'information (ou le manque d'information) joue donc un rôle primordial. Sans information, le public voit sa capacité à participer à l'élaboration et à la négociation d'un projet grandement affaiblie (Krupar et Krupar, 1989; Senecah, 2004). Pourtant, en vertu de nombreuses lois ou accords multilatéraux, les citoyens doivent avoir accès facilement à un minimum d'information concernant leur environnement (Banas, 2010).

L'incertitude liée à certains projets de développement, à plusieurs niveaux, gonfle les craintes des opposants, souvent dans un contexte où l'information est déficiente (Dziedzicki, 2006). Le public se retrouve malgré lui confus et divisé (Krupar et Krupar, 1989). Les enjeux environnementaux génèrent en effet un besoin important de savoir (Senecah, 2004). Le besoin d'information peut parfois sembler infini; plus une personne est préoccupée par un enjeu qui peut avoir des impacts sur l'environnement ou la santé, plus elle sera vraisemblablement insatisfaite des informations obtenues, puisque celles-ci génèreront à leur tour de nouvelles questions (Baden, 2007). Commence alors une quête insatiable et exigeante d'information. Il s'agit du processus de création de sens qui n'est jamais fini (Weick, 1995).

Par ailleurs, les gens ont parfois le réflexe de se regrouper (Lyrette, 2003; Proulx et Sauvé, 2007; Teo, 2008; Tindall, 2002). Ce désir d'association peut naître d'un besoin de savoir, d'un besoin d'information sur le projet qui les concerne (Lascoumes, 1994). Cette information leur est nécessaire pour la négociation à laquelle ils veulent prendre part. Il n'est pas rare que ces associations développent une certaine expertise sur l'objet du conflit, justement parce qu'elles se sont informées, même si l'enjeu est complexe et nouveau (Lascoumes, 1994; Petts, 1997; Proulx et Sauvé, 2007). Il arrive même que certains opposants à un projet de développement aient plus d'information au sujet de ses impacts sur l'environnement

et sur la santé que les élus qui devront approuver ou non le projet (Petts, 1997). Ainsi, les scientifiques ne sont pas perçus comme les seuls experts; les citoyens aussi peuvent devenir une source d'information légitime, tout comme ils peuvent percevoir les risques différemment que les experts ne le font (Aitken, 2009; Dervin, 1994; Endres, 2009; Fischer, 2000; Frewer *et al.*, 2003; Kinsella, 2004; Kraft et Clary, 1991; Petts, 1997; Plough et Krimsky, 1987).

La première étape de la participation publique doit nécessairement être l'information et la sensibilisation : la transparence est vue comme un préalable à la participation (Beauchamp, 1997). Malheureusement, certains promoteurs privés sont réputés pour la piètre qualité des processus de consultation qu'ils mettent en place (Devine-Wright, 2005). De nombreux promoteurs continuent en effet d'avoir recours à des approches centralisées qui consistent très souvent pour le promoteur à « décider-annoncer-défendre ». Cette approche connue sous le sigle DAD n'inclut pas ou très peu la population dans l'élaboration du projet et risque fort de mener à une réaction d'opposition de la part du public directement touché par un projet (Hendry, 2004; Marchetti, 2005). Selon certains, ces promoteurs font du tort à tout leur secteur d'industrie (Jegen, 2008).

Dans ces cas, l'impression d'un manque de transparence s'ajoute à l'idée du manque d'information. Les citoyens ont alors la perception que les décideurs, les promoteurs ou d'autres groupes d'intérêts taisent des informations, contrôlent ce qui est dit au sujet d'un projet dans l'espoir de maintenir dans l'ignorance le plus longtemps possible une population potentiellement hostile au projet. Par contre, donner des informations n'est pas tout; il ne s'agit pas d'inonder le public de faits bruts, mais plutôt de lui donner les moyens de mieux comprendre la situation (Laird, 1993). Tout comme informer ne signifie pas simplement informer d'une décision déjà prise (Blanc, 2006), mais bien informer d'un projet dans le but d'entamer par la suite une négociation sur ce même projet.

Pour l'inclusion du public, l'amont revêt une importance toute particulière (Ogrizek, 1993). Certains promoteurs de projets, comme Hydro-Québec au Québec (Gauthier, Simard et Waaub, 2000; Simard, 2006), l'ont bien compris. Ces promoteurs

privilégient la négociation avec les acteurs incontournables, ceux dont l'accord (ou du moins la neutralité) tôt dans le développement du projet facilitera la suite des procédures (Fourniau, 2006; Jegen, 2008). Le grand public ne fait évidemment pas partie de ceux-ci. Mais lorsque la population est placée devant un projet déjà bien avancé sur lequel elle sent qu'elle n'a que peu d'influence, il est plus difficile d'établir une relation de confiance nécessaire à l'acceptabilité sociale du projet (Blanc, 2006; Jegen, 2008). Même si les promoteurs entreprennent à ce moment d'informer la population, ils auront peut-être déjà suscité de la part du public une attitude de méfiance (Jegen, 2008) ou pire, fait éclater un conflit (Audhui, 2006; Krupar et Krupar, 1989). Les auteurs – hormis ceux déjà cités ici – qui insistent sur l'importance d'impliquer les citoyens concernés le plus tôt possible dans le processus de développement d'un projet (éolien en particulier) sont de plus en plus nombreux (Aitken, 2010c; 2010b; Aitken, McDonald et Strachan, 2008; Wolsink, 2007).

Par ailleurs, malgré qu'elle se plaigne de manquer d'information, la population a souvent accès à une très grande quantité de données (rapports, études d'impacts, sites web, reportages dans les médias, etc.), parfois plus qu'elle ne pourra jamais en assimiler. En dépit de cette surabondance de données, les citoyens arrivent à créer du sens (Weick, 1995) à partir de cette information, suffisamment à tout le moins pour prendre position à un moment du processus. Si la controverse est vive, ce moment se produit souvent avant tout le processus d'information et de consultation, comme celui du Bureau d'audiences publiques sur l'environnement présenté ci-après, où les gens arrivent avec une opinion arrêtée (Beauchamp, 1997; Bourg et Boy, 2005). À première vue, il peut sembler étonnant de prendre position avant d'être informé. La raison de cette prise de position est peut-être alors ailleurs que dans l'accès à l'information.

1.4 Le BAPE, outil démocratique pour la gestion de l'environnement

Fort d'une crédibilité et d'une réputation qu'il s'est bâti au fil des ans, le Bureau d'audiences publiques en environnement du Québec (le BAPE) a servi et sert encore de modèle à plusieurs États qui cherchent à trouver une façon démocratique de gérer les dossiers environnementaux en incluant le plus possible dans la discussion les différents acteurs concernés (Simard *et al.*, 2006).

En 1978, grâce à une modification de la Loi sur la qualité de l'environnement, le Québec s'est doté de cet outil démocratique pour gérer les conflits environnementaux. En posant ce geste, le gouvernement du Québec insistait sur l'importance d'informer et de faire participer le public dans les débats environnementaux (Baril, 2006). La mission officielle du BAPE en est une d'information et de consultation auprès de la population pour toutes les questions portant sur la qualité de l'environnement (BAPE, 2012). Il s'agit d'un processus obligatoire, strictement encadré par le Ministère du Développement durable, de l'Environnement et des Parcs (MDDEP), pour tous les projets de développement qui peuvent avoir des impacts sur l'environnement.

D'après Michel Yergeau, vice-président du BAPE de 1979 à 1984 : « le BAPE a été créé pour le public. Il n'a pas d'autres raisons d'exister que d'informer le public sur un projet donné et d'écouter ce qu'il a à en dire par la suite » (Simard *et al.*, 2006, p. 35). Le BAPE est un organisme consultatif indépendant composé de sept membres (nommés par le ou la ministre du MDDEP), appelés aussi commissaires. L'organisme peut se voir confier un rôle d'enquêteur, mais également un rôle de médiateur, à l'occasion (voir Figure 1.1).

La Figure 1.1 montre aussi que le processus d'audiences publiques se passe en deux temps devant une commission créée spécifiquement pour évaluer un projet et ses impacts. La première phase en est une d'information, où le promoteur présente les détails de son projet et où les citoyens sont invités à poser des questions. La deuxième phase en est une de consultation, où les citoyens et organisations sont invités à exprimer publiquement leur opinion quant au projet sous la forme d'un

mémoire. Le processus d'audiences publiques se termine par la remise du rapport de la commission au MDDEP. Le BAPE n'a pas de pouvoir décisionnel. Après une audience publique, il ne peut que formuler des recommandations au gouvernement. La décision finale concernant le projet à l'étude revient au ministre ou à la ministre du MDDEP.

Le BAPE connaît aussi des détracteurs. Les promoteurs des projets qui sont soumis à l'évaluation du BAPE trouvent souvent que l'organisme accorde trop d'importance à l'étude de la justification des projets plutôt qu'à la seule étude des impacts sur l'environnement (Simard *et al.*, 2006). D'autres voudraient le voir aboli, car l'apport économique des projets n'y est pas suffisamment considéré (Boisvert, 2006). Mais le BAPE essuie également les critiques provenant de certains groupes environnementalistes qui voient sa crédibilité affectée par certaines décisions rendues dans des dossiers plus controversés (Normandin, 2007, p. 6).

Des critiques viennent même de certains des premiers artisans du BAPE. Par exemple, André Beauchamp, qui a été président du BAPE de 1983 à 1987, a écrit, en parlant de la « procédure quasi judiciaire » du BAPE, qu'elle « provoque l'antagonisation des parties » (Beauchamp, 1997, p. 31). Des experts et d'anciens membres du BAPE ont même signé en 2010, dans un quotidien québécois, une lettre d'opinion où la Commission créée pour évaluer l'impact de l'exploitation des gaz de schiste au Québec était considérée comme le test ultime de l'indépendance du BAPE par rapport au gouvernement (Baril *et al.*, 2010). Il semble que le BAPE ait passé le test puisque le rapport rendu public en février 2011 – qui recommandait que davantage d'études soient menées sur les impacts de l'industrie du gaz de schiste et qu'un moratoire sur le développement de ce secteur soit déclaré durant cette évaluation environnementale stratégique (BAPE, 2011a) – a suscité essentiellement des commentaires et réactions positives (Radio-Canada, 2011).

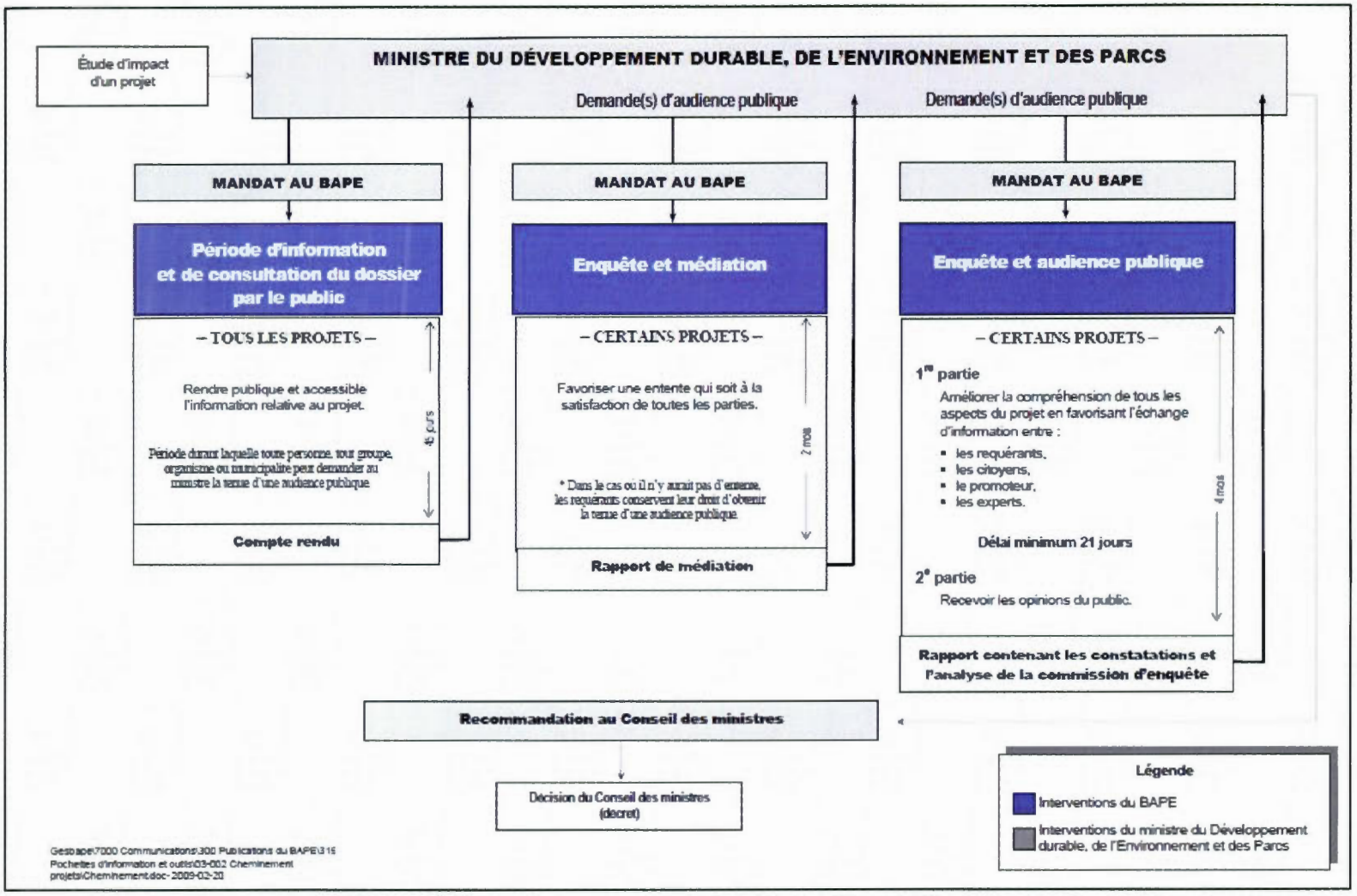

Figure 1.1 – Le cheminement d'un projet dans le processus du BAPE (BAPE, 2012)

Par ailleurs, plusieurs maintiennent que l'inclusion du public dans le processus d'évaluation environnementale se fait trop tard (Baril, 2006; Gauthier, 1998; Gauthier, Simard et Waaub, 2000; Simard *et al.*, 2006).

> [I]l faut informer et consulter les communautés locales dès l'ébauche de l'avis de projet, pour mieux connaître l'intérêt du public, en établir les enjeux principaux, les options possibles, recueillir l'information initiale qu'il détient et s'entendre sur celle qu'il reste à aller chercher par les différentes études d'impacts. (Baril, 2006, p. 86)

Baril (2006) favorise lui aussi une inclusion du public plus tôt dans l'élaboration du projet parce que la « démarche de consultation a posteriori entraîne méfiance, réticence et polarisation des points de vue » (p. 86). Ce phénomène de polarisation lors des processus de consultation publique n'est pas unique au BAPE, puisqu'il a aussi été observé ailleurs dans le monde (Aitken, McDonald et Strachan, 2008; Bell, Gray et Haggett, 2005).

Un manque d'information contribue à accentuer les antagonismes dans un conflit en suscitant parfois des attitudes hostiles de la part du public désireux d'en apprendre davantage sur l'enjeu environnemental au cœur du débat (Ogrizek, 1993; Sharlin, 1987). Le manque d'information peut aussi susciter injustices, inégalités, conflit d'intérêt et division sociale (Bouchard, 2007a), mais également un désengagement de la part de la population. D'après Ruest (2007), l'engagement des citoyens sera grandement influencé par l'information à laquelle ils auront accès. Ainsi aux yeux de Ruest, faire en sorte que les gens aient accès à une information suffisante et de qualité, c'est s'assurer d'une plus grande participation du public aux processus de consultation publique.

De plus, Baril (2006) critique la disponibilité des documents essentiels au public pour comprendre et juger d'un projet de développement, notamment les études d'impacts. Il donne en exemple des projets soumis à une audience publique alors que leurs plans n'étaient pas complètement arrêtés; dans ces cas, les citoyens se sont exprimés à partir de documents, dont les études d'impacts, qui présentaient des

données incomplètes et sujettes à modifications. Or, comme tout le processus consultatif découle des informations déposées durant la première phase d'audience publique, il est primordial que celles-ci soient les plus représentatives possible du projet envisagé.

Baril (2006) dénonce également la très courte période (soit 45 jours) prévue à la loi pendant laquelle les documents relatifs à un projet de développement sont accessibles au public. C'est durant cette période, et à partir de ces documents (qui contiennent en principe tout ce qui a été utilisé pour réaliser l'évaluation environnementale du projet), qu'une municipalité, un organisme public ou des citoyens peuvent demander une audience publique. Or, certains de ces dossiers peuvent contenir jusqu'à 3 000 pages d'information parfois fort complexe.

La phase d'information, la première des deux étapes d'une audience publique du BAPE (la seconde étant la consultation du public), est la phase « la plus productive », malgré la perception des participants, qui ont souvent hâte d'exprimer leur point de vue au sujet du projet proposé (Beauchamp, 2006, p. 41). La phase d'information constitue, grâce aux questions posées aux experts présents, « l'essentiel de l'enquête de la Commission » (Beauchamp, 2006, p. 42). D'après cet auteur, c'est donc lors de cette phase d'information que peut s'opérer un transfert de pouvoir entre les acteurs. L'étape de l'information, que nombre d'observateurs qualifient de cruciale en raison de son potentiel de répartition des connaissances et donc d'équilibre des forces en présence (Beauchamp, 2006), demeure malgré tout très peu explorée. En effet, la littérature fait état de nombreuses recherches s'intéressant à la médiation et à la négociation des conflits environnementaux, mais peu se sont concentrées sur l'étape préalable à toute participation publique, soit la phase d'information (Beauchamp, 1997; Simard *et al.*, 2006).

1.5 Les conflits environnementaux liés à l'éolien au Québec

Au Québec, et particulièrement depuis les années 1990, les grands projets d'aménagement ou d'infrastructure sont fréquemment sources de conflits, particulièrement dans le secteur énergétique (Simard, 2006). Les conflits éoliens ou les débats engendrés par la filière éolienne sont aussi présents ailleurs dans le monde :

- aux États-Unis (Abbott, 2010; Punch, James et Pabst, 2010);
- aux Pays-Bas (Agterbosch, Glasbergen et Vermeulen, 2007; Bolin *et al.*, 2011; Breukers et Wolsink, 2007; Wolsink, 2001);
- en Suède (Bolin *et al.*, 2011; Khan, 2003; Pedersen, 2007);
- en France (Jobert, Laborgne et Mimler, 2007; Le Floch, 2012);
- en Allemagne (Breukers et Wolsink, 2007; Jobert, Laborgne et Mimler, 2007);
- en Australie (Gross, 2007);
- en Nouvelle-Zélande (Graham, Stephenson et Smith, 2009; Shepherd *et al.*, 2011)
- au Royaume-Uni (Aitken, 2009; 2010d; 2010a; Aitken, McDonald et Strachan, 2008; Bell, Gray et Haggett, 2005; Breukers et Wolsink, 2007; Ellis, Barry et Robinson, 2007; Riddington *et al.*, 2010; Toke, 2005; van der Horst et Toke, 2010; Walker et Devine-Wright, 2008; Walker *et al.*, 2010; Warren et McFadyen, 2010).

Au Québec, ces conflits sont relativement récents, essentiellement parce que la province a investi cette filière énergétique dans la dernière décennie seulement (Jegen, 2008; Québec, 2006; Saucier *et al.*, 2009; Thériault, Chaumel et Feurtey, 2007).

Le premier parc éolien québécois, Le Nordais, a été implanté en 1998, à Cap-Chat; il comptait 76 éoliennes d'une puissance de 750 kW chacune (Hydro-Québec, 2012a).

L'année suivante, le parc a été complété avec l'érection de 57 éoliennes de la même puissance, à Matane. L'initiative, développée par un groupe de promoteurs privés, visait alors, notamment, à relancer les régions administratives de la Gaspésie-Iles-de-la-Madeleine et du Bas-Saint-Laurent, dans l'Est du Québec. Ces régions ressources ont été durement touchées par les difficultés économiques des secteurs de la pêche, de l'agriculture, des mines et de la forêt (Saucier *et al.*, 2009; Thériault, Chaumel et Feurtey, 2007)

À l'époque, le projet Le Nordais a suscité une certaine opposition, comme en témoigne une partie des 73 mémoires déposés au Bureau d'audiences publiques sur l'environnement (BAPE, 1997). Cependant, d'après Lyrette (2003), les opposants au projet avaient vraisemblablement défendu leur position isolément, sans se regrouper, et n'avaient donc pas la force du nombre.

La société d'État Hydro-Québec a longtemps refusé de développer la filière éolienne prétextant un manque de fiabilité de la ressource et un manque d'expertise nationale dans le domaine (McDonald, 2008), malgré la reconnaissance du fort potentiel éolien de la province (Hélimax Énergie et Truewind, 2005). Puis, le secteur éolien a pris son envol grâce à deux appels d'offres d'Hydro-Québec; l'un en 2003 pour une valeur de 1000 MW ne concernait que les régions Gaspésie-Iles-de-la-Madeleine et Bas-Saint-Laurent dans l'est du Québec, et l'autre en 2005 pour une valeur de 2000 MW concernait tout le Québec (Hydro-Québec, 2012a).

Les sept projets de parc éolien retenus au premier appel d'offres sont tous en opération depuis 2011. Des 15 projets retenus dans le cadre du deuxième appel d'offres, trois sont situés dans le Bas-Saint-Laurent, trois dans la région de la Capitale-Nationale, trois en Chaudières-Appalaches, deux en Gaspésie, deux en Montérégie, un dans la région du Saguenay et de Charlevoix et un dans le Centre-du-Québec (Hydro-Québec, 2012b). Ils ont tour à tour été soumis au processus du Bureau d'audiences publiques sur l'environnement. Certains n'ont pas exigé d'audiences publiques et seul l'un d'entre eux, en Montérégie, a reçu un décret défavorable du gouvernement du Québec. Le projet éolien de l'Érable est celui qui a soulevé le plus grand intérêt en termes de participation au processus de consultation

publique, avec un record de 248 mémoires présentés au BAPE lors des audiences qui se sont tenues à l'automne 2009 (BAPE, 2010a). Malgré une vive controverse dans la communauté concernée (BAPE, 2010a), le projet a obtenu par décret l'autorisation gouvernementale nécessaire pour aller de l'avant (Québec, 2011b). Au moment de soumettre cette thèse, le projet est en construction. Les opposants au projet sont toujours actifs et se sont retirés dans les derniers mois d'un processus de médiation mis en place pour rétablir les relations entre les différents acteurs impliqués parce qu'ils considèrent que les citoyens les plus impactés par le projet éolien ne sont pas écoutés ni considérés (RDDA, 2012).

Les projets d'énergie éolienne, répondent à un besoin de réduction des émissions de gaz à effet de serre, mais ils peuvent aussi entrer en conflit avec d'autres enjeux environnementaux comme l'utilisation et la gestion du territoire, la conservation, l'agriculture, etc. (Abbott, 2010). Ce faisant, ils entrent dans la sphère publique et entraînent des batailles parfois intenses entre partisans et opposants de cette forme d'énergie.

De manière générale, l'opposition aux projets éoliens dénonce différents types d'impacts :

- des impacts sur l'environnement (Bouchard, 2007b; Graham, Stephenson et Smith, 2009; Québec, 2007);
- des impacts sociaux, notamment des conflits (Agterbosch, Glasbergen et Vermeulen, 2007; Aitken, 2009; 2010c; Bouchard, 2007a; Devine-Wright, 2005; Ellis, Barry et Robinson, 2007; Feurtey, 2008; Gariépy, 2006; Graham, Stephenson et Smith, 2009; Gross, 2007; Krohn et Damborg, 1999; Lyrette, 2003; Saucier *et al.*, 2009; Thériault, Chaumel et Feurtey, 2007; Wolsink, 2007);
- des impacts sur la santé humaine et la qualité de vie, notamment en raison du bruit particulier des éoliennes (Abbott, 2010; Académie nationale de médecine, 2006; AFSSET, 2008; Aitken, 2009; Bolin *et al.*, 2011; Cass, Walker et Devine-Wright, 2010; INSPQ, 2009; Janssen *et al.*, 2011; Keith,

Michaud et Bly, 2008; Knopper et Ollson, 2011; Pedersen, 2007; 2009; Pedersen et Persson Waye, 2004; 2006; 2007; Pedersen et Larsman, 2008; Pedersen et Persson Waye, 2008; Pedersen, Hallberg et Persson Waye, 2007; Pedersen *et al.*, 2009; Persson Waye et Öhrström, 2002; Pierpont, 2009; Punch, James et Pabst, 2010; Shepherd *et al.*, 2011; van den Berg, 2005; van den Berg *et al.*, 2008; Verheijen *et al.*, 2011; Wolsink, 2007);

- des impacts sur la faune, particulièrement pour les chauves-souris et les oiseaux (Abbott, 2010; Côté, 2006; de Lucas *et al.*, 2008; Exo, Hüppop et Garthe, 2003; Ferrer *et al.*, 2012; Hüppop *et al.*, 2006; Johnson *et al.*, 2003; Kunz *et al.*, 2007; Kuvlesky Jr *et al.*, 2007; Masden *et al.*, 2009);
- des impacts sur les paysages (Abbott, 2010; Bouchard, 2007a; CMSQ, 2006; Lyrette, 2003; Nadaï et van der Horst, 2010; Pasqualetti, 2000; 2011; Riddington *et al.*, 2010; Thériault, Chaumel et Feurtey, 2007; van der Horst et Toke, 2010);
- des impacts économiques, comme la dévaluation des habitations à proximité du parc ou des inégalités entre les différents acteurs concernées (Abbott, 2010; Aitken, 2010d; Brannstrom, Jepson et Persons, 2011; Cass, Walker et Devine-Wright, 2010; Cowell, Bristow et Munday, 2011; Graham, Stephenson et Smith, 2009; Hoen *et al.*, 2009; Sims, Dent et Oskrochi, 2008).

Malgré la présomption – qui n'a jamais été mesurée de façon rigoureuse – que le public est grandement en faveur des énergies renouvelables, plusieurs projets un peu partout dans le monde (particulièrement, les projets éoliens) soulèvent une opposition inattendue, considérant que le soutien public pour ces énergies devrait être très élevé (Aitken, 2010c; Krohn et Damborg, 1999; Smith et Klick, 2007; Wolsink, 2001). La perception que l'acceptabilité sociale de ces projets est une « chose » qui doit être gérée tout au long des différentes phases de développement par les promoteurs est encore répandue (Jobert, Laborgne et Mimler, 2007). Les solutions mises de l'avant sont souvent des approches autoritaires dites « top-down » d'information et d'éducation du public (Aitken, 2010c; Kraft et Clary, 1991; Wolsink, 2007). De façon encore plus catégorique, certains promoteurs et décideurs

considèrent cette opposition simplement comme une manifestation du syndrome « Pas dans ma cour! » ou PDMC, ce qui est une façon de délégitimer leur discours et de les exclure du débat (Bernoux, 1990), alors que le syndrome PDMC est davantage une action de protection d'un lieu fortement lié à l'identité sociale et aux différentes stratégies d'adaptation (Devine-Wright, 2009; Kraft et Clary, 1991). Le modèle PDMC en lien avec l'énergie éolienne a de toute façon été grandement déconstruit dans la littérature scientifique, plusieurs auteurs avançant que d'autres facteurs (par exemple, la confiance envers les institutions) influencent davantage l'opposition que la proximité des installations (Bell, Gray et Haggett, 2005; Devine-Wright, 2005; Smith et Klick, 2007; Wolsink, 2001; 2007).

Au Québec, en plus, la façon de développer les projets éoliens –en partenariat avec le secteur privé et non par la société d'État Hydro-Québec– est aussi dénoncée (Bouchard, 2007a) ou sérieusement questionnée (Jegen, 2008). Dans le but de favoriser une plus grande acceptabilité sociale de ces projets, différents observateurs de la filière éolienne, dont le BAPE, insistent sur l'importance d'inclure les citoyens très tôt et tout le long du processus d'élaboration d'un projet éolien, surtout si celui-ci est envisagé en milieu habité (BAPE, 2010b; 2010a; Feurtey, 2008; Jegen, 2008; Saucier *et al.*, 2009).

Plusieurs groupes se sont organisés pour dénoncer les projets de parcs éoliens qui se multiplient à différents endroits du globe; par exemple, un groupe européen qui affirme réunir 523 organisations dans 23 pays européens (la Plateforme européenne contre les éoliennes industrielles[1]), un groupe américain (Wind Watch[2]), un groupe ontarien (Ontario Wind Resistance[3]), ainsi que des groupes québécois –souvent locaux– (Éole-Prudence[4], le Regroupement pour le développement durable des Appalaches[5] et Terre citoyenne[6]). La plupart de ces groupes ont parmi leurs

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[1] Plateforme européenne contre les éoliennes industrielles, http://www.epaw.org/, site consulté le 15 mars 2012.
[2] Wind Watch, http://www.wind-watch.org/, site consulté le 15 mars 2012.
[3] Ontario Wind Resistance, http://ontario-wind-resistance.org/, site consulté le 15 mars 2012.
[4] Éole-Prudence, http://www.eoleprudence.org/, site consulté le 15 mars 2012.
[5] Regroupement pour le développement durable des Appalaches, http://www.rdda.ca/, site consulté le 15 mars 2012.
[6] Terre citoyenne, http://www.terrecitoyenne.qc.ca/, site consulté le 15 mars 2012.

premiers objectifs de diffuser la « vraie » information ou les « faits » au sujet du développement éolien qu'ils qualifient d'industriel. Encore une fois, ceci démontre l'importance de l'information dans ce genre de conflits.

1.6 Objectifs généraux de recherche

Comme on a pu le constater jusqu'ici, les conflits environnementaux ont fait l'objet d'études nombreuses et variées. Par contre, ils ont rarement été évalués de l'intérieur, du point de vue des membres du public les plus impliqués et concernés (à titre d'exception voir Teo, 2008). Ce projet ne vise pas à comprendre les raisons du conflit ou les arguments des protagonistes, pas plus qu'il ne cherche des pistes de solutions pour la négociation ou la médiation du conflit. Ce projet de recherche vise à mieux comprendre certains éléments précis du déroulement d'un conflit environnemental, et ce, du point de vue des acteurs impliqués sur le terrain. Pour ce faire, il a exploré, à travers une étude de cas et une méthodologie mixte, 1) la façon dont l'information est diffusée dans un conflit et comment le public se l'approprie; 2) le rôle de la confiance dans la diffusion de l'information et dans la consolidation de l'opposition dans un conflit, et 3) la division sociale dans une communauté affectée par un conflit et la façon dont le soutien social se déploie par et pour les gens impliqués.

1.7 Questions de recherche

Les trois thèmes de notre thèse (information, confiance et cohésion sociale) sont étroitement liés et seul un souci d'organisation préside à leur distinction en trois séries de sous-questions.

La motivation première derrière cette recherche était de mieux comprendre le rôle de l'information dans les conflits environnementaux. C'est avec cet intérêt en tête que nous avons mis les pieds sur le terrain pour la première fois à l'été 2009. Les premières actions de recrutement ont été entreprises auprès des opposants au projet éolien visé par cette étude de cas. Sans opposition, il n'y aurait pas eu de conflit et donc, pas d'objet d'étude. En discutant de façon informelle de leurs sources d'information avec certaines personnes, nous avons constaté qu'ils et elles prenaient pour acquis que l'information leur avait été cachée, mais malgré tout qu'ils et elles en savaient suffisamment pour s'opposer au projet. Ce paradoxe nous interpellait et nous incitait d'autant plus à fouiller la question de l'information en situation de conflit.

L'information joue un rôle central dans les conflits environnementaux et ceux liés au développement éolien n'y font pas exception. Au Québec, malgré la présence du BAPE comme espace d'information et de dialogue, l'argument du manque d'information demeure invoqué par plusieurs citoyens. La question du « quand? » occupe une place prépondérante : le moment où on donne au public accès aux informations pertinentes est central (Aitken, 2010b; Daniels et Walker, 2001; Depoe, Delicath et Aepli Elsenbeer, 2004; Gariépy, 1997; Simard *et al.*, 2006).

Malgré la connaissance du rôle primordial que joue l'information dans les conflits environnementaux, il existe toujours un besoin de comprendre comment exactement la diffusion de l'information se produit dans ces situations. Il est reconnu que les stratégies d'information déficientes de la part des promoteurs sont répandues, mais peu de chercheurs ont étudié les façons dont elles avaient réellement lieu (Wolsink, 2007). Les stratégies d'un promoteur pour informer la population vont pourtant influencer la vitesse de diffusion de cette information et l'émergence d'une opposition (Aitken, 2010c; Graham, Stephenson et Smith, 2009; Wolsink, 2007).

Ces enjeux sont explorés dans cette thèse au travers des trois questions suivantes :

- Qui est informé du projet proposé?
- Quand les citoyens sont-ils informés du projet proposé?
- Quel impact la diffusion de l'information a-t-elle sur le déroulement du conflit?

La légitimité accordée à une nouvelle information est hautement liée à la confiance qu'inspire (ou non) la source (Fox et Irwin, 1998; Huijts, Midden et Meijnders, 2007; Newell et Swan, 2000; Senecah, 2004; Slovic, 1999). Ainsi, les gens auront tendance à avoir davantage confiance en ceux qu'ils perçoivent comme leur ressemblant (Lewicki, Saunders et Minton, 1997). Dans les conflits environnementaux et dans l'évaluation des risques, les informations proviennent de nombreuses sources et la confiance est alors susceptible de jouer un rôle primordial (Daniels et Walker, 2001; Depoe, Delicath et Aepli Elsenbeer, 2004; Kraft et Clary, 1991; Lewicki, Saunders et Minton, 1997). Le manque de confiance envers les décideurs et les promoteurs de projet est en effet plutôt répandu, surtout quand celui-ci suscite une opposition (Aitken, 2010c; Ellis, Barry et Robinson, 2007; Huijts, Midden et Meijnders, 2007; Kraft et Clary, 1991; Priest, Bonfadelli et Rusanen, 2003).

La relation de confiance ou de défiance entre les acteurs impliqués dans un conflit environnemental est explorée dans cette thèse au travers des trois questions suivantes :

- En qui, les citoyens ont-ils confiance pour obtenir des informations et se faire une opinion du projet proposé?
- Qui les citoyens perçoivent-ils comme des dissimulateurs d'information, suscitant donc leur défiance?
- Quel impact la confiance et la défiance ont-elles sur le déroulement du conflit?

Par ailleurs, dès les premiers échanges que nous avons eus avec les opposants, la question de la division sociale revenait fréquemment dans leur discours. Parce que nous croyons fermement en la nécessité d'une science socialement ancrée, c'est-à-dire une science qui tienne compte des préoccupations exprimées par les citoyens, nous avons sauté sur l'occasion d'explorer cet enjeu également. La question de la modification de la structure sociale nous a ainsi permis de continuer d'étudier ce qui était véhiculé – outre l'information – dans les relations unissant (ou désunissant désormais) les acteurs impliqués dans ce conflit.

Quand une opposition survient, plusieurs personnes prennent position pour ou contre le projet, ce qui peut causer une division sociale dans la communauté (Graham, Stephenson et Smith, 2009; Gross, 2007; Walker *et al.*, 2010), entraînant des modifications à sa structure sociale. Par exemple, le manque d'information et le besoin de soutien peuvent être moteurs de mobilisation. Sur la base d'un comportement de recherche d'information ou de soutien, il y a formation de groupes et de coalitions : ceux qui sont favorables au projet et ceux qui s'y opposent. Ce nouveau réseau provoqué par l'arrivée du projet modifie la cohésion sociale des communautés concernées. Ces modifications peuvent avoir des impacts importants, notamment par l'absence ou la piètre qualité du soutien social disponible dans la communauté (Kawachi et Kennedy, 1997; Poortinga, 2006; Szreter et Woolcock, 2004; Veenstra *et al.*, 2005; Ziersch *et al.*, 2005). De ce soutien social déficient peuvent découler de mauvaises stratégies d'adaptation employées par les gens confrontés à un stress (Skinner *et al.*, 2003).

Ces enjeux sont explorés dans cette thèse au travers des trois questions suivantes :

- Comment le projet proposé modifie-t-il la structure sociale de la communauté?
- Comment la recherche de soutien social s'exprime-t-elle dans ces modifications à la structure sociale?
- Ces modifications présentent-elles un avantage ou un désavantage pour la communauté?

Tout au long de la démarche, le véritable fil conducteur qui réunit tous les morceaux de cette thèse a émergé comme étant celui de la relation sociale, et non la seule question de l'information, comme il avait été envisagé au départ. La relation sociale peut être à la fois porteuse d'information, de confiance et de soutien ou, au contraire, ne pas l'être. Ces questions riches seront explorées plus en détails dans les trois chapitres de résultats et discussion.

1.8 Pertinence sociale et scientifique de la recherche

Le but de cette recherche est d'ouvrir la voie à une réflexion plus vaste sur le rôle de l'information et de la confiance dans les conflits environnementaux, ainsi que sur les impacts sociaux pour les communautés visées par un projet de parc éolien. Elle vise à mieux comprendre les différentes stratégies de diffusion de l'information et leurs impacts sur la population; les différents types de recherche d'information par les acteurs concernés; la diffusion de la confiance et de la défiance parmi ces gens; les différentes modifications apportées à la structure sociale d'une communauté par un conflit; l'impact de ces dernières sur le soutien social disponible ou recherché dans

un conflit, et finalement, les différentes stratégies d'adaptation mises en œuvre par les acteurs impliqués.

En fait, cette recherche se veut l'occasion d'aller plus loin dans la compréhension du déroulement des conflits environnementaux et de la réaction du public quant à ces projets de développement controversés. Ces enjeux ont d'abord besoin d'être bien analysés et compris pour éventuellement arriver à y trouver des solutions, ce qui demeure une manière plus constructive à long terme de gérer les conflits environnementaux que de simplement chercher des façons de contourner l'opposition du public à certains projets de développement (Aitken, 2010c; 2010b; Aitken, McDonald et Strachan, 2008; Devine-Wright, 2005; Ellis, Barry et Robinson, 2007). Malgré qu'elles demeurent largement incomprises ou mésinterprétées, les réactions du public confronté à des projets d'énergies renouvelables comme l'éolien donnent lieu à des présomptions qui façonnent les politiques publiques et la pratique dans le milieu (Aitken, 2010c). Il apparait donc d'autant plus important de mieux les comprendre.

Cette recherche cherche à explorer et à mieux comprendre une situation que la littérature a identifié comme étant cruciale dans le processus de participation publique, soit le rôle de l'information, étroitement liée à la confiance. Les acteurs impliqués dans un conflit environnemental gagneront à ce que ces enjeux soient mieux compris, tout comme ils gagneront à ce que soient étudiés les impacts sociaux de tels projets. Cela présente un grand intérêt pour eux et pourrait se révéler d'une utilité certaine pour, par exemple, les artisans du BAPE et les responsables de santé publique qui doivent évaluer les effets de conflits environnementaux avant de soumettre leurs recommandations aux décideurs. Ces deux organisations ont d'ailleurs déjà manifesté leur enthousiasme pour la recherche présentée ici.

Par ailleurs, la réalité de la division sociale générée par les conflits environnementaux a souvent été reconnue par les acteurs concernés ou par des observateurs extérieurs comme les médias ou les instances en charge d'évaluer les impacts d'un projet (le BAPE, par exemple). Cette division sociale a pourtant rarement été montrée, ce qui est fait dans cette thèse. Ce faisant, il s'agit d'une

contribution importante à la littérature scientifique sur l'évaluation des impacts sociaux, un champ de recherche dont la pertinence augmente au même rythme que naissent les conflits liés à des projets de développement qui ont un impact sur l'environnement et la santé.

Et finalement, au-delà de l'intérêt de départ de cette recherche, il y a les citoyens qui, armés de leurs seules convictions, se lancent dans des batailles où les moyens sont souvent inégaux. C'est la présence d'un tels citoyens qui a justifié la recherche; sans ceux-ci, le contexte d'étude disparaissait, tout comme la pertinence d'y mener une recherche comme celle présenté dans ces pages. Si la recherche entreprise ne s'avère pas utile – concrètement et directement – pour les citoyens impliqués dans cette étude, elle le sera peut-être pour d'autres qui entreprendront des combats similaires dans les années à venir.

CHAPITRE II

INTEGRATIVE THEORETICAL FRAMEWORK

This chapter presents the theories used in this study in an integrative way. The theoretical framework follows one main line of argument: the embeddedness of individuals in a web of social relationships. It is through that lens that information, trust, and social cohesion are defined, always in a way that is socially relevant to the study of environmental conflicts. Before this closer look at theory, the research approach and posture are presented as the foundation on which the framework of the research was built.

2.1 Research approach and posture

This thesis is clearly embedded in the emerging field of environmental communication. The manuscript that is often referred to as the first text on environmental communication (Oravec, 1984) is not even 30 years old. The creation of the International Environmental Communication Association (IECA) as recently as in 2011 is an even more striking evidence of the youth of this field. However, since 1991, researchers from different disciplines, from different countries around the world, have felt the need to attend biannual conferences[7] specifically dedicated to this field. Before the birth in 2007 of a centralised journal entitled *Environmental*

[7] Conference on Communication and Environment (COCE), Retrieved in April 2012 from http://environmentalcomm.org/conference-communication-and-environment-coce.

Communication: A Journal of Nature and Culture[8], research on environmental communication was published in different journals mainly related to science or risk communication (Pleasant *et al.*, 2002).

Theories of environmental communication were first introduced in the Encyclopedia of Communication Theory in 2010 (Milstein, 2010). The field developed only few theories that are exclusive to environmental communication, mostly borrowing from rhetoric, organisational communication, media studies and critical theory, but also from disciplines other than communication, such as sociology, psychology, politics, economics, environmental sciences or health sciences. For many years, environmental communication scholars were doing the same kind of research they are now doing, but in different fields that had other names (Cox, 2007). The situation however tends to change as research projects develop and as this new identity of environmental communication is adopted by scholars (see for example Hansen, 2011). Research in environmental communication is interested in communication and interactions between humans and the environment, and it postulates that the way people communicate about the natural world has important impacts in an era where the environmental crises are largely attributed to humans (Milstein, 2010).

Milstein proposed a first division of the field of environmental communication in three research trends: 1) the material-symbolic discourse, about how the environmental discourse is integrated into social and institutional structures that constrain it; 2) the mediating human-nature relations, about how nature speaks and how humans speak in, with or about nature; and 3) the applied and activist theory, where environmental communication aims at socio-environmental changes. This division is particularly innovative in the sense that it does not hold to traditional divisions in the larger field of communication and allows new categories to emerge. The research proposed in this thesis finds its place in the last category.

Before aiming at socio-environmental changes, in the case of this thesis, a first step should be to better understand the situation of information, trust, and social support

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[8] *Environmental Communication: A Journal of Nature and Culture*, Retrieved in April 2012 from http://www.tandf.co.uk/journals/titles/17524032.asp.

in environmental conflicts. It can be argued that the mere idea of studying these issues implies the belief that there may be something "wrong" with them. We argue, like Beck (1992), that the necessary – and sometimes radical (Luhmann, 1989) – changes to our "risk society" can only be instigated by social conflicts, thus the need to study them. Furthermore, environmental communication is dealing with crises and consequently has the ethical duty of aiming toward alternatives and solutions to these crises (Cox, 2007; Peterson, Peterson et Peterson, 2007). Our understanding of the production of knowledge implies that researchers are led by values and principles (Lacey, 2005) that do not make science less accurate, but more socially relevant. In that sense, although the research can be considered socially committed and oriented toward changes, we also believe that these changes cannot happen before an accurate assessment of the situation, thus with a longer-term perspective in mind.

In this study, the researcher avoids narrow-minded thinking and also reaches outside the field of communication for useful theories from different disciplines and authors. Despite the multiplicity of its sources, the theoretical framework of this research follows a coherent line of argument. We assume that communication traditions are not mutually exclusive, but can and should be carefully – mixed, according to the object of research (Craig, 1999; Littlejohn et Foss, 2005). In this research, the complexity of the studied phenomenon and a will to consider it as much as possible from an ecosystem approach (Waltner-Toews, Kay et Lister, 2008) led to the adoption of an innovative integrated theoretical framework and a unique methodology.

The ecosystem approach stemmed from ecological science during the second half of the twentieth century, when an increasing number of researchers felt the need to include humans in the study of the biophysical environment. They progressively developed a global approach to environment and health based on the inextricable links that tie humans to their environment in a dynamic balance (Webb *et al.*, 2010). We postulate that environmental communication can easily be integrated in this perspective by considering that the social structures (constituted of relationships) are

the social environment in which humans evolve and are thus part of the ecosystem (Berkes et Davidson-Hunt, 2008; Moser, 2009).

The ecosystem approach relies on systems and complexity theory and stands on three methodological pillars: 1) transdisciplinary research, which integrates the environmental and social dimensions of a given phenomenon; 2) participation, which implies that the communities targeted by a study contribute to the co-construction of knowledge, warranting at the same time a greater social relevance to the research; and 3) social equity, which aims at better considering marginalised groups at every steps of the research (Lebel, 2003; Waltner-Toews, Kay et Lister, 2008). For example, social iniquities suspected to be present in environmental conflicts were the starting point of the interest for the present research. The ecosystem approach invites researchers to become socially committed scientific actors and offers flexible methodological guidance to do so. In that sense, its posture resembles that of the applied and activist theory in environmental communication.

From a broader perspective, the ecosystem approach takes into account different phenomena of the social environment. For example, the notion of feedback loop is especially important in system theory (Kay, 2008) and it can be easily related to the concept of information; a quest for information often only generates a need for more information (Baden, 2007). In the same vein, the ongoing process of sensemaking (Weick, 1995) is fed by feedback loops. Another essential feature of the ecosystem approach is the complexity, and this comes with uncertainty and contradiction (Funtowicz et Ravetz, 2008).

This research postulates that social reality does not exist outside the representations that people make of it (Leeds-Hurwitz, 1995). However, these representations are also influenced by various material constraints (for example, the access to resources, like information). In this sense, our posture is more idealist than materialist (Johnson, Dandeker et Ashworth, 1984), but we believe the first one does not necessarily exclude the latter. In other words, social reality is constructed through communication according to the constructionist perspective (Berger et Luckmann, 1966; Leeds-Hurwitz, 1995), but social reality is also sometimes reified,

because this reification or this ontological security (Giddens, 1984) presents many advantages in daily human interactions.

In accordance with Bergmans (2008), we postulate that in the study of social systems the reference units are the individuals in interactions. Humans are empowered as much as they are constrained by structure – that is, the social environment in which they interact; hence, we consider that both individuals and structures have to be taken into account (Leeds-Hurwitz, 1995) for an accurate understanding of the social reality of environmental conflicts.

Moreover, like Dervin (1994), we postulate that social reality and humans are both stable and chaotic, both fixed and dynamic, which is coherent with the ecosystem approach. Therefore, as Dervin did before, we reject the idea that radical changes are opposed to regulation, because society can face conflicts but still maintain a relative social order. How could society be status quo, consensus, and solidarity on the one hand, and conflict and domination on the other? The answer is simple: social reality is all this at once. This dual vision of social reality is always constructed and deconstructed by social structures, but also – and even more so – by actors in relationships (Dervin, 1994).

Because the research objects of environmental communication are related to environmental issues, we argue that it is necessary to reconcile subjectivity and objectivity (Peterson, Peterson et Peterson, 2007); yes, social reality is a construction, but some things can also be observable and even measurable. For example, despite being socially constructed, environmental risks are also "real", especially for the people affected or concerned (Jaeger *et al.*, 2001). This brings us to the ontological security presented above, which is crucial in the uncertain world in which we live. Many environmental risks are not only social representations or discourses that can thus be deconstructed (Peterson, Peterson et Peterson, 2007). Many of these risks can be assessed and some can even be managed. In all cases, however, they force us to think on the impacts of science and technology (or modernity) on the environment, be it biophysical or social (Beck, 1992; 1996), from a critical realism perspective (Simmoneaux et Legardez, 2010).

In the same way, this study using mixed methods reconciles quantitative and qualitative methods. Within mixed methods, the triangulation design uses qualitative and quantitative methods together not only to validate data gathered in different ways, but also to get a better systemic picture of the object under study (Creswell et Clark, 2007; Olsen, 2004).

The assumptions presented in this section are essential to the understanding of the following theoretical framework that relies on the argument that social reality evolves in the relationships between interacting humans in a given environment, whether it is considered through the lens of information, of trust or of social support.

2.2 The embeddedness in social relationships

People are embedded in social networks (Granovetter, 1985) in every sphere of their life. These relationships are the line of argument that this study follows. Whether it is information, power, trust, social support or social cohesion that is more closely analysed, it should always be considered from the perspective that these are contents and/or features of social relationships.

2.2.1 Emergence and roles of social networks

In everyday life, social networks play different roles. Some provide emotional and cognitive support, some give access to information, some contribute to the diffusion of trust, etc. Closer to our interest here, some network structures may emerge because of special conditions such as external threats (Stein, 1976) that necessitate the organisation or reorganisation of relationships. The new structure does not emerge randomly; usually informal ties are used to provide scaffolding on which the new structure can be built (Teo, 2008). According to the diffusion model (Rogers,

2003; Valente, 1995), a critical mass of involved individuals must be reached in order to foster participation in such groups (Oliver, Marwell et Teixeira, 1985; Teo, 2008; Teo et Loosemore, 2011). But, according to social movements theory (Benford, 1997; Benford et Snow, 2000; Diani, 1992), the network that contributed to recruit new members may differ from the network that would provide social support in order to maintain the movement over time (Chaeyonn, 2008; Teo, 2008). For these groups to endure, people need to feel that they can act to counter the threat and the structure should provide the needed social support to its members (Stein, 1976; Tajfel, 1982).

Such emergent structures can be seen as groups, defined by internal and external criteria (Tajfel, 1982). If the internal criteria, such as feelings of identification and interdependence, cohesiveness and sense of belonging, as well as attachment to others and commitment to the cause (Teo et Loosemore, 2011), are not enough to define a group, they are nevertheless required for this type of structure to emerge (Tajfel, 1982). The main external criterion is the characterization of the group as a social unit in the eyes of outsiders (Tajfel, 1982).

In a group, people can be linked by multiplex relationships, for example some members can also be friends. This multiplexity helps to bound people together (Teo, 2008), because they thus usually share more than one interest, value or activity. Strong ties (alter closer to ego) generally provide social support, while weak ties (alter more distant to ego) present a greater chance of providing new information (Granovetter, 1983; Tindall, 2002). The content exchanged between alter and ego plays an important part in mobilization in social movements and builds upon common interests (Chaeyonn, 2008).

The more the members are embedded or central in the group, the more they will identify with it (Tindall, 2002) and groups often structure around a core of more involved individuals – in comparison with more peripheral members (Borgatti et Everett, 1999; Teo, 2008). These individuals – often acknowledged as leaders by their peers – play a key role in maintaining the movement over time (Teo, 2008; Teo et Loosemore, 2011). Group identification often serves as a basis for collective

action, which in return feeds group identification because it helps members to see themselves as a group in the eyes of others (Tindall, 2002).

2.2.2 Social identity

As an important element of social cohesion, identity plays a significant role in the recruitment of participants in such groups. Prior ties are not the only factor influencing recruitment, and the answer to why people choose or not to participate in these groups may lie somewhere in the network structure or in the content they convey (McAdam et Paulsen, 1993).

Social identity is the motivation to identify oneself with one group, to feel a sense of belonging to that group, and it is a way to make sense of the otherwise unorganised world around us (Cheng et Daniels, 2005). Social identity is formed, in the context of social networks, by contagion (Burt, 1987; Scherer et Cho, 2003; Teo, 2008; Tindall, 2002) or by comparison (Brewer, 2001; Tindall, 2002). Rituals and conversations – that bring among other things social support – are important for group members and serve to reinforce this identity (Tindall, 2002). Therefore, it is through communication and socialization that members develop and reinforce group identification (Brewer, 2001; Tajfel, 1982) and in some cases, a sense of pride (Teo, 2008), which in return also reinforces this identity. Group members often (but not always) develop collective goals (Teo, 2008) and collective frames (Brummans *et al.*, 2008; Scherer et Cho, 2003).

People who share knowledge on a topic are more susceptible to interact, and vice versa (Carley, 1991; McPherson, Smith-Lovin et Cook, 2001; Rogers, 2003). In a conflict, communication tends to increase between people who agree and to decrease between people who disagree (Lewicki, Saunders et Minton, 1997). Scherer & Cho (2003) and Teo & Loosemore (2011) have observed that communication created groups of "like-minded" individuals who shared the same perceptions of health risks associated with an environmental conflict. In other words,

the more people think alike, the more they interact, or the more they interact, the more they think alike. This tendency to interact with similar people is called homophily (McPherson, Smith-Lovin et Cook, 2001). It is hard to tell – between relation and cognition – which is the cause and which is the effect, since both seem to influence the other. Nonetheless, the sense given by an individual to a piece of information is strongly associated with the relational closeness or distance of the person from whom the information is derived (McPherson, Smith-Lovin et Cook, 2001; Rogers, 2003). Therefore, the local network of an individual can influence his or her exposure to information (Heiss et Monge, 2007). However, frames may vary importantly within a group (Brummans *et al.*, 2008) and, on the contrary, be shared between groups or between "strange bedfellows" (Hanke, Gray et Putnam, 2002).

Many scholars of social movements or intergroup conflict depicted the achievement of group identification as a sense of us-versus-them (Brewer, 2001; Cheng et Daniels, 2005; McPherson et Smith-Lovin, 2002; Stein, 1976; Tajfel, 1982; Teo, 2008). It is the ingroup-outgroup effect (Cheng et Daniels, 2005; Stein, 1976; Tajfel, 1982). This effect can be amplified if a bottleneck appears at some point in the evolution of the social structure, which prevents information from flowing easily from one group to the other, either because intergroup communication has ceased or because someone controls what comes in and out of the group (Zachary, 1977).

When a situation is especially threatening, the necessary cohesiveness of a group as an "us" is simple to understand, and this cohesiveness can be reinforced by the presence of a common enemy, a "them" (Stein, 1976; Tajfel, 1982). In a social movement, the lack of a common enemy can be associated with a lack of social cohesiveness in a group (Teo, 2008), as if this us-versus-them duality was a functional relationship necessary to the regulation of conflicts (Brewer, 2001; Murphy, 1957; Tajfel, 1982). However, some groups may be interdependent or have a sense of common fate that existed prior to the conflict, which helps to avoid or nuance this ingroup-outgroup effect (Tajfel, 1982) and to not depict the other solely in a negative light (Brummans *et al.*, 2008).

In environmental conflicts, the dynamic processes of group identification are just as important as the processes of outgroup characterization (Gray, 2003; Gray, Hanke et Putnam, 2007; Lewicki, Gray et Elliott, 2003). These processes often bring an undifferentiation of outgroup (Brewer, 2001; Tajfel, 1982); others become one single enemy despite the fact that they probably have different claims, values or goals. It is the idea of "you are either with us or against us". The processes can go as far as depersonalizing and dehumanizing this "other" (Brewer, 2001; Tajfel, 1982). History provides terrible examples of how far these processes can go.

2.3. Information: a thing and a construction

Information is conveyed in relationships and plays a crucial role in environmental conflicts, because, among other reasons, it is related to power. Information can be understood as "information-as-construction" and "information-as-thing" (Dervin, 2003, p. 201). Defining information in both ways – even if the line between the two is sometimes blurred – reflects its complexity and richness and prevents the reification of a unique vision (Deetz, 1996).

This dual vision of information implies that social reality is, on one hand, fixed and ordered – "information-as-thing" –, and on the other hand, chaotic and dynamic – "information-as-construction" – (Dervin, 1994). For some these two conceptions of information are irreducible and one has to choose either one or the other. Considering information as a thing is even deemed by some to be an out-dated perspective (Dervin, 1994; 1999). Such an opinion reflects an underlying epistemological posture for which different 'paradigms' are mutually exclusive (Burrell et Morgan, 1979). Although intellectually comforting (Deetz, 1996), this position does not favour inter-paradigm criticism and limits innovative ideas within a given paradigm. This is why, as it was presented at the beginning of this chapter, it is not the posture adopted in this study.

In the present study, considering information also as a thing helps understand information from the point of view of actors. In environmental conflicts, citizens claim their right to access information; they wish to see maps, facts, reports, etc. In doing so, they claim access to something that exists somewhere outside of them and that they believe someone else has in his or her possession.

From an individual point of view, information-as-construction is linked to the sense an actor gives to reality at a given time and place. This vision introduces the notion of subjectivity (Dervin, 1999). Subjectivity is grounded in the social-cultural-historical context in which the actor is embedded; actors make sense from previous knowledge and social interactions with people or even things (including "information-as-thing") (Weick, 1995). Therefore, information is constantly constructed and reconstructed through social interactions and communication (Berger et Luckmann, 1966; Dervin, 1999; Mumby, 1988). In many ways, information from this perspective comes more from how we make sense and organise an event, than from any objective reality pertaining to the event (Weick, 1979). Information-as-construction refers to the process of constructing sense (Hacking, 1999). Hence, one is never fully informed (Dervin, 1999) and sense is constantly renegotiated (Graham, 2004) and in this same process, new information is generated (Innes, 1989).

However, sometimes information-as-construction becomes reified and endures (Giddens, 1991). This information then "represents in an identical way the form and the content of reality" (Dervin, 1999, p. 35). In these cases, it becomes information-as-thing, which may circulate in social networks (Rogers, 2003). The advantage provided by this mobility of information-as-thing does not imply that everyone will uptake this information in a similar manner. Information-as-thing is an external observation (Dervin, 1994) or an input in the process of sensemaking (Weick, 1995).

Moreover, in order to be perceived as information in this process, information-as-thing has to be new to the actor (Losee, 1997) or, at least, be distinct from what is already known (Saint-Charles, 2001). Information-as-thing in itself does not contribute to sensemaking; it needs to be put in relation with other information already organised in interpretative schemes (Weick, 1995). Especially in situations of

uncertainty, people may develop information-seeking behaviours (Brashers, 2001; Goldsmith, 2001) to have access to external information-as-thing that will help them fill the gaps in the sense they make or need to make. In conflictive situations, information-as-thing may be contested, deconstructed and reconstructed through communication so as to create a "new" information-as-thing. And the process starts again.

Whether information is considered a thing or a construction, it needs relationships to flow and be co-constructed. According to the theory of diffusion (Coleman, Katz et Menzel, 1966; Rogers, 2003; Valente, 1995; 2010), information is diffused through a social network; its spread, uptake, blockage and/or transformation is dependent upon the structure of this network and the type of relationships it is made of. For information to spread rapidly and have greater influence, one may, for instance, aim at the opinion leaders of a community (Burt, 1999; Rogers, 2003; Valente et Pumpuang, 2007) or local bridges (Bergmans, 2008), who link people who are otherwise disconnected. Developers, who often face controversy, have devised the strategy of aiming first at elites from whom they need approval (or neutrality) in order to favour further adoption of the project by the public (Simard *et al.*, 2006).

2.3.1 The power of information

Many authors acknowledge information as a basis for power (Bernoux, 1990; Crozier et Friedberg, 1977; Krackhardt, 1990; Stinchcombe, 1990). Power is not an attribute of an actor; rather, it emerges in relationships (Bernoux, 1990; Crozier et Friedberg, 1977; Deutsch, 1973; French, 1985; Friedberg, 1993).

As a thing, information grants power to actors who possess it because it is a resource they can share or guard (Goldman, 1972). An actor could guard information from other actors who covet it, because this coveting makes the information valuable and thus brings power to the guardian. Actors are thus dependent on the one in possession of the information, and since power is relational the guardian is also

dependent on their desire for this information (Bernoux, 1990; Blau, 1967; Daniels et Walker, 2001; Deutsch, 1973; Friedberg, 1993; Lewicki, Saunders et Minton, 1997).

Consequently, the power of other actors resides in their autonomy toward the resource of information possessed by someone else: if their manoeuvre margin is large, for example if they can do without the information or gain it by other means, they have more power in their relationship with this someone else (Bernoux, 1990; Blau, 1967; Crozier et Friedberg, 1977; Friedberg, 1993). The autonomy lies also in the actors' capacity to question the value, legitimacy and relevance of information. In such an information-as-construction perspective, information may no longer be a basis for power if it can be framed (therefore constructed) as irrelevant or invalid.

The control of information-as-thing through its manipulation or withholding is also a strategy available to an actor in, for instance, a negotiation process (Daniels et Walker, 2001; Eyuboglu et Atac, 1991; Friedberg, 1993; Lewicki, Saunders et Minton, 1997). In that case, information is not so much a basis for power as it is a tool in a power relationship over another coveted resource.

Some actors may occupy a strategic position in the social structure that gives them power over resources and the possibility of controlling relationships, and by extension, others (Brass et Krackhardt, 1999; Monge et Contractor, 2003). For instance, an intermediary position allows the individual occupying it to have better control of information (Burt, 1992; 1995; Crozier et Friedberg, 1977): information can be withheld or its diffusion can be facilitated. However, when the existence of such control is exposed, the social structure can be modified in order to access the information by other means (Deutsch, 1973) such as other social relationships.

2.4. The coexistence of trust and distrust

Trust is also relational and it is highly intertwined with information, as we will see. Many definitions and dimensions of trust are presented in the literature (Kramer, 1999; Lewicki, McAllister et Bies, 1998; Nannestad, 2008; Simon, 2007). Distrust remains insufficiently explored since the focus is most often put on trust, and rarely on both (for two major exceptions, see Kramer, 1999; Lewicki, McAllister et Bies, 1998).

Trust and distrust are psychological states linking two individuals (Kramer, 1999). Trust is indeed not a switch that can be turned on (*a* trusts *b*) and off (*a* distrusts *b*). It has often been described as laying on a continuum, from total trust, involving strong solidarity between individuals, to total distrust, involving endings of relationships and social fragmentation (Lewis et Weigert, 1985). However, Lewicki *et al.* (1998) proposed that trust and distrust are not opposed; they rather are "confident positive expectations regarding another's conduct" on a specific issue in the case of trust and "confident negative expectations regarding another's conduct" on a specific issue in the case of distrust (p. 439). At first glance, these definitions may seem to be the two faces of the same coin, but this would be forgetting that relationships are multiplex (Monge et Eisenberg, 1987), i.e., one can feel both trust and distrust toward another. For instance, someone can trust a friend to keep a secret, but distrust that same person to drive his or her car (Lewicki, 2006; Lewicki, McAllister et Bies, 1998). This also means that trust and distrust always have an object (Nannestad, 2008); in the previous example, keeping a secret or driving a car. Trust and distrust are thus different dynamic states linking individuals; they can coexist simultaneously in a relationship and vary independently (Lewicki, McAllister et Bies, 1998).

Previously, trust has been described as a rational choice that one makes between the costs and benefits of trusting or not (Kramer, 1999; Lewicki, McAllister et Bies, 1998; Priest, Bonfadelli et Rusanen, 2003; Simon, 2007; Slovic, 1993). Trust was understood as being based only on cognition; new or previous information were used

to know if trust was the best choice. This rational perspective neglected or underestimated the role that emotions play in trust (Kramer, 1999; Lewicki, McAllister et Bies, 1998). It was based on the cognitive capacities of individuals, their consciousness of calculations. It was also based on the premise that ideas, values, and preferences were fixed and stable over time (Kramer, 1999). Some models later integrated emotions, acknowledging that trust implies both affective and cognitive dimensions (Lewis et Weigert, 1985; Simon, 2007). However, these perspectives on trust forgot to stress the essential point – implicit since the beginning of this section–, which is that trust is relational (Burt et Knez, 1995; Granovetter, 1985; Kramer, 1998; 1999; Lewicki, 2006; Lewicki, McAllister et Bies, 1998; Lewis et Weigert, 1985; Nannestad, 2008; Simon, 2007). Strongly influenced by his or her social relationships, an individual will trust or not. Trust is therefore embedded in social relationships (Granovetter, 1985). Saying this however does not imply that trust and distrust are exempt of cognitive and affective dimensions; a better understanding of trust relies on the reconciliation of the rational, affective and social perspectives (Kramer, 1999; Lewicki, McAllister et Bies, 1998).

Trust and distrust are strongly related to the previously presented concept of identification, i.e., the perception of one's own identity and the characterization of others. Identification is thus central to any actor involved in environmental conflicts as it is one of the elements at the basis of sensemaking (Weick, 1995; Weick, Sutcliffe et Obstfeld, 2005), framing (Brummans *et al.*, 2008; Gray, 2003; Gray, Hanke et Putnam, 2007), and trust (Kramer, 1999; Lewicki, 2006). Understandably, trust is more likely to blossom in a relationship between members of the same group. Similar people tend to interact more because of homophily (McPherson, Smith-Lovin et Cook, 2001), and knowing that values are shared decreases the perceived risk of trusting a person (Kramer, 1999). Trust in institutions follows the same pattern; an institution perceived by an individual as holding the same values increases the likelihood of trust (Peters *et al.*, 2007; Slovic, 1993; 1999).

Many authors stated that trust is hard and long to build (Burt et Knez, 1995; Kramer, 1999; Simon, 2007). Between two individuals, the various experiences will validate

or invalidate the perception of trustworthiness; their interactions will increase or decrease the trust or distrust they feel toward one another (Burt et Knez, 1995; Kramer, 1998; 1999). Moreover, trust is more likely to arise between people having mutual friends (Burt et Knez, 1995; Granovetter, 1985) and information about the trustworthiness of other actors is bound to reach an individual through this personal network. Hence, one tends to grant more credibility to information that comes from trustworthy, familiar sources and this, especially in situations of uncertainty such as environmental conflicts (Babrow, 2001; Brashers, 2001; Frewer et Shepherd, 1994).

Trust and distrust are shifts toward certainty; the higher the trust or distrust, the more certain one's perception of another is (Burt et Knez, 1995; Kramer, 1999; Lewicki, McAllister et Bies, 1998). Trust is also understood as a sign of well-being, both for individuals and for societies (Kramer, 1998); it answers a need for security (Lewis et Weigert, 1985). By contrast, to distrust is to express a fear that someone may act in a way that can be harmful or reckless (Kramer, 1999). The social impacts of distrust are as yet not well understood; it is perceived as a social ill, but at the same time it can be the sign of resilient societies (Kramer, 1999). To distrust may sometimes be interpreted as an adaptive attitude, being vigilant and aware, to make sense out of a potentially hostile situation in order to act accordingly (Kramer, 1998). Distrust is also in part at the origin of the various monitoring and assessment systems currently in place in our societies (Kramer, 1998; Lewis et Weigert, 1985), such as the one that serves as the context for the present case study.

2.4.1 It is not what you know, it is who you believe

Information and trust are highly intertwined. Lack of information is a complaint often expressed by stakeholders who feel excluded from the planning process, especially in environmental conflicts. This information insufficiency is documented in the literature on risk perception and communication (Griffin, Dunwoody et Neuwirth, 1999). According to deficit models in communication (Endres, 2009), an individual

exposed to a given risk (thus needing information) reaches a point where his or her knowledge about this risk will be sufficient to help protect himself or herself from the risk – granted that protection measures do exist. This point would be the threshold where the need for information meets someone's current knowledge of a risk. However, this theoretical explanation does not consider that more information may also modify the risk perception and therefore raise the information sufficiency threshold (Griffin, Dunwoody et Neuwirth, 1999). Neither does it take into account that knowledge is inseparable from the context in which it is acquired, meaning again that more knowledge does not systematically result in a greater acceptability of risks (Priest, Bonfadelli et Rusanen, 2003).

For someone exposed to a risk, information-seeking behaviour does occur, but not always (Brashers, 2001). People often access information already available in their memory or in their daily life (Fiske et Taylor, 1991; Griffin, Dunwoody et Neuwirth, 1999), but do not dig further for more information (Cobb, 2005) and systematic information-seeking efforts from unfamiliar channels are the least common behaviour in uncertain situations (Griffin, Dunwoody et Neuwirth, 1999).

In these situations, people who need to decide whether or not to trust someone often rely on proxies to acquire information, because gathering information alone may represent a lot of interactions and much information management (Kramer, 1999). These proxies can be information relayed by third-parties, someone bridging two individuals unknown to each other (Burt et Knez, 1995; Kramer, 1999). Although it is common to rely on third-parties who diffuse "second-hand knowledge about others", these third-parties often present incomplete and partial information (Burt et Knez, 1995; Kramer, 1999 , p. 577). The sense made out of this information (e.g., an information about someone being untrustworthy) will also be influenced in part by prior beliefs and values (Burt et Knez, 1995; Fox et Irwin, 1998). According to cognitive dissonance theory (Festinger, 1957), people selectively focus on information that is consistent with prior beliefs and avoid information that does not confirm what is already known (Sorrentino et Roney, 2000). Information regarding

the reputation of others and their trustworthiness follows the same pattern (Burt et Knez, 1995).

Moreover, suspicion, the primary component of distrust (Kramer, 1998), is a state where someone "actively entertains multiple, plausibly rival, hypotheses about the motives or genuineness of a person's behavior" (Fein, 1996 1165). Suspicion is a way of coping with disturbing social environments, and often implies a fearful perception that something is hidden (Kramer, 1998). Suspicion is sometimes associated with beliefs in conspiracy theories (Goertzel, 1994; Kramer, 1998). When one is already suspicious of someone else, one's entourage (the third-parties mentioned above) will often increase distrust because they then tend to relay more negative information about that someone else (Burt et Knez, 1995). Distrust also engenders actions that impede the nurturing of trust, for example ceasing contact with someone judged untrustworthy (Kramer, 1999). As a result, initial perceptions of untrustworthiness will taint any new information coming from these sources, and thus foster distrust (Kramer, 1999; Slovic, 1993).

In environmental conflicts, the struggles for the right to know are illustrations of the widespread perception that information is undisclosed (Depoe, Delicath et Aepli Elsenbeer, 2004). This raises suspicion toward the actor who is believed to withhold it, providing a fruitful context for distrust to blossom and once installed, it is especially hard to invalidate (Kramer, 1999).

Suspicion and distrust can also be directed toward institutions, decision-makers, and experts (Clapp et Mortenson, 2011; Lewis et Weigert, 1985; Peters *et al.*, 2007; Siegrist, Cvetkovich et Roth, 2000; Slovic, 1993). Generally, each provider of information claims a status of truth for the information they produce and diffuse, and discredits the sense made by their rivals; the objective is to see their own narrative dominate (Mumby, 1988). In the technocratic model, science is the most important form of evidence (Endres, 2009; Fischer, 2000; Kinsella, 2004). It posits the public against the experts, and the first one has to know how to play the game according to the latter's rules in order to have a voice, albeit sometimes unsuccessfully (Aitken, 2009; Endres, 2009; Kinsella, 2004). Trying to identify the gaps, misinterpretations,

and omissions in the experts' discourse and assessments is one way to play the game; bringing new scientific evidence to the table is another one, even if not every member of the public has the technical competency to do so (Endres, 2009; Kinsella, 2004). However, attempts to discredit the discourse of a rival are a way of raising awareness about someone's untrustworthiness.

Public perception and acceptance of risks is not much influenced by technical risk assessments, but more by conspicuous visible trust-destroying events, by nuclear accidents for instance (Cobb, 2005; Slovic, 1993). Also, sources of negative or trust-destroying information are often perceived as being more credible (Kramer, 1999; Slovic, 1993) than these technical assessments. Furthermore, the public does not necessarily trust decision-makers to act in accordance with science in order to protect people (Frewer *et al.*, 2002; Peters *et al.*, 2007). When such distrust toward experts and decision-makers arises, the public tends to rely on sources they believe to be independent or serving the best interest of the general population (Frewer et Shepherd, 1994), or to rely on their neighbours and friends (Morell, 1987). Decision-makers facing crisis situations similarly prefer using information from sources they trust, even if they deprive themselves of crucial information in doing so (Deutsch, 1973; Hance, Chess et Sandman, 1988; Rosenthal, 't Hart et Charles, 1989).

2.5. The importance of social cohesion

Social cohesion is a concept used to express what holds relationships together. Its opposite is social divide. The state of social relationships will influence the cohesion between members of a community, as well as cohesion will influence the content of these relationships. The scientific literature on social cohesion and social capital is abundant, and the many definitions of both concepts are often interrelated and overlapping. The present study uses the concept of social cohesion, yet some

elements are borrowed from the literature on social capital because they were deemed to be important when assessing the overall wellbeing of a community.

An environmental conflict can impact the social cohesion of a community. Social cohesion, in its most basic form, may be defined as the willingness of people to get involved and collaborate with their peers (Jackson *et al.*, 2000). Social cohesion flows through social networks and the support they provide. A dense network will therefore more easily resist fragmentation, thus contributing to foster cohesion (Moody et White, 2003; Rogers, 2003).

For instance, social cohesion in cities differs from that in rural areas; inhabitants of these latter communities tend to know their neighbours, to trust them more and to volunteer more often than citizens in urban areas (Canada, 2005). Cohesion of inhabitants in these more cohesive rural areas may be more susceptible to a modification of the social structure during conflicts. Moreover, in these areas, the sense of belonging to the place and the community tends to be greater (Canada, 2005), which can influence the way a development project is received by the concerned people.

Social cohesion is a complex and dynamic process, constantly renegotiated by actors: it is the construction of interpretative communities that provide people with a shared identity, common norms and values – and behaviours that reflect these norms and values –, and a sense of belonging to a place or to a community (Forrest et Kearns, 2001; Hulse et Stone, 2007). A community lacking social cohesion would be prone to conflicts and display heterogeneous values, social inequities, few social interactions, and a weak sense of belonging (Forrest et Kearns, 2001). As part of social cohesion, social capital – understood as the different features of social organisation that facilitate coordination and cooperation for mutual benefit (Putnam, 1993, p. 1-2) – is also considered a community resource (Poortinga, 2006; Putnam, 1993; 1995; Szreter et Woolcock, 2004) that actors rely on when taking action (Floress, Stalker Prokopy et Broussard Allred, 2011; Lin, 2001). Social capital is especially important for a group when other types of capital, like financial ones, are lacking (Teo, 2008).

A cohesive group should be able to bring, through networks, social support and emotional comfort to its members, without (or with few) ties to outsiders (Kitts, 1999; Stein, 1976; Tajfel, 1982). This is referred to as bonding social capital: relationships of trust and cooperation between members of the same group (Poortinga, 2006; Szreter et Woolcock, 2004; Teo, 2008).

Members of a community can also reach out of their proximate network to people with whom they share weaker ties in order to gain access to the support they need (Granovetter, 1983). This is referred to as bridging social capital: relationships of mutuality between members of groups that present dissimilarities (Poortinga, 2006; Szreter et Woolcock, 2004; Teo, 2008). Strong ties (alter closer to ego) usually provide social support, while weak ties (alter more distant to ego) present a greater opportunity of providing new information (Granovetter, 1983; Tindall, 2002). Both bridging and bonding social capital are especially important in non-routine situations (Hurlbert, Haines et Beggs, 2000), such as conflicts.

Social capital may not always be beneficial, there may be some costs associated with it, and the pursuit of more social capital may not always be desirable (Adler et Kwon, 2002; Woolcock, 1998). For instance, a network with high social capital can exert too much constraint on an individual, whose obligations toward the community prevent him or her from expanding his or her activities outside the community. This is why it should be optimized and not necessarily maximized (Woolcock, 1998). The costs of social capital are mainly reported in management or organizational literature, but also in health literature (Szreter et Woolcock, 2004).

2.5.1 When relationships impact health

In the last decade, health has been an emerging topic in the social capital literature, showing that social capital and health are related in many ways, either positively or negatively (Poortinga, 2006; Szreter et Woolcock, 2004; Ziersch *et al.*, 2005). For example, when measured as trust and social participation, social capital has been associated with better health (Nummela *et al.*, 2008; Poortinga, 2006). Communities that are low in social capital, whether in an urban or a rural area, will comprise individuals more subject to stress and isolation (Szreter et Woolcock, 2004), while trust, solidarity, and tolerance are more present in communities that possess high social capital resources (Kawachi et Kennedy, 1997).

Impacts of social cohesion on health have also been documented; people well integrated socially have longer life expectancies, compared with isolated people who lack support, be it social or instrumental (Kawachi et Kennedy, 1997). A high level of trust (provided by social support) is associated with many indicators of good physical and psychological health (Barefoot *et al.*, 1998; Kawachi et Kennedy, 1997). Furthermore, stress and lack of social support can be associated with a loss of autonomy over one's life or environment and thus with negative impacts on health (Szreter et Woolcock, 2004). In the same vein, mistrust and suspiciousness have negative effects on health (Barefoot *et al.*, 1998; Kawachi et Kennedy, 1997; Nummela *et al.*, 2008).

Of course, beneficial effects of social support and social cohesion on health are not automatic. Poortinga (2006) stated that the idea is not to choose between quitting smoking or joining a civil rights league, yet the latter can provide access to support, activities, and relationships, which are also important elements that need to be taken into account when assessing health in a community.

2.5.2 Coping when facing stress

Environmental conflicts can bring stress (Moser, 2009), and with it different ways of coping (Folkman et Moskowitz, 2000). Coping is an adaptive function when facing stress (Lazarus et Folkman, 1984; Skinner *et al.*, 2003). The different dynamic ways of coping will be influenced by the stressful context, the personality of the individual under stress, and the social resources (Carver, Scheier et Weintraub, 1989; Folkman et Moskowitz, 2000). These social resources can bring positive emotional and cognitive support that is important for the individuals under stress, especially if the stressful context lasts over time (Folkman et Moskowitz, 2000).

Coping strategies have in the past been divided into two categories: the problem-focused coping and the emotion-focused coping (Carver, Scheier et Weintraub, 1989). In the first category, strategies could either be active like planning, suppressing other activities to concentrate on the source of stress, and seeking information or instrumental support; or passive, like denying the occurrence of the threat (Carver, Scheier et Weintraub, 1989). Similarly, in the second category, strategies could be active like seeking emotional support or venting emotions about the threat; or passive, like disengaging from the source of stress or the processes to counter it (Carver, Scheier et Weintraub, 1989). According to this model, problem-focused coping was considered much more adaptive, because it was more rational, among other reasons. Therefore, the strategy to seek emotional support was positive when used to refocus on the problem, but it was in some cases maladaptive, especially when used to ruminate with others about the threat (Carver, Scheier et Weintraub, 1989).

Already in 1989, Carver and his colleagues showed reluctance to consider different personalities of coping, as if the way someone would react to stress was a fixed disposition. In their view, because coping was a dynamic solution that was highly influenced by social relations, there was a need to consider the social context of stress, but also the support and network of individuals under stress (Carver, Scheier et Weintraub, 1989). The exhaustive literature review of Skinner and her colleagues

(2003) was a welcome clarification of the field. From 400 definitions existing in the literature, they outlined 12 families (see Table 2.1 for an overview) that included different options regarding the response to stress.

Half of these families are generally considered positive adaptation (problem-solving, information seeking, self-reliance, support seeking, accommodation, and negotiation) and the other half are generally considered negative adaptation (helplessness, escape, delegation, isolation, submission, and opposition). For instance, the last family – opposition – comprises among other things the coping options of blaming others, projecting, and aggressing (Skinner *et al.*, 2003).

Some families orient the individual under stress toward the stressor while others bring him or her away from it. Because coping is dynamic, those 12 families are not exclusive; they can co-occur and evolve in an individual. However, they are not only related to the individual; they all have public equivalents that unfold in social networks, like blaming others in front of relatives, which is a public form of opposition, and constant complaints to relatives, which is a public form of rumination (Skinner *et al.*, 2003).

Some of these options of coping that are apparently positive can also be negative, and vice versa. Effective ways of coping are those that are organised, flexible, and constructive (Skinner *et al.*, 2003, p. 231). People using maladaptive ways of coping, such as helplessness, opposition, and social withdrawal over a long period of time are considered at risk of depression, low self-efficacy, losing sight of what is important, interpersonal hostility, etc. (Skinner *et al.*, 2003, p. 231). These negative options of coping prevent people from accumulating coping resources, but may also contribute to the development of coping vulnerabilities, such as levels of stress that become unmanageable.

Part of this unmanageability may be explained by inappropriate social support or by a lack of social support (Skinner *et al.*, 2003). As seen previously, social support is a sign of social cohesion. Therefore, cohesive relationships are more likely to provide social support, while maladaptive ways of coping may easily be related to social division in disturbed social systems such as those of environmental conflicts.

Table 2.1
Coping families, their options and their adaptive process (Inspired by Skinner *et al.*, 2003)

Family	Coping options	Adaptive process	Function in adaptive process
Problem-solving	strategizing, instrumental action, planning	Coordinate actions and contingencies in the environment	Adjust actions to be effective
Information Seeking	reading, observation, asking others		Find additional contingencies
Helplessness	confusion, cognitive interference, cognitive exhaustion		Find limits of actions
Escape	cognitive avoidance, behavioral avoidance, denial, wishful thinking		Escape noncontingent environment
Self-reliance	emotion regulation, behavior regulation, emotional expression, emotion approach	Coordinate reliance and social resources available	Protect available social resources
Support Seeking	contact seeking, comfort seeking, instrumental aid, spiritual support		Use available social resources
Delegation	maladaptive help-seeking, complaining, whining, self-pity		Find limits of resources
Isolation	social withdrawal, concealment, avoiding others		Withdraw from unsupportive context
Accomodation	distraction, cognitive restructuring, minimization, acceptance	Coordinate preferences and available options	Flexibly adjust preferences to options
Negotiation	bargaining, persuasion, priority-setting		Find new options
Submission	rumination, rigid perseveration, intrusive thoughts		Give up preferences
Opposition	other-blame, projection, aggression		Remove constraints

The theoretical framework presented in this chapter was essential to understand how were conceptualized the different elements of the thesis. This framework relies on the argument that social reality evolves in the relationships between interacting humans in a given environment. This has to be kept in mind to follow the scientific

endeavour reported in the three results and discussion chapters. Whether they are considered through the lens of information, of trust or of social support, social relationships are the foundation of the interactions that allow these three elements to be constructed, diffused, nourished, given or received.

CHAPITRE III

METHODOLOGY

This chapter described the methodology used in this thesis. First, the research design is presented, followed by the specific context of the study. Then, the sampling and data collection methods are described in detail. Finally, the analyses that were performed on the data are presented. An example of the interview grid (in French) is presented in Appendix A.

3.1 Research design

In order to understand the social dynamics between the different elements presented until now, the literature review and the theoretical framework called for an original and innovative methodology. Therefore, to study how information, trust, and social cohesion unfold in an environmental conflict, a case study employing mixed methods in a real-life context was chosen (Gerring, 2007; Yin, 2003). This case study involved observation, documentation review, interviews, and sociometric questionnaires. The methodology will be presented in more detail in the following subsections.

3.2 The context of the study

The selected case was an ongoing environmental conflict related to a wind farm in the planning phase and that was to be located in three small villages – approximately 3100 inhabitants (Québec, 2011a) – from a rural area relying mainly on agriculture and forestry (Canada, 2006) in the province of Québec, Canada. The wind farm project consisted of 50 wind turbines of 2 MW each situated on private lands. The project was initially developed by a wind prospector from Québec and then sold to a foreign wind developer. Electricity was to be sold to Hydro-Québec, the state-owned power company responsible for the production and distribution of electricity in Québec. The project faced considerable opposition, mostly in the concerned and surrounding communities (BAPE, 2010a).

In 2009, the opponents came together and publicly declared themselves to be against any industrial wind farms in inhabited areas of southern Québec. The opponents' group had a name, a logo, and a website. They were especially active in diffusing information, notably regular leaflets that volunteers distributed from house to house in the concerned and neighbouring villages. Quite rapidly, they started to issue press releases to get media attention. Their discourse was reproduced mainly by the local media, but also, on some occasions, by the national media. They became officially incorporated as a non-profit organisation in the spring of 2010 with an annual membership of ten dollars. Before that, it was difficult to evaluate the number of members and sympathizers. However, in the fall of 2012, they counted approximately 200 members.

The wind farm project was submitted to the BAPE process, previously described in Chapter I. In the fall of 2009, 248 briefs with regard to this wind farm project were presented at the BAPE, among which 209 were opposed to the project. To this date, it is a record high number of briefs for a wind farm project. The BAPE submitted its report to the MDDEP in March 2009 and some of the main conclusions were the following: the project spurred important social division between opponents and supporters in the concerned communities; there was a lack of information in the first

years of the project's development and the community was involved only late in the process; and the project would modify the living environment, essentially because of the noise and the impacts on the landscape. The government of Québec nevertheless authorized the project in March 2011, after one year of silence, which contributed to nourish the controversy.

3.3 The sampling

Those who expressed themselves through a brief or were actively involved in the public hearings process were considered to have shown interest in the project, and thus these 308 individuals were retained as the study population. The convenience sample was constituted of 93 individuals encountered during the BAPE process and completed with the snowball method (Goodman, 1961).

Of the 93 individuals, 58 were males and 35 females; 74 were opponents to the project and 19 were supporters. Fifty-nine participants had a residence in one of the three targeted municipalities, 22 in municipalities at the limits of the wind farm area, and 12 lived outside the area concerned by the project. For instance, the perceived vicinity of the wind farm, the distance to the closest turbine, and the visibility of the turbines (from the dwelling) when the project will be constructed are all information that were also gathered about participants. The details of the sample are synthesized in Table 3.1.

Proportionally to the study population, the opponents (men and women) are accurately represented in the sample, with a ratio of 1.0. The women supporters are underrepresented in the sample (ratio of 0.4) mainly because they kept especially low profiles and were therefore hard to reach for interviews. On the other hand, the men supporters are overrepresented in the sample (ratio of 1.5). These men were not overly numerous in the study population, however they were highly concerned by and involved in the project; therefore the proportion of men supporters in the sample

is not considered a bias, but rather a more complete representation of the social dynamics at stake in this conflict.

Table 3.1
Details of the sample, according to their position in regard to the project

	Position			
	Supporters		Opponents	
	N = 19	%	N = 74	%
Gender				
Women	1	5.3	34	45.9
Men	18	94.7	40	54.1
Perceived vicinity of the turbine				
Yes	2	10.5	67	90.5
No	17	89.5	7	9.5
Distance to the closest turbine				
Less than 750m	1	5.3	19	25.7
Between 751m and 1500m	3	15.8	23	31.1
More than 1501m	13	68.4	27	36.5
Do not know	2	10.5	5	6.8
Visibility of the turbine				
Yes	8	42.1	53	71.6
No	11	57.9	20	27.0
Do not know	0	0	1	1.4
Concerned residence				
Targeted villages	8	42.1	51[9]	68.9
Neighboring villages	0	0	22[10]	29.7
Outside the area	11[11]	57.9	1	1.4

[9] For 7 individuals out of 51, it was a secondary residence that was in the targeted villages.
[10] For 1 individual out of 22, it was a secondary residence that was in one of the neighboring villages.
[11] Two out of 11 individuals who lived outside the area had their workplace within the projected wind farm.

3.4 The data collection

This case study involved observation, documentation review, interviews, and the administration of a sociometric questionnaire.

The observation phase lasted between August 2009 and May 2010, during which four months were spent in the community. It was mainly made during the consultation process of the BAPE, but also during demonstrations and local or regional authorities meetings. This observation aimed at identifying the involved actors and getting in touch with some of them to discuss my study and, if they agreed, to fix an appointment for an interview. This part of the data collection also allowed the researcher to observe the social dynamics of the conflict, and identify the tension zones and the arguments of each side. The observations were noted as a research diary (Winkin, 1996) and some events and informal discussions were even audio-recorded. These notes were consulted many times during the fieldwork to keep tracks of the different relevant elements, but also, for the researcher, to already engage herself in a reflexive work about the way the study was done. It was an essential step to perform good interviews and be able to easily identify the involved actors. Indeed, during the interviews, this deep knowledge allowed for a high level of understanding of the participants' answers that would not have been possible to reach otherwise. Moreover, the whole study itself could not have been done without the aforementioned comprehension gained by an intensive integration in the community.

The documentation review was done in parallel to the observation phase. It involved a press review, but most importantly a review of the environmental impact study, a review of all the documentation available on the BAPE's website and related to the wind farm project (produced by the developer, by different governmental agencies and ministries, by experts, etc.), a review of all the briefs submitted to the BAPE, and a review of the local and regional authorities proceedings. Some members of the community also provided the researcher with documentation they perceived as being relevant. All these documents were carefully kept and considered. While writing the

manuscript, many were once again consulted to ensure accuracy of the story rebuilding. The documentation review also allowed the researcher to get a better sense of the conflict's chronology and of the different arguments put forward by both sides.

The interviews were conducted during January and May 2010. The 93 individuals were interviewed individually or in pairs (in the case of couples or colleagues). The interviews were semi-directed and lasted between 40 minutes and 3 hours, and were all audio-recorded. Data were collected about: socio-demographics, sources of information, sources of influence, perception of undisclosed information, and social networks. Please see Appendix A for the interview grid. Note that to ensure confidentiality of the participants, names were removed from the sociometric questionnaire, and thus only one page (out the 26 that counted the questionnaire) is reproduced in the Appendix. The amount of data collected was impressive. In the end, choices were made and, mainly for reasons of time and space, some pieces of data were purposely kept aside while writing the thesis. Some of them may be used for further work.

The administration of the sociometric questionnaire was made at the end of the interviews. This means that the length of time mentioned above included the period where the questionnaire was administrated. It was the longest part of the interviews, because it consisted of a list of more than 300 names that participants had to go through to identify the individuals they knew. For these names, they had to specify the kind of relationship they had with them, if they discussed the wind farm together, and if the relationship was either new, the same as before, intensified or deteriorated because of the project. At the end, participants were invited, if they wished to, to add people that were not on the list, but with whom the relationship was intensified or deteriorated.

3.5 The data analyses

The analyses performed on the data were mixed, both qualitative and quantitative. They involved case story rebuilding through qualitative analysis of the participants' answers during the interviews, social networks analysis (SNA), and multiple correspondence analysis (MCA). The case story rebuilding was mainly inspired by Miles and Huberman (1994), Winkin (1996), Leeds-Hurwitz (1995), and Gerring (2007). Since this thesis was a case study, the case story rebuilding was a normal and straightforward methodological choice to describe what happened in the conflict. To dig deeper, however, and because the line of argument of the theoretical framework presented previously was the relationship, SNA imposed itself as the most relevant method. It is indeed, because of SNA – among others – that the focus of many studies in social sciences shifts from the individuals to the relationships that linked them (Saint-Charles et Mongeau, 2005; Wasserman et Faust, 1994; Wellman et Berkowitz, 1988). In this thesis, we chose to perform SNA with UCINET (Borgatti, Everett et Freeman, 2002) and Netdraw (Borgatti, 2002). For one analysis in particular (Chapter V), MCA was performed with the FactomineR package (Lê, Josse et Husson, 2008) in R (R Development Core Team, 2009). MCA allowed for rigorous analysis of a considerable dataset of numerous categorical variables; this quantitative method was used to assist the qualitative analysis made on the data, by grouping in a first step the individuals into clusters or clouds (Le Roux et Rouanet, 2010). MCA provides results that the researcher still needs to make sense of, but it helps to identify findings that could have been simply lost in the amount of data, or forgotten because some more prominent data were taking too much space in the researcher's memory or situation assessment, for instance.

The use of mixed methods allowed the researcher to optimise the information gained from the data. In some cases, the triangulation of more than one method on the same dataset confirmed the expected models (or the outcomes of other analyses) and provided a more reliable portrait of the different objects of study. Also, the joint use of qualitative and quantitative methods provided results that were not only

scientifically accurate, but also socially relevant for the involved actors and for any external observers of environmental conflicts.

CHAPITRE IV

INFORMATION DIFFUSION STRATEGIES

In this chapter, results concerning the information diffusion strategies used by the developer and the reactions they provoked are presented in extended detail. The results are then followed by a discussion of these results. For more clarity, the specific data that were used in this part of the analysis are presented in the introduction to the chapter. A short conclusion ends this first results and discussion section.

4.1 Specific data

The data used in this chapter came from observation, documentation review, and interviews. From the latter, two questions were mainly – but not exclusively – used:

- When did you first learn of the existence of the wind farm project and who told you about it?
- Did you attend the different public information sessions that took place over time to learn more about the project and its impacts?

4.2 Results

In this section, the results from primary sources of information and public information sessions will be presented. In order to get a clear picture of the unfolding case study and of the pace of diffusion, these results are presented chronologically along with the necessary background elements.

4.2.1 Primary sources of information

The interviews revealed that many participants learned of the existence of the project late. Several participants mentioned the circulation of rumours in regard to wind turbines in the region, but as these remained vague, they usually did not trigger information-seeking behaviour. Most participants identified one individual as being the first bearer of information about the project, hereafter called the "primary source." Some participants identified more than one individual or an organization as their primary source. It is noteworthy that some primary sources were not found among the studied population that submitted a brief to the BAPE. These external primary sources are included in the analysis.

4.2.2 News that slowly spread

Five years passed between the time when the first study participants learned of the project, in the summer of 2004, and when the last ones to learn about it were informed, in the summer of 2009. Figure 4.1 shows the number of people informed on a continuum from the summer of 2004 to the summer of 2009.

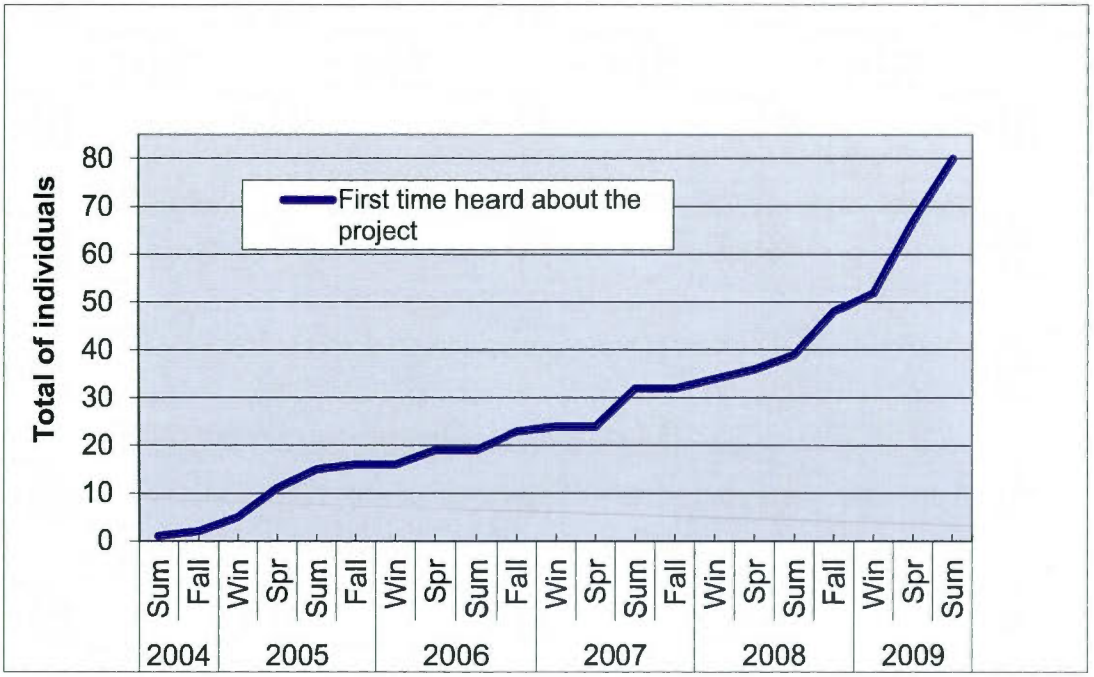

Figure 4.1 Continuum of people informed, from 2004 to 2009

The answers of 13 individuals were not precise enough to be included in Figure 4.1.

Figure 4.1 shows that the biggest increases in the number of people informed were in the spring and summer of 2009, with respectively 15 and 13 individuals newly informed. The 19 other time periods had an average of 2.7 initiates. The lack of information and the feeling of exclusion expressed by the opponents were central in the briefs submitted to the BAPE and in the interviews.

4.2.3 Public information sessions

According to the data presented at the BAPE, six public information sessions were held before the first information session of the BAPE in September 2009.

The data collected in the interviews revealed that the participants attended on average 2.7 events (2.4 for the opponents, and 3.9 for the supporters). Figure 4.2 shows the attendance at these six events. More importantly, it also shows that many

participants were unaware that these events took place. The details of these events will be presented chronologically, as the case story unfolds.

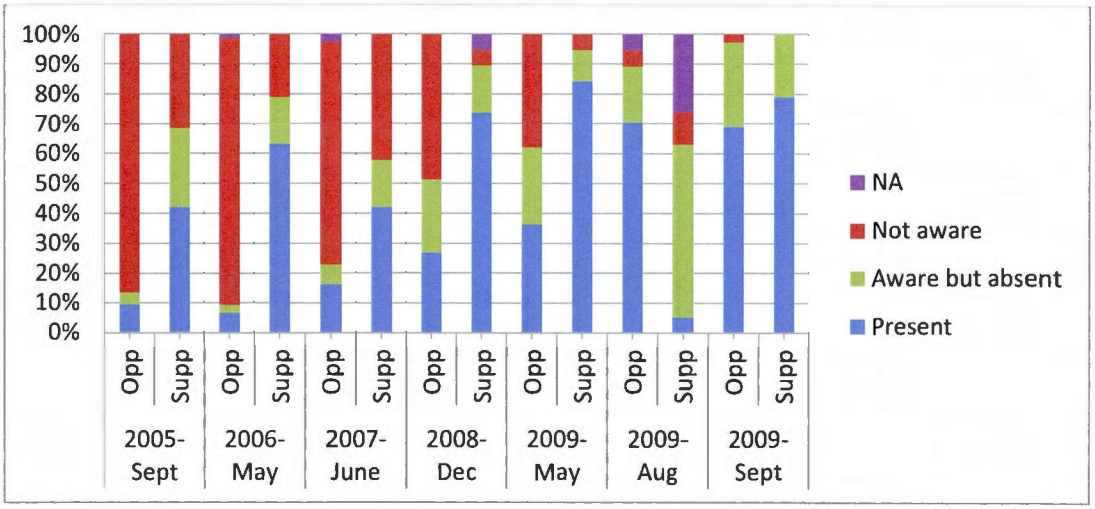

Figure 4.2 Proportions of attendance to and awareness of public events, from 2005 to 2009

The answers come from 93 participants; 74 opponents and 19 supporters.

4.2.4 Four information phases

The answers of 91 participants regarding the date at which they first learned of the existence of the project were divided into four phases: 1) 2004-2005 (n= 21); 2) 2006-2007 (n= 22); 3) 2008 (n=16); and 4) 2009 (n=32) as illustrated in Figure 4.3 for three main reasons: (1) to keep phases relatively equal in number of individuals (because too few people were informed in the first years); (2) to include early-learners despite their sometimes imprecise recollection of long-past events; and (3) to maintain the confidentiality of participants. The answers of two participants were too imprecise to be included in a phase, and were thus excluded from this part of the analysis. Figure 4.3 shows, from left to right, on two rows, the four phases of information diffusion in this conflict.

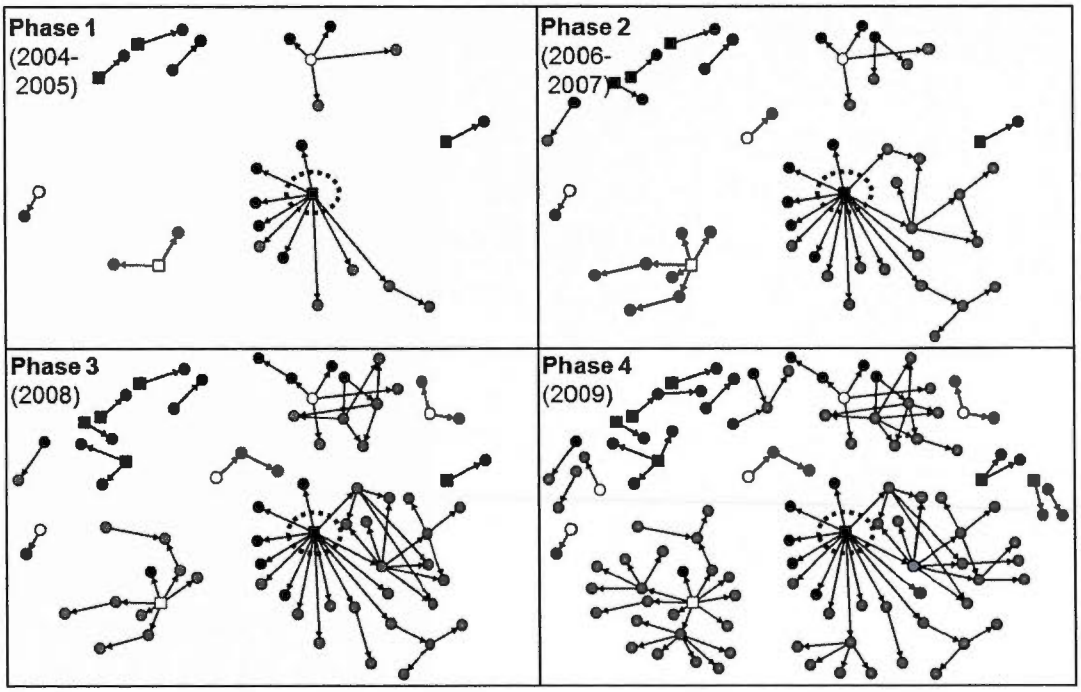

Figure 4.3 Four information phases, from 2004 to 2009

The grey dots are opponents, the black ones are supporters, and the white ones had an allegiance unknown to the researcher. The circles are individuals, while the squares are organisations. The developer stands in a dotted circle. A directed link between nodes A and B identifies the following relationship: "A was primary source for B".

The intention was not to follow the exact path of information in the community from its origin, but to have an idea of how the information spread between people involved in the public hearings process. Several nodes in Figure 4.3 were not interviewed, and among them, some had not submitted a brief to the BAPE. Consequently, it is unknown to the researcher where they took the information from and who they communicated it to (sometimes their allegiance to the project is also unknown). This is why several sources of information appearing in early phases do not lead to other individuals in later phases. Hence, links between the nodes may be missing in Figure 4.3, but it is nevertheless representative of how the participants were informed.

4.2.4.1 Phase 1: 2004-2005

The first participants to be informed were mainly informed by the wind developer; they were approached to sign a contract granting a part of their land for the installation of a wind turbine, the construction of a road, etc.

A man said in an interview that he was solicited by the wind developer at that time, but turned him down because he did not trust the project. For him, saying no to the developer was like getting rid of the project, as if it did not exist anymore. This attitude prevented him from taking concrete action regarding the project for four years, which was when he began to speak of the project to those around him.

In 2005, several representatives of Local and Regional authorities learned from a citizen that parts of the territory were claimed for wind development. The wind developer had not yet contacted these authorities directly. Therefore, they had to gather information to understand the implications of such a project and to vote on rules to govern wind development. Several motions voted in the following years, started with the mention: "Whereas many landowners have signed a contract with [the wind developer]..."

A first public information session was held in September 2005 in one of the villages – the one mainly concerned by the project at that time. It is unclear who was behind this initiative. According to several participants, it was an initiative from citizens who had heard that wind prospection was going on in their village while the developer maintained that the Regional authorities were behind the event. Both opponents to the project and representatives of the Regional authorities stated in their brief or during the interview that people present at this event were rather in favour of a "community project" led by the Regional authorities in collaboration with a wind developer from Québec. "Community project" was the term used for a project where the community would be a partner (an investor who would contribute to decisions), and not just a beneficiary of the project. This kind of project resembles what Walker and Devine-Wright (2008) described: compared with a conventional private wind farm, it is a project where the community is involved in the planning process and directly concerned by the outcomes. At that time, this kind of project had the

approval of the Regional authorities and of many citizens (among them, future opponents to the final project). According to the documentation submitted to the BAPE by the developer, 100 people attended this session. In the sample, 16% (7 opponents and 8 supporters) attended and 75% were unaware of this first public event (Figure 4.2).

4.2.4.2 Phase 2: 2006-2007

In 2006-2007, the wind developer was still a major primary source of information since it was making increasingly more contacts with landowners who could become potential partners, and this allowed the news to circulate in the community. Several people contacted by the wind developer said that they were asked to be discreet about the proposal. Once signed, the contract binding a landowner and the wind developer was confidential. Furthermore, several people said that they were told by the wind developer that the contracts were highly speculative since the project still needed to be selected by Hydro-Québec. Some participants recalled being invited to sign – in exchange for immediate money – but at the same time, being told that there was no guarantee that the project would become a reality, as there were around 300 projects under competition at this time. This competition may have warranted some secrecy surrounding the project.

In May 2006, a second public information session occurred where it was revealed to the attendees that a wind developer (from Québec) had claimed the territory and was leading the project. The assembly insisted on the importance of getting maximum benefits from the wind farm for the community. Once more, the preference for a community project was expressed and not dismissed by decision-makers. According to the documentation submitted to the BAPE by the developer, 150 people attended this session. In the sample, 18% (5 opponents and 12 supporters) attended and, again, 75% were unaware of the event (Figure 4.2).

In the summer of 2007, the wind farm project was officially submitted, as a private project, to Hydro-Québec in the context of a call for offers. The idea of a community

project was not on the table anymore. At this stage, the concerned Local authorities and the Regional authorities had officially given their approval to the project. A memorandum of understanding that stated the basis of a partnership was then signed by the wind developer, the Local and Regional authorities, but also by two agricultural unions, which had been included in the negotiation process.

A third information session occurred in June 2007, as an open-house activity, with posters and maps of the wind farm. It was held by the wind developer in one of the three villages where the wind turbines were intended to be concentrated. According to the interviews, some citizens of the neighbouring villages did not feel concerned by this event. However, when the final locations of the wind turbines would be presented to the public in 2009, the majority of the planned turbines were located in one of these neighbouring villages. Moreover, many participants expressed in the interviews the idea that, at this stage, the project was so farfetched that it could not possibly receive the necessary authorisations. There is no official record of the attendance to this activity. In the sample, 22% of the participants (12 opponents and 8 supporters) were present, while 67% were unaware of the event (Figure 4.2).

4.2.4.3 Phase 3: 2008

In 2008, every supporter from the sample but one knew about the project. The word kept spreading, but not as fast as would have been expected considering that the project had been officially accepted by Hydro-Québec in April 2008 (although it still had to fulfill many conditions, among which, the public hearings process).

In 2008, a group of citizens, worried about the impacts of the project, began to ask questions to their elected representatives. At this point, according to the interviews and the brief, they were not against the project, but wanted to work with the involved actors for "a successful integration" of the wind farm. The influence they had at that time – both over representatives and on the developer – appears to have been limited. Several opponents reported that this exclusion of the citizens led to the radicalization of their movement a year later.

A fourth public information session took place in December 2008. It was a public event that was presented afterwards by the mayor of one of the three villages in the official municipal leaflet as "the first public information session about the wind farm project." The developer mentioned at the BAPE that a "final map" and visual simulations of the turbines were shown to the population that night. The session was advertised in a local newspaper the day before the event. The opponents criticized the absence of individual invitations sent by mail to all concerned citizens. There is no official record of attendance to this activity, but in its brief, the opponents' group stated that there was between 75 and 100 people. From the sample, 37% (20 opponents and 14 supporters) attended, while 40% mentioned being unaware of it (Figure 4.2).

4.2.4.4 Phase 4: 2009

In 2009, important public information events occurred. In May, a public information session took place where the developer, in collaboration with the firm that assessed the environmental impacts of the project, presented to the public highlights of the environmental impact study. Some participants reported seeing maps of the project for the first time, and it helped them to understand the impacts the planned wind turbines could have on them. There is no official record of attendance for this activity, but in its brief, the opponents' group stated that there were 200 people. They attributed this high attendance to a leaflet inviting people to attend that they had delivered to each dwelling concerned by the wind farm project. In the sample, 46% (27 opponents and 16 supporters) attended. This time, less than a third (31%) of the sample was unaware of the event (Figure 4.2).

In this fourth phase, an explosion in the number of people who knew about the project occurred, and with it, a climate of suspicion. The opposition was getting organized, and recently-informed people rapidly spread the word. These were the ones in phase 4 who went to considerable lengths to raise awareness among the population; they are visible on Figure 4.3 where they are linked to several people.

The idea seems to have been at that time to spread the news as much as possible into the community. This awareness led to another public event (in August 2009) organised by the opponents' group, where, among others, photos and videos of a wind farm similar to the one projected were presented. Opponents also publicly expressed concerns about economic, social and health impacts of the project. According to the public hearings and the interviews, the feeling of being excluded, misinformed and misrepresented became widespread among the opponents. According to the opponents' group, 500 people attended their information event, but, based on room capacity and the observation of a fair amount of empty seats, this number may be exaggerated. The crowd was nevertheless large inside the room, and also outside the building where demonstrators assembled to express their support of the wind farm project. Among the sample, 56% of participants attended the event (52 opponents, but only one supporter). However, 11 supporters mentioned that they were aware of this event, but decided not to attend; some of them expressed the idea that it was not meant to inform, but to "misinform." Only 6% of the sample mentioned being unaware of this event (Figure 4.2).

4.2.5 Local Authorities meetings

According to the proceedings of one of the three municipalities, between January and May 2009, an average of 10 individuals attended the Local authority's regular meetings held during that period. However, in June 2009, soon after the developer presented its project to the population and after the emergence of an official opponents' group, 50 people attended the local authority meeting, and in August 2009 the crowd reached a record of approximately 150 people. At this occasion, the mayor replied to the people who complained that they were not informed, that he often gave information about the project to the point of being told by the wind developer that he talked too much.

4.2.6 The word spread between individuals

Overall, the word spread mostly between individuals (70 primary sources were individuals out of a total of 104). This trend was especially prominent among opponents, for whom individuals constituted 82.4% of their primary sources (compared to 57.9% for supporters). For opponents, the primary sources of information were, in order of decreasing importance, a friend (22 mentions); a neighbour (16); a member of the opponents' group – identified as such by the participant (12); a family member (7); an acquaintance (5); a representative of the wind developer (5); or a life partner (3). For supporters, the primary sources of information were a representative of the wind developer (5); an acquaintance (3); a neighbour (1); a life partner (1); or a colleague (1).

Organizations played a secondary role in information diffusion, especially for the opponents (23 out of 104, or 17.6% of opponents cited an organization, versus 42.1% for supporters). For opponents, the main primary sources of information – when it was an organization – was the media (8) and the wind developer, but not a specific representative, (4). Only one individual declared having been informed by the opponents' group, but many identified some individuals involved in this group as their primary source. For supporters, it was mainly the business sector (3).

The primary sources with the highest centrality of degree scores, i.e., the number of mentions as primary sources of information, were the developer (14 mentions) and the media (9). However, 8 individuals had a score higher or equal to 4 in the sample. These people played an important role in raising awareness about the wind farm; one of them was already active in Phase 1, some were active in Phase 2 and 3 when the first attempts to bring more public participation to the process were made, and finally, some others learned of the existence of the project in Phase 4 and spread the word without waiting. The two latter waves of mobilization corresponded to the evolution of the opponents' organization; at first, a small group of worried individuals who tried to modify the project, and later, a larger group that wanted the project to be stopped.

Furthermore, among the participants, many people were first informed by someone with the same opinion. Indeed, according to the 91 participants (the answers of two participants were not usable in this analysis), 14 out of 18 supporters were first informed by another supporter (either an individual or an organisation), while 44 out of 73 opponents were first informed by another opponent (mostly individuals).

4.3 Discussion

This discussion focuses mostly on the diffusion strategies used by the developer and on the evolution of the participants' reactions to the project, from indifference to strong opposition.

4.3.1 Developer's strategies: paving the way for opposition

From the results, it appears that the developer made choices about information that largely contributed to spur on opposition in the latest stage of the development of the project, creating, from the beginning, conditions for an environmental conflict to emerge.

At first, in Phase 1 and 2, the developer displayed efforts to inform mainly those who seemed to be "people of interest" in regards to the developer's agenda, that is, people owning large areas of land where a wind turbine could be erected. Some of them were interested by the proposal and signed. Others, despite the immediate money promised as revealed in the interviews, refused to sign. The strategy to inform only "people of interest" at the beginning is not especially innovative, as it is frequent that developers first get in touch with the ones from whom approval – or at least neutrality – is needed to push the project forward. However, "people of interest" usually includes the authorities (Fourniau, 2006; Simard, 2006), which was not the case in this study.

In small communities, it can be hard to remain unnoticed. This is why, despite the developer's invitation to discretion (highlighted by the confidential nature of the contracts), the information about the project began to leak in Phase 1. This is how – and almost by "accident" – the authorities learned about the existence of the project from a worried citizen who came to a Regional authorities' meeting to address the question of the wind prospection that was going on in the region.

In the following years, both the Local and Regional authorities voted motions to approve the project, motions that began with the mention: "Whereas many landowners have signed a contract with [the wind developer]". There were apparently many people who already adhered to the idea. Enough people to, according to the critical mass theory (Oliver, Marwell et Teixeira, 1985), make the project seem unavoidable in the authorities' eyes. This strategy is cited by Rogers (2003) as a means to elicit the adoption of a new idea.

The exclusion of the authorities at the beginning of the project development resulted in them not being proactive in diffusing information to the population which is reflected by the fact that neither the Local nor the Regional authorities were considered a primary source of information by the great majority of the study participants.

Once the authorities knew about the project, the developer went to some effort to get the approval of another powerful actor in a rural area: the agricultural unions. This strategy concords more with what Fourniau (2006) and Simard (2006) have observed, and aims at having favourable and influential allies that may help to gain approval of the project in the future. In an area where agriculture is one of the main economic activities, agricultural unions play a central role and can be perceived by many as opinion leaders (Burt, 1999; Valente et Davis, 1999).

Until late in the project development, the developer did not seem inclined to inform the population, as suggested by the large number of participants who learned of the existence of the project only in 2009 (Figure 4.1). This is also reflected by the small number of public information sessions organised by the developer itself in the first years, despite its presence in the region since 2004. Indeed, before the public event held in December 2008 and presented by a mayor as "the first public information

session about the wind farm," only one session – an open day activity in May 2007 – had been organized by the developer. In 2008, the developer advertised the event in the media only one day in advance and did not choose to invite the population by sending mail announcements, a strategy that was later denounced by the opponents' group. Furthermore, the 2007 activity was held in one of the three concerned villages, but not in the village were the majority of the turbines would be concentrated in the final version of the project. These changes (probably normal in the development of such a project) nevertheless contributed to the uncertainty surrounding the project. On the basis that the project was still under development, the developer demanded confidentiality. Even a mayor candidly said in a public meeting that the developer told him "he was talking too much." The gag rule surrounding the project, when discovered afterwards by community members, undoubtedly contributed to the climate of suspicion and to the resistance of the opponents toward the project.

Several members of the community contacted by the wind developer to sign a contract in Phases 1 and 2 refused to do so. Some of these individuals contravened the gag rule and spread the news around them. In 2008, a small group of people already worried about the impacts of the project (among them some of the early-learners informed by the developer) tried to participate in the project's development. The project was now in Hydro-Québec's short list for its call for offers, and thus not speculative anymore. These citizens tried to bring changes to the project itself and to its negotiation process, which they wanted to be more transparent and inclusive. At this stage of the project, they might have had an opportunity to influence the decision process, but they were too few and not organized enough to have a significant impact. Furthermore, the interviews revealed that there was a lack of willingness from the developer, and to a certain extent from the Local and Regional authorities, to address the citizens' requests. The exclusion of these citizens at this stage created fertile ground for stronger opposition later on.

Similarly to what the BAPE (2010a) observed, this study also suggests that the developer's view regarding the relevance of public participation was limited: the less people were informed about the developer's activities, the less they would have

opportunities to get organised or to oppose the project. Until late in the project, the number of people informed was low and the details of the project were not revealed because, among other reasons, of competition in the call for offers and of gag rules. The ongoing implementation of this wind farm (because of its final acceptance by the Québec government in March 2011) is another example that the Decide-Announce-Defend (DAD) approach can work well for developers and decision makers, despite its high potential for conflicts that stems from this approach eliciting criticism, instead of support, from the public, which is not truly involved (Bell, Gray et Haggett, 2005; Depoe, Delicath et Aepli Elsenbeer, 2004). The DAD approach is still widespread because it has proven to be successful, at least in favouring projects' achievement, even though social peace may be jeopardized. The problem here, as it was observed elsewhere (Khan, 2003; Nadaï et van der Horst, 2010; Wolsink, 2007) may be that the government is placed in the uncomfortable position of, on the one hand, promoting and planning renewable energies at the national level, and on the other hand, of taking final decision regarding specific projects at the local level. The consultation structures, such as the BAPE, that are intended to stimulate participation, in fact encourage oppositional participation; since the government (of Québec, in this case) already expressed a strong support to wind energy, it destined its consultation processes to only trigger more opposition (Aitken, McDonald et Strachan, 2008; Bell, Gray et Haggett, 2005). As other authors did before (Khan, 2003; Nadaï et van der Horst, 2010; Wolsink, 2007), this important question needs to be raised again: can governments be an impartial judge on those projects, since that they have interests in them succeeding? In the case presented here, for example, the government had already spent a lot of money, time, and expertise on this project even before the BAPE process. As a matter of fact, opposition to such projects rarely succeeds in stopping them, but it can however delay the planning process and bring extra costs, just as it can diffuse negative publicity about the developer (Aitken, McDonald et Strachan, 2008). Those arguments could also entice developers to be more sensitive to opposition in their planning strategies of future projects (Aitken, McDonald et Strachan, 2008).

This case study is also illustrative of the power of information used as a strategy; the main bearer of information (the developer) managed to control it in a way that prevented opposition to emerge too soon in the process. However, it was theorised earlier that information is a resource that can serve as a basis of power only when it is coveted by someone else. In this study, at first information was hidden and many participants ignored that a wind farm was planned in their region until late in the process (Figure 4.1), information could, therefore, hardly be coveted. Although this result could be interpreted as contradictory to the idea that power is relational, in that case information was part of a strategy ("undisclosing information") to gain power over the other party regarding a resource coveted by both: the land. One covets the land because he or she inhabits it, and the other, because it wants to develop it. If information regarding the existence of the project is withheld, citizens will not get organized to protect the land since they do not know it is coveted by the developer. Information consequently gives a greater margin of manoeuvre to its bearer, who can act as if there was no competition for the resource. Information, no matter the angle from which it is considered, remains at the heart of a negotiation process (Lewicki, Saunders et Minton, 1997), and thus plays a central role in the build-up of a conflict.

4.3.2 Uncertainty: the long road from indifference to action

The developer's strategies undoubtedly influenced the pace of information diffusion, but the different reactions of the population also impacted the diffusion. Indeed, if the news of the project was slow to spread, the awareness of the studied population was slow to rise as well.

Already in Phase 1, some rumours circulated among the population, although primarily among supporters (Figure 4.3). However, at first, these fragments of information mainly spurred indifference. Some people did not feel concerned, either because the project was to be located in a neighbouring village and not in their own, or because they did not understand the impacts the project may have on their

environment and daily lives. The lack of participation at the few public events held to inform and consult the population (Figure 4.2) is an illustration of this feeling of not being concerned, and is not specific to the studied population since it was also observed in the case of a wind farm in Scotland (Devine-Wright, 2005). The participant who turned down the wind developer and then acted as if the project did not exist anymore (mentioned in Phase 1), is also a good example of this. Such indifference to a project that was perceived to be distant contributed to the slow diffusion of information among the population. Indeed, why was there a need to discuss a project that did not concern one personally?

Even the 2008 announcement by the government that the project was in the shortlist of Hydro-Québec's call for offers (in Phase 3) did not spur many negative reactions – except for a small group of opponents. The public events and announcement, and the awareness of wind prospection in the region could have stimulated an interest to learn more about the project, but this did not seem to have been the case. This denial and cognitive avoidance are well-known coping strategies used by people to escape a stressor, but they are also considered maladaptive ways of coping (Carver, Scheier et Weintraub, 1989; Skinner *et al.*, 2003). This is particularly interesting for developers and authorities; despite an apparent indifference from the population, efforts should still be deployed to diffuse information about a project. Indifference at the earlier stages, as it was the case in this study, should not be interpreted as acceptance, as much as it is no warranty of the absence of conflict later on in the developing process of a project. It could indeed mean that coping strategies are already present in the communities, and could therefore evolve toward different and much more intense strategies, such as opposition (Skinner *et al.*, 2003).

As revealed in the interviews, the developer also encouraged people to sign up to have a wind turbine on their land (with an immediate bonus in money) while saying that the project was still highly speculative because it had to be submitted to Hydro-Québec and thus was not yet approved. This created uncertainty around the project, and contributed to limited awareness.

Furthermore, for some people the public events contributed to reduce their vigilance: several people, who later declared themselves against the final project, were in

favour of the community project in early phases. Indeed, it is impossible to know if the community project had ever been in the developer's plan, or simply to know when the developer abandoned this idea. However, in 2007, the project submitted to Hydro-Québec was totally private and did not involve a financial contribution of, or a partnership in the decisions with, the concerned communities. In light of the other strategies used by the developer, letting the idea of this community project spread without denying its feasibility can now be interpreted as another strategy to prevent opposition from emerging.

Another important reason for indifference is that the project sounded so unreal to many participants that they could not believe it would ever receive the needed approvals. This disbelief (fed by the speculative nature of the project in the first phases) is an example of uncertainty that does not incite information-seeking behaviours (Brashers, 2001; Knobloch et Solomon, 2002; Norton, Sias et Brown, 2011). This lack of motivation to reduce uncertainty might be due to incapacity to cope with the answers that information-seeking might have brought (Alsop, 1999; Brashers, 2001; Knobloch et Solomon, 2002; Norton, Sias et Brown, 2011), or might even be a manner of maintaining hope (Brashers, 2001; Norton, Sias et Brown, 2011) in the non-existence of the wind farm. However, this attitude prevented some individuals from seeking information, discussing the project and its impacts, and spreading the news among the community. This attitude delayed the sensemaking process of individuals because there was no input (new information) to launch the process.

In 2008, a small group of worried citizens first attempted – unsuccessfully – to participate in the negotiation process. The citizens involved in these first attempts probably understood that the relationship with the developer was unequal and that they had to win proponents to their cause if they were to stand a better chance of being heard. Consequently, in 2009, the spreading of information among the population began, as shown in Figure 4.1, led by a few individuals who played the role of opinion leaders (Burt, 1999; Rogers, 2003; Valente et Davis, 1999; Valente et Pumpuang, 2007), as illustrated in Phase 4 of Figure 4.3. They brought information to other people that had not been reached yet in order to create awareness among

the population. If these central people are removed from the network (in Figure 4.3), the ones who declared them as primary sources would become untied from the rest of the network. As such, they acted as local bridges between unconnected people (Bergmans, 2008) and actively contributed, not only to information diffusion, but also to the growth of the opponents' cause.

As suggested by Devine-Wright (2005), interpersonal channels played a prominent role; this is reflected by the fact that the word spread between individuals, especially among opponents, in the context of informal discussions between friends, neighbours, representatives of the opponents' group or family members. No longitudinal data are available to ascertain if these central individuals were already opinion leaders in their community before the wind farm project. A few insights allow the researcher to believe that most of them were not opinion leaders before, but emerged as such because of the situation. These opponents were among the people most suspicious of the project, and consequently, became the most active. They had thus more opportunity to be influential within the population. They represented the core of the opponents' group, which is often observed in a protest movement even in the absence of centralized leadership (Teo et Loosemore, 2011).

Also, according to the homophily principle, i.e., the likelihood of similarity between two individuals who communicate (McPherson, Smith-Lovin et Cook, 2001; Rogers, 2003), the opinion leaders probably decided to spread the news to people that they figured would be receptive to their ideas and opinions. This would be coherent with Teo and Loosemore (2011), who found that contagion occurred primarily when relationships already exist. The consequences of homophily in this case study are observed in the fact that supporters were primarily informed by supporters, and that more than half of the opponents by other opponents (Figure 4.3). Homophily is not the sole element that had an influence here, trust between actors surely played an important role (Fox et Irwin, 1998; Frewer et Shepherd, 1994; Frewer, Howard et Shepherd, 1998; Frewer *et al.*, 1999; Newell et Swan, 2000; Senecah, 2004; Slovic, 1999), and this will be examined in Chapter V.

Information-as-thing was also influential in building awareness in this case study; the opposition to the project became increasingly organized as the information related to

the project became concrete, through maps and visual simulations provided by the developer or through photos, videos, and simulations provided by the opponents. People needed to have access to this information-as-thing in order to launch the sensemaking process (Dervin, 2003; Weick, 1995), but were for a long time deprived of it by the developer (see Phase 4). The project became "real" to the citizens once they could see it by making sense of these maps and visual simulations. From a developer's point of view, however, it could mean that withholding crucial information, such as maps, as long as possible can be a good strategy to avoid negotiating a project with citizens. However, this tactic – when discovered – can create distrust and further opposition.

Opinion leaders, discussions through informal channels, and information-as-thing helped to reach, in 2009, a critical mass of opponents (Rogers, 2003). A critical mass, in this case, constituted a threshold in the number of people in disfavour of the project that was sufficient to generate more adopters of the idea that the project was not desirable for the community. The number of adherents to the opponents' group was then large enough to have a public voice and be heard, but it was apparently too late to have an impact on the project, no matter the effort put in. They had then access to public forums and a civic legitimacy to express themselves in the debate, but still, did not have much influence. According to the trinity of voice, the last of the three pillars (access, civic legitimacy, and influence) of any participatory processes (Senecah, 2004; Walker, Senecah et Daniels, 2006) was therefore missing. This is also consistent with Gariépy's idea (2006) that the more a project advances in time, the more the potential of influence of the population on this project erodes. This is also why many authors expressed the importance of getting the public involved upstream of projects (André, Bryant et Coté, 1995; Depoe, Delicath et Aepli Elsenbeer, 2004; Senecah, 2004; Simard *et al.*, 2006).

4.4 Conclusion

Many strategies used by the developer contributed to the slow diffusion of information in the community, and later to the emergence and organisation of an opposition to the project. The strategies highlighted by this study were the following: confidentiality surrounding the project, exclusion of many actors but especially the inhabitants of the concerned communities, the spreading of rumours (about the community project and about the speculative nature of the contracts) that were not denied, the lack of willingness to address the concerns expressed by citizens at a moment when it could have reduced tensions in the population, and the late release of maps and visual simulations of the project. However, this case study also showed that citizens were slow to react to the news of the project; some were indifferent because they did not feel concerned, and some perceived the project to be so unreal that they did not launch the sensemaking process. The indifference, the perception that the project could not be true, and the lack of participation in information sessions slowed the emergence and organisation of opposition. Once awareness was widespread in the community, the project was already well under way and it was too late to modify or even abandon it. Both the information diffusion strategies and the public's reactions contributed to the build-up of a conflict still active at the time of submitting this thesis.

This study raises further questions, one of which is how to raise awareness about a project in order to prevent or manage environmental conflicts? Many studies in science communication and in energy planning have looked at the different ways of doing so without finding a universal answer, even though the dialogue principle is more and more acknowledged as the best path to follow (Aitken, 2010c; 2010b; Burns, O'Connor et Stocklmayer, 2003; Clark et Illman, 2001; Valenti et Wilkins, 1995; van der Sanden et Meijman, 2008; Wolsink, 2007). In echo to the trinity of voice model (Senecah, 2004), these dialogue models have to be inclusive and every actor should be legitimate to express his or her opinion (even those who disagree with the project) and influence the planning process (Aitken, 2010c). These dialogue models should try to address the concerns of citizens and not only try to overcome

them with reassuring words from the developers (Aitken, 2010c). There should be no occurrence of the top-down model, where the participation and consultation processes have only cosmetic purpose to legitimize decisions that have already been made (Aitken, 2010c), and more occurrences of collaborative approaches (Daniels et Walker, 2001; Walker, 2007; Walker, Senecah et Daniels, 2006; Wolsink, 2007). At the very least, the present study clearly shows that the strategy of not informing can lead to intense opposition.

CHAPITRE V

UNDISCLOSED INFORMATION AND DISTRUST

In this chapter, results concerning the perception that information was undisclosed and the distrust that came with it are presented in extended detail. They are then followed by a discussion of these results. For more clarity, the specific data that were used in this part of the analysis are presented in the introduction to the chapter. A short conclusion ends this second results and discussion section.

5.1 Specific data

The data used in this chapter came from observation, semi-directed interviews and sociometric questionnaires. No direct questions about trust were asked the participants. Perceptions of trust and distrust were operationalized through two main questions about information:

- In order to understand the project and its impacts; what were your main sources of information?
- Do you think that someone was withholding information from you? If yes, who withheld what kind of information exactly?

5.2 Results

In this section, the results from th main sources of information, information-seeking profiles, and perception of undisclosed information will be presented. These results will be illustrated by excerpts from the interviews.

5.2.1 Main sources of information

Participants were asked whom (or what) they considered to be a source of information (N=91). Most participants answered this question by recalling chronologically their quest for information. They freely cited individuals, groups and organizations, but also public events or documentation, as sources of information. This analysis will focus on specific responses referring to identifiable individuals, groups, organizations, or public events. Some participants, while they mentioned that they received information from some actors (for example, the developer or the opponents' group), argued that these actors were not, according to them, sources of information, and consequently they did not take their messages into account. These actors were thus not retained as sources of information for those participants.

Overall, 663 information sources were cited (525 by opponents, and 138 by supporters), among which 217 sources were different. Opponents and supporters had different sources, as shown in Table 5.1.

Table 5.1
Most-cited information sources (5 top responses for each group are in bold)

Source/ Position about the project	Opponents (N = 525)		Supporters (N = 138)	
	%	Mentions	%	Mentions
Opponents' group/ Opp.	**9.5**	**50**	2.2	3
Media/ NA	**6.9**	**36**	**3.6**	**5**
Internet/ NA	**5.5**	**29**	1.5	2
BAPE/ Neutral	**3.8**	**20**	0	0
Other wind farm projects/ NA	**3.6**	**19**	**6.5**	**9**
Actual developer/ Supp.	3.2	17	**5.1**	**7**
EIA firm/ Sup.	3.2	17	1.5	2
Man A/ Opp.	3.0	16	1.5	2
Groups against wind farms/ Opp.	2.9	15	0	0
Man B/ Opp.	2.5	13	1.5	2
Man C/ Opp.	2.1	11	0.7	1
Man D/ Opp.	2.1	11	0	0
Man E/ Opp.	1.9	10	0	0
Public information sessions/ NA	1.7	9	**3.6**	**5**
Government/ NA[12]	1.3	7	2.9	4
Wind farm visits/ NA	1.1	6	2.9	4
Hydro-Québec/ Supp.	1.1	6	2.2	3
Contracts/ Supp.	1.0	5	2.2	3
Laws and rules/ NA	0.8	4	2.9	4
Regional authorities/ Supp.	0.8	4	2.2	3
Former developer/ Supp.	0.2	1	**5.8**	**8**
Man F/ NA	0.2	1	**5.1**	**7**
Agricultural Union/ Supp.	0.2	1	2.9	4

For opponents, the most-cited source was the opponents' group. This source was followed by the media (mainly local), Internet, the BAPE, and other wind farm projects. The sixth place was shared by the developer and the firm hired by the developer to assess the environmental impacts of the project. Also, 5 men (identified

[12] At the time of data collection, the position of the Government with regard to the project was unknown. It can now be considered a supporter of the project.

as Man A, B, C, D, and E) had high centrality scores. These 5 men were active members of the opponents' group.

For supporters, the sources of information were, in order of decreasing importance: other wind farm projects, the former developer, and the actual developer (during the course of the development of the project, it had been sold from a wind prospector to a wind developer). The actual developer and a man (Man F) who is an expert on wind development shared third place as the most relied on source of information. The media and public information sessions tied for the fourth most accessed source of information. The last main sources of information were the Regional authorities and the agricultural union. These had relatively high scores for supporters, while they were much less important for opponents.

5.2.2 Different information-seeking profiles

The 217 different sources of information were regrouped in 13 categories. Each category included documentation produced by the source, public hearings of the source, or discussions with the source or one of their representatives in the case of organisational actors. The categories were: 1) developers (local, national, or international wind developers, and their associations); 2) opponents (local, national or international associations against wind farms); 3) experts (any person or organizations – mainly researchers – aside from the developer or the opposition who provided information on wind energy development, or the specific project and its impacts); 4) Local and Regional authorities; 5) public organizations (including the federal and provincial governments and their ministries, Hydro-Québec, the BAPE, etc.); 6) agricultural sector; 7) business sector; 8) media (local, national, or international, including Internet); 9) environmentalist groups (other than those against wind farms); 10) other wind farm projects (this included direct or indirect visits to a wind farm or specific documentation about these projects); 11) rules, laws and officials contracts (including the contracts binding a landowner and the

developer, or the Local authorities and the developer); 12) relatives and acquaintances (mainly family members, neighbours, or friends), and 13) other sources of information. The perception of the participant prevailed for the categorization; when a source was introduced as a specific individual (e.g., the mayor, a brother, a cousin working in the wind sector, etc.), it was categorised as expressed by the participant, even if the individual could fit in more than one category.

To elicit the information-seeking profiles, MCA (multiple correspondence analysis) was conducted using two series of categorical variables, one derived from the above categories and the other one composed of variables deemed influential for information-seeking behaviours.

For the first series of categorical variables, the 13 categories of information sources mentioned above were coded as to whether the participant perceived it as a source of information or not. The categories for which discussion with the source was mentioned (developers; opposition; Local and Regional authorities; experts, and agricultural sector) were coded for whether there had been a discussion or not.

The second series of categorical variables consisted of: 1) average time (hours/week) spent on the project by the participant (for information gathering, making phone calls to organize meetings, sharing information with others, etc.); 2) allegiance of the person who first informed the participant; 3) year when the participant learned about the existence of the project; 4) total number of sources cited by the participant; and 5) number of different types of sources (from the 13 categories) cited by the participant. Data from variables 1, 4 and 5 were transformed into categorical values by creating quartiles in order to qualify for the MCA. Data from variable 3 were also transformed in 4 categories: 2004-2005; 2006-2007; 2008, and 2009. Data from 79 individuals (62 opponents and 17 supporters) were complete enough to be used in this analysis (86.8% of the sample).

As Ellis and his colleagues (2007) in a different kind of analysis also observed, preliminary tests showed that the position (against or for the project) of participants distorted the results of the MCA; this variable was thus not taken into account. Other

variables (sex, age, education background, proximity to wind turbines, etc.) had very little influence on the MCA; they were thus not considered.

Three clusters were identified by the MCA (Figure 5.1).

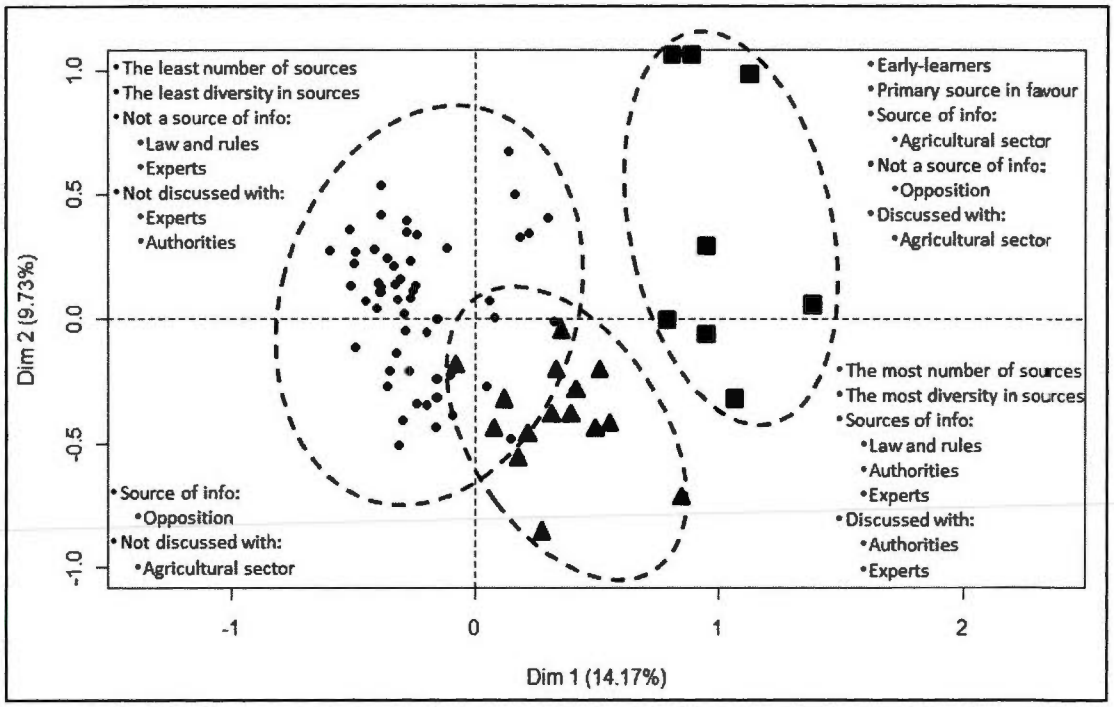

Figure 5.1 Clusters of information-seeking profiles (n = 79)

The Privileged Info-Accessing Supporters Cluster is composed of squares in the upper-right quadrant. The Active Info-seeking Opponents Cluster is composed of triangles, and the Second-hand Info-Using Opponents Cluster is composed of smaller dots.

Before taking a closer look at the three clusters, the features of the four quadrants, which stem from the intersection of the two dimensions computed from an aggregate of variables, will be described.

In the upper-right corner are situated 13 early-learners, who were mainly informed by someone in favour of the project. They mentioned the agricultural sector as a source of information and they had discussions with members of that sector. They also did

not declare the opposition as a source of information. They spent many hours a week on the project (between 3.75 and 10.5 hours per week), but yet were not necessarily those who spent the most time on it.

The bottom-right quadrant contains the 19 individuals with the highest total number of sources (between 11 and 23), but also the highest number of different types of sources (between 6 and 9, out of a possibility of 13). They mentioned the laws and rules, the Local and Regional authorities, and the experts as sources of information. They also discussed with a representative of the latter two sources.

The 17 individuals of the lower-left quadrant had only two things in common: they mentioned the opposition as a source of information, and had not discussed with members of the agricultural sector or theirs associations.

The 30 least informed individuals are found in the upper-left quadrant. They had the lowest total number of sources of information (between 2 and 5) and the fewest different types of sources (between 1 and 3, out of a possibility of 13). They mentioned neither the laws and rules nor the experts as sources of information. Also, they did not mention having discussed with the experts and the Local and Regional authorities.

Among the clusters presented in Figure 5.1, there was a large group of people (circles) on the left, and two smaller groups on the right (squares and triangles).

There is a group represented by squares composed of 8 men, who were all but one supporters of the project. Individuals in this cluster were well-informed men and early-learners. They had privileged access to the developer, the local and regional authorities, the agricultural sector, and the experts. For the rest of this document, this cluster will be referred to as the Privileged Info-accessing Supporters Cluster. This name and those of the following clusters are of course cognitive shortcuts to clarify the text.

There is a group represented by triangles composed of 11 men and 4 women, all opponents of the project, except 3 men. Individuals in this cluster sought information from many different sources, particularly information against the project from sources

categorized as the opposition, either local or from other areas, or through the Internet. Some of them had the opportunity to discuss with the developer, the Local and Regional authorities, and the experts, but none of them cited the agricultural sector as a source of information. For the rest of this document, this cluster will be referred to as the Actively Info-seeking Opponents Cluster.

The largest cluster (circles) was composed of 56 individuals, half of them (27) women, and the great majority (49) against the project. The individuals in this cluster counted on the opposition, their relatives and acquaintances, and the media as sources of information. For the rest of this document, this cluster will be referred to as the Second-hand Info-using Opponents Cluster.

From the individuals most-cited as sources of information in Table 5.1, one (Man C) had a profile that situated him in the Actively Info-seeking Opponents Cluster, but two others (Man A and Man D) were members of the Second-hand Info-using Opponents Cluster. Data were not available for the other individuals in Table 5.1.

5.2.3 Undisclosed information and distrust

Overall, 15 actors were identified as withholders of information (data was available for 91 participants), as indicated by participants' response to the question regarding the withholding of information. Most of them were groups or organisations rather than specific individuals. Withholders received between 1 and 57 mentions, with an average of 15.6. Each participant identified between 0 and 7 different actors (mean of 2) as potential withholders of information, with 11 (12.1%) of them indicating that no one was withholding information; 10 of these were supporters of the project (more than half of the supporters in the sample).

The most-cited withholders of information were: developer (57 citations out of 91 participants), Local authorities (53), Regional authorities (34), Environmental Impact Assessment (EIA) firm (23), government (22), Hydro-Québec (16), and relatives (8).

For each actor identified, participants were asked to explain what was undisclosed; an actor could withhold more than one thing. The results came essentially from the opponents, because they composed most of the studied population and of the sample, but also because more than half of the supporters said that no information was undisclosed. Details of the supporters' answers are presented at the end of this section.

Overall, the participants mentioned 319 entries of undisclosed information (this number was compiled as: 91 participants × the number of withholders of information cited by each participant × the number of different kinds of information undisclosed by each withholder cited by a given participant). In order to emphasize the most important information that was perceived as undisclosed, the 319 entries were grouped into 24 types, purposely kept numerous and broad in their focus in order to preserve the diversity of answers. The five actors most often cited as withholders of information and the information they are perceived to withhold are presented in Table 5.2.

As shown in Table 5.2, 73.7% of the participants mentioned that the developer withheld "details of the project development." They had the perception that the developer withheld information about the characteristics of the project, the possibilities of expansion, etc. Some perceived that the developer withheld information as long as they could or misled the population with false or incomplete facts.

> Excerpt 1 – Man: [The developer] said nothing. It was maybe not in their interest to talk… It is the approach: "I am not a liar, I did not withhold anything, but I did not say everything…"

To illustrate the extended distrust toward the developer, notably about the way the prospection was carried out, another man said:

Excerpt 2 – Man: I don't know if it is a rumour, but I have friends who told me they have proof that some people were offered money. You go there and they give you 1000 dollars and you sign your name under here. I have no proof for this. Usually, I avoid this kind of comment, but these are things we hear, and, considering the enormity of their actions, I say that, yes, they probably did that on top of everything else.

Table 5.2

Five actors most often cited as withholders of information and the types of information they were perceived to withhold

Withholders of information[13]	Types of undisclosed information	% of undisclosed information, by type[14]	% of undisclosed information, by type and actor
Developers (N=94)	Details of the project development	14.9 (14)	**73.7**
	Maps	14.9 (14)	51.9
	Prospection and contracts content, exclusion of some actors	14.9 (14)	63.6
	Real costs, benefits, and number of jobs created	11.7 (11)	64.7
Local authorities (N=75)	Negotiations and decision-making	37.3 (28)	**62.2**
	Conflicts of interest and corruption	26.7 (20)	50.0
	Lack of real information and willingness to consult	12.0 (9)	50.0
Regional authorities (N=47)	Negotiations and decision-making	27.7 (13)	28.9
	Conflicts of interest and corruption	12.8 (6)	15.0
	Early and disreputable engagement in favour of the project without consultation	12.8 (6)	35.3
	Lack of real information and willingness to consult	10.6 (5)	27.8
	Other ongoing projects in the region	10.6 (5)	**71.4**
EIA firm (N=27)	Negative impacts of the project	44.4 (12)	**85.7**
	Conflicts of interest and corruption	25.9 (7)	17.5
Government (N=24)	Justification for the development of wind energy	62.5 (15)	**68.2**

[13] For each actor, the undisclosed information listed received more than 10% of the responses for that actor.
[14] In parentheses, the total of citations of undisclosed information.

The two following quotes provide an idea of the scale of distrust that many participants expressed about the Local and Regional authorities. Most of the time, these two actors were considered as one by the participants, possibly because some representatives sat in both assemblies. Many participants suspected conflicts of interest and corruption; together, the Local and Regional authorities received 65% of the responses of this type (Table 5.2).

> Excerpt 3 – A couple: Man: What do [the Local and Regional authorities] withhold? I am tempted to say: bribes. They withhold something because I don't understand... Once, I asked them publicly: why do you think this project is a good one? No one ever answered. Woman: Their motives, they withhold them.

> Excerpt 4 – Woman: I think there were bribes. Maybe it is not true, but the mayor just built a huge house on the lakeside. Maybe he received money? Maybe it is not even true, but I think it is. When he speaks, it doesn't sound true.

Many participants said that the negotiation and decision processes regarding the project were hidden. However, a lot of them said it was the result of a lack of "competence" or expertise. For them, the Local and Regional authorities did not have enough knowledge to lead such processes. The words of this man show that he perceived himself as being better informed than his local representatives:

> Excerpt 5 – Man: Our role was to give [our representatives] the information they did not have in order for them to make enlightened decisions. Even if the government sends [the information] to their office, if they are not used to integrate such a great quantity of information... It is not because the government gives it to you that you will read it, and it is not because you are a local elected representative that you will start to read several books and documents. But these are now prerequisites if you want to make decisions on behalf of thousands of people.

The main criticism aimed at the EIA firm was that their work was of poor quality because they hid the negative impacts of the project (Table 5.2).

> Excerpt 6 – Woman: The impact studies were not serious. I did not compare, but I believe the people who say that [the EIA firm] just repeats their study from one project to another, that they only adapt it very superficially, not spending a lot of time on it. People told me that, but I believe it because what I read from the impact studies was unsatisfactory. For example the noise measures were not at all adapted to our villages. They did not consider that if you live on a hilltop, there will be more noise than if you live in the valley. I am not an expert, but topography is a reality that needs to be considered, and the studies were very general.

Another participant said that the EIA firm "followed a 'seller logic'", trying to sell the project to the population. Several participants also expressed this as the reason why they thought that the EIA firm had conflicting interests in the situation.

The last actor perceived as a withholder of information is the government of Québec (Table 5.2). The main point that the government withheld was the justification for the development of the wind energy sector. People questioned the way it was done, especially the political decision to have this energy being developed by the private sector instead of Hydro-Québec (the state-owned energy company), but also the costs and benefits of wind energy for the province.

Even if more than half of the supporters in the sample said that nobody hid anything in the conflict, some were nevertheless cited as information withholders by the supporters: the Regional authorities (5 responses out of 19 supporters), the opponents' group (3), and the developer (2). Two main factors were perceived as being undisclosed: the political strategies (perceived as undisclosed by the opponents' group, 3 mentions), and another neighbouring wind farm project (perceived as undisclosed by the Regional authorities, 3). This parallel project of 15 wind turbines in the same region was also under development at the time of data collection, but was finally abandoned by the Regional authorities.

5.3 Discussion

This discussion is divided into four sections, which are as many ways to tie information and trust (or distrust) together: 1) trustworthy and familiar sources; 2) privileged access to information; 3) seeking and diffusion information: two distinct tasks, and 4) the seed of suspicion.

5.3.1 Trustworthy and familiar sources

Within agreement with previous work stating that people tend to turn towards trustworthy and familiar sources in situations of uncertainty (Babrow, 2001; Brashers, 2001; Frewer et Shepherd, 1994), this research showed that those opposing the project relied more on the opponents' group – that was constituted of neighbours, friends, acquaintances, etc. – as a source of information. In Table 5.1, the 5 men with centrality scores higher than 10 were active members of the opponents' group.

This tendency also highlights the importance of the informal discussion networks that were, along with the media, the only way that people in the Second-hand Info-using Opponents Cluster sought information, as Morell (1987) also found in his study. Results show that the majority of the participants acquired information through discussions with relatives and acquaintances, some of whom were members of the opponents' group. Great trust toward the latter was expressed, and the information found this way seemed to have convinced the members of the Second-hand Info-using Opponents Cluster to adopt the same position. Homophily (McPherson, Smith-Lovin et Cook, 2001) may have played a role in the situation; people in this cluster probably perceived the relatives and acquaintances they cited as sources of information as being similar to them. Similar beliefs and values (Peters *et al.*, 2007; Slovic, 1993; 1999) could have also been an important part of this homophily, just as mutual friends could have increased the likelihood of trust between these opponents, and distrust toward their adversaries (Burt et Knez, 1995; Granovetter, 1985). This is

a good example of the third-party effect developed by Burt and Knez (1995); in the case of opponents, relatives and acquaintances contributed to increasing distrust toward other actors.

5.3.2 Privileged access to specific information

Members of the Privileged Info-accessing Supporters Cluster had privileged access to the developer and the agricultural sector (Table 5.1). Supporters generally expressed great trust toward the developers, even if they could not be considered familiar sources since they were newcomers in the region (which is of course not the case of the agricultural sector in this rural area). However, the privileged access to the developers most probably also gave them access to certain information others did not have. This phenomenon of supporters trusting the developer does not seem to have been documented in other studies on conflicts related to wind farm planning, perhaps because their focus was more often than not on overcoming opposition, which is perceived as a problem and not as an opportunity to improve planning processes (Aitken, 2010b; 2010c).

The men in this cluster were early-learners (Figure 5.1), involved in various ways in the negotiation process. As such, it may be considered that the trust they expressed toward these sources of information was not so much in the information they diffused, but rather in the relationship they had with these powerful actors. They seemed to be satisfied with the information they received from the developer and the agricultural sector. The developer and some decision-makers probably nourished this privileged relationship with these few supporters, who could then act as intermediaries to diffuse their ideas within the community (Bergmans, 2008), or as third-parties to spread the perception of their trustworthiness among supporters (Burt et Knez, 1995). The privileged access of these supporters may have helped them to reduce their uncertainty, as well as reducing their need to seek more information elsewhere, in accordance with uncertainty management and problematic integration

theories (Babrow, 2001; Bradac, 2001; Brashers, 2001; Norton, Sias et Brown, 2011).

The finding that these privileged relationships fostered trust is reinforced by the particular answer of supporters with regard to the parallel wind farm project. Indeed, three of the supporters mentioned this parallel wind farm project of which they felt excluded because of undisclosed information. These supporters no longer had the privileged relationship with the decision-makers as they had in the other project, and thus trust in the Regional authorities was starting to erode.

For both projects (the one that is the object of this study and the parallel one), the great majority of opponents did not have this privileged access to the developer and the agricultural sector.

5.3.3 Seeking and diffusing information: two distinct tasks

Participants in the Actively Info-seeking Opponents Cluster palliated the lack of access to privileged sources by intense information-seeking activities; they had many sources and, which is even more relevant in this context, they had many different types of sources. A systematic quest for information, including the utilisation of unusual channels, is the least common behaviour (Griffin, Dunwoody et Neuwirth, 1999), and it is thus also normal to observe "only" 15 people in this cluster. Only one opinion leader in Table 5.1 (Man C) was part of this group. The members of this cluster showed behaviour that could be related to the vigilance and awareness described by Kramer (1998) when coping with a disturbing social environment, and to a willingness to monitor the ongoing implementation process (Kramer, 1998; Lewis et Weigert, 1985).

The opponents could hardly control the scientific debate, as observed elsewhere (Aitken, 2009; Endres, 2009; Kinsella, 2004); through their information-seeking activities they rather tried to bring new evidence into the local debate and to raise questions about gaps, misinterpretations and omissions that could have been

present in the scientific arguments of the developer and of the EIA firm. Their efforts seem to have been successful among the community of opponents.

As shown in Figure 5.1, 56 people rely on second-hand information with very little diversity in their source of information. Such a number may be surprising at first sight, but this result is also consistent with that found in the literature, where a minimal information-seeking behaviour is the most common reaction when dealing with risks (Cobb, 2005; Fiske et Taylor, 1991; Griffin, Dunwoody et Neuwirth, 1999). Two other opinion leaders (Men A and D) were part of this Second-hand Info-using Opponents Cluster, and thus among the least informed in terms of number and diversity of sources. Homophily (McPherson, Smith-Lovin et Cook, 2001) could be an explanation of these high centrality scores as source of information, despite them not being information-seekers themselves.

This finding may be a variant of the well-known model of the two-step flow of information (Lazarsfeld, Berelson et Gaudet, 1948); information did not spread from opinion leaders to other members of the community in two distinct steps, rather in a multitude of bidirectional links. The close relationships between the opinion leaders of the opponents' group (as it will be presented in Chapter VI) suggests indeed a frequent back-and-forth between opinion leaders who divided the tasks – probably unconsciously – between those who searched for information and those who spread it. Some made sure that new information was coming into the system, and some made sure that the information circulated among the network. The relationships between these two clusters are a good illustration of the third-party effect arising when faced with an intense need for information about the trustworthiness of others (Burt et Knez, 1995; Kramer, 1999). This diffusion strategy was not successful in convincing supporters, but it was influential among opponents in the Second-hand Info-using Opponents Cluster, especially the ones situated in the lower-left hand quadrant of Figure 5.1 who had only one source of information in common: the opponents' group.

Results show no such opinion leaders for supporters. This may be explained by the strong presence of the developers as a source of information for supporters, since

both the former and the current developers were perceived as sources of information by supporters (Table 5.1).

5.3.4 The seed of suspicion

When one perceived that an actor could not be trusted, in most cases that actor was not considered a source of information (Babrow, 2001; Brashers, 2001; Frewer et Shepherd, 1994). This means that even accurate information from said actor was being disregarded because of the distrust he or she inspired (Burt et Knez, 1995; Fox et Irwin, 1998; Kramer, 1999; Peters *et al.*, 2007).

As the conflict developed, a great majority of participants became entrenched in their position: supporters increasingly trusting supporters and distrusting opponents and vice versa. The distrust was constructed through social networks (Rogers, 2003), as the groups were framing the issue, their adversaries and themselves (Gray, 2003). At the time of data collection, trust was indeed almost blind between members of the same group (either in favour or against the project), while distrust toward the other group (especially from the opponents to the supporters) seemed to be just as high.

When opponents decried a lack of information (BAPE, 2010a), they in fact expressed a lack of trust in the information diffused (mainly because of its bearers). The opponents' demand for more information was thus unsolvable because they were asking for more information they could trust (i.e. information that suited their cause) from actors they considered to be untrustworthy. This information would have given legitimacy to their voice, a legitimacy that is essential for public participation (Senecah, 2004). However, their adversaries (in this case the supporters of the project) had no reason to fuel the public debate with information they, in turn, did not trust. The two discourses were at this point irreconcilable, but each side wanted to see its own prevail (Mumby, 1988). Therefore, one of the main problems in this conflict was not uncertainty, but rather the certainty expressed by each side, which is consistent with definitions of trust and distrust that imply a shift toward certainty (Burt

et Knez, 1995; Kramer, 1999; Lewicki, McAllister et Bies, 1998). This entrenchment contributed to the escalation of the conflict and to social division (BAPE, 2010a; Lewicki, Saunders et Minton, 1997; Walker *et al.*, 2010).

The widespread distrust expressed by opponents who believed that many actors were withholding information from them (Table 5.2) could be interpreted as a refusal to relinquish control of their fate to someone else (Mayer, Davis et Schoorman, 1995). Indeed, if to trust is to accept to rely on another's actions without control (Lewicki, McAllister et Bies, 1998; Mayer, Davis et Schoorman, 1995; Simon, 2007), then it was definitely something they were not ready for. Therefore, the opponents' strategy was to spread suspicion, and thus distrust (Fein, 1996; Kramer, 1998), through discussion networks, spreading the idea that their adversaries and the information coming from them were untrustworthy.

The suspicion affected the credibility of the actors with a strong influence in the negotiation and decision-making processes (with the exception of the agricultural sector). Some of the above excerpts about rumours and unverified information are particularly revealing of this widespread suspicion. Suspicion had created fertile ground for these rumours to grow (Fein, 1996; Kramer, 1998). Some of these were not to be taken lightly, like suspicion of corruption and conflicts of interest in the case of the Local and Regional authorities (Table 5.2, as well as excerpts 2, 3 and 4). Suspicions of bribes have also been observed in other studies, suggesting that the current way of developing wind farm projects might increase distrust toward developers and decision-makers, especially considering that the financial benefits attributed to the community are not subject to formal guidelines (Aitken, 2010d; Cass, Walker et Devine-Wright, 2010; Cowell, Bristow et Munday, 2011).

The distrust toward the elected representatives was so strong that many participants said that the Local and Regional authorities had neither the competence nor the expertise to make decisions about such a project (Excerpt 5). This perceived incompetence fed a lack of institutional and social trust and is consistent with the literature on trust and risk perception (Frewer *et al.*, 2002; Huijts, Midden et Meijnders, 2007; Lewis et Weigert, 1985; Peters *et al.*, 2007; Priest, Bonfadelli et

Rusanen, 2003; Siegrist, Cvetkovich et Roth, 2000; Slovic, 1993). Some even felt they were better informed than their representatives (Excerpt 5) – which may have indeed been the case for some members of the Actively Info-seeking Opponents Cluster (Aitken, 2010c).

Also, many opponents did not trust the EIA firm, which they perceived as being biased in favour of the project, even though these opponents acknowledged their own lack of expertise to judge the work done by the EIA firm (Excerpt 6). This exemplifies that even the institution that could have made an independent scientific assessment of the impacts was suspected of having failed at its role. This is another example of a case in which technical risk assessments had less influence on risk perception than trust-destroying information (Kramer, 1999; Slovic, 1993). In this case, the experts and their arguments had less authority than postulated in the deficit model, reinforcing the idea that such a model has important limitations (Dervin, 1994; Endres, 2009; Fischer, 2000; Frewer *et al.*, 2003; Kinsella, 2004; Plough et Krimsky, 1987). Indeed, this model implies that the public is an empty well that needs to be filled with scientific information and it does not take into account the way the public constructs and manages scientific information and arguments (Endres, 2009). This case study also provides an example of erosion in institutional trust. However, at the same time, this case shows that great trust can develop among opponents – to the extent that assumptions expressed by members of that group are reported by others as if they were verified fact. Opponents had high expectations of the opponents' group and displayed a great willingness to believe its discourse.

For many opponents, suspicion was not only related to the specific project, but to the whole development of the wind energy sector in Québec, perceived as inadequate and disrespectful of the population. To them, it was an expression resulting from a feeling of not being taken into consideration by the actors responsible for the decisions made during the process, from the local authorities to the provincial government itself. They did not trust their representatives at any level to protect them

from the actions of the developer and therefore expressed extended social and institutional distrust (Lewis et Weigert, 1985; Siegrist, Cvetkovich et Roth, 2000).

The perception that so many actors withheld crucial information fed into a belief in conspiracy theories (Goertzel, 1994; Kramer, 1998; 1999) for many opponents, and distrust contributed in giving meaning to their opposition to the project. Not only did the opponents' group acquire legitimacy this way, it also gained autonomy and thus power (Friedberg, 1993) over the actors who were believed to withhold information. Repeated demands to access information were merely an argument, because the most important thing for opponents with this strategy of suspicion was to discredit these powerful actors by spreading the idea – justified or not – of their untrustworthiness.

Furthermore, the strategy of suspicion contributed to the cohesion between the opponents to the project (Lewicki, Saunders et Minton, 1997; Scherer et Cho, 2003) through a consolidation of the opposition discourse. This can be observed in the results on withholders of information (Table 5.2); the fact that many opponents cited the very same actors, and the same undisclosed information showed that consolidation was occurring (Gray, Hanke et Putnam, 2007). The opponents were positioning themselves in relation to the supporters (the opposite – i.e., supporters positioning themselves in relation to the opponents – may also have been present, but was not observable from this data). This resulted in strong social cohesion within this group against common and untrustworthy adversaries (Brewer, 2001; Goertzel, 1994; Gray, Hanke et Putnam, 2007).

5.4 Conclusion

Public participation in environmental consultation processes implies access to information and trust in the providers of information. Without trust, information will likely be disregarded. However, with trust, information will likely be taken for granted and diffused further.

Supporters of and opponents to this wind farm project showed high variability in their information-seeking profiles in terms of access to powerful actors and of quantity and diversity of sources of information. Three clusters were clearly identified: the Privileged Info-accessing Supporters, the Actively Info-seeking Opponents, and the Second-hand Info-Using Opponents.

Among themselves, opponents and supporters showed high levels of trust. Distrust regarding the other group was also very high, especially from opponents to supporters. Distrust was fed by lack of information, suspicion, and exclusion. It was also used as a strategy to discredit adversaries who were considered to be untrustworthy. Trust was fed by privileged access to some actors, homophily, informal discussions through personal networks, but also by suspicion and distrust toward the other group.

This study raises further questions, one of which is how to use levels of trust and distrust in order to assess the social impact of a project like a wind farm. Many studies on risks have explored the relationship between risk perception or public participation and trust, and the different ways to develop and repair trust (Daniels et Walker, 2001; Lewicki, 2006; Lewicki, Saunders et Minton, 1997; Lewicki, Gray et Elliott, 2003; Senecah, 2004). The present study focused on trust and distrust through information-seeking behaviour. It shows that information alone did not seem to have much impact on one's position, but that the perception of untrustworthiness of the provider of information, diffused through social networks, has a great influence on the position taken by an individual.

CHAPITRE VI

SOCIAL DIVIDE

In this chapter, results concerning the social divide caused by the wind farm project and its impacts on social cohesion, social capital, social support, and coping strategies are presented in extended detail. They are then followed by a discussion. For more clarity, the specific data that were used in this part of the analysis are presented in the introduction to the chapter. A short conclusion ends this third and last results and discussion section.

6.1 Specific data

The data used in this chapter come from two sections of the interviews: one on discussions about the wind farm, and the other on social networks. For the first section, participants had to answer yes or no if the wind farm was an object of discussion according to five categories of relationships: spouse, family, neighbour, friends and colleagues. For the second section, participants had to identify every person they knew from a list of the study population. Once identified, they had to specify if that person was an acquaintance, a member of the family, a friend, a neighbour or a colleague. Then, they were asked if the relationship was new, the same as before, had intensified or had deteriorated because of the wind farm

project. Intensification and deterioration due to any other subjects were not considered in the analysis.

6.2 Results

In order to better understand the impact of this conflict on social cohesion, the results have been grouped in the following way: 1) Wind farm as topic of discussion; 2) Portrait of the study population; 3) New relationships; 4) Intensified relationships; 5) Deteriorated relationships; and 6) Types of relationships that changed. The majority of the quantitative results will be presented in section 2, while other sections will mainly deepen the understanding with qualitative data from the interviews.

6.2.1 Wind farm as topic of discussion

The wind farm project was an important topic of discussion in the sample, as shown in Figure 6.1. Proportionally, opponents discussed the wind farm more than the supporters; it was a topic of discussion for at least 85% of the opponents in every category. Most of the supporters discussed the project with colleagues. It was the only category in which supporters discussed the wind farm proportionally more than opponents. Some of the supporters were involved in the project because of their professional position. Discussion was therefore related to their work or professional interactions, which was not the case for the great majority of opponents.

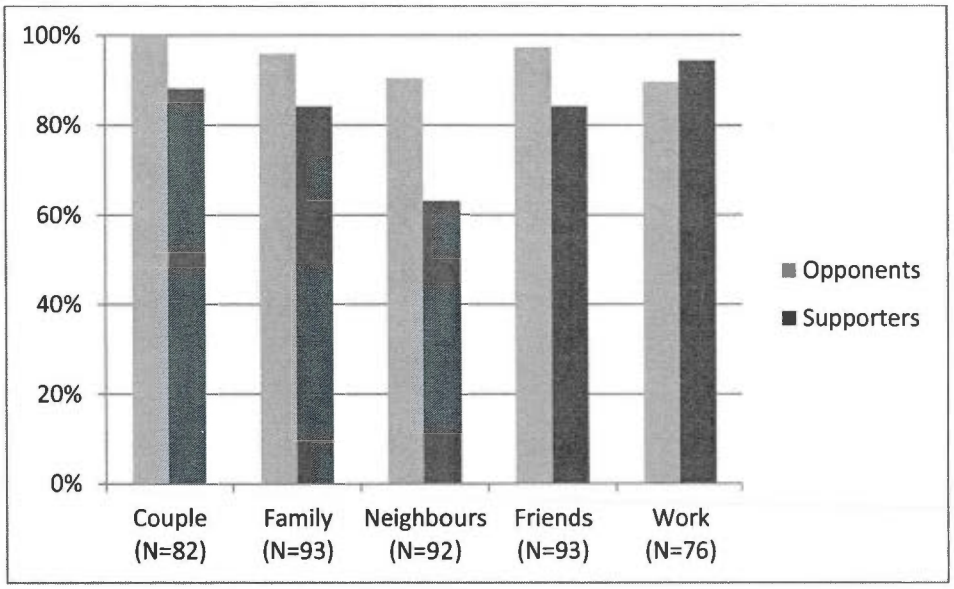

Figure 6.1 Wind farm as a topic of discussion, by category

The number of participants varied between categories because some were not in a relationship, did not work or data were incomplete; calculations were made on the numbers indicated in parentheses.

Often, participants expressed the idea that to avoid arguments and preserve relationships, people at times avoided the topic, acted as if nothing was going on or as if they had no opinion.

> Excerpt 1 – A woman
> At work, [if you comment on the news about the wind farm], people hide their head in their lunchbox. With colleagues, we don't talk about it. We talk only with those who we know think like us.

When participants knew or suspected they would have been in disagreement with someone, the topic was taboo. Otherwise, the wind farm was, for many participants, the one and only topic of conversation.

> Excerpt 2 – A woman
> Our kids are fed up with hearing everybody talking about the wind farm!

6.2.2 Portrait of the study population

Overall, the sociometric questionnaires revealed many unidirectional relationships of different types (acquaintance, family, friend, neighbor or colleague) connecting 302 individuals. An overview of all the relationships reported in the interviews is presented in Table 6.1. Six members of the study population are missing; although they presented a brief, they were either unknown to or not identified by anybody in the sample. Of the 302 nodes, 175 were men and 127 were women, 242 opponents, 50 supporters and 10 people that had a position unknown to the researchers since they did not take a clear position in their brief or only asked a question during the public hearing process.

Table 6.1
Overview of the relationships reported in the interviews[15]

	Relationships reported...		
	with members of the study population (N=302)	between participants (N=93)	reciprocally between participants (N=93)
Pre-existing	4924	1931	**1352**
Same as before	2280	739	272
Intensified	1402	857	**524**
Deteriorated	**612**	335	152
New	1478	890	**466**
	Emerging category		
Not deteriorated (Same as before + intensified)	3682	1596	**1066**

Firstly, Table 6.1 shows relationships that were pre-existing or new. From the former, the relationships were categorized as same as before, intensified or deteriorated.

[15] Numbers in bold are discussed in the text.

The first two columns of results present relationships concerning either the study population or the sample. However, in order to be more severe, the data matrix was symmetrized to the minimum value, i.e., only the relationships where both members of the relationships claimed to know the other before the conflict were retained. These symmetrized results – or reciprocal relationships – are presented in the last column to the right. Unless stated otherwise, all matrices in this chapter have been symmetrised to the minimum value. This means that, with one exception (deteriorated relationships), only reciprocal relationships were taking into account, allowing for especially rigorous analyses. Before the conflict, the 93 participants were linked by 1352 reciprocal relationships with an overall density of 0.32 and an average of 14.5 reciprocal ties per person, as shown in Table 6.2. Figure 6.2-A provides a portrait of the web of pre-existing ties in the sample before the conflict.

Table 6.2
Changes in the group densities from pre-existing ties, with matrices symmetrized to minimum value

	Pre-existing ties (N=1352)		Not deteriorated ties (N=1066)		Difference (-286 ties)	
Sample	Opp.	Supp.	Opp.	Supp.	Opp.	Supp.
Opp. (N=74)	0.35	0.2	0.34	0.02	-0.01	-0.18
Supp. (N=19)	0.2	0.67	0.02	0.67	-0.18	0
Overall density	**0.32**		**0.25**		**-0.07**	
Average of ties	**14.5**		**11.5**		**-3.0**	
	Pre-existing ties (N=1352)		New ties (N=1818)		Difference (+466 ties)	
Sample	Opp.	Supp.	Opp.	Supp.	Opp.	Supp.
Opp. (N=74)	0.35	0.2	0.52	0.2	+0.17	0
Supp. (N=19)	0.2	0.67	0.2	0.75	0	+0.08
Overall density	**0.32**		**0.43**		**+0.11**	
Average of ties	**14.5**		**19.5**		**+5.0**	

To assess the loss in density within the sample, a new category was created: not deteriorated (Table 6.1). It included the relationships that participants perceived as "same as before" and "intensified," in other words, all those that were not

deteriorated. At the time of the interviews, the same network of relationships showed an overall density of 0.25 and 1066 reciprocally not deteriorated ties, with an average of 11.5 ties. Therefore, there was a loss of 0.07 in the overall density and an average deterioration of 3 reciprocal relationships per member of the sample. Table 6.2 shows that the loss in density happened mostly between the two groups, and not within each group. Figure 6.2-B provides a portrait of the web of ties (that are considered not deteriorated) in the sample at the moment of the interviews.

On the other hand, Table 6.2 also shows that reciprocal new relationships (when deteriorated new relationships are not taken into account) induced a gain in overall density of 0.11, with a more important gain for opponents. Indeed, when the 466 reciprocal new relationships are added to the pre-existing ties, the total increases to 1818, with an average of 19.5 relationships per participant. This represents an increase of 5 relationships per person. The reciprocal new relationships are illustrated in Figure 6.2-C (the larger a node is, the more new relationships the individual has).

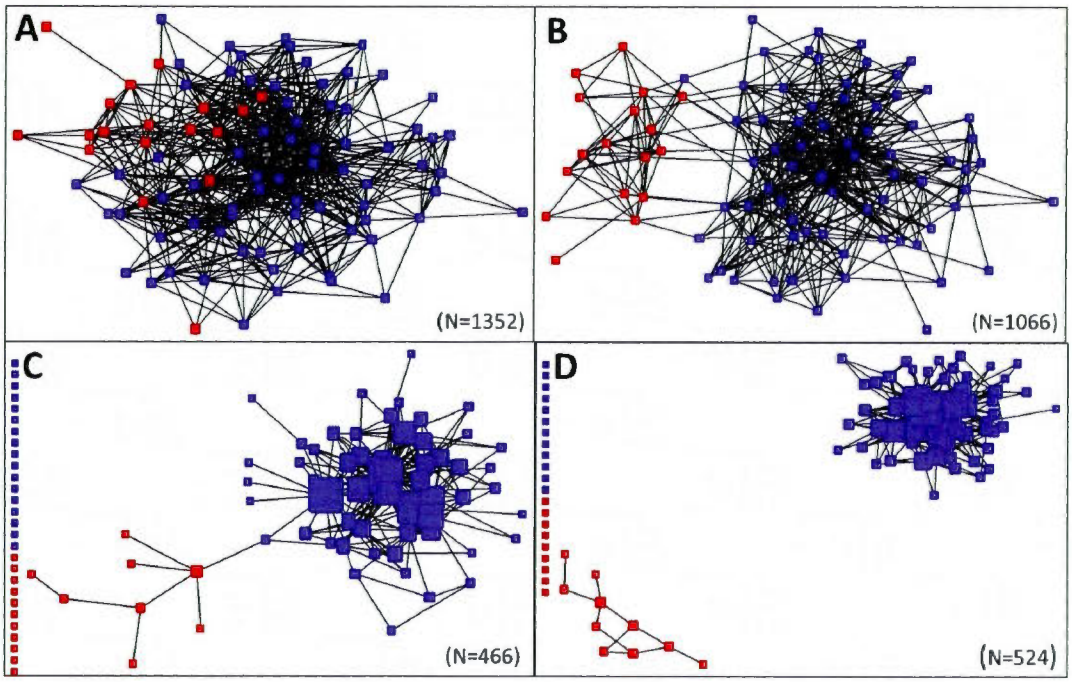

Figure 6.2 Social structure of the sample and various modifications related to the conflict

A: Reciprocal pre-existing ties prior to the conflict; B: Pre-existing ties that were reciprocally reported as not-deteriorated; C: Reciprocally reported new ties, when deteriorated ties are not taken into account; D: Reciprocally reported intensified ties. Matrixes are all symmetrized to minimum value. Blue dots are opponents and red dots are supporters. In C and D: the larger a node, the higher its number of ties.

6.2.3 New relationships

The conflict generated 466 reciprocally reported new relationships among the sample. For some individuals in particular, the conflict generated many new relationships. One opponent had as much as 27 new reciprocal relationships, and 21 opponents had more than 10 new reciprocal relationships. The supporter who cited the most new reciprocal relationships had five.

The networking that happened around the wind farm was expressed by many participants as the "positive side" of the situation, but some also expressed a doubt

about the duration of these new relationships. Unfortunately, no longitudinal data are available to see how the relationships reported in this chapter evolved over time.

6.2.4 Intensified relationships

The conflict contributed to the reciprocal (and positive) intensification of 524 pre-existing relationships among the sample, especially among opponents. The reciprocally intensified relationships are illustrated in Figure 6.2-D. Two major components (when isolates are set aside) can be seen in the figure: the opponents and the supporters. There were no reciprocally intensified relationships between opponents and supporters.

Figure 6.2-D also shows that for some individuals in particular, the conflict generated many intensified relationships: the larger a node is, the more reciprocally intensified relationships this individual has. One opponent (not the same as the one previously cited for the most new reciprocal relationships) had 31 reciprocally intensified relationships and 19 opponents had more than 10 reciprocally intensified relationships. Intensification was less important for supporters.

Participants named many ways in which a relationship was intensified. Some expressed for example more esteem, admiration, respect, or pride toward someone in their network. Others talked about the motivation or the help they gave or received. Some relationships were intensified in terms of frequency because people met more often than usual (at demonstrations, meetings, public events, etc.) or in terms of intimacy. For instance, some felt closer to an acquaintance or a colleague because they now shared their thoughts on personal matters. Some intensified relationships were also old friends or acquaintances that reappeared in participants' lives because of the project, or some fairly bad relationships that had a chance to be partially repaired because people now had something new in common that was more important than old bitterness.

The feeling of "playing on the same team" was sometimes sufficient to intensify a relationship. Some participants expressed the idea that having many other people thinking as they did comforted them that it was worth spending time and energy in favour of or against the project. An important sense of solidarity was thus present in the participants' discourse, especially for opponents. People felt the need to provide and receive this mutual help, which gave them direction.

> Excerpt 3 – A couple
> The man: There was a nice companionship between us, a lot of values in common. What really counts? This project questioned every single one of us.
> The woman: For that, the wind farm was good: we had to stick together. Sometimes I received phone calls from discouraged people, but it's me who was in that state the day before. I had to fight because others needed me.
> The man: And you didn't take enough care with some people in the past or you had prejudices... And suddenly, everything changed. We had to help others... In wartime, unbelievable solidarities are possible, and because everyone is under shock, there is creation. Creation, like friendships and love, is a release from what is going on.

> Excerpt 4 – A man
> Everyone who worked for or against the wind farm will have something in common: they will be marked for life. For sure, there will be social division between those who were for and those who were against. This will always be there. But those who worked together will probably show more solidarity than those who stayed at home, watching TV and thinking life was beautiful.

Some participants who were known to be at the core of the opponents' group were reluctant to categorize other members of this group as friends; they talked of others in the core more as acquaintances. They met and shared often (sometimes everyday), but did not talk much about their personal life. Most of them acknowledged an intensified relationships, but one of a peculiar kind.

Excerpt 5 – A woman
They are not friends; they are colleagues in trench warfare. It's a relationship that goes further than friendship and that I never had in my life. We understand each other down to the bones, but we know nothing about each other's private life. We have a common objective, a common enemy, and we are in a hurry to act. I'm ready to do many things for these people, but not in the name of friendship. I could never have had friends with whom I communicate so intensively; no friend would stand such a pace, except a trench warfare colleague.

6.2.5 Deteriorated relationships

Participants reported 612 deteriorated pre-existing relationships among the study population. These deteriorated ties were not analysed from a symmetrized data matrix. This matrix was the only one that was not symmetrized because deteriorated relationships are important indicators of social division; indeed, even if only one participant perceived the relationship as deteriorated, it is already a sign of degradation.

From these 612 deteriorated ties, 451 were expressed by opponents and 161 by supporters. The average deteriorated relationships per participant was 7.3 (6.1 for opponents and 8.5 for supporters), respectively. Almost all of the supporters' deteriorated relationships (97.5%) were with opponents. Similarly, the opponents who cited deteriorated relationships targeted in great majority the supporters (87.8%), but in their case, also other opponents (12.2%), reflecting some dissensions among the opponents themselves.

The number of deteriorated relationships per participant was calculated for two categories: deteriorated from the participant and deteriorated toward someone in the study population. Results of the higher quartile for both categories are presented in Table 6.3. For confidentiality reasons, in Table 6.3, individuals are identified with a code; the first letter, either S or O, stands for Supporter or Opponent; the middle is a random number; the last letter, either M or W, stands for Man or Woman.

Table 6.3
Deteriorated relationships (N=612), higher quartile

Rank	Individual	Deteriorated from	Rank	Individual	Deteriorated toward
1	**S-311-M**	40	1	**S-095-M**	42
2	**S-095-M**	33	2	S-345-M	29
3	O-135-M	25	3	S-072-M	25
4	O-286-W	23	4	S-170-M	23
5	O-030-M	20	5	S-033-M	22
6	O-348-M	19	6	**S-311-M**	21
7	S-345-M	17	7	S-322-M	19
8	O-349-W	17	8	S-232-M	16
9	O-285-M	16	9	S-249-M	14
10	S-033-M	16	10	S-178-M	13
11	O-226-M	15	11	S-246-M	13
12	O-239-W	15	12	S-102-M	12
13	S-288-M	14	13	S-305-M	11
14	O-278-M	14	14	S-172-M	10
15	O-031-W	14	15	O-187-M	9
16	O-343-M	13	16	S-171-M	9
17	O-057-M	12	17	S-173-M	9
18	O-059-M	12	18	S-179-W	9
19	S-299-M	11	19	O-226-M	8
20	O-058-W	10	20	S-288-M	8
21	O-177-M	10	21	O-037-M	8
22	O-134-W	10	22	S-039-M	8
23	O-291-M	10	23	S-104-M	8
24	O-138-M	10	24	S-218-M	8
			25	S-312-W	8
			26	O-348-M	7
			27	O-343-M	7
			28	O-198-M	7

The individuals who reported the greatest amount of deteriorated relationships were opponents and men in 75% of cases. However, the two individuals who reported the highest number of deteriorated relationships (from themselves) were supporters (in bold in Table 6.3) and had a particularly high number of deteriorated relationships, respectively 40 and 33, while the mean in this subgroup was 14.5.

On the right-hand side of Table 6.3, the upper half of the individuals with the highest number of deteriorated relationships reported toward them are all supporters, some

of whom received a particularly large number of citations of deteriorated relationships, since the average in this subgroup was 9.5 deteriorated relationships.

In the study population, 178 individuals (57.8%) had no deteriorated relationships (either from or toward them). This means that the perceived deteriorated relationships mainly concerned one part (42.2%) of the study population, and only one part of the sample (58 individuals or 62.4%). Observation and interviews show that these were among the more active and involved individuals in the conflict. For instance, the two supporters shown in bold in Table 6.3 were both very active in the project and seemed to have been the focus of the opponents' frustration.

> Excerpt 6 – A man
> He's really our scapegoat, on whom all the hate is focused... We dream that we fight with him. I am not violent, but gosh, him, it's like... If there was someone that could be beaten, someone we could chain and whip, it would be him! I hate him. I am not able to stand the sight of him. I avoid him, it upsets me too much. We think too differently to agree.

A relationship could be deteriorated in many ways, ranging from a cold attitude to threats, or even the termination of the relationship. The more benign form of deterioration was related to someone whose position disappointed the participant or to someone simply being on the "wrong side." In these cases, many people avoided or refused to greet this person (or underwent the same treatment). Some expressed suspicion toward others, meaning that more deteriorated relationships might be observed later in the conflict. There were also various ways of denigrating others in the participants' discourse. For instance, some people would say about someone that he or she was close-minded or that this person laughed at others. Some participants accused others of disinformation and manipulation. For example – and this from both sides – some people suspected that others falsely presented as their own a brief that was written by someone else. In both groups, some participants even identified one (or more) individuals who they thought to be at the origin of the whole conflict.

Many participants reported insults, either expressed toward or received from someone. Maybe because they felt protected by the confidentiality of the interview, some participants used strong expressions to insult others in the study population. Some participants even expressed threats toward others (or reported threats that were directed to them). These threats were as follows: make someone lose his or her job, urge someone to move out, vandalize, physically aggress, or even wish someone beaten up or dead. These threats were sometimes only reported in the interviews (as a personal wish, but have not been formally expressed), sometimes reported as second-hand information, and sometimes reported by the person who expressed them or by the one who underwent them. A few participants expressed a certain pride in these hostile attitudes or messages, both in the case of insults and threats.

Another indicator of deteriorated relationships was the numerous places in the community where social division was perceptible and where the wind farm was, according to the participants, either a taboo or a forbidden topic: church, barbershop, post office, convenience store, bars, restaurants, school, softball team, association of country women, choir (either for adults or for children), and many private events.

In this rural community, the church plays a relatively important role; a participant reported that the church was now divided in two: the opponents on one side and the supporters on the other. Another participant expressed great concern about addressing the topic at church.

> Excerpt 7 – A woman
> Once, I caught a conversation from our priest, but I would never talk about it with him. Because I think he is like... in favour... like "for the sake of our families?" It mixes us up when we hear that, because the priest is someone important, but it's like if I don't want to know what he thinks. The truth is, we don't want to know who is against [us]. It changes the way we see that person too much.

Some participants said they boycotted some local shops. A shop owner said that some people were not welcome in his shop anymore. Moreover, some cited having resigned their membership at the cross-country ski club or at the agricultural union.

Many also expressed the end of some mutual help that was present in the community before the conflict (like snow removal, hay mowing, babysitting, etc.). Some of these small services involved money, but not always. The conflict has clearly changed some habits.

> Excerpt 8 – A man
> This neighbour, if we need his tractor, well... too bad! You know, here when we drive, we often land in the ditch [because of the countryside roads and the snow]. When it happened to us or to friends visiting, we used to call [this neighbour]. From now on, we'll call a towing truck.

6.2.6 Types of relationships that had deteriorated

Even strong ties were deteriorated. Some reported division in their family where the topic was taboo or where some members were excluded because of their position regarding the project.

> Excerpt 9 – A man
> This is the kind of really uncool thing that happened. [Some parents helped us a lot while we were going through a really rough time], this is why I'll do my best on my side. In the family, you will be more tolerant to avoid arguments. The topic will now be taboo. Positions are polarized; no one wants to back down. So I guess that basic respect is not to talk about it.

> Excerpt 10 – A couple
> The woman: She did not invite us. Usually, she does... For Christmas, for Grandma's birthday... For me, this is the saddest...
> The man: It looks bloody silly! I don't care that much, but the kids... They're missing something!

Other participants reported difficulties with friends who did not have the same position as they did or were simply not involved as much as they would have expected.

> Excerpt 11 – A man
> He was my best friend. A close and strong friendship. I'm not able to go to his place anymore. For the first time in my life, I lied to my friend [in order not to see him]. I know he knows! For a month, we haven't called each other and that's really unusual. I don't know how all this will be fixed. [Expletive] I was never involved in such a struggle in my life. For those who are close, it's an opportunity to be close in this struggle. But if you can't talk to your friend about the real things that really make you tick, because you'll have a bad argument, then, what other choice do you have than to avoid this friend?

> Excerpt 12 – A man
> When you tell a friend you've known for 30 years that, for us, [the project] is really a problem, that it changes all our dreams and our quality of life, and his answer was for a long time: "I don't care. I won't see [the wind turbines]." We stopped talking to each other; we saw each other less often. We weren't involved in the same fight. We spent hours and hours each week on this... You don't have time anymore for those who stay outside the game.

Participants of course talked about their personal relationships, but interestingly, some reported a lot about others' stories. Some of these deteriorated relationships were relatively well known among participants. They depicted some individuals particularly negatively and others as victims. The information diffused this way was often taken for granted and was influential despite the absence of contextual information and of the other side's version.

6.3. Discussion

In this conflict, the social divide had been observed by the BAPE (2010a), but had not been assessed. The present study fills this gap by taking a closer look at the impacts of the conflict on social cohesion. It will be shown that these impacts can also be related to maladaptive coping strategies. The latter dimension is emerging from the analysis since no direct questions about coping strategies were asked the participants. The social divide and its implications will be presented in further detail. Finally, the discussion will propose avenues for the assessment of social impacts in conflicts.

6.3.1 The birth of We-as-opponents-to-the-wind-farm

The opponents' group was born in reaction to the location of the project, which created the special conditions necessary for the new social structure to emerge (Stein, 1976). Density among the opponents-to-be before the conflict was not as high (0.35) as it became later (0.52), as shown in Table 6.2; hence, the opponents' group first had to craft the 'we' (Cheng et Daniels, 2005). Through the creation of new relationships between opponents, the group managed to increase its density. Prior informal ties provided the structure for the new group to emerge. Through these ties, the idea of the wind farm project as a threat was diffused in the community, in accordance with other studies using contagion or comparison models (Brewer, 2001; Burt, 1987; Teo, 2008; Tindall, 2002), thus creating a more cohesive interpretative community (Forrest et Kearns, 2001; Hulse et Stone, 2007).

We-as-opponents-to-the-wind-farm was born and displayed the characteristics of a group (Tajfel, 1982; Teo et Loosemore, 2011): 1) a strong sense of identification and of belonging, expressed for instance by the idea of "playing on the same team"; 2) an interdependency, illustrated among others by the help some said they gave to or received from the group; 3) the expression of cohesiveness, shown for example in

Excerpt 3 and 4 where the important solidarity between opponents despite the difficulties of the struggle is depicted; 4) an attachment to others, illustrated by the numerous intensified relationships, and 5) a commitment to the cause, obvious in the intense participation of many of the opponents in the consultation processes.

The ingroup-outgroup effect (Stein, 1976) became clearer as positions and disputes became public and as each group could see itself as a social unit in the eyes of the other group (Tajfel, 1982; Tindall, 2002). There was not only a 'we-as-opponents-to-the-wind-farm' but also a 'them,' who was behind the threat to their environment. Processes of framing were underway, either the construction of one's identity as a group or the categorization of others (Gray, 2003; Gray, Hanke et Putnam, 2007; Lewicki, Gray et Elliott, 2003). Since many opponents perceived themselves as victims of the project, they were then confronted by a common enemy: the supporters. This finding is emphasized by the numerous supporters with very high numbers of deteriorated relationships toward them (Table 6.3), and strongly illustrated in Excerpt 6 where a participant fantasized about the bad treatment he would submit a scapegoat to. For many opponents, this man symbolized the project and all its supporters. The supporters were turned into one single enemy for the opponents, undifferentiated and dehumanized, despite their heterogeneity (Brewer, 2001; Tajfel, 1982), and could thus – at least in fantasy – be made to suffer.

The perception was that each side could win only to the detriment of the other (Daniels et Walker, 2001; Deutsch, 1973; Lewicki, Saunders et Minton, 1997). For opponents especially, a war was going on (revealed by the choice of words in Excerpts 3 and 5, for instance), that only one group could win, and for some people, this justified the hostility and aggressivity that was reported in the interviews.

6.3.2 Cohesion through rituals and powerlessness

The high level of discussion (presented in Figure 6.1 and Excerpt 2) showed that rituals of conversation (Tindall, 2002) were taking place. In these informal rituals, some famous stories, about insults or threats for example, spread widely. Because ingroup trust was high as shown in the previous chapter, these stories did not need to be verified to enter the discourse. It contributed to the cohesiveness of this group that was constructing its own new interpretative community and where striking anecdotes played an important role (Forrest et Kearns, 2001; Hulse et Stone, 2007).

Figure 6.1 also showed that the project was less preeminent in the supporter's conversation compared with the opponents', except when it was related to work, which suggests that the supporters might have then viewed the project from a more professional than personal stance. The detailed description of the sample (Chapter III) showed that they were less directly affected by the wind farm, notably because the majority of them did not live in the area, and proximity is an influential factor for opposition to wind farm (Le Floch, 2012; van der Horst et Toke, 2010).

Many of the worst-deteriorated neighbour or family relationships were well known among opponents in the sample and were reported by participants that were not even concerned. This could be interpreted as identification (McPherson, Smith-Lovin et Cook, 2001): many participants identified with those who were going through a rough time publicly. Seeking support from others through complaints or through the rumination of sad or frustrating events may be considered a maladaptive coping strategy (Skinner *et al.*, 2003), but at the same time it contributed to reinforcing the social identity of the opponents (Brewer, 2001; Tajfel, 1982) as the victims of this project. This shared identity, despite being potentially negative in terms of a coping strategy when dealing with stress, nevertheless reinforced the opponents' cohesiveness and their willingness to act together in order to prevent – in vain – the wind farm's construction (Forrest et Kearns, 2001; Hulse et Stone, 2007). This finding is shown in Figure 6.2-D, where the intensification of ties between opponents is particularly important.

A sense of pride (Teo, 2008) that fosters ingroup cohesion was also present, for example in Excerpt 4 where a man explained the difference between those who participated in the movement compared with others who did nothing. In the telling of their stories, both groups also showed great pride in their achievements. For opponents, however, more widespread than the sense of pride was the impression of being relatively powerless in the situation (Moser, 2009). This can be observed in Excerpts 9 to 12, where people described important relationships that were strongly deteriorated because of the conflict. These people seemed to resent the deterioration or loss of these relationships and did not seem to consider that there were easy, short-term solutions to the situation. In a group like the one studied here, the co-existence of a sense of pride and of the feeling of being powerless may be common, contributing to the emotional fatigue that Teo (2008) also observed for some of the most involved actors of a protest movement in Australia. This may result in greater vulnerability to stress, which is not often reported in the scientific literature about environmental conflicts; but, since it can have serious impacts on those involved, should be more closely considered when assessing the social impacts of a project.

6.3.3 Bonding that provides potentially insufficient support

The cohesiveness of opponents was obvious, whether in terms of frequency or intimacy. This is a good example of bonding social capital (Poortinga, 2006; Szreter et Woolcock, 2004; Teo, 2008): trust was indeed highly present among opponents (see Chapter V) and cooperation occurred in various forms. Opponents often gave to and found social support from other members of the group. For many people, the feeling of not being alone made it worth spending time and energy against the project, exemplifying how social resources provide emotional and cognitive support (Folkman et Moskowitz, 2000).

However, it is possible that an important part of the support provided in the time of an environmental conflict such as the one presented here may be of an inappropriate kind, exposing people already under stress to even greater vulnerabilities (Skinner *et al.*, 2003) compared with social support in routine situations (Kitts, 1999; Stein, 1976; Tajfel, 1982). Hurlbert and her colleagues (2000) made a step in this direction, but they studied the response to natural disaster and tie activation. A conflict such as the one studied here is also unusual, but it presents special features that affect the need of, the quest for and the use of support as a social resource.

Participant's comments (Excerpts 2 and 3, among others) revealed the presence of social support in intensified relationships. However, there is also evidence that the support provided by the usual network was inadequate for some opponents. For example, in Excerpt 12, a man expressed his frustration regarding the behaviour of a friend that was not sensitive enough to his situation; support was thus not where it was expected. The position of this man's friend is unknown (from the interview), yet what is known is that he did not feel concerned and did not get involved. However, for this participant, it was enough to put an end to the relationship by pretexting that all his energy was now focused on the project. For this man (and for many other participants), the conflict induced social changes that resulted in support being sought elsewhere, mainly within each group. The same idea is present in Excerpt 11: in the struggle, a friend that cannot provide the expected support, i.e., be committed to the cause, is disregarded, regardless of the suffering brought by the loss of the friendship. Other "colleagues in trench warfare" (as in Excerpt 5) would have to provide the support usually found in the relationships that were strongly impacted by the conflict. In the literature on health and social support, the perception that others provide the expected support appears to be as important as the support actually provided (Barrera, 1986; Caron et Guay, 2005).

In order to attain a critical mass (Oliver, Marwell et Teixeira, 1985) of opponents, but also more probably simply to gain social support (Hurlbert, Haines et Beggs, 2000), the opponents reached outside their usual close network to weaker ties or new ties. Figure 6.2-C shows this movement, especially important for opponents. Opponents

probably turned to individuals they perceived as being similar to them (McPherson, Smith-Lovin et Cook, 2001; Szreter et Woolcock, 2004) because they may have felt they would be sensitive to their cause, and turned less (or unsuccessfully) to groups who presented dissimilarities, like those assumed in the definition of bridging social capital. Therefore, these activities appeared more to be support-seeking behaviours (thus bonding) rather than strategic bridging between activists groups, like the one described by Teo (2008) and by Floress and her colleagues (2011). This corresponds to a classic situation described by Granovetter (1983): a group with few external ties often does not succeed in its objective of opposing the developer as a result of this dearth of ties. The bonding activities presented here seemed to have been intended to reach a critical mass of individuals committed to the cause and ready to get involved. In the opponents' understanding, the more members there were in their group, the greater were the chances that the project would be rejected by decision-makers. It is hard to assess whether the opponents reached this critical mass (or if it would have influenced the decision), because the favorable governmental decision regarding the wind farm project may have been influenced by several elements that were not the focus of this research, and not necessarily because of the size of the opponents' group.

There were two discourses co-occurring among opponents regarding the many new or intensified relationships. Indeed, some perceived them as being the "positive side" of the conflict (like in Excerpt 4), while others already suspected that they might not last over time. Excerpt 5 shows that the position against the wind farm seems to be the only thing people of the core of the opponents' group had in common. They were "at war" and that was what held them together. Their common interest was their main – and sometimes only – link (Chaeyonn, 2008). The reluctance to qualify their colleague as friends with whom more intimate matters could be discussed by some people in the core – at least at the time of interviews – might mean that these relationships will not be sustainable after the conflict (Teo, 2008; Teo et Loosemore, 2011). On the other hand, for a group to endure, it needs to provide social support to its members (Stein, 1976; Tajfel, 1982), and the fact that the opponents' group is still active at the time of submitting this thesis may be a sign that the group is managing

to provide social support to its members. However, it may also be because of a lack of external ties (and some seriously deteriorated ties) that members of this group have had to turn to each other for support.

Nonetheless, despite the notable increase in density among participants, conflicts should not be considered good occasions to meet people and make friends (although this may happen); rather, the new and intensified relationships should be interpreted as a strategic move to gain support and as one of the coping strategies of people subjected to a stressful situation. In this case, some deteriorated relationships were fairly important (Excerpts 9 to 12, for instance) and could probably not be easily replaced by new relationships.

6.3.4 Cessation of mutual help, taboos, and suspicion

Cooperation and mutual help between members of a community is a form of social capital (Adler et Kwon, 2002; Brehm et Rahn, 1997; Coleman, 1988; Forrest et Kearns, 2001; Kawachi et Kennedy, 1997; Putnam, 1995; Woolcock, 1998). There is evidence that some members of the sample were relying on others for small services, like towing, snow removal, haying, and babysitting, sometimes in exchange for small amounts of money, but sometimes as a generous act between relatives. Because of the conflict (at least at the time of interviews), some participants stopped using these services or said they would not use or provide them in the future, like in Excerpt 8. These represent a loss in terms of social capital and are hard to measure. They nevertheless imply social and small-scale economic impacts (Adler et Kwon, 2002; Woolcock, 1998). In the same way, the boycott and avoidance of local shops that many opponents expressed also involves economic losses for these businesses. No data are available to measure these impacts. However, the findings presented in this chapter suggest that these socio-economic impacts should not be overlooked by decision-makers when assessing a project.

The long list of places where the wind farm was taboo as a topic of discussion, including some particularly central ones like the school or the church, is indicative of the degradation of the social fabric, especially for a small rural community (Canada, 2005). Hence, when the conflict is so present that it reaches places (shown by Excerpt 7) where hostility is not welcome, such as a church, it suggests that social degradation was greater than the confines of the sample.

The wind farm project, perceived by many as an economic panacea that must not be rejected, was a topic that people also avoided to address unless they were sure of the position of the people it would be discussed with, as evidenced in Excerpt 1. Judging that it was safer not to discuss a topic without knowing the other's position (or because that person's position is known, like in Excerpt 7) creates a generalised climate of suspicion that may have negative impacts on health (Barefoot *et al.*, 1998; Kawachi et Kennedy, 1997; Nummela *et al.*, 2008). In this study, the perception that briefs had been falsely presented from both sides was just one example of the occurring suspicion. These impacts on a community's wellbeing are once again hard to measure, and to estimate in terms of costs, but they should be considered as well when assessing a controversial project.

6.3.5 The obviousness of social divide

There were striking modifications to the social structure because of the conflict, most notably shown in Figure 6.2. There was an important social divide in the sample, synthetized in Table 6.2 and represented by the difference between Figures 6.2-A and 6.2-B. Figure 6.2-B shows explicitly the gap between opponents and supporters, since the ties linking the two groups represented the great majority of those that disappeared. For the participants, one out of five relationships was deteriorated by the conflict, which is quite a large proportion in such a small community. Other signs of social divide were the hostile behaviours reported by both sides, whether they were insults or threats. Data show that both groups were impacted.

Declaring that the relationship was deteriorated could be a way to socially blame others and project on some specific individuals the responsibility of the unhappiness occurring in the community, which are maladaptive ways of coping. It may also mean that some actors were showing hypervigilance (Kramer, 1998), which is also associated with suspicion and negative health effects (Barefoot *et al.*, 1998; Kawachi et Kennedy, 1997; Nummela *et al.*, 2008).

Not surprisingly, the supporters did not use the argument of social divide as much as the opponents, most probably because it was not serving their cause; it was therefore less present in their discourse, except when blaming the opponents for feeding this social divide. Consequently, some supporters may have overlooked the deterioration as an unimportant matter that would be settled shortly, despite the fact that they stated a fair number of deteriorated relationships per person on average, and that two of them reported the highest number of deteriorated relationships (Table 6.3). These two people were aware that the project had brought changes to their relationships.

The wind farm project indeed brought important modifications to the social structure of a part of the community, most notably for the actors that were most involved in the conflict. Furthermore, there were clearly two components in the sample in terms of reciprocally intensified relationships: the opponents and the supporters (Figure 6.2-D). Despite this divide, the members of the two groups in great majority will still need to live next to each other.

6.3.6 Coping strategies are not choices

In this case study, opponents relied on various coping strategies, including maladaptive ones. This is of course only a snap-shot of a part of the community at a very specific point of the conflict. Coping strategies are not fixed, they evolve over time, but most importantly they are influenced by the context and the social resources of people under stress (Carver, Scheier et Weintraub, 1989; Folkman et

Moskowitz, 2000). The context was particularly stressful for some individuals (BAPE, 2010a) and had been going on for many years, which increased the need to seek emotional and cognitive support (Folkman et Moskowitz, 2000), and increased the risk for negative impacts on health (Skinner *et al.*, 2003). Signs of support-seeking were pointed out in this chapter, but it was also shown that the support provided seems to have been in some cases either insufficient or inappropriate for coping with the stressor without exposing oneself to more coping vulnerabilities (Skinner *et al.*, 2003). Furthermore, the social support that may have been available in the sample before the conflict may have been fairly disturbed by the changes to the social structure (Figure 6.2).

From the 12 families of coping strategies available to the actors, it is known that opponents have tried some that are generally considered positive, like information-seeking and negotiation, as shown in Chapter IV. However, some of the positive ways of coping, like problem-solving, were simply not available to the opponents because they were not in a position where they could make decisions or even have a voice in the planning until late in the process (see also Chapter IV). More probably, opponents ended up using maladaptive coping strategies without knowing it, because they were "at war" and thus trying everything, especially considering that they were facing powerful adversaries, namely the developer and the Québec government. Some people had probably been using these strategies for a long period of time, and still are at the time of submitting this thesis. The prolonged use of these strategies potentially exposed the opponents to adverse health risks, such as depression, low self-efficacy, losing sight of what is important, and interpersonal hostility (Skinner *et al.*, 2003, p. 231). Some of these states were presented in this chapter. The involved actors did not choose the coping strategies they used, and some showed difficulties in managing the stress they were facing, because of the context and potentially inappropriate social support and resources. Since social support is one key element of social cohesion, the use of maladaptive coping strategies may also suggest a lack of social cohesion. Indeed, social cohesion is a community resource; if the members of a group cannot find the appropriate support in their group it may be a sign of its non-cohesiveness.

6.3.7 The limitations of the literature on social cohesion in conflicts

Literature on social cohesion or social capital, through the link it makes between social support and wellbeing, is insufficient for scholars to understand the social impacts of a conflict. A long-lasting conflict appears to exacerbate the need for social support (as in Excerpts 11 and 12), but at the same time, it seems to reduce the capacities of people to cope with stress (Folkman et Moskowitz, 2000; Skinner *et al.*, 2003). In a conflict, bonding capital is not only used as a resource, but also as a way to focus on the stressor, as shown by the modification to the sample's relationships into two distinct groups (Figure 6.2), and by the apparently unique topic of discussion (especially for opponents) that represented the wind farm (Figure 6.1), to the point where it impinged on children (Excerpt 2).

Also, social capital can be measured by social participation and trust between members of a community (Forrest et Kearns, 2001; Nummela *et al.*, 2008; Poortinga, 2006). In this conflict, a relatively large portion of the population took part in the consultation process and ingroup trust was especially high, as high as distrust toward the other side, as shown in Chapter V. When these social resources (participation and trust) are used toward a source of stress (or even more so, against a project and the ones who support it), social capital may be high, but only among cliques in the community. Therefore, the benefits for health can be highly reduced by the negative impacts of stress and maladaptive coping. In the conflict studied, levels of trust could not have been an indicator of social capital for the community as a whole, and this, because of the social divide. In the same way, Szreter and Woolcock (2004) said that societies that were low in social capital were more subject to stress, while Kawachi and Kennedy (1997) stated that solidarity, among others, was associated with high social capital; yet both stress and solidarity were apparent in the present study. A community could thus have high levels of social capital in subgroups that express important solidarity, but at the same time, have low levels of social capital in subgroups that report high levels of stress. When social capital is not used for mutual benefit and cooperation (Putnam, 1993), but against another group of the community, is it still a resource available to the community or only to some

groups inside it? Can it still empower citizens to take action (Floress, Stalker Prokopy et Broussard Allred, 2011; Lin, 2001) or does it, on the contrary, constrain them in their actions? These questions and the findings presented in this chapter bring up new issues regarding social capital in intense conflicts.

Moreover, social cohesion – embodied by the willingness of people to get involved and collaborate with their peers (Jackson *et al.*, 2000) – was clearly not present in the study population as a whole, and maybe in the larger community as well, but only among subgroups of the sample. This community was indeed subjected to conflicts and heterogeneous values (thus lacked social cohesion), but the modifications to the social structure involved many social interactions, including new and intensified relationships. According to this last element only, the community was in this sense not lacking social cohesion (although this would obviously be a reductionist vision of social cohesion). Social cohesion in times of conflict may thus not be the same as social cohesion in routine situations, and special attention should be given to subgroups and not only to the community as a whole.

The present research suggests that coping theory brings complementary elements that scholars could take into account in order to explain the impacts of a conflict on the social structure of a community and questions on this matter could be integrated in the interviews during data collection. Moreover, as shown in this chapter, the strength of the actors supporting the project led some opponents to see themselves as victims and as powerless – a reality that affects the coping strategies available to them.

6.4 Conclusion

This case study showed the important social divide that arose in a community that faces the controversial implementation of a wind farm. It showed that the project gave birth to a new social structure: the opponent's group. As this group reinforced its own identity through rituals, anecdotes, and a feeling of powerlessness, it also positioned itself against those that were in favor of the project; the polarization of the community became increasingly obvious. The deterioration of relationships (even strong ones), the intensification and the creation of relationships between the most-involved actors are striking signs of modifications to the social structure brought about by the project. Although, in this case, the social divide was already reported by external observers, such as the BAPE, this study was a first step in assessing and quantifying this important social impact.

It also went further in assessing how relationships were modified and what they conveyed. In this conflict, it appeared that bonding capital responded to the need for social support in a stressful context, where, for some people, the support was either insufficient or inappropriate. These people were exposed to more vulnerability because of the social resources they had access to and the coping strategies they used to manage the stress provoked by the conflict. The social divide also had a negative impact on the mutual help previously present in the community and gave rise to suspicion toward others who were perceived as "playing on the wrong team," which often resulted in the wind farm being taboo. These social impacts can have effects not only on the social cohesion of a community, but also on the wellbeing of its members. Therefore, they should be carefully considered, alongside the environmental impacts of a project.

CONCLUSION

Cette section vise à poser un regard transversal sur les résultats de recherche et sur leurs implications. Les thèmes les plus porteurs sont repris ici et une analyse intégratrice porte un peu plus loin la compréhension des enjeux présentés dans cette thèse. Les limites de la recherche, des pistes de recherche émergentes ou qui mériteraient d'être explorées davantage, ainsi que des suggestions pratiques pour les acteurs concernés par les conflits environnementaux sont également proposées à la fin de cette section.

1. Information : pouvoir et homophilie

Dans le conflit rapporté ici, l'information a énormément circulé dans les canaux informels, et ce, notamment parce qu'elle était peu diffusée par les voix officielles. Dans ces réseaux interpersonnels, c'est l'homophilie qui guidait la diffusion, particulièrement pour les opposants, dont certains ont entrepris tardivement (en 2009) de sonner l'alarme auprès de gens de leur communauté.

Pendant longtemps, l'information concernant la venue du projet éolien a été inconnue; elle n'était donc pas convoitée puisqu'il est difficile, voire impossible, de convoiter quelque chose dont on ignore l'existence. Selon les théories liant pouvoir et information, le détenteur de l'information initiale (l'arrivée du projet dans la région) n'avait par conséquent pas de pouvoir sur celui qui ignorait l'existence de cette information qu'il ne convoitait pas. Or, en réalité, l'étude a montré que le détenteur de l'information initiale avait effectivement du pouvoir parce qu'il a pu agir pendant

plusieurs années sans que les autres interviennent de façon à stopper ou modifier son projet. Ainsi, l'objet de la convoitise dans le cas étudié n'était pas tant l'information que le territoire, comme le rapportait le chapitre III. L'information n'était donc pas tant une base de pouvoir qu'un instrument pour exercer le pouvoir. Le pouvoir de l'information demeure donc relationnel, et ce, même si la ressource information n'est pas elle-même convoitée. Il s'agit d'un déplacement, d'une base de pouvoir à une stratégie pour l'exercer, puisque tant que les citoyens ignoraient l'existence de l'information initiale et ne la convoitaient pas, la participation publique ne pouvait avoir lieu.

Une fois l'information initiale connue, certaines personnes se sont montrées avides d'information et ont fait en sorte de diffuser cette première information dans leurs réseaux personnels, lors de la dernière phase à l'étude, soit en 2009. Cependant, inquiets de la venue du projet, ces personnes ne se sont pas contentées d'informer leurs proches et connaissances de l'existence du projet, elles ont aussi selon toute vraisemblance fait simultanément circuler l'idée que l'information initiale avait été cachée à la population pendant une longue période. Ainsi, certaines personnes ont appris du même coup qu'un projet éolien arrivait dans leur environnement et qu'il leur avait été longtemps caché. Ce dernier segment d'information, soit le secret et l'exclusion entourant le projet, leur est alors probablement apparu tout à fait vraisemblable puisque plusieurs ignoraient l'existence même du projet. Déjà, la graine de la suspicion était semée. Les gens ont alors semblé avides d'information, tout en affichant déjà une méfiance à l'égard des organisations (promoteur et élus, notamment) qui leur avaient caché cette information si importante. Puisqu'un grand nombre de participants a eu comme source primaire des opposants (s'affichant déjà ainsi), la position de cette source a pu, pour plusieurs d'entre eux, influencer le sens créé à partir de l'information initiale et vraisemblablement, le sens créé à partir des informations subséquentes fournies par différentes sources.

À ce sujet, la recherche présentée ici soulève un intéressant questionnement sur le lien entre la position prise par un individu et celle de la source primaire. Dans le cas à l'étude, les entrevues ont révélé que la position des participants tendait à être la

même que celle de leur source primaire. L'homophilie pourrait expliquer ce phénomène de deux façons : la première, un individu est influencé par la source primaire, et ce, particulièrement si cette source inspire confiance ou au contraire défiance, et la deuxième, l'information est diffusée par la source primaire vers des individus qu'elle perçoit comme partageant les mêmes croyances et valeurs, et non vers ceux qui présentent des valeurs dissimilaires. Il est possible aussi que les deux situations surviennent en même temps. Également, si l'information initiale est véhiculée avec l'information qu'une tierce personne cache de l'information et donc, qu'elle est indigne de confiance, le message peut contribuer à créer de la cohésion entre des gens qui partagent désormais un ennemi commun présentant une menace pour leur environnement. Ainsi, un minimum d'homophilie pourrait être suffisant pour augmenter encore plus cette homophilie. Cette thèse n'avait pas pour objectif de démontrer laquelle de ces situations a eu le plus d'influence dans le cas étudié, puisqu'elles semblent toutes avoir joué un rôle important dans l'émergence d'une opposition au projet, dans la grande confiance que semblaient s'accorder les gens de ce groupe et dans l'importante cohésion qui les unissait. Cette piste de recherche laissée en suspens mériterait à elle seule d'être explorée, en étudiant de façon plus approfondie la question de la confiance envers la source primaire, ainsi que le moment où l'individu prend position par rapport à un tel projet dans son environnement et la façon dont il le fait.

2. Diffusion lente et ciblée, opposition tardive

Bien que dans le cas qui nous intéresse, le projet ait reçu toutes les autorisations nécessaires pour aller de l'avant, la stratégie de ne pas diffuser d'information demeure risquée. Une telle stratégie peut clairement, comme dans le cas étudié, mener à une opposition vive, même si la diffusion tardive de l'information a eu pour effet de retarder cette opposition. De plus, cette stratégie attise l'opposition et contribue au renforcement de la cohésion entre les opposants parce qu'elle alimente

la perception de l'existence d'un « ennemi extérieur », d'adversaires indignes de confiance parce qu'ils ont retenu l'information.

Par exemple, dans l'année qui a suivi le travail de terrain nécessaire à cette recherche, le Québec a connu deux autres projets de parcs éoliens aux destins très différents. Ces projets n'étaient séparés que par une vingtaine de kilomètres de distance et présentaient des environnements humains similaires. Pourtant, l'un d'entre eux a été abandonné, le gouvernement du Québec n'ayant pas donné son feu vert en raison de l'inacceptabilité sociale du projet (BAPE, 2011c), tandis que l'autre n'a pratiquement pas connu d'opposition (BAPE, 2011b) et a par conséquent obtenu les autorisations nécessaires de Québec. Dans ce deuxième cas, le promoteur a fait un véritable exercice d'information souligné par le BAPE, avec notamment un très grand nombre de sessions d'information publique, plus que dans la très grande majorité des projets éoliens développés dans les dernières années au Québec. Ces événements d'information et de consultation n'ont probablement pas à eux seuls fait la différence, mais ils certainement eu une influence positive sur le regard posé sur le projet proposé.

Pour revenir au projet éolien qui nous intéresse, une absence de réaction de la part de la population concernée ne constitue pas un signe d'acceptabilité sociale, particulièrement quand la venue d'un projet n'est pas ou peu diffusée. Au contraire, l'absence de réaction publique (population pas organisée ou ne montrant pas clairement de signes d'opposition) peut signifier que des stratégies d'adaptation plus individuelles, comme le déni ou l'évitement, sont à l'œuvre, ce qui contribue à limiter la diffusion de l'information concernant le projet. Pour les quelques personnes informées, le projet est peut-être donc déjà perçu comme une source de stress.

Idéalement, dans le but d'éventuellement favoriser une plus grande acceptabilité sociale du projet, la relation privilégiée que certains partisans ont pu entretenir avec les acteurs en position de pouvoir devrait être élargie à un plus grand nombre d'individus. La relation privilégiée pourrait alors prendre différentes formes. En effet, puisque ce n'est pas tant l'information en soi qui contribue à la confiance envers la source d'information, mais bien la relation entretenue avec cette source, une relation

privilégiée avec un nombre d'acteurs élargi pourrait contribuer à réduire les antagonismes, surtout si elle est faite dans un but inclusif et non dans le but de museler un groupe dérangeant. Plus tôt dans le processus d'élaboration du projet, les premiers opposants qui ont tenté d'y apporter des modifications importantes, notamment sur l'emplacement de certaines éoliennes, n'ont pas senti cette nécessaire ouverture de la part du promoteur. Leur relation, malgré donc un accès précoce aux développeurs et décideurs, a eu un effet négatif sur leur confiance envers ces acteurs : au lieu d'apaiser les craintes, la relation tendue a plutôt servi de base à leur manque de confiance par la suite.

L'inclusion d'un plus grand nombre d'acteurs doit évidemment être réfléchie. En effet, cette inclusion ne signifie pas nécessairement de faire participer l'ensemble de la population à toutes les étapes du processus, mais certainement d'inclure plus rapidement la population intéressée ou concernée dans l'élaboration du projet et d'ouvrir avec celle-ci un dialogue. Ce modèle répondrait davantage aux approches collaboratives et aux modèles du dialogue mis de l'avant par plusieurs chercheurs.

3. Réaction lente, mais au final vive

Plusieurs personnes concernées par le projet sont passés de l'ignorance du projet (ou d'une certaine indifférence par rapport au projet) à un état de vive opposition, et ce, parfois en très peu de temps, soit entre le printemps ou l'été 2009, moment où ces gens ont appris l'existence du projet, et l'automne 2009, période des audiences publiques du BAPE. Ces gens ont mis du temps à réagir, comme il a été dit maintes fois, dans bien des cas, par ignorance. Par contre, une fois informés, la réaction de plusieurs a été très vive, passant quasiment immédiatement en mode alerte pour défendre leur environnement. Qu'est-ce qui justifie cette différence subite entre ces deux états? L'entrée en scène officielle du groupe d'opposants peut-elle avoir contribué à cette augmentation rapide du niveau d'alerte dans la population?

L'opposition a certes occupé un espace de discussion dans la sphère publique laissé libre par le promoteur et les décideurs. Avant son arrivée, il n'y avait tout simplement pas de discussions publiques sur le projet. Le groupe d'opposants, d'abord à travers les réseaux informels, puis rapidement, par des moyens publics (site web, dépliants, manifestations, séance d'information publique et participations aux séances municipales) a fait émerger le sujet dans le débat public.

Il y avait dans ce débat essentiellement deux groupes : l'un qui se faisait avare d'information quant au projet, et l'autre farouchement opposé, mais qui inondait l'espace public d'information dénonçant le projet. Entre les deux, plusieurs personnes parmi les participants se sont davantage approprié le message de ce dernier groupe, surtout si elles se reconnaissaient dans les anecdotes qui posaient certains individus en victimes et d'autres en responsables de la situation.

Par ailleurs, le manque d'information maintes fois dénoncé lors des audiences publiques et des séances municipales peut sembler paradoxal par rapport à la faible activité de recherche d'information d'un grand nombre de participants, bien que celle-ci soit conforme aux observations dans la littérature scientifique. Cela pourrait signifier que le manque d'information constitue une information en soi, une construction sociale se résumant à : « nous n'avons pas été informés ». Cette information maintenant réifiée est rediffusée entre les opposants qui, étant donné la forte confiance exprimée envers les autres membres de leur groupe, la prenne pour acquise. Par conséquent, ils adoptent la position de vive opposition qui vient avec cette construction. En effet, comment accepter un projet dont on pense avoir été volontairement exclus?

4. La valeur de la source

Pour répondre à leur besoin d'information dans la situation étudiée, les gens n'ont pas tant cherché à savoir où se trouvait l'information la plus pertinente, mais ils se sont plutôt tournés vers ceux en qui ils avaient confiance. Par conséquent, les participants ne cherchaient pas la « meilleure » information, mais celle qu'ils percevaient comme la plus fiable. De facto, l'information de la source la plus fiable (souvent celle qui leur était familière ou qui leur ressemblait) est devenue la meilleure, et souvent la seule valable. Cette perception était également nourrie par le fait qu'avec les informations concernant le projet, circulaient dans les réseaux sociaux aussi celles du manque de fiabilité des adversaires, et ce, parmi les deux camps.

Étant donné l'abondance d'anecdotes, mais aussi le grand nombre d'opposants qui avaient peu de sources d'information et surtout peu de diversité dans leurs sources, il se peut que plus que les informations sur le projet lui-même, ce sont les informations sur la fiabilité des acteurs qui ont davantage circulé dans les réseaux. Plusieurs semblent ne pas avoir cherché à en apprendre plus sur le projet après avoir pris position. Le projet devenait dès lors terrible ou extraordinaire, dépendamment du camp choisi. Ce qui semblait alors intéresser davantage un certain nombre de participants, c'était l'information sur les agissements de tout un chacun : Qui a dit quoi? Qui a fait quoi à telle ou telle autre personne? Ces anecdotes, qui souvent posaient un groupe en victime contre un autre responsable de la situation du premier, ont circulé abondamment dans les réseaux interpersonnels au point qu'elles aient été rapportées dans les entrevues par des personnes qui n'étaient même pas concernées. Ainsi, la division sociale et l'impression d'injustice qu'elle suscitait – plus que le projet éolien lui-même – semble avoir été pour certains à la base même de leur position ou a servi à la renforcer. En effet, de toute l'information au sujet du projet qui circulait parmi les opposants, une des plus importantes pour plusieurs ne semble pas avoir été celle sur la nature et les détails du projet, mais davantage celle sur les agissements des différents acteurs

impliqués, notamment ceux en position de pouvoir, comme le promoteur et les décideurs.

Ceci vient encore une fois souligner l'importance de tenir compte des impacts sociaux de tels conflits, et ce, tôt dans le processus. Non seulement la division sociale est-elle une conséquence du conflit, mais elle le nourrit également en contribuant aux antagonismes. Dans le système social concerné par le projet, il s'agit d'une boucle de rétroaction qui contribue à l'escalade du conflit environnemental.

5. Ressource précieuse : la relation

Les relations sociales sont essentielles pour les individus; elles sont notamment porteuses d'information, de confiance, mais aussi de soutien social. Les relations sociales sont aussi particulièrement fragiles, puisqu'elles peuvent être détériorées ou rompues lorsqu'il y a divergence d'opinion. Il s'agit donc d'une ressource précieuse – dans certains cas heureusement renouvelable! – à laquelle il faut faire attention.

Dans le conflit à l'étude, les relations sociales ont été le lieu de nombreuses discussions sur le projet, mais peut-être encore plus sur les différents acteurs impliqués en raison d'une recherche inhabituelle de soutien social et d'appui à leur cause. Dans la communauté, il y avait en effet un grand besoin de discuter de ces sujets, au départ dans le but de susciter un éveil, mais également dans le but d'obtenir du soutien social de la part des autres citoyens, notamment pour les opposants. À l'opposé, il y avait aussi un grand besoin de ne pas discuter du projet, observé dans les nombreux lieux ou événements privés où le sujet était tabou. Ainsi, ce silence visait à préserver les relations et les lieux où se trouve souvent le soutien social, comme à l'église ou dans les différentes activités sociales retrouvées habituellement dans une communauté rurale.

Le conflit étudié a provoqué la détérioration de nombreuses relations, y compris des liens forts, tout comme il a généré de nombreuses nouvelles relations. Parmi ces dernières toutefois, il est possible qu'elles ne puissent aisément remplacer les liens détériorés (surtout dans le cas d'amitiés ou de liens familiaux), mais surtout, ces nouvelles relations unissent majoritairement des gens de la même allégeance, ce qui contribue à creuser le fossé entre les opposants et les partisans du projet.

Comme le soutien social est présent dans les relations, les modifications aux relations sociales ont un impact sur le soutien social disponible dans un réseau, d'où l'importance de bien comprendre et évaluer ces modifications. Dans ce conflit, une part du soutien social habituel n'était plus là où il se trouvait normalement (relations détériorées ou sujet tabou), mais une nouvelle part de soutien a émergé avec les nouvelles relations créées en raison du projet. Ce déplacement du soutien social peut avoir des aspects positifs, mais il peut aussi ajouter à la vulnérabilité d'une communauté confrontée à un stress puisque le soutien social est une ressource appartenant non pas aux individus, mais bien à la communauté. Cette recherche a permis de montrer la centralité du soutien social pour une communauté confrontée à un conflit, mais en raison de son design, l'exploration du soutien social échangé entre les participants n'est pas complète. De plus, seules les personnes parmi les plus actives dans le conflit ont été prises en compte. D'autres recherches approfondissant spécifiquement ces questions apparaissent nécessaires pour comprendre les besoins et l'offre de soutien social dans un conflit.

De plus, pour minimiser les impacts sociaux de la division sociale, les membres de la communauté, tant au niveau personnel que public, ont recours à différentes stratégies d'adaptation, notamment en fonction du soutien social disponible. Les stratégies d'adaptation des participants étaient nombreuses et variées, mais parfois aussi négatives. Pour évaluer les impacts sociaux, il ne faut pas seulement analyser si les individus sont en mesure de s'adapter, mais bien de quelle manière ils le font, surtout si certaines manières de s'adapter exposent à des risques importants pour le bien-être des individus. L'échelle de temps entre aussi en ligne de compte dans l'analyse, puisque certaines stratégies d'adaptation considérées comme négatives,

mais utilisées sur une courte période, n'auront pas les mêmes impacts que celles utilisées plus longtemps. Dans un conflit de l'ampleur de celui décrit dans cette étude, certaines stratégies d'adaptation ne sont tout simplement pas disponibles pour les acteurs, notamment les plus positives comme la résolution de problème et la négociation. Il devient alors plus probable que les stratégies potentiellement négatives soient davantage utilisées, et ce, au détriment de la santé des individus et, par extension, de la communauté, puisque les ressources en soutien social en sont ainsi affectées.

Le recours aux stratégies d'adaptation inappropriées est généralement dû à un manque de soutien social ou à un soutien social inadéquat, tel que nous l'avons présenté. Il peut cependant aussi être dû à l'impuissance de certains acteurs dans le processus décisionnel d'un projet. Ainsi, quand la structure sociale est modifiée et que le soutien social habituellement disponible s'en trouve perturbé, les risques d'avoir recours à des stratégies d'adaptation inappropriées peuvent être considérées comme plus grands. De la même manière, quand la capacité d'influence de certains acteurs est limitée, les risques de recourir à des stratégies d'adaptation inappropriées sont aussi plus grands. Alors que les participants à cette recherche montraient justement un grand besoin de soutien social et des activités de recherche d'un tel soutien, la structure sociale qui les liait auparavant n'était plus la même. Certains participants ont eu recours à des comportements tels l'hostilité interpersonnelle, la plainte, le blâme, la rumination, le déni et l'évitement cognitif. Le recours à ces options a été favorisé par l'exclusion de certains acteurs du processus décisionnel. La recherche de soutien social, qui découlait aussi de l'impuissance de certains participants quant aux décisions concernant le projet, semble avoir nourri le recours à ces stratégies d'adaptation, surtout celles qui se font à travers les relations sociales. Encore une fois, nous pourrions être en présence de boucles de rétroaction. Une première boucle serait l'usage de stratégies d'adaptation inappropriées parfois associé à un soutien social inadéquat, qui encourage à son tour les stratégies d'adaptation négatives, voire potentiellement à risque pour le bien-être des membres de la communauté. Une autre boucle de rétroaction pourrait défiler comme suit : des gens ne se sentant pas capable d'influencer le processus

décisionnel s'opposent au projet, et en réaction à cette opposition, les acteurs en position de pouvoir les excluent davantage du processus de décisions.

L'une des contributions importantes de ce projet de recherche aura été l'utilisation de l'analyse des réseaux sociaux pour montrer la division sociale d'une communauté confrontée à un conflit environnemental. Il s'agit donc d'un outil à retenir pour l'évaluation des impacts sociaux, et ce, même si plusieurs questions restent en suspens sur la façon concrète de s'y prendre pour mener une telle analyse en amont du projet. En effet, cette étude a permis d'évaluer la division observée après les audiences publiques –mais quand même avant l'implantation du projet; c'est donc un bon outil d'évaluation *a posteriori* des impacts du conflit. Cependant, pour que l'analyse des réseaux sociaux devienne un outil de prévention des conflits, il faudrait qu'une certaine mesure de la cohésion sociale soit faite avant que les relations ne soient détériorées dans la communauté, une mesure qui serve de point de repère de ce qu'était la situation préalable. Cette mesure n'implique pas nécessairement qu'on s'attende à ce que les relations se détériorent en raison du projet, mais bien qu'on reconnaisse l'existence de ce risque. La meilleure façon pour ce faire n'apparaît pas évidente, puisque pour voir la division, il faut que des relations soient détériorées, mais pour prévenir la division, il faut agir avant la détérioration. De plus, ce type d'analyse exige que l'on fixe les limites du réseau, sinon on a tôt fait d'y inclure la Terre entière! Dans cette étude, les limites ont été inspirées par l'implication des différents acteurs dans le processus de consultation du BAPE. Pour agir en amont, le BAPE ne constitue probablement pas la porte d'entrée idéale puisque nombreux sont ceux qui dénoncent son intervention tardive dans le développement d'un projet.

Par ailleurs, l'analyse des réseaux sociaux pourrait, par exemple, devenir un outil de mesure de la division sociale dans le but éventuel de fixer des compensations pour les gens subissant les impacts sociaux d'un projet. Par contre, cet objectif pourrait voir naître une division sociale entretenue dans l'espoir de faire échouer un projet ou d'obtenir de plus importantes compensations. Est-ce que cette étude n'est pas justement tombée dans ce piège, c'est-à-dire n'a-t-elle pas joué le jeu des opposants en évaluant la cohésion sociale? Malgré la forte proportion d'opposants dans

l'échantillon, nous pensons avoir réussi à éviter ce biais; en effet, le choix de symétriser les matrices de relations à la valeur minimale (dans tous les cas, sauf un) a permis de dresser un portrait fidèle de la division, même s'il peut être jugé conservateur étant donné la sévérité de l'analyse imposée par une matrice symétrisée au minimum.

En somme, les relations sociales influencent la diffusion de l'information, le sens créé à partir de l'information, la confiance accordée à la source de l'information, le recours aux stratégies d'adaptation face à un stress, et la disponibilité du soutien social. Tous ces éléments mis ensemble ont affecté la structure sociale de la communauté concernée, les ressources sociales disponibles dans la communauté, incluant le soutien et les services d'entraide, et le bien-être des membres de la communauté.

6. Limites de la recherche

Comme toute recherche, cette thèse présente des limites. La première, qui est probablement aussi la plus importante, est liée à l'échantillonnage : la population mère dont a été tiré notre échantillon découlait de la participation au processus d'information et de consultation du BAPE. En effet, cette organisation est incontournable pour quiconque s'intéresse à l'information dans les conflits environnementaux au Québec. Toutefois, ce point de départ du BAPE a eu pour conséquence que la population mère et l'échantillon contenaient beaucoup plus d'opposants au projet que de partisans. De plus, les opposants étaient très visibles publiquement (par des manifestations et des interventions lors d'événements publics, par exemple) ce qui les rendait facilement identifiables pour la chercheuse. De nombreux opposants ont également présenté un grand enthousiasme à participer à la recherche rapportée dans cette thèse, car ils y voyaient une occasion de témoigner de ce qui leur arrivait. À l'opposé, la chercheuse a dû faire face aux

refus de participer à la recherche de plusieurs partisans du projet (présents dans la population mère), alors que nous croyons qu'un plus grand nombre de partisans dans l'échantillon auraient pu enrichir les données recueillies. Cependant, comme nous l'avons déjà mentionné, nous croyons avoir pu contourner cette limite de différentes façons, notamment lors de l'analyse des changements à la structure sociale de la communauté en symétrisant toutes les matrices de réseaux (à l'exception d'une).

Nous ne pensons pas que le déséquilibre entre opposants et partisans dans l'échantillon ait nui à la recherche, mais il en constituait bel et bien une limite et celle-ci ne doit pas être négligée, car elle parle aussi du processus de participation publique du BAPE, qui était dans ce cas la tribune des opposants au projet. Certains diront que c'est là un de ces défauts, puisque le BAPE donne trop d'importance à l'opinion de ce que certains considèrent comme une minorité de gens. À l'opposé, d'autres pourraient voir en le BAPE un ultime rempart démocratique où des élus, des représentants, des promoteurs sont tenus de rendre des comptes publiquement à une population inquiète qui a besoin de savoir. Dans ce contexte, les partisans d'un projet ont moins besoin d'une instance comme celle du BAPE que les opposants, ce qui pourrait expliquer qu'ils soient moins nombreux à y exprimer leur opinion et à y prendre part.

Une autre limite de la recherche relève du moment de la collecte de données, soit dans la période qui a suivi les audiences du BAPE. Ainsi, quand les participants étaient invités à parler de leurs relations avec les autres personnes de la population mère, leurs réponses étaient fortement influencées par le conflit déjà bien implanté. Les données ont donc été recueillies à un moment précis du conflit (moment où les tensions étaient particulièrement vives), mais il est impossible de savoir si ces résultats seraient les mêmes à ce jour. Les lecteurs sont invités à garder en tête que ces résultats dressent le portrait d'un des moments les plus tendus du conflit.

7. Pistes de recherche à explorer

Le processus de recherche n'est jamais complètement achevé; souvent des résultats de recherche génèrent à leur tour de nouvelles questions. Puisqu'il faut quand même que l'aventure doctorale s'arrête quelque part, il faudra que d'autres prennent le relais et explorent ces nouvelles questions de recherche. Nous tenons cependant à noter ici, sans ordre précis, des pistes de réflexion qui découlent de l'observation de terrain, des résultats de recherche ou de leur analyse ou tout simplement, de l'insatiable curiosité de la chercheuse. Certaines ont déjà été mentionnées dans les chapitres précédents ou dans cette section, mais d'autres sont nouvelles. Elles sont rassemblées ici de façon synthétisée dans le seul but de laisser une brève trace de ces idées.

Premièrement, une question qui a surgi en cours de route et qui demeure sans réponse pour l'instant, est : comment les gens se font-ils une opinion lorsqu'ils sont confrontés à un nouveau projet dans leur environnement? Quand arrêtent-ils leur position par rapport à un projet donné? En effet, puisqu'une grande proportion de gens semble prête à se faire une idée sans avoir besoin davantage d'information sur le projet, qu'est-ce qui les a fait prendre position? Est-ce une information en particulier? Est-ce la position adoptée par d'autres? Il est évidemment que plusieurs personnes sont à même de créer du sens *a posteriori* quant à cette position, qu'elles arrivent à rationaliser leur opinion. Il y a ainsi des raisons qui motivent cette opinion. Mais les informations nouvelles quant au projet ne semblent pas avoir l'influence qu'on leur prête généralement. De plus, les gens semblent souvent guidés par la position qu'ils ont adoptée pour mener leur recherche d'information, ce qui signifie finalement que l'opinion précède l'information. Cette affirmation n'est pas banale. En effet, ceci voudrait dire qu'une campagne d'information de qualité et une démarche transparente – même si celles-ci restent à définir en fonction du contexte – pourraient n'avoir aucun effet sur la position d'une partie de la population. Celle-ci sera davantage influencée par la confiance et l'homophilie que par l'information. Est-ce là que la dualité de l'information, en tant qu'objet et en tant que construction,

prend tout son sens? Les données recueillies pour cette thèse ne permettent pas d'explorer ces vastes questions qui mériteraient à elles seules une démarche de recherche probablement plus ancrée dans le champ de la psychologie.

Deuxièmement, nous l'avons déjà suggéré dans le chapitre VI, mais il serait pertinent d'explorer, dans le contexte des conflits environnementaux qui suscitent une division sociale, comment arrimer méthodologiquement l'étude des stratégies d'adaptation, du soutien social et de la cohésion sociale. En effet, nous avons montré que ces éléments sont étroitement liés, qu'ils s'influencent mutuellement, mais comment pousser plus loin l'analyse? D'un simple plan technique, les questionnaires sociométriques sont particulièrement longs à administrer, tout comme un bon questionnaire qui viserait à dégager rigoureusement les stratégies d'adaptation déployées par les individus concernés. Un participant qui s'engagerait dans une telle recherche devrait donc être prêt à y consacrer beaucoup de temps, en plus d'accepter de se plonger dans une introspection certaine. Pourtant, les résultats obtenus par une telle étude pourraient s'avérer particulièrement pertinents. Dans notre cas, la mise en œuvre de différentes stratégies d'adaptation a été observée lors du terrain et elle a été confirmée lors de l'analyse des résultats. Nous déplorons cependant de ne pas avoir intégré des questions à ce sujet dans nos entrevues. Ceci est d'autant plus regrettable que le recours aux diverses stratégies d'adaptation est directement influencé par le soutien social dans une communauté, lui-même influencé par les réseaux sociaux.

Troisièmement, l'analyse des réseaux sociaux s'est révélée être un outil particulièrement pertinent pour l'analyse de l'impact social d'un projet de développement. Elle a permis d'innover en évaluant en profondeur la division sociale. Par contre, pour en faire un réel outil d'analyse – voire de prévention ou de gestion des impacts sociaux –, plusieurs questions demeurent en suspens : y a-t-il un meilleur moment pour mener l'analyse des réseaux sociaux? Quels types de relations doivent être analysés pour bien évaluer les impacts sociaux; seulement les relations porteuses de soutien ou d'autres également? De plus, est-ce que l'analyse des réseaux sociaux est un outil qui ne peut qu'être utilisé *a posteriori*, c'est-à-dire

une fois que la division sociale est installée? Si la réponse à cette dernière question est positive, dans ce cas, il importe de réfléchir à la façon dont l'outil pourrait être utilisé en amont en développant et testant des façons de faire. Une solution pourrait alors être de cartographier la communauté, en faisant un emprunt aux sciences de la terre, pour identifier non pas les individus, mais les groupes vulnérables. Il est fort probable que, si l'on cherche à agir plus en amont, l'analyse des réseaux sociaux devra être plus macro et porter davantage sur les groupes, les parties prenantes, que sur les individus eux-mêmes.

Quatrièmement, et c'est là, à notre avis, une des questions les plus importantes laissée en suspens dans cette thèse, à savoir comment les relations de la communauté étudiée ont-elles évolué depuis les entrevues et comment évolueront-elles dans le futur? Une étude longitudinale permettrait de mieux comprendre les impacts sociaux à long terme de la division sociale. En termes pragmatiques, dans un conflit, est-il possible de mener une étude longitudinale sans nourrir le ressentiment et ainsi, alimenter la division sociale? De la même manière, quelles sont les implications éthiques d'une telle démarche de recherche? Ainsi, nous croyons que les chercheurs ne doivent pas négliger les impacts sociaux de leur propre démarche de recherche, et particulièrement quand ceux-ci constituent leur objet de recherche! Par contre, puisque les principales conclusions de l'étude ont été présentées à de nombreux participants, leurs réactions nous aident à juger de la pertinence d'une étude longitudinale. En effet, plusieurs personnes ont exprimé un vif désir que la recherche se poursuive, au grand étonnement de la chercheuse. Ces gens affirmaient que les relations avaient beaucoup évolué depuis 2010 et que la nouvelle structure sociale différait déjà de celle dégagée par l'étude. Par exemple, lors de cet évènement de diffusion des résultats, certains ont dit vivre plus de solitude puisqu'ils en avaient assez de ressasser les mêmes histoires et sentiments avec leurs voisins et amis. D'après eux, la solution immédiate était de renoncer à ces rencontres pour éviter le sujet, créant en contrepartie de l'isolement. Il s'agirait alors d'une étape nouvelle dans l'évolution de la structure sociale qui n'a pas du tout été observée lors des entrevues puisqu'au contraire, les gens avaient alors créé un nombre important de nouveaux liens et intensifié également plusieurs relations déjà

existantes. Bien sûr, une telle invitation à poursuivre la recherche doit être prise au sérieux, surtout si elle émane d'une demande de membres de la communauté. Par contre, elle entraîne aussi son lot de questionnements, par exemple sur la population mère à cibler, sur la façon de mener le recrutement, sur l'élaboration des grilles d'entrevue, etc., mais aussi sur les implications sociales d'une seconde étape de recherche. Force est toutefois de reconnaître qu'il s'agit malgré tout d'un très beau défi scientifique.

Finalement, la dernière question qui aurait pu être explorée dans cette thèse est celle du rôle des femmes dans un conflit environnemental comme celui étudié ici. Occupent-elles une place différente de celles des hommes? À titre d'exemple, nous avons vu que plusieurs hommes figuraient parmi les sources d'information les plus souvent citées par les participants, mais aucune femme. Pourquoi les femmes sont-elles moins considérées comme des sources d'information? Aussi, l'observation a permis de constater qu'en 2009-2010, pratiquement aucune femme n'occupait un rôle de leader dans le conflit, autant chez les promoteurs, chez les élus que parmi les citoyens. Est-ce à dire qu'aucune femme parmi toutes celles impliquées dans le conflit (elles étaient pourtant nombreuses dans la population mère) n'avait les compétences, l'envie ou même la possibilité de jouer un tel rôle? Un participant a évoqué la possibilité que les femmes restent en retrait de poste de pouvoir parce que ce sont elles qui maintenaient les relations et le tissu social, loin de la lutte publique. Est-ce vrai? Par contre, à l'opposé, plusieurs personnes parmi les opposants ont raconté que l'implication des femmes dans le mouvement correspondait à la radicalisation des positions des différents camps. Pourrait-on croire alors que les femmes sont plus radicales que les hommes dans les situations conflictuelles? Certains commentaires recueillis lors des entrevues – par les participants à la recherche, mais également par des membres de leur famille également présents dans la pièce et qui assistaient à l'entrevue – semblent abonder dans ce sens. Ainsi, la question demeure entière : les femmes contribuent-elles à la radicalisation des positions ou sont-elles, au contraire, celles qui maintiennent le tissu social? Une analyse plus systématique gagnerait fortement à être faite. Les discours de chacun – hommes et femmes – seraient particulièrement riches à

explorer. Cependant, ces questionnements sont probablement parfois loin des intérêts immédiats et des préoccupations des gens impliqués dans un tel conflit. Ceci ne signifie pas pour autant que les réponses qu'ils pourraient apporter sont impertinentes pour une meilleure compréhension des conflits. Ainsi, la chercheuse a aussi une réflexion à faire sur la manière d'aborder ces enjeux dans un contexte comme celui étudié ici.

8. Suggestions pratiques

Dans un souci de clarté pour les lecteurs, les différentes suggestions pratiques présentées au fil de la thèse sont regroupées ici. La majorité de ces suggestions sont déjà présentées dans le document, mais certaines ne le sont qu'en filigrane pour ne pas prendre le pas sur le contenu scientifique. Ainsi, cette section se veut l'occasion d'insister sur certaines conclusions pratiques à tirer de cette étude. Nous considérons que ces idées sont parties d'un tout et par conséquent que l'ensemble concerne tous les intervenants de la filière éolienne, de la population aux plus hautes instances, en passant par l'industrie. Malgré tout, les suggestions sont organisées en fonction du type d'acteurs principalement concernés, dans l'ordre les promoteurs, les autorités municipales et régionales, les citoyens eux-mêmes, le gouvernement québécois et finalement, les instances qui mènent les évaluations environnementales des projets de développement comme celui présenté ici, soit le BAPE et les Agences de santé publique, entre autres.

Tout d'abord, les promoteurs éoliens sont à même de constater avec cette étude que la volonté de contrôle de l'information est une stratégie de développement risquée, notamment car elle peut mener à une importante opposition. En effet, si le promoteur d'un projet comme celui présenté dans cette thèse a besoin dans une certaine mesure de contrôler l'information, surtout dans les premières étapes de son projet, c'est qu'il évolue dans un marché hautement compétitif. Au Québec, cette

situation semble amplifiée par la formule d'appel d'offres mené par Hydro-Québec pour le développement de la filière éolienne. Cette formule place, dans un court laps de temps, les différents acteurs de l'industrie en forte compétition les uns contre les autres et vise à ne retenir que les meilleurs projets, en fonction de divers critères. Dans le cas du deuxième appel d'offres de 2 000 mégawatts lancé par Hydro-Québec et dont est issu le projet éolien présenté ici, la société d'État a obtenu des soumissions pour des projets éoliens totalisant 8 000 mégawatts. C'est donc dire que plusieurs des projets soumis n'ont pas vu le jour. Ainsi, il peut paraître normal pour un promoteur de ne pas chercher à publiciser trop tôt son projet, qui demeure pendant de longues années surtout une idée sur les planches à dessin. Dans le cas qui nous intéresse, la prospection, la négociation et l'élaboration du projet faites entre 2004 et 2008 auraient pu ne jamais aboutir au projet tel qu'il se construit au moment de soumettre cette thèse, car le projet aura pu tout simplement ne pas être retenu par Hydro-Québec. Ainsi, cette volonté de contrôle de l'information – si elle semble en partie justifiée sur le plan des affaires – est une stratégie dont les impacts peuvent être imprévisibles. Ici, le fait que la venue du projet ait été longtemps cachée a alimenté l'opposition et la perception que le promoteur n'était pas digne de confiance. De toute façon, une fois que le groupe d'opposants s'est emparé de la nouvelle, elle a circulé dans les réseaux informels, devenant ainsi particulièrement difficile à contrôler par le promoteur, notamment. Finalement, entre le silence du promoteur et les cris des opposants, une partie de la population a davantage entendu les cris des opposants. Plus encore, se faisant, les opposants ont donné au promoteur une voix. Par contre, cette voix n'était probablement pas celle que le promoteur se serait donnée lui-même s'il avait occupé davantage le haut du pavé en diffusant sa version des faits.

De plus, avant qu'apparaissent les parcs éoliens sur le territoire québécois, ces projets demeuraient – et demeurent encore pour plusieurs – relativement inconnus. De nombreuses personnes connaissent la technologie, mais s'imaginent mal à quoi peut ressembler un parc éolien dans un environnement donné. Dans ce contexte, les cartes et les simulations visuelles des installations revêtent une importance toute particulière. Pour certains, c'est en voyant des cartes suffisamment précises

présentant les éoliennes projetées, ou en visionnant des photos et des vidéos d'éoliennes déjà installées ailleurs, que s'est produit le déclic, en faveur ou en défaveur du projet éolien. Ces images, qui faisaient partie de ce que nous avons appelé informations-objets dans cette thèse, sont donc essentielles pour déclencher le processus de création de sens. Par ailleurs, des gens peuvent être très ouverts à l'idée d'éoliennes sur un territoire donné, mais pas partout. Par exemple, ils peuvent vouloir préserver des paysages, des habitats ou des attraits particuliers d'une région en empêchant l'installation d'éoliennes à des endroits bien précis. C'est le cas de certaines régions le long du fleuve Saint-Laurent où les éoliennes sont interdites entre le fleuve et la route 132 qui le longe, en raison des panoramas exceptionnels qu'on y retrouve. Pour arriver à ces décisions importantes concernant le territoire, il faut que les promoteurs visent à mettre à la disposition des acteurs concernés les différentes cartes et images nécessaires, et ce, le plus tôt possible dans le développement du projet. Bien sûr, ceci doit être fait en tenant compte des différentes contraintes environnementales, économiques, stratégiques, etc., auxquelles sont confrontés les promoteurs. Dans les faits, cette façon de faire pourrait contribuer à l'élaboration de projets bonifiés, puisqu'ils sont pensés en partenariat avec les différents acteurs du milieu.

Aussi, les modèles autoritaires qui excluent certaines personnes du processus de décisions des projets posent aussi des risques pour les promoteurs. Comme nous l'avons présenté, les approches collaboratives, où une véritable volonté d'information, de consultation et d'intégration de toutes les parties prenantes, réduisent les risques d'opposition. Il faut cependant être clair, elles n'éliminent pas complètement ces risques. Il serait utopique de le penser. Par contre, dans bien des dossiers, les approches inclusives ont fait leur preuve en matière de concertation avec le milieu et d'acceptabilité des projets. De plus, d'après plusieurs observateurs des conflits environnementaux, du milieu universitaire ou du milieu de la consultation, les promoteurs pourraient sortir gagnants de ces approches collaboratives, du moins beaucoup plus qu'ils ne le croient. En effet, une opposition comme celle rapportée ici, mais observée aussi ailleurs dans le monde, entraîne des retards dans le développement des projets et par conséquent, elle entraîne des

coûts. De plus, elle peut contribuer à véhiculer une image négative d'un promoteur ou même de toute l'industrie. Retards, coûts et image négative ne sont généralement pas des objectifs poursuivis par un promoteur, peu importe son secteur d'activités. Ainsi, inclure la population (ou à tout le moins les acteurs les plus concernés) tôt dans le processus d'élaboration d'un projet peut représenter en fin de compte des bénéfices pour un promoteur qui pourrait ainsi faire face à moins d'opposition, surtout s'il a développé en parallèle des mécanismes de concertation quand survient un imprévu ou un problème.

Ensuite, il paraît essentiel que les autorités municipales et régionales tirent comme conclusion de cette thèse qu'elles doivent jouer dans ces projets un rôle plus proactif pour la diffusion de l'information. Le projet éolien présenté dans ce document n'a pas été proposé par les acteurs municipaux; il leur est plutôt tombé du ciel. En effet, aucun élu ou représentant municipal n'a sollicité les prospecteurs pour que soit considéré leur territoire pour le développement de l'énergie éolienne. Ils ont au contraire plutôt été approchés par ces derniers, dont ils sont ensuite restés à la remorque pour informer leur population. Les initiatives pour informer la population, par des séances d'information publiques ou par des documents écrits spécifiquement dédiés au projet de parc éolien, ont malheureusement été insuffisantes. Les autorités municipales et régionales avaient-elles seulement les réponses aux questions, de plus en plus nombreuses, de certains citoyens? Encore aujourd'hui, il est difficile d'évaluer si les autorités municipales avaient en effet en mains les informations que réclamaient ces citoyens et si elles ont volontairement omis de les diffuser ou si elles ont été dans l'impossibilité, pour diverses raisons, de le faire. Il apparaît que les élus ont été rapidement dépassés par les événements, par l'ampleur du projet éolien en préparation sur le territoire et par le conflit qu'il a fait naître dans leurs communautés. Quoi qu'il en soit, les responsabilités énormes qui ont incombé aux autorités municipales et régionales en raison de ce dossier éolien auraient mérité que celles-ci, si elles n'en avaient pas les moyens à l'interne, aillent chercher les ressources pour bien gérer une situation de cette ampleur. Plus encore, il y a lieu de mettre en question le rôle du gouvernement dans le dossier éolien au Québec puisque plusieurs responsabilités nouvelles aux conséquences importantes

se sont soudain retrouvées dans la cour des municipalités et des municipalités régionales de comté, alors que celles-ci n'avaient peut-être pas les moyens de bien les gérer.

Par ailleurs, il importe aussi de souligner ici la responsabilité des citoyens de s'informer sur ce qui se passe dans leur communauté. Pour ce faire, assister aux séances du conseil municipal et porter une attention particulière aux nouvelles locales et aux avis publics (qui gagneraient très certainement à être rendus plus accessibles à qui n'écrit pas de règlements municipaux!) est une étape préalable. En fait, l'idée est d'inviter la population à s'intéresser d'un peu plus près aux décisions qui la concernent. Pour certains, ceci peut sembler aller de soi, mais rester informé sur les affaires de la cité demande temps et efforts et c'est trop souvent une activité que l'on sacrifie au tourbillon du quotidien. Le problème survient pourtant quand ces affaires nous rattrapent. Pour d'autres, les gens qu'ils ont élus pour les représenter vont nécessairement agir dans l'intérêt collectif et pour le bien commun. La grande majorité des élus le font probablement. Or, l'intérêt collectif et le bien commun sont invoqués par toutes les parties dans un conflit environnemental, c'est donc dire qu'il s'agit là de notions élastiques et que l'intérêt collectif des uns n'est pas nécessairement celui des autres. Par conséquent, le cas rapporté dans ces pages rappelle qu'une certaine vigilance citoyenne devant le travail de gens représentant la population est de rigueur. Loin de l'idée d'une chasse aux sorcières, cette suggestion repose sur le constat que, trop souvent, une grande partie de la population vit une forme d'apathie pour la chose publique. En situation de conflit, le réveil n'en est alors que plus brutal.

Également, il est important de réitérer le paradoxe déjà soulevé quant au double rôle que joue le gouvernement du Québec dans le développement de la filière éolienne. En effet, ce gouvernement a affirmé un appui fort à ce secteur d'énergie en annonçant en quelques années trois importants appels d'offres qui ont créé un réel boum dans l'industrie. L'appui de principe et la volonté d'un développement rapide et important sont clairs. Par contre, à la fin du processus de consultation publique du BAPE, le gouvernement est aussi le juge final des différents projets, retenus par

Hydro-Québec. Cette dualité le pose à la fois en promoteur de cette énergie et en juge. Fait-il un juge impartial s'il a déjà affirmé haut et fort son appui à l'idée globale? Ainsi, une partie des arguments des opposants qui mettent en doute les choix stratégiques faits par Québec dans le développement de l'éolien (que ce soit le moment de ce développement, voire sa nécessité, mais aussi la mainmise du privé sur ce développement dans un secteur d'activités autrement perçu comme relevant du monopole de l'État québécois) ne trouvent pas nécessairement d'oreilles conciliantes à la tête du gouvernement. En effet, se rendre à ces arguments aurait pu être considéré comme la reconnaissance du manque de justesse de certains choix politiques. Ce constat sur la dualité du rôle de l'État ne contribue pas uniquement à rendre la tâche ardue aux opposants à l'éolien, mais elle pèse également lourd sur toutes les structures de consultation publique, comme le BAPE. Ces structures deviennent alors des arènes où dominent la critique et l'opposition au lieu d'encourager la participation citoyenne. Dans le cas étudié, le BAPE a en effet été le dernier rempart démocratique des opposants au projet, faisant ainsi de ce forum l'occasion ultime pour eux de se faire entendre, au détriment d'un débat plus inclusif et peut-être plus fructueux. L'impact sur cet outil de consultation publique qu'est le BAPE n'est pas à négliger puisqu'il peut mener à une érosion de la confiance envers cette institution. De plus, si, comme dans le cas présenté ici, la décision finale du gouvernement tarde, pour finalement être favorable au projet, le manque de confiance institutionnelle peut malheureusement devenir pour plusieurs généralisé. Ce constat a également été fait au Royaume-Uni dans le cas de projets éoliens controversés. Il n'est donc pas unique au Québec et par conséquent, le double rôle du gouvernement dans le développement de cette filière et les impacts qui en découlent sur les processus de consultation publique sont à prendre au sérieux.

Finalement, les deux dernières suggestions pratiques que nous souhaitons mettre de l'avant dans cette thèse sont probablement les deux plus importantes. Elles s'adressent à tous les décideurs, peu importe le palier auquel ils agissent, mais plus particulièrement aux observateurs extérieurs qui sont chargés de juger du processus

d'évaluation environnementale, le BAPE et les Agences de santé publique, notamment.

La première suggestion n'est pas nouvelle. Elle a en effet été maintes fois présentée, mais puisque les changements sont lents à survenir, nous jugeons qu'il est bon de la répéter dans ces pages. Nous joignons donc notre voix à celles qui disent qu'il est essentiel d'inclure les citoyens le plus tôt possible dans le processus d'élaboration d'un projet de développement. Plus le temps passe, moins la capacité d'influence des citoyens est grande. Par conséquent, plus le potentiel de vive opposition augmente, puisque les citoyens verront leur capacité à modifier le projet pour accommoder peut-être un plus grand nombre considérablement réduite. Quand la porte est fermée aux compromis, l'opposition peut facilement devenir plus intense. En incluant la population en amont des projets, certaines situations conflictuelles pourraient être évitées.

La deuxième suggestion est quant à elle plus originale. Elle découle des connaissances acquises grâce à cette thèse sur les impacts de la division sociale dans une communauté. Nous appelons ainsi à l'intégration de l'évaluation des impacts sociaux dans le processus d'évaluation environnementale québécois. Cette suggestion nous apparaît d'autant plus importante que les impacts sociaux d'un projet comme celui rapporté ici peuvent survenir dès les premières étapes de prospection, soit dès 2004 dans le cas qui nous intéresse. Étant donné que les impacts environnementaux, eux, ne surviennent qu'avec le début de la construction du projet, soit en 2011, une premier pas consiste à reconnaître que les impacts sociaux précèdent les impacts environnementaux. Plus important encore, si, pour une raison ou une autre, ce projet éolien n'avait pas vu le jour, il n'y aurait pas eu d'impacts environnementaux, mais il y avait déjà des impacts sociaux lors de la collecte de données en 2010. Bien sûr, les impacts sociaux auraient évolué. Ils se seraient peut-être même résorbés dans certains cas. Encore une fois, seules des données longitudinales pourraient nous éclairer sur ces possibilités. Dans cette thèse, nous avons proposé une évaluation de la division sociale, en sachant qu'il ne s'agit là que d'une facette des impacts sociaux. Nous n'aurons pas la prétention

d'affirmer que nous connaissons la meilleure façon de tenir compte des impacts sociaux des projets de développement. Le domaine est en pleine émergence et le Québec pourrait déjà s'inspirer de ce qui se fait, à différents degrés, ailleurs dans le monde, notamment dans les pays où une évaluation des impacts sociaux est obligatoire. Intégrer l'évaluation des impacts sociaux dans le processus d'évaluation environnementale permettrait d'identifier les zones de tensions ou de conflits potentiels (ou avérés), ainsi que les différentes communautés plus vulnérables devant la proposition d'un nouveau projet. En somme, nous ne pouvons que plaider en faveur d'une plus grande considération des impacts sociaux de tous les projets de développement, et non pas des seuls projets éoliens.

ANNEXE A

GRILLE D'ENTREVUE

Code d'entrevue : _____

Date : _____

Identification

Couple
☐ Oui
☐ Non

Genre ☐ Homme ☐ Femme	Occupation	
Âge	Bénévolat dans la communauté ☐ Oui ☐ Non Heures/semaine Qui?	Modification ☐ + ☐ - ☐ = Autres : _____ _____
Scolarité		

Informations liées au projet éolien

Municipalité	Rue	Années

Contrat d'option	Proximité des éoliennes	Distance des éoliennes
☐ Oui ☐ Non Précisez : _____ _____ _____ _____	☐ Oui ☐ Non ☐ Ne sait pas Visibilité des éoliennes ☐ Oui ☐ Non ☐ Ne sait pas	☐ < que 500 m ☐ 500 m à 749 m ☐ 750 m à 999 m ☐ 1 000 m à 1 500 m ☐ > de 1 500 m ☐ Ne sait pas Nombre : _____

Mémoire	Cote	Opinion
☐ Écrit ☐ Les deux ☐ Oral		

Nouvelles du projet et processus public d'information

Première fois entendu parler du projet		
Qui?	Quand?	Contexte

Avez-vous assisté aux événements suivants?				
	Assisté		Entendu parler	
	Oui	Non	Oui	Non
Séance d'information publique 12 septembre 2005 (Lieu)				
Séance d'information publique 30 mai 2006 (Lieu)				
Activité Portes ouvertes 27 juin 2007 (Lieu)				
Séance d'information publique 10 décembre 2008 (Lieu)				
Activité Portes ouvertes 11 décembre 2008 (Lieu)				
Séance d'information publique 7 mai 2009 (Lieu)				
Séance d'information du BAPE 16 septembre 2009 (Lieu)				
Réunions du conseil municipal (Lieux)				
Réunions du conseil (Lieux)				
Réunions du Comité de suivi				

Sources d'information et influence

Sources d'information pour vous faire une opinion du projet (experts, organisations, médias, sites web, individus, rapports, communiqués, etc.)	
Homme	Femme
1.	1.
2.	2.
3.	3.
4.	4.
5.	5.
6.	6.
7.	7.
8.	8.
9.	9.
10.	10.

Influence – pour vous faire une opinion du projet (individus, proches ou non)	
Homme	Femme
1.	1.
2.	2.
3.	3.

Information cachée

Avez-vous l'impression qu'on vous cache des choses par rapport au projet?	
Qui?	Quoi?

Discussions

Le projet a-t-il suscité des discussions…			
	Oui	Non	NA
Dans votre couple?			
Dans votre famille?			
Avec vos voisins?			
Avec vos amis?			
Avec vos collègues?			

Réseaux sociaux

	C	F	A	V	T	I	DP		CR		NC	
Nom 1							□ O □ N	□ O □ N	□ + □ - □ =	□ + □ - □ =	□ O □ N	□ O □ N
Nom 2							□ O □ N	□ O □ N	□ + □ - □ =	□ + □ - □ =	□ O □ N	□ O □ N
Nom 3 et Nom 4							□ O □ N	□ O □ N	□ + □ - □ =	□ + □ - □ =	□ O □ N	□ O □ N
Nom 5							□ O □ N	□ O □ N	□ + □ - □ =	□ + □ - □ =	□ O □ N	□ O □ N
Nom 6							□ O □ N	□ O □ N	□ + □ - □ =	□ + □ - □ =	□ O □ N	□ O □ N
Noms 7 à 10							□ O □ N	□ O □ N	□ + □ - □ =	□ + □ - □ =	□ O □ N	□ O □ N

Légende :
C : connaissance; F : Famille; A : Ami;V : Voisin; T : Travail : I : Inimitié
DP : discuté du projet?; CR : changement dans la relation? NC : Nouvelle relation?
O : oui; N : non; + : intensification; - : détérioration; = : pas de changement

Réseaux sociaux (suite)

Y a-t-il des gens qui n'étaient pas dans la liste mais avec qui vous avez…		
	Qui?	Opinion
Rompu des liens ou assisté à une détérioration de votre relation en raison du projet?		
Créé de nouveaux liens ou assisté à une amélioration de votre relation en raison du projet?		

Êtes-vous membre des organisations ou associations suivantes? Connaissez-vous les responsables de ces organisations ou associations?				
	Membre		Responsable	
	Oui	NCP	Oui	Non
Organisation 1				
Organisation 2				
…				

NCP : Ne connaît pas

Êtes-vous membre des organisations ou associations suivantes?
Connaissez-vous les responsables de ces organisations ou associations?
Avez-vous déjà discuté du projet avec ces responsables?
Y a-t-il eu un changement dans vos relations avec ces personnes en raison du projet?

	Membre		Responsable		Discuté		Changement		
	Oui	NCP	Oui	Non	Oui	Non	+	-	=
Organisation 3									
Organisation 4									
...									

ANNEXE B

INTRODUCTION (ENGLISH VERSION)

Information, trust, and social cohesion are three concepts that are strongly intertwined. At least, this is what we believed before this scientific endeavour, but we could only imagine how interdependent they really are, which is nicely revealed by this thesis. In the context of an environmental conflict, they make even more sense together: indeed, in these stressful situations, information comes from those you trust and from those you feel you belong to. This could be (in less than 20 words!) the not-so-innovative abstract of the following thesis. Of course, if this attempt to synthesize this study does not sound exceptional, it is because many layers of complexity and refinement are lacking, and it is in these layers that the contribution of this study is significant. This is why this document in reality unfolds in several chapters and in 200 pages or so, and not in 20 words.

Before we start, you may be wondering 'why wind energy?' A too simple answer would be: why not? A pragmatic one would sound more like: question of timing and of opportunities. Indeed, at the very beginning of this doctoral research, we were on the lookout for any given development project with potential environmental impacts that we could follow through the consultation process of the Bureau d'audiences publiques sur l'environnement (BAPE). We were not necessarily on the lookout for a project from a specific sector; it could have been a project of a port for methane carriers, of a big dam, of gas exploration, of an opencast mine, etc. Projects that

raise controversy due – among others – to their environmental and health impacts are unfortunately widespread, not only in Québec. As it turned out, the development project that best fit into our research schedule and interests was about a wind farm. Not any kind of wind farm; one that was facing opposition. Looking at a map of Québec, we knew minimally the area. Like others, we were wondering why this specific wind farm created opposition. As soon as we tried to familiarize ourselves with the case, we were able to see that all the necessary ingredients for our study were there: an opponents' group, the argument of a lack of information, uncertainties expressed by citizens in regard to the environment, their health, their quality of life, etc.

From a strict and cold scientific point of view, this case was perfect. Now, we know that this scientifically perfect context of study is also – and especially – the rough reality of many citizens. After looking at this specific conflict through several lenses, we can present rigorous and original results that have, to our understanding, a great social relevance. Some of these results are disturbing, sometimes for supporters of the wind farm, sometimes for opponents, and also sometimes for both. We firmly believe that they are consequently even more important.

The wind farm behind this case study is of course unique in itself. It is thus important not to generalise the observations and conclusions made in this thesis to the whole wind energy sector in Québec. That being said, at the same time, it probably presents some similarities with other wind farm projects. Furthermore, because wind energy is an especially fast-growing sector in many countries, because wind energy has a quasi-virtuous image of being "green" that is hard to contradict, and because wind energy is facing more and more opposition around the world, we actually think, like other scholars, that conflicts related to the development of this renewable energy sector will be commonplace in the future. For that reason, it is increasingly relevant to better understand what is at stake in the conflicts related to the planning of wind farms, in regard to information processes and in regard to social impacts, as we did in this thesis.

In more details, this thesis is firstly about information in the context of an environmental conflict. In such conflicts, and particularly when tensions between involved stakeholders are high, a lack of information is often denunciated. But at the same time, especially when dealing with risks to the environmental and/or to health, the stakeholders are often overwhelmed by information; they have more than they could ever read and make sense out of. This paradoxical situation was the hook that first caught the researcher's eye: where does the "truth" lay between this perceived lack of information and the context of overabundance of information? Is information scarce or, on the contrary, overabundant? What is it exactly that people mean when they talk about a lack of information and plead for their right to know? These questions needed to be better understood, but in a real-life context, which did not appear like an easy task – and indeed, it was not!

Nevertheless, the important role that information plays in environmental conflicts has been known for a long time now. In North America and in Europe, notably, it resulted in many acts, conventions, rules, and public participation processes trying to frame the right-to-know of citizens and their capability to take part in various ways in the decision-making. These were among the first environmental struggles: for citizens to have access to information in order to help them take actions to protect their environment and their health. Without information, citizens see their ability to participate in the planning process of a development project that may have impacts on health and/or environment highly weakened. Along with the right-to-know, the duty to inform was born, but many developers and decision-makers still need to get familiar with better ways of informing and consulting the population.

For many decades, it was widespread to follow top-down models to inform citizens. These models are still frequently used. However, not only do they exclude citizens and prevent them from having a real influence over the planning process, but they can also favour unfair treatments and spark negative reactions to the proposed project. The poor communication strategies of numerous developers, despite being acknowledged in the scientific literature, are nevertheless not well understood and

not often studied, as if they were simply natural, as if it was merely a premise with which scholars, planners, developers, citizens, etc. need to work.

Information provided and received by the different actors involved in the public consultation process of the Bureau d'audiences publiques sur l'environnement (the BAPE, an organisation that will be presented in more details in Chapter I) was therefore the first path that we chose to explore in this study.

Second, this thesis is about trust in a context where information providers are sometimes even more important than information itself. In environmental conflicts, the need for information seems to be infinite; the more the citizens are worried about an issue that may have impacts on their health and/or their environment, the more likely they will never be satisfied by the information they receive or find. New information only generates more questions; this is the ongoing process of sensemaking.

For concerned citizens, various sources of information are available; some are familiar, such as neighbours and friends, and some are not. Also, some sources are perceived as trustworthy – like the familiar ones, while some are not, as developers and decision-makers often are. Many people will rely on the easily available information, while others will dig deeper. In these groups, despite them having different information-seeking behaviours, the belief that things are undisclosed is generally widespread. What exactly is undisclosed is sometimes hard to tell, but the feeling that some sources of information cannot be trusted is all too real for worried citizens. This perception will taint all information they will have access to: an information coming from perceived untrustworthy sources will be disregarded, while one coming from perceived trustworthy ones will be taken for granted, often without or with little verification.

What justifies the apparently different needs and quests for information? Of course, there is probably more than just one answer to that question, but we looked more closely at trust since the perceived legitimacy of information is highly related to the perceived trustworthiness of the source.

Trust and distrust expressed by or toward some actors involved in the environmental conflict were therefore the second path that we chose to explore in this study.

Finally, this thesis is about social cohesion in the especially stressful context that occurs when a proposed project –in this case, a wind farm– divides the community in two groups: the opponents and the supporters. There is 'us' and there is 'them'. There are also people who do not feel that they belong to any of the two groups, but when tensions are high, they often stay silent and/ or join the safest side for them, i.e., the side where there will be less people angry at them because of their decision. Therefore, sometimes because of peer pressure, people need to take position.

Unfortunately, this divide can deeply modify interactions in a community and the way people perceive themselves; the 'us' sticks together, helps each other, and provides support, while the 'them' does just the same, but with other people. Between the two? A gap that deepens if the conflict becomes greater. More importantly, a gap that was not there before the proposed project. This means that the project also has social impacts, such as changes to the social structure, especially in small rural communities, and this before the first shovel hits the ground. These modifications can have impacts on the social cohesion and on the social capital of these communities. Furthermore, they can impact the health of some of the more involved actors. They should therefore not be taken lightly by decision-makers. Indeed, the impacts of a project on the biophysical environment are usually well-documented, and when necessary and applicable, mitigation measures are planned. However, the social impacts of a given project, e.g., the impacts on the human environment where the project will be located, are often overlooked and are generally neglected in the planning process of a project.

The reality of social divide in environmental conflicts has often been acknowledged by involved stakeholders or by external observers, like public bodies in charge of monitoring and assessing environmental impacts of various projects. However, such social divide has rarely been assessed. There is therefore a need to better understand how a project modifies the social structure of a community and whether these modifications are a benefit to the community or a high price to pay.

Social cohesion – or more precisely its corollary: social divide – and its impacts on a community facing an environmental conflict were therefore the third and last path that we chose to explore in this study.

1. Plan of the thesis

After this short introduction, the problematic (Chapitre I) is presented. At the end of this chapter, we can find the research objectives and questions, a presentation of the frame of the thesis, and the justification of its social and scientific relevance. This chapter is followed by the theoretical framework (Chapitre II) and the methodology (Chapitre III). Further than the integrative theoretical framework, the second chapter also presents the research approach and posture put forward in this thesis.

The three following chapters (Chapitres IV to VI) report the most important scientific contributions of this study. As it was presented in the introduction, this thesis is about three broad themes highly intertwined. However, for more clarity and to allow for a more refined analysis of each theme, we decided to present results and the related discussion together, in three distinct sections: the first one on information diffusion strategies (Chapitre IV), the second one on undisclosed information and distrust (Chapitre V), and the last one on social divide (Chapitre VI). An overall conclusion wraps up the document by highlighting the most significant contributions of this thesis and the research paths to it opens.

With the approval of the Sous-comité d'admission et d'évaluation from the Faculty of Communication at the Université du Québec à Montréal, this thesis is in great parts written in English, (chapters II to VI). Moreover, in order to allow all jury members to assess the whole document, English translations of the French sections are provided in the appendixes (starting from Annexe B), in the same order that they appear in French in the thesis. Annexe A, on its part, contains a French copy of the interview grid and sociometric questionnaire that were used to lead the interviews.

ANNEXE C

PROBLEMATIC (ENGLISH VERSION)

Environmental conflicts are the background in which the research project presented here was born. In this problematic, we will address this background according to five themes: 1) the environmental conflicts; 2) the social divide they cause; 3) the information and public participation; 4) the public hearings office or BAPE, and 5) the environmental conflicts related to wind energy projects in the specific energy context of Québec. Then, the general research objective and the questions that guided the three results chapters will be presented. The link between these three chapters will follow. This problematic will close on the justification of the scientific and social relevance of this study.

1.1 The environmental conflict

Environmental issues, because they are sources of uncertainty, are sources of conflicts (Beauchamp, 1997; Blackburn et Bruce, 1995; Burgess et Burgess, 1995; Daniels et Walker, 2001; Lewicki, Gray et Elliott, 2003; Simard *et al.*, 2006). These conflicts occur between actors, between land-uses and interests or between opposing visions of development. In this section, we will address different literature currents useful to the understanding of environmental conflicts. They all have at their core what we decided to call environmental conflict, even if the cited authors talk

about sociotechnical controversies, intractable conflicts, or land-use conflicts, for example. The definition of environmental conflict that was used in this study is presented at the end of this section. It comes from the literature explored in the following pages. Environmental conflicts are often difficult to manage or solve, and this will be addressed as well, but first we will have a closer look at the concept of conflict itself.

The term "conflict" generally has a negative image (Daniels et Walker, 2001); one who thinks of conflict, thinks of struggle, violence or even war, which is indeed often called "armed conflict". Many elements contribute to such a negative image. Lewicki and his colleagues (1997) identified eight of them: 1) conflicts involve competitive processes where the actors perceive that only one of them can win; 2) stereotypes and biases undermined the actors' discourse; 3) actors are subject to emotions (notably anger and frustration); 4) communication decreases between actors who do not share the same vision of the issue; 5) this issue can even become blurred because of other aspects that have nothing to do with it at first sight; 6) as the conflict evolves, positions become polarized and actors refuse to modify these position by fear of losing face; 7) when a conflict reach such a threshold, involved actors tend to maximize their differences and minimize the similarities in their discourse, which negatively affects the possibilities of finding a way out of the conflict, and 8) the conflict's escalation results in the actors putting always more pressure on their adversaries in hope that this will be the final step toward victory.

Many authors in the last decades studied the concept of conflict, but they defined it differently (Daniels et Walker, 2001), as shown in Table 1.1. Some elements are found in more than one definition: the opposition (illustrated by the keywords: struggle, incompatibility, interference, tension, and competition), the actors' interdependency, the importance of the situation's perception by these actors, the necessity to communicate (illustrated by the keywords: negotiation, cooperation, and interaction), and the notion of the resources' scarcity. These concepts are important and will be used in the definition of environmental conflict.

Table 1.1
Definitions of conflict (Inspired by Daniels et Walker, 2001, p. 29)

Authors	Definition	Keywords
Coser (1956)	Social conflict is a struggle between opponents over values and claims to scarce status, power, and resources.	Struggle Opposition Scarcity
Schelling (1960)	Conflicts that are strategic are essentially bargaining situations in which the ability of one participant to gain his ends is dependent on the choices or decisions that the other participant will make.	Strategy Negotiation Dependence Choice
Deutsch (1973)	A conflict exists whenever incompatible activities occur... one party is interfering, disrupting, obstructing, or in some other way making another party's actions less effective.	Incompatibility Interference Effectiveness
Wall (1985)	Conflict is a process in which two or more parties attempt to frustrate the other's goal attainment... the factors underlying conflict are threefold: interdependence, differences in goals, and differences in perceptions.	Goal Interdependence Perception
Pruitt and Rubin (1986)	Conflict means perceived divergence of interest, or a belief that the parties' current aspirations cannot be achieved simultaneously.	Perception Interest Aspiration Belief
Conrad (1990)	Conflicts are communicative interactions among people who are interdependent and who perceive that their interests are incompatible, inconsistent, or in tension.	Perception Communication Interdependence Tension
Tjosvold and van de Vliert (1994)	Conflict – incompatible activities – occurs within cooperative as well as competitive contexts... conflict parties can hold cooperative or competitive goals.	Goal Incompatibility Cooperation Competition
Folger *et al.* (1997)	Conflict is the interaction of interdependent people who perceive incompatible goals and interference from each other in achieving those goals.	Perception Interaction Interdependence Incompatibility
Wilmot and Hocker (2001)	Conflict is an expressed struggle between at least two interdependent parties who perceive incompatible goals, scarce resources, and interference from others in achieving their goals.	Struggle Interdependence Perception Scarcity

The environmental conflict, on its part, comes out of situations that have or may have impact on the environment (Blackburn et Bruce, 1995), which means an "effect, during a given time and in a defined space, of a human activity on a component of

the environment understood in a broad sense (i.e., including physical and human aspects)" (André *et al.*, 1999, p. 22). This impact can be denunciated when it already occurred or feared when the activity is still at the stage of project. In these cases, the implementation of the development project worries some actors directly or indirectly concerned. The development project generally involves the construction of infrastructures, by contrast to a project that would be more immaterial (even though the latter can also bring about environmental conflicts, for instance in the case of the establishment of conversation area where no or few human activities are allowed). Environmental conflicts can also happen because of uncertainties related to the risks or the assessment of the risks that a development project may create (Daniels et Walker, 2001; Kraft et Clary, 1991).

Beauchamp (1997) described six characteristics of environmental conflicts that make them complex: 1) they emerge because of issues that are not well defined and are difficult to isolate; 2) they involve many actors with various interests; 3) these actors call upon common interest, which is but a blurred notion, subject to discussion, 4) they go further than the sole technical dimension and embraced symbolic representations, such as principles and values; 5) they evolve outside the usual timeframe; 6) they involve a desire to control the uncertainties. Environmental conflicts are also territory conflicts because the involved actors struggle for the land and its different uses, but also because the notion of landscape is to be taken into account (Dziedzicki, 2006).

Literature on environmental conflicts (especially the one of intractable conflicts that will be presented hereafter) presents important similarities with the one on sociotechnical controversies (Callon, Lascoumes et Barthe, 2001; Latour, 1999). McDonald (2007) proposed a hybrid model composed of the two research currents. In general, for a controversy to occur, people who reflect on the issue must disagree and there should be at least two diverging points of view on the object of the controversy (McDonald, 2008). Moreover, the actors must do more than simply express their opinion, they have to argue and defend their position (McDonald, 2008). Sociotechnical controversies more specifically have four characteristics:

1) they concern our future in a world that is innovating at the scientific and technical level; 2) they involve many actors that have different expertise on the issue; 3) they are embedded in different disciplines because they bring up heterogeneous issues, and (4) they involve many objects or scientific and technical artefacts (McDonald, 2008). Furthermore, for Callon, Lascoumes and Barthe (2001), sociotechnical controversies are opportunities to enrich democracy because they force the rethinking of controversial development projects and allow collective learning (p. 49).

If environmental conflicts are complex, their resolution is just as complex. A whole research field has emerged in the last decades to analyse and facilitate the resolution of environmental conflicts (Blackburn et Bruce, 1995; Daniels et Walker, 2001; Depoe, Delicath et Aepli Elsenbeer, 2004; Lewicki, Saunders et Minton, 1997; Lewicki, Gray et Elliott, 2003; Simard *et al.*, 2006).

For instance, Burgess and Burgess (1995) and Lewicki and his colleagues (2003) studied what they call intractable conflicts, i.e., conflicts that seem to have no end and for which every attempt to solve the issue has failed (Putnam et Wondolleck, 2003). These conflicts oppose groups with diverging beliefs with regard to the relation between society and the natural environment (Burgess et Burgess, 1995) or groups that have different representations of what constitute a quality environment (Daniels et Walker, 2001). Intractable conflicts are characterized by 1) important divide between actors; 2) strong intensity in the interactions, notably an emotional intensity; 3) invasion of the issues in the actors' social and private life; and 4) an important complexity that can lead to the difficult to find appropriate discussion spheres to debate about the issues. The impossibility to manage these conflicts can find its source in 1) the actors themselves (because of diverging ideologies or senses of belonging, for instance); 2) the issues (such as moral or religious values, or again threat to health or to human security), or 3) the social system that is unable to provide an appropriate structure to solve the conflict (Putnam et Wondolleck, 2003).

Despite the fact that the expression "environmental conflict" was preferred to name the situation that is the background of this study, its definition integrates elements

from the literature on conflicts in general, on environmental conflicts particularly, on intractable conflicts, and on sociotechnical controversies. Inspired by the authors cited until now, the following definition of environmental conflict was used in the analysis:

> An environmental conflict happens when an action that has or may have an impact on the environment raises opposition between at least two interdependent parties that have incompatible visions of the environment and of the development of a given territory. These parties attempt to reach their goals or to prevent the others to reach theirs, in an environmental, social, political, and economic context where some resources are scarce and where uncertainties remain about the risks to the environmental and to health or about the assessment or the management of these risks.

1.2 Social divide caused by environmental conflicts

Despite their centrality, social impacts are often still overlooked in environmental impact assessment studies; the impacts of a project on the biophysical environmental are usually well-documented, and when necessary and applicable, mitigation measures are planned. However, the social impacts of a given development project, i.e., the impacts on the human environment where the project will be located, are rarely taken into account (Becker, 2001; Burdge et Vanclay, 1996; Vanclay, 2003).

Trusting social relationships between the different actors involved in a development project (including members of the community where a development is planned) are beneficial for all and are conducive to reaching consensus instead of division in the community; they can prevent deterioration of the social fabric (Walker *et al.*, 2010). However, in environmental conflicts, relationships are not always harmonious. The public struggles can leave social impacts in concerned communities that may last over time. As a matter of fact, when opposition emerges, communities can become divided, with the project therefore modifying the social structure of the community,

either only superficially or more deeply (Graham, Stephenson et Smith, 2009; Gross, 2007; Walker *et al.*, 2010). However, when a development project brings changes to the day-to-day interactions between people or to the wellbeing of people in a community, for instance, that should already be considered as social impacts (Vanclay, 2003).

Modifications to the social structure of a community may have impacts on its social cohesion – understood, in its most basic form, as what helps relationships to hold together –, and this, in different ways (Forrest et Kearns, 2001; Friedkin, 2004; Hulse et Stone, 2007; James, 1987). For instance, these structural changes can have an impact on the services and mutual help present in the community. In the literature, the latter are usually associated to social capital, which is an element of the more global concept of social cohesion (Adler et Kwon, 2002; Brehm et Rahn, 1997; Coleman, 1988; Forrest et Kearns, 2001; Kawachi et Kennedy, 1997; Putnam, 1995; Woolcock, 1998). According to some authors, these modifications to the social structure may even have an impact on the health of community members, which is indeed increasingly acknowledged in the public health literature (Kawachi et Kennedy, 1997; Poortinga, 2006; Szreter et Woolcock, 2004; Veenstra *et al.*, 2005; Ziersch *et al.*, 2005).

Social cohesion and social capital are signs of the overall wellbeing of a community. They are community resources that actors relay on when taking action (Floress, Stalker Prokopy et Broussard Allred, 2011; Lin, 2001). If social cohesion is indicative of a healthy community, it should be customary to take actions in order to prevent its deterioration or to restore it when facing conflict, even though a certain amount of conflict is normal (Brewer, 2001; Carver, Scheier et Weintraub, 1989; Lazarus et Folkman, 1984; Moser, 2009).

1.3 Information and public participation

Early environmental movements aimed at allowing people to have access to information about their environment or the risks they were exposed to (Cox, 2006; Maisonneuve, 2005; Simard *et al.*, 2006; Walker, 2007). At the core of environmental conflicts, information (or the lack thereof) therefore plays a central role. Without information, the public sees its ability to participate in the negotiation surrounding a development project highly weakened (Krupar et Krupar, 1989; Senecah, 2004). Nevertheless, according to many laws or multilateral agreements, citizens need to have access easily to a minimum of information related to their environment (Banas, 2010).

Uncertainties in regard with some development projects, and this at different levels, increase the fears of opponents, often in a context where information is deficient (Dziedzicki, 2006). The public, sometimes, in spite of its efforts, is confused and divided (Krupar et Krupar, 1989). Environmental issues indeed create an increasing need to know (Senecah, 2004). This need for information seems to be infinite; the more someone worries about an issue that may have impacts on health and the environment, the more likely he or she will never be satisfied – the information gathered only generating more questions (Baden, 2007). Thus begins an insatiable and demanding quest for information. This is the ongoing process of sensemaking (Weick, 1995).

Besides, people sometimes have the reflex to group together (Lyrette, 2003; Proulx et Sauvé, 2007; Teo, 2008; Tindall, 2002). This desire for association may be the result of a need to know, a need for information on the development project that concerns them (Lascoumes, 1994). This information is necessary for the negotiation process of which they want to be part. It is not unusual that these groups develop a certain expertise on the issues of the conflicts because people informed themselves, despite the fact that the issue is complex and new (Lascoumes, 1994; Petts, 1997; Proulx et Sauvé, 2007). Sometimes, some opponents to a given development project are better informed about its impacts on the environment and on health than the

representatives who will have to vote for or against the project (Petts, 1997). In addition, scientists are not perceived as the sole experts, since citizens can also become legitimate sources of information and perceive risks differently than experts do (Aitken, 2009; Dervin, 1994; Endres, 2009; Fischer, 2000; Frewer *et al.*, 2003; Kinsella, 2004; Kraft et Clary, 1991; Petts, 1997; Plough et Krimsky, 1987).

A first step in public participation is therefore information and awareness; transparency is perceived as a prerequisite for participation (Beauchamp, 1997). Unfortunately, some private developers are famous for carrying out poor public consultation processes (Devine-Wright, 2005). Many developers indeed keep using centralized communication approaches, among which the widespread "Decide-Announce-Defend" approach. Such an approach, known as DAD, does not include the population (or includes it just minimally) in the planning of a development project and brings the risk of raising opposition from the public directly concerned by the project (Hendry, 2004; Marchetti, 2005). Some believe that these developers, by doing so, harm the whole of their industrial sector (Jegen, 2008).

In these cases, the perception of a lack of transparency adds on to the idea of a lack of information. Some citizens will thus have the impression that decision-makers, developers, and interest groups are withholding information, are controlling what is said about a development project with the hope of maintaining as long as possible a part of the population potentially disagreeing with the project. However, providing information is not everything; a developer should not submerge the public with crude data, but instead give it the mean to better understand the situation (Laird, 1993). In the same way, to inform does not mean to inform about an already taken decision (Blanc, 2006), but more to inform about a development project in order to get engaged later on in negotiation about this same project.

For the population's inclusion, the earlier the better; the upstream of a development project becomes thus especially important (Ogrizek, 1993). Some developers, like Hydro-Québec in Québec (Gauthier, Simard et Waaub, 2000; Simard, 2006), already understood this well. These developers opt for negotiation with key players, whose agreement (or at least neutrality) early in the planning of the project is essential to

facilitate the rest of the process (Fourniau, 2006; Jegen, 2008). The population in general is obviously not part of these key players. However, when the population is confronted to a well advanced project on which there are only few possibilities of having influence, it is more difficult to establish this trusting relationship necessary to the social acceptability of a development project (Blanc, 2006; Jegen, 2008). Even if the developers try at this stage to inform the population, they may already have, in the public's eyes, raised mistrust (Jegen, 2008) or worst, made a conflict happened (Audhui, 2006; Krupar et Krupar, 1989). As a matter a fact, the number of authors – outside of those already cited – who insist on the importance of involving the concerned citizens in the planning process of a development project (especially a wind farm) as early as possible is increasing (Aitken, 2010c; 2010b; Aitken, McDonald et Strachan, 2008; Wolsink, 2007).

Furthermore, despite the complaint of a lack of information, the population has often access to a great deal of data (governmental reports, impact assessment studies, websites, reports in the media, etc.), sometimes more than people could ever assimilate. Despite this overabundance of data, citizens manage to make sense (Weick, 1995) from this information, at least enough to take position at a certain stage of the process. If controversy is intense, this stage occurs often before the official information and consultation process, such as the one of the Bureau d'audiences publiques sur l'environnement presented hereafter, in which people get involved with an already firm opinion (Beauchamp, 1997; Bourg et Boy, 2005). At first sight, it could seem surprising to take position before being informed. Hence, the reason behind this decision may lie somewhere else than in the access to information.

1.4 The BAPE, democratic tool for managing the environment

Thanks to a credibility and a reputation that it builds through the years, the Bureau d'audiences publiques en environnement du Québec (or BAPE) was used and is still used as a model for many states who want to find a democratic tool for the management of environmental issues by including in the debate, as much as possible, the concerned actors (Simard *et al.*, 2006).

In 1978, because of a modification to the *Loi sur la qualité de l'environnement, Québec* put in place this democratic body to manage environmental conflicts. By doing so, the government of Québec made a statement about the importance of informing and allowing the public to participation in the debate about environmental issues (Baril, 2006). The BAPE's mission is to "enlighten government decision-making in a sustainable development perspective, which encompasses biophysical, social and economic aspects" (BAPE, 2012). It is a compulsory process, strictly managed by the Ministry of Sustainable Development, Environment and Parks (Ministère du Développement durable, de l'Environnement et des Parcs, MDDEP), for every planned project that may have impacts on the environment.

According to Michel Yergeau, Vice-president of the BAPE between 1979 and 1984, "the BAPE was created for the public. It has no other fundamental objective than to inform the public on a given project and to listen to what the public has to say about it afterwards" (Simard *et al.*, 200635). The BAPE is an independent consultative body composed of seven members, appointed by the MDDEP minister. These members are commissioners. The BAPE can be mandated to investigate, and sometimes also to mediate (see Figure 1.1)

Figure 1.1 also shows that the process unfolds in two phases observed by a commission created to assess the project and its impacts. The first phase is one of information sharing, where the developer presents the details of its project and where citizens and organizations are invited to ask questions. The second phase is one of consultation, where citizens and organizations are invited to express publicly their thoughts about the project in the form of a brief. The public hearings process

ends when the commission submits its report to the MDDEP. The BAPE is an advisory instance and has no power of decision: it provides advice and recommendations to the government with regard to the project it was commissioned to assess. The final decision with regard to the project belongs to the Minister of MDDEP.

Despite its reputation, the BAPE also faces critics. The developers who see their projects submitted to the BAPE's assessment often consider that the organisation gives too much importance to the study of the projects relevance instead of looking at the sole environmental impacts of the project (Simard *et al.*, 2006). Others would like to see the BAPE abolished because the economic impact of projects is not taken into account enough (Boisvert, 2006). However, the BAPE sometimes also receives criticism from some environmentalist groups who believe that its credibility is affected by some decisions it has made in the past on controversial cases (Normandin, 2007, p. 6).

Some critics even come from the first members of the BAPE. For instance, André Beauchamp, who was President of the BAPE from 1983 to 1987, wrote about the "quasi-judicial procedure" of the BAPE that it "provokes the polarization of the parties" (Beauchamp, 1997, p. 31). Experts and former members of the BAPE signed an open letter in 2010, published in a Québec's newspaper, in which they stated that the Commission created to assess the impact of the shale gas exploitation in Québec was the final test for the BAPE's independence from the government (Baril *et al.*, 2010). The BAPE seems to have succeeded, since the report released in February 2011 – which recommended that more studies about the impact of the shale gas industry be conducted and that, during this strategic environmental assessment, a moratorium in the development of this sector be declared (BAPE, 2011a) – generated essentially positive comments and reactions (Radio-Canada, 2011).

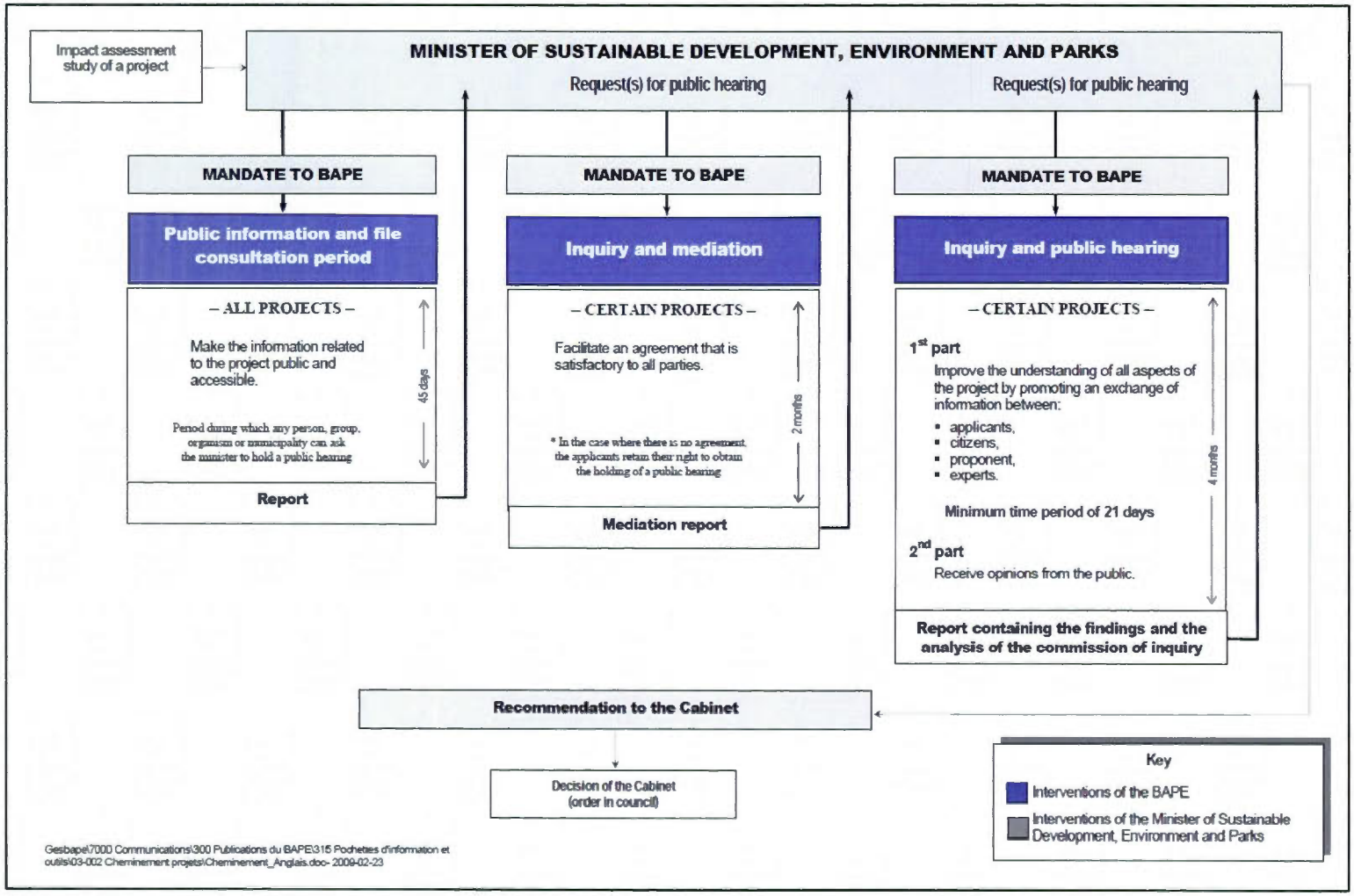

Figure 1.1 – The process that a given project undergoes through the BAPE (BAPE, 2012)

Besides, many authors criticized the (too) late inclusion of the public in the environmental assessment process (Baril, 2006; Gauthier, 1998; Gauthier, Simard et Waaub, 2000; Simard *et al.*, 2006).

> Local communities should be informed and consulted as soon as the project's planning begins in order to know the public interest, to identify the major issues, the different options, to collect initial information that the public possesses, and to agree on which information still need to be found by the different impact studies (Baril, 2006, p. 86)

Baril (2006) calls thus for an early inclusion of the public in the planning of a project because "an a posteriori consultation process will raise mistrust, reluctance, and polarization of the opinions" (p. 86). Such a phenomenon of polarization in a public participation process does not occur only at the BAPE; it has also been observed elsewhere, notably in the United Kingdom (Aitken, McDonald et Strachan, 2008; Bell, Gray et Haggett, 2005).

A lack of information contributes to deepen the polarization in a conflict since it sometimes brings hostility from a part of the public keen to know more about the issues (Ogrizek, 1993; Sharlin, 1987). Such a lack of information can also be a cause of unfairness, iniquities, interest conflict, and social divide (Bouchard, 2007a), but also of a disengagement of some individuals in the population. According to Ruest (2007), the citizens' engagement will be strongly influenced by the information they have access to. Hence, for this author, to make sure that people have access to sufficient and quality information is to make sure that more people will take part in the public hearings processes.

Furthermore, Baril (2006) is very critical of the availability of the documentation that is necessary for the public to understand and evaluate a proposed development project, notably the impact studies. To make his point, this author provides examples of projects that were submitted to public consultation while their plans were not even final; in these cases, citizens had to express themselves from documentation, among others the impact studies, that presented incomplete or subject to changes data. Since, at the BAPE, the whole consultation process is the result of the information

presented during the first phase of public hearings, it is especially important that this information be as much representative as possible of the proposed project.

Baril (2006) also denunciates the really short period of time (in this case, 45 days) planned in the law for the public availability of the documentation in regard with a proposed development project. During this short period of time, and with this documentation that includes everything that is relevant to the environmental impact assessment of a project, a local authority, a public organism or citizens can ask for public hearings. However, some of this documentation may count up to 3000 pages of information, sometimes highly technical and complex.

The information phase, the first of the two phases of the public hearings process of the BAPE (the second one is the public consultation), is the "most productive" phase, despite the perception of the participants, who often cannot wait to express themselves on the proposed project (Beauchamp, 2006, p. 41). The information phase, because of the questions asked to the experts, constitutes "the core of the investigation made by the Commission" (Beauchamp, 2006, p. 42). According to this author, it is during this phase that a power transfer between the involved actors can happen. This stage of information, that many observers consider crucial because of its potential for knowledge distribution, and thus of power balance (Beauchamp, 2006), is still however relatively unexplored by scholars. Indeed, in the literature many studies can be found on mediation and negotiation of environmental conflicts, but few scholars have researched the prerequisite stage of every public participation process, namely the information phase (Beauchamp, 1997; Simard *et al.*, 2006).

1.5 Environmental conflicts related to wind energy in Québec

In Québec, and particularly since the 1990s, great infrastructure projects are frequently at the source of conflicts, especially in the energy sector (Simard, 2006). Conflicts related to wind farms or debates provoked by the development of the wind energy sector do not only occur in Québec, they are also present elsewhere in the world, for example in:

- the United States of America (Abbott, 2010; Punch, James et Pabst, 2010);
- the Netherlands (Agterbosch, Glasbergen et Vermeulen, 2007; Bolin *et al.*, 2011; Breukers et Wolsink, 2007; Wolsink, 2001);
- Sweden (Bolin *et al.*, 2011; Khan, 2003; Pedersen, 2007);
- France (Jobert, Laborgne et Mimler, 2007; Le Floch, 2012);
- Germany (Breukers et Wolsink, 2007; Jobert, Laborgne et Mimler, 2007);
- Australia (Gross, 2007);
- New-Zealand (Graham, Stephenson et Smith, 2009; Shepherd *et al.*, 2011)
- the United Kingdom (Aitken, 2009; 2010d; 2010a; Aitken, McDonald et Strachan, 2008; Bell, Gray et Haggett, 2005; Breukers et Wolsink, 2007; Ellis, Barry et Robinson, 2007; Riddington *et al.*, 2010; Toke, 2005; van der Horst et Toke, 2010; Walker et Devine-Wright, 2008; Walker *et al.*, 2010; Warren et McFadyen, 2010).

In Québec, these conflicts are relatively new, essentially because the province started to develop more intensively this energy sector in the last decade only (Jegen, 2008; Québec, 2006; Saucier *et al.*, 2009; Thériault, Chaumel et Feurtey, 2007).

The first wind farm in Québec, *Le Nordais*, was implemented in 1998, in the town of Cap-Chat: it comprised 76 wind turbines of 750 kW each (Hydro-Québec, 2012a). In the following year, the wind farm was completed with the addition of 57 other wind turbines of the same power in the town of Matane. This initiative, planned by a group

of private developers, at the time aimed, essentially at revitalizing the economy of the administrative regions of Gaspésie-Iles-de-la-Madeleine and Bas-Saint-Laurent, in Eastern Québec. These two regions rely mainly on natural resources and were highly impacted by the economic crises in the fisheries, agricultural, mining, and forests sectors (Saucier *et al.*, 2009; Thériault, Chaumel et Feurtey, 2007).

At that time, the wind farm *Le Nordais* provoked a certain opposition, as shown by the 73 briefs presented during the public hearings of the BAPE (BAPE, 1997). However, according to Lyrette (2003), the opponents quite possibly defended their position in isolation, without grouping themselves together, and consequently did not have strength in numbers.

The state-owned company Hydro-Québec refused for a long period of time to develop the wind energy sector, arguing that the resource was not reliable enough and that Québec did not have the expertise at the national level, (McDonald, 2008), and this despite the knowledge of a high potential for wind resource in the province (Hélimax Énergie et Truewind, 2005). Finally, the wind energy sector was launched by two consecutive calls for offers from Hydro-Québec; one in 2003 for a 1000 MW of wind power only for the regions of Gaspésie-Iles-de-la-Madeleine and Bas-Saint-Laurent, and the other in 2005 for a 2000 MW of wind power, but this time for the whole province of Québec (Hydro-Québec, 2012a).

Seven wind farms from the first call for offers are now operating since 2011. From the 15 wind farm projects that were selected in the second call for offers, three are located in Bas-Saint-Laurent, three in the region of Capitale-Nationale, three in Chaudière-Appalaches, two in Gaspésie, two in Montérégie, one in Saguenay and Charlevoix, and one in Centre-du-Québec (Hydro-Québec, 2012b). One after the other, they all went through the BAPE process. Some did not have to undergo public hearings (because there was no request in that sense from anybody) and only one of them, in Montérégie, received an unfavourable decree from Québec's government. The wind farm de l'Erable (Centre-du-Québec) is the one which raised the most interest in terms of participation to the consultation process, with a record of 248 briefs submitted to the BAPE during the public hearings that were held in the fall of

2009 (BAPE, 2010a). Despite an intense controversy in the concerned community (BAPE, 2010a; Québec, 2011b), the project received the necessary favorable decree from the government that meant the authorisation to go ahead. At the time of submitting this thesis, the project is under construction. The opponents to the wind farm are still active, but they withdrew in the last months from the mediation process put into place to reconcile the different actors involved, because they considered that the most impacted citizens are not listened to and are not taken into account (RDDA, 2012).

The wind farm projects are an answer to the need of reducing the greenhouse gases, but they can also be conflicting with other environmental issues such as land-use and land management, conservation, agriculture, etc. (Abbott, 2010). When they do, they enter the public sphere and bring sometimes intense struggles between the supporters of and the opponents to this form of energy.

Generally speaking, opponents to wind farms denunciate different types of impacts:

- Environmental impacts (Bouchard, 2007b; Graham, Stephenson et Smith, 2009; Québec, 2007);
- Social impacts, most notably conflicts (Agterbosch, Glasbergen et Vermeulen, 2007; Aitken, 2009; 2010c; Bouchard, 2007a; Devine-Wright, 2005; Ellis, Barry et Robinson, 2007; Feurtey, 2008; Gariépy, 2006; Graham, Stephenson et Smith, 2009; Gross, 2007; Krohn et Damborg, 1999; Lyrette, 2003; Saucier *et al.*, 2009; Thériault, Chaumel et Feurtey, 2007; Wolsink, 2007);
- Impacts on human health and quality of life, especially because of the particular noise produced by wind turbines (Abbott, 2010; Académie nationale de médecine, 2006; AFSSET, 2008; Aitken, 2009; Bolin *et al.*, 2011; Cass, Walker et Devine-Wright, 2010; Hanning, 2012; INSPQ, 2009; Janssen *et al.*, 2011; Keith, Michaud et Bly, 2008; Knopper et Ollson, 2011; Pedersen, 2007; 2009; Pedersen et Persson Waye, 2004; 2006; 2007; Pedersen et Larsman, 2008; Pedersen et Persson Waye, 2008; Pedersen,

Hallberg et Persson Waye, 2007; Pedersen *et al.*, 2009; Persson Waye et Öhrström, 2002; Pierpont, 2009; Punch, James et Pabst, 2010; Shepherd *et al.*, 2011; van den Berg, 2005; van den Berg *et al.*, 2008; Verheijen *et al.*, 2011; Wolsink, 2007);

- Impacts on wildlife, especially bats and birds (Abbott, 2010; Côté, 2006; Exo, Hüppop et Garthe, 2003; Hüppop *et al.*, 2006; Johnson *et al.*, 2003; Kunz *et al.*, 2007; Kuvlesky Jr *et al.*, 2007; Masden *et al.*, 2009);
- Impacts on landscapes (Abbott, 2010; Bouchard, 2007a; CMSQ, 2006; Lyrette, 2003; Nadaï et van der Horst, 2010; Pasqualetti, 2000; 2011; Riddington *et al.*, 2010; Thériault, Chaumel et Feurtey, 2007; van der Horst et Toke, 2010);
- Economic impacts, such as loss in value of the houses in the vicinity of a wind farm or iniquities between the different actors involved (Abbott, 2010; Aitken, 2010d; Brannstrom, Jepson et Persons, 2011; Cass, Walker et Devine-Wright, 2010; Cowell, Bristow et Munday, 2011; Graham, Stephenson et Smith, 2009; Hoen *et al.*, 2009; Sims, Dent et Oskrochi, 2008).

Despite the assumption – that has never been accurately measured – that public support to renewable energies is high, many development projects around the world (especially wind farms) are facing unexpected opposition given that support is presumed to be high (Aitken, 2010c; Krohn et Damborg, 1999; Smith et Klick, 2007; Wolsink, 2001). The perception that social acceptance is something that needs to be managed by developers along the different planning phases of a project is still widespread (Jobert, Laborgne et Mimler, 2007). The solution to overcome opposition is often top-down approaches of public information or education (Aitken, 2010c; Kraft et Clary, 1991; Wolsink, 2007). More drastically, some developers and decision-makers only consider this opposition as NIMBYism (where NIMBY stands for Not In My Backyard). This is a way of delegitimizing the opposition's discourse and excluding it from the debate (Bernoux, 1990), even though NIMBYism is more a place-protective action strongly related to social identity and to ways of coping (Devine-Wright, 2009; Kraft et Clary, 1991). The NIMBY model related to wind

energy has been deconstructed in scientific literature; many authors indeed proposed that other factors (for instance, institutional trust) may have greater influence on opposition than proximity to the wind turbines (Bell, Gray et Haggett, 2005; Devine-Wright, 2005; Smith et Klick, 2007; Wolsink, 2001; 2007).

Moreover, in Quebec, the way wind farms are developed – in partnership with the private sector, and not by the state-owned company Hydro-Québec – is also denunciated (Bouchard, 2007a) or seriously questioned (Jegen, 2008). With the objective of favoring a greater social acceptability of these projects, different observers of the wind energy sector, among which the BAPE, insist on the importance of including citizens early and all along the planning process of a wind farm, especially if it is planned in an inhabited environment (BAPE, 2010b; 2010a; Feurtey, 2008; Jegen, 2008; Saucier *et al.*, 2009).

Many groups emerged to denunciate the wind farms projects that are flourishing in several countries; for example, a European group, which states that it counts 523 associations in 23 European countries (European Platform Against Windfarms[16], an American group (Wind Watch[17]), an Ontarian group (Ontario Wind Resistance[18]), and some Quebecer groups – often local – (Éole-Prudence[19], le Regroupement pour le développement durable des Appalaches[20], and Terre citoyenne[21]). The majority of these groups have among their first objectives to diffuse the "real" information or the "facts" about what they call the industrial wind energy development. Once again, it shows the importance of information in this kind of conflicts.

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[16] European Platform Against Windfarms, http://www.epaw.org/, site consulté le 15 mars 2012.
[17] Wind Watch, http://www.wind-watch.org/, site consulté le 15 mars 2012.
[18] Ontario Wind Resistance, http://ontario-wind-resistance.org/, site consulté le 15 mars 2012.
[19] Éole-Prudence, http://www.eoleprudence.org/, site consulté le 15 mars 2012.
[20] Regroupement pour le développement durable des Appalaches, http://www.rdda.ca/, site consulté le 15 mars 2012.
[21] Terre citoyenne, http://www.terrecitoyenne.qc.ca/, site consulté le 15 mars 2012.

1.6 General research objectives

As it was presented until now, environmental conflicts are the topic of many and various studies. However, they are rarely studied from the inside, from the point of view of those involved and concerned (for an exception, see Teo, 2008). This study aimed neither at understanding the reasons of the conflict or the arguments of the involved actors, nor at looking for a solution for the negotiation or mediation of the conflict. Rather, this study aimed at better understanding some specific elements of the unfolding of an environmental conflict, and this, from the point of view of the involved actors on the field. To do so, this study explored, through a case study and mixed methods, (1) the way information was diffused in a conflict and how people used it; (2) the role of trust in the diffusion of information and in the cohesion of opposition in a conflict, and (3) the social divide in a community affected by a conflict and how the involved actors give and receive social support.

1.7 Research questions

The three themes of our thesis (information, trust, and social cohesion) are highly intertwined and only an intent for organisation led to distinguishing them in three series of questions.

The initial motivation behind this study was to better understand the role of information in environmental conflicts. It is with this interest in mind that we first put the foot in the field in summer 2009. Initially, recruitment activities for the study were undertaken among opponents to the wind farm of this case study. Without opposition, there would have been no conflict and thus, no object of study. While discussing in an informal way with some of them about their sources of information, we noticed that many took for granted that information had been withheld from them, but nevertheless that they knew enough to be against the project. Such a paradox

aroused our curiosity and invited us to dig deeper into the issue of information in times of conflicts.

Information plays a central role in environmental conflicts, and those related to the development of wind energy are no exceptions to the rule. In Québec, despite the existence of the BAPE as a space for information and dialogue, the argument of a lack of information is still used by many citizens. The timing of information – the moment at which people have access to the relevant information – is central (Aitken, 2010b; Daniels et Walker, 2001; Depoe, Delicath et Aepli Elsenbeer, 2004; Gariépy, 1997; Simard *et al.*, 2006).

Despite our knowledge of the role of information in environmental conflict, there is still a need to understand how the process of information diffusion concretely unfolds in these situations. Poor communication strategies are prevalent in the planning of renewable energies, but few scholars have looked at the way they were concretely done (Wolsink, 2007). The promotional strategies chosen by a developer to inform a community affect the pace of diffusion and the emergence of resistance (Aitken, 2010c; Graham, Stephenson et Smith, 2009; Wolsink, 2007).

These issues are explored in this thesis through the following three questions:

- Who is informed of the wind farm project?
- When are these people informed?
- What impact does information have on the build-up of the conflict?

The perceived legitimacy of information is highly related to the perceived trustworthiness of the source (Fox et Irwin, 1998; Huijts, Midden et Meijnders, 2007; Newell et Swan, 2000; Senecah, 2004; Slovic, 1999). An actor will more likely trust people perceived as being similar to him or her (Lewicki, Saunders et Minton, 1997). Relationships carrying information and trust are central in environmental conflict and in risks assessment (Daniels et Walker, 2001; Depoe, Delicath et Aepli Elsenbeer, 2004; Kraft et Clary, 1991; Lewicki, Saunders et Minton, 1997).

Lack of trust in decision-makers and developers is often observable in communities concerned by a development project, especially if the latter provokes an opposition (Aitken, 2010c; Ellis, Barry et Robinson, 2007; Huijts, Midden et Meijnders, 2007; Kraft et Clary, 1991; Priest, Bonfadelli et Rusanen, 2003).

The relations of trust or distrust between actors involved in an environmental conflict are explored in this thesis through the following three questions:

- To whom do people turn to get information about the wind farm project?
- Who do they not trust to provide relevant information about the wind farm project?
- What impact do trust and distrust have on the unfolding of the conflict?

Besides, from the first interactions with the opponents, we noticed that the issue of social division was coming frequently in their discourse. Because we firmly believe in the necessity of socially-grounded science, that is, science that takes into account the concerns of citizens, we jumped on the opportunity of exploring this issue as well. The question of modifications to the social structure allowed us to keep on studying what is conveyed – besides information – in relationships that linked (or that did not link anymore) the actors involved in this conflict.

When opposition emerges, people can take position in favour or against the project, which may create division within the community (Graham, Stephenson et Smith, 2009; Gross, 2007; Walker *et al.*, 2010) leading to modifications in its social structure. For instance, a lack of information and the need for social support can be instigators for mobilization. On the basis of information- and support-seeking behaviors, some groups are created: those who are in favor of the project and those who are opponents to the project. This new network provoked by the coming of the wind farm modifies social cohesion in the concerned communities. These modifications may have important impacts, among others because of a lack of (or because of an inappropriate) social support in the community (Kawachi et Kennedy,

1997; Poortinga, 2006; Szreter et Woolcock, 2004; Veenstra *et al.*, 2005; Ziersch *et al.*, 2005). From this poor social support may result maladaptive coping strategies used by the people facing a stress (Skinner *et al.*, 2003).

These issues are explored in this thesis through the following three questions:

- How did the wind farm project modify the social structure of the concerned community?
- How can social support-seeking be observed in these modifications to the social structure?
- Are these modifications for the concerned community a benefit or a high price to pay?

Along the research process, the integrative line of argument that ties the different pieces of this thesis emerged as that of social relationship, and not only that of information that was at first consider. Social relationship can convey information, trust, and social support, but it can also convey neither of them. These rich questions are explored in further details in the three results and discussion chapters.

1.8 Social and scientific relevance of the study

The idea behind this thesis is to open the way for a greater reflection on the role of information and trust in environmental conflicts, as well as on the social impacts of a wind farm project on the concerned communities. This study aims at better understanding the different information strategies and their impacts on the population; the different information-seeking behaviours used by the concerned actors; the diffusion of trust and distrust among these people; the different changes brought to the social structure of a community facing a conflict; the impacts of these

changes on the availability of and search for social support in a conflict; and finally, the different coping strategies used by the concerned actors.

In fact, we have with this study the objective of going further than the understanding of how environmental conflicts unfold and how the public responds to these controversial development projects. These issues and concerns first need to be analysed and understood in order to eventually find solutions. Addressing these questions in such a manner would be more constructive on the long-term than simply searching ways to overcome negative public responses to these controversial development projects (Aitken, 2010c; 2010b; Aitken, McDonald et Strachan, 2008; Devine-Wright, 2005; Ellis, Barry et Robinson, 2007). Despite the fact that they are still largely misunderstood or misinterpreted, public responses to renewable energy projects such as wind farms induce assumptions that then shape public policies and practices in that domain (Aitken, 2010c). Therefore, it seems to us even more important to better understand these issues.

This study aims at exploring and better understanding a situation that literature identified as crucial in public participation process: the role of information, highly related to trust. Actors involved in an environmental conflict will benefit from the better understanding of these issues, just as they will benefit from the study of the social impacts of controversial development projects. This is of great relevance for them and could also be useful, for instance, for members of the BAPE or public health authorities who both have to assess the impacts of environmental conflicts before submitting their recommendations to decision-makers. These organisations indeed already expressed a strong enthusiasm regarding the present study.

Moreover, the reality of social divide caused by environmental conflicts was often acknowledged by the concerned actors or reported by external observers such as the media or organisations in charge of impact assessment or of the monitoring of development project (like the BAPE). However, such a social divide has rarely been assessed, which is done in this thesis. By doing so, we contribute in an important way to the literature on the assessment of social impacts, a recent research field that

sees its relevance increasing at the same pace that conflicts emerge in relation to development projects that have impacts on the environment and on health.

Finally, behind the initial interest of this study, there are citizens, armed only with their convictions, who get involved in struggles where means are unequally distributed. It is the presence of such citizens that justified this study: without the opponents' group, the study's context as well as its relevance would have disappeared. If this study is not useful – concretely and directly – for the citizens involved in it, it will surely be so for other groups that will get involved in similar fights in the upcoming years.

ANNEXE D

CONCLUSION (ENGLISH VERSION)

This section intends to offer a broader vision of the study results and their implications. We therefore provide a closer look at the main themes and a more integrative analysis in order to further our understanding of the issues presented in this thesis. At the end, limits of the research, emerging research paths that would be worth greater attention, as well as practical suggestions for actors involved in environmental conflicts are also presented.

1. Information: power and homophily

In the conflict presented here, information was abundantly diffused through informal channels, notably because it was minimally diffused by official channels. In the interpersonal networks, diffusion was led by homophily, especially for opponents, some of whose decided rather late (in 2009) to raise awareness in their community.

For a long period of time, information related to the upcoming wind farm project was unknown; it was therefore not coveted since it is difficult – even impossible – to covet something one does not know the existence of. According to theories linking power and information, the actor who possessed the initial information (in this case, the upcoming wind farm in the region) had consequently no power on those who ignored

the existence of this information they did not covet. Yet, in reality, this study showed that the actor who possessed the initial information effectively had power because it was free to act for many years during which nobody intervened with the intention of stopping of modifying the project. Hence, what was coveted in this case was not so much information, but the land, as it was shown in Chapter IV. Information was not really a basis for power, rather a tool to exercise power. Power of information is thus still relational, and this, even if the information-as-a-resource is not in itself coveted. This represents in fact a change in the status of information – from a basis of power to a tool to exercise it– and because of that, as long as the population ignored the existence of the initial information and did not covet it, public participation could not happen.

Once this initial information was known, some citizens were eager for information and acted accordingly to diffuse this initial information in their interpersonal networks during the last phase studied (which took place in 2009). However, obviously worried about the wind farm project, these citizens did not only inform their relatives and acquaintances of the upcoming project, they most probably spread – together with the initial information – the idea that this information had been withheld from the population for a long time. Hence, some members of the community learned at the same time that a wind farm project was coming in their region and that it had been for a long time withheld from them. This last piece of information – the secrecy and exclusion surrounding the project – probably appeared plausible since many of them did indeed ignore the existence of the wind farm. Already, the seed of suspicion was sown. More people, were then eager for information, but they already expressed important mistrust toward planners (developers and representatives, especially) that had withheld from them such an important information. Since a great number of participants had as a primary source of information opponents to the project (already displaying this opinion), the position of this primary source may have, for many participants, influenced the sense made from this initial information, and most probably, the sense made out of the following information provided by different sources.

On this topic, the study presented here raises an interesting question about the link between the position taken by an individual and the one of the primary source. In this case study, interviews revealed that the position taken by participants tended to be similar to that of their primary source. Homophily can explain this phenomenon in two ways: the first one is when an individual is influenced by the primary source, and this, especially if this source inspires trust or, on the contrary, distrust; the second one is when information can be diffused by the primary source toward individuals who the source perceives as sharing beliefs and values, and not toward individuals who the source perceives as holding dissimilar values. The two situations might also occur at the same time. Furthermore, if the initial information is diffused along with the information that someone is withholding information, and thus is untrustworthy, the message may contribute to cohesiveness between people who now perceive they have an enemy in common that represents a threat to their environment. Hence, a minimum of homophily could thus be sufficient to strongly increase this homophily. This thesis did not have as an objective to show which one of these situations had the more influence in this conflict since they all seem to have played an important role in the emergence of an opposition to the wind farm project, in the great trust that the opponents expressed toward members of their group, and in the great cohesion that unified them. This research path is left unsettled for the moment, but is worth to be explored in itself, by studying more deeply the question of trust toward the primary source, but also the moment when an individual takes position in regard to such a project in its environment and the way he or she does so.

2. Slow but targeted diffusion, and late opposition

Despite the fact that, the wind farm project from this case study received all the necessary authorisations to proceed, the strategy of not diffusing information is still risky. It can clearly arouse an intense opposition, such as what occurred in the present case, even if a late diffusion of information delayed this opposition.

Moreover, such a strategy can instigate opposition and create more cohesiveness among opponents since it feeds the perception of the existence of an "external enemy", of adversaries that are untrustworthy because they withheld information.

For instance, in the year that followed the fieldwork of this study, the province of Québec was the scene of two other wind farm projects that faced really different destiny. These projects were geographically separated by only twenty kilometers or so and were planned in similar human environment. However, one of them was abandoned when the government of Québec did not give the decree for its authorisation because of the high social unacceptability of the project (BAPE, 2011c), while the other wind farm faced practically no opposition (BAPE, 2011b) and was consequently authorised by a decree from Québec. In the latter case, the developer made a significant effort to diffuse information, an effort even acknowledged by the BAPE, with notably a great number of public information sessions, more than in the great majority of wind farms projects developed in Québec in the last years. These information and consultation events may not have, all by themselves, made the difference in the way the proposed project was considered, but they certainly had a positive effect.

Back to the wind farm project in this case study, the absence of reaction from the concerned population did not constitute a sign of social acceptability, especially as the existence of the project was not or only minimally diffused. On the contrary, the absence of public reaction (population unorganised or not showing clear signs of opposition) might mean that more personal coping strategies, such as denial or avoidance, are at work, which also contributes to limit the diffusion of information in regard to the project. For the few people informed, the project may already be perceived as a source of stress.

Ideally, in order to eventually favor a greater social acceptability of the project, the privileged relationship that some supporters had with actors in powerful position should be extended to a greater number of individuals. This privileged relationship could then take various forms. Indeed, since it is not the information in itself that contributes to trust toward the source of information, but more the relationship with

this source, a privileged relationship with a greater number of actors may contribute to reduce polarization, especially if this privileged relationship has an inclusive goal, and is not only maintained with the objective of keeping silent a disturbing group of opponents. Early in the planning process, the first opponents who tried to bring important changes to the wind farm project, regarding the location of some wind turbines, among others, did not perceive this necessary openness from the developer. This relationship, despite an early access to the developer and decision-makers, had a negative impact on the trust they granted these actors: instead of calming their fears, the relationship rather served as a basis for the lack of trust that happened afterwards.

The inclusion of a great number of actors must obviously be made carefully. Indeed, such an inclusion does not necessarily mean to make the whole population participate in every steps of the planning process, but certainly to include earlier the interested or concerned population in the project development, and thus to open a dialogue. Such a model would be closer to the collaborative approaches and the dialogue models put forward by many scholars.

3. A slow, but intense reaction

Many people concerned by the wind farm project went from a state of ignorance of the project (or a certain indifference in regard to the project) to a state of intense opposition, and this, in a really short period of time, that is between spring or summer 2009 - moment when they learned the existence of the project – and fall 2009 – moment of the public hearings of the BAPE. These people were slow to react because, as it was said many times, they were not informed of the project. However, once informed, the reaction of many of them was really intense; they went almost instantly into an alert mode in order to defend their environment. What justified the sudden difference between these two states? Did the official entrance of the

opponents' group in the debate contribute to this fast increase in the alert level of the population? The opponents certainly occupied a discussion space in the public sphere that was left empty by the developer and the decision-makers. Before the entrance of the opponents' group, there were simply no public discussions about the wind farm. The group, first through informal channels, then rapidly through public channels (website, flyers, demonstrations, information session, participation to local authorities' meeting), brought the topic – and the debate – in the public sphere.

There were essentially two groups in this debate: one offered only very scarce information about the wind farm, and the other, strongly against the project, submerged the public space with information decrying the wind farm. Between the two, several people among the participants held on more to the message of the latter group, especially if they could identify themselves with the anecdotes that portrayed some individuals as victims of and others as being responsible for the situation.

Besides, the lack of information many times denunciated at the BAPE or during the local authorities' assembly may seem paradoxical when it is compared to the low information-seeking activity of a great number of participants, even if it concurs with observations in the scientific literature. This may mean that the lack of information is information in itself, a social construction that can be summarized as "we were not informed." This reified information spread between opponents who, because of the high trust they express toward other members of their groups, took it for granted. Consequently, they adopted the position of strong opposition that comes with this construction. Indeed, how can one accept a project from which one believes having been voluntarily excluded?

4. Value of the source

In the conflict, to fulfill their need for information, people did not necessarily try to know where the most relevant information could be, they rather turned themselves to those they trusted. Consequently, participants did not necessarily look out for the "best" information, rather for the one that was perceived as the most reliable. *De facto*, information coming from the most reliable source (often the one that was familiar or similar to them) became the best information, and sometimes the only one valid. This perception was also fed by the fact that, along with information related to the project, other information regarding the lack of reliability of the adversaries was also diffused in social networks, and this, on both sides.

Given the abundance of anecdotes, but also the great number of opponents who had few sources and especially little diversity in these sources, it might be that, more than information about the project itself, it is information about the reliability of the involved actors that spread in the networks. Several participants did not seem to have sought more information about the wind farm once their mind was made up. The project was either perceived as disastrous or extraordinary, depending on the side taken. What seemed to be of greater interest for many participants was information about the actions of everyone: Who said what? Who made what to whom? These anecdotes, which often depicted one group as the victim of the other group, spread abundantly in the interpersonal networks to the point that some were reported during the interviews by people that were not involved in or even concerned by the anecdotes. Hence, the social divide and the perceived unfairness that it created – more than the wind farm itself – was for some at the very basis of their position in regard to the wind farm or was used to reinforce this position. Indeed, from all the information that was spreading among opponents, one of the most important for many was apparently not the one about the nature and details of the wind farm project, but more the one about the actions of the different involved actors, notably those in position of power, such as the developer and the decision-makers.

This finding highlights once again the importance of taking into account the social impacts of such conflicts, and this, early in the planning process. Not only is social divide a consequence of the conflict, but it also feeds it by contributing to the polarization. In the social system concerned by the wind farm project, it could be considered a feedback loop that contributed to the escalation of the environmental conflict.

5. Precious resource: the relationship

Social relationships are essential for the individuals; they carry information, trust, but also social support. Social relationships are however particularly fragile, since they can be deteriorated or broken when the two people in a relationship hold different opinion. It is therefore a precious resource – in some cases fortunately renewable! – of which great care should be taken.

In this conflict, social relationships were the place where happened many discussions on the wind farm project, but even more so on the different involved actors because of an unusual search for social support. There was indeed in the community an important need to discuss about these issues, at first to raise awareness, but also in order to gain social support from other citizens, especially for opponents. On the contrary, there was also an important need for a break about the wind farm project, observed in many public places or private events where the topic was taboo. Hence, this silence aimed at protecting the relationships or the places where social support can normally be found, like in the church or in the different social activities occurring in a small rural community.

The conflict provoked the deterioration of many relationships, including the deterioration of strong ties, while it also induced the creation of new relationships. The latter, however, may possibly not easily replace the deteriorated relationships (especially in the case of long-lasting friendships or familial relationships), but most importantly, these new relationships are linking in majority people holding the same

position, which contributes to deepen the gap between opponents to and supporters of the wind farm project.

Since social support stands in relationships, changes to social relationships have impact on the social support available in a network, which emphasizes once again the relevance of well understanding and assessing these changes. In this conflict, one part of the social support was not where it used to be found (because of deteriorated relationships or of the topic being taboo), but one new part of the social support emerged with the new relationships that were created because of the wind farm project. This movement of social support might have had positive impacts, but it could also have added to the vulnerability of a community facing stress, since social support is a resource that belongs to the community and not to the individuals. This study contributed to show the centrality of social support for a community under conflict, but because of the study design, the exploration of the social support between participants was not complete. Further researches deepening this issue appear to be necessary to understand the need and offer of social support in a conflict like the one studied.

Furthermore, to minimize the impacts of the social divide, community members, both publicly and in their personal life, turned to different coping strategies, and this is especially influenced by the social support available. The participants coping strategies were numerous and various, but also sometimes maladaptive. To assess the social impacts, we should not only analyze whether people are able to cope, but also how they cope, especially if some ways of coping carry more risk for the wellbeing of individuals. Time scale has to be taken into account as well, since some coping strategies considered as negative but used only for a short period of time will not have the same impacts than those used for a longer time. In a conflict with such intensity as the one studied, some coping strategies are simply not available to the actors, notably the most positive ones such as problem-solving and negotiation. It is thus more probable that the potentially maladaptive strategies are most used, and this, to the detriment of the health of individuals and, by extension, of the community, since social support resources are therefore impacted.

Turning to maladaptive coping strategies is generally due to a lack of social support or to inappropriate social support, as it was shown. It can however also be the result of the powerlessness of some actors in the planning process of the wind farm. Hence, when a social structure is modified and the usual social support is disturbed, the risk of turning to negative coping strategies may be higher. In the same way, when the capability to influence of some people is limited, the risks to turn to maladaptive coping strategies are also higher. While participants to this study showed indeed a great need of social support and support-seeking activities, the social structure that previously linked them had changed. Some participants turned to behaviours such as interpersonal hostility, complaint, blaming, rumination, denial, and cognitive avoidance. The use of these options of coping was favored by the exclusion of some actors from the planning process. The support-seeking activities that resulted also from the powerlessness of some actors to influence the planning process seem to have fed these behaviours, especially those that occur through social relationships. Once again, this might be signs of feedback loop. One of those loops would be turning to maladaptive coping strategies in some cases associated to inappropriate social support, which in return feeds coping strategies that are maladaptive, even potentially risky for the wellbeing of community members. Another feedback loop would unfold in the following way: some people, who feel powerless and unable to influence the decisions regarding the project, oppose the project, and in reaction to this opposition, actors in position of power exclude these people even more from the planning process.

One of the major findings of this study was how the use of social networks analysis (SNA) allows us to show the social divide in a community facing an environmental conflict. It is therefore a tool to remember for social impact assessment, and this, even if several questions remain unanswered on the concrete way to lead such an assessment upstream of a development project. Indeed, this study allowed to assess the divide already observed during the public hearings of the BAPE – but it was nevertheless assessed before the implementation of the wind farm; it is therefore a good tool to assess *a posteriori* the social impacts of the conflict. However, for SNA to become a tool to prevent conflicts from occurring, some measurement of social

cohesion of a community should be done before the deterioration of social relationships, and could then be used as a milestone of the preliminary situation. This measurement does not imply that we necessarily expect some relationships to be deteriorated, rather that we acknowledge that this risk exists. The best way to perform such an analysis does not seem obvious, because to see the divide, social relationships have to be already deteriorated, but to prevent the divide, actions must be taken before this deterioration. Furthermore, this type of analysis requires that limits be put to the network, otherwise the network will soon count all of the Earth's inhabitants! In this study, limits were inspired by the involvement of different actors in the public hearings process of the BAPE. In order to act upstream, the BAPE constitutes most probably not the ideal entry door since many people decried its late intervention in the development of a project.

SNA could, for example, become a tool to assess social divide in order to fix compensations for the population socially impacted by a development project. However, this objective could bring up a falsely maintained social divide with the hope of seeing a project fail or gaining greater compensations. Has this study not just fallen into the trap? In other words, has this study played the game of the opponents by assessing social cohesion? Despite the sample being composed of a majority of opponents, we believed we succeeded in avoiding this bias; indeed, the choice to symmetrize the relationships matrices to the minimum value (in every case but one) allowed drawing a reliable portrait of the divide, even if it could be judged conservative given that a matrix symmetrized to the minimum value provides more severe analysis.

Finally, social relationships influence the diffusion of information, the sense made out of the information, the trust showed toward the source of information, the use of coping strategies when facing stress, and the availability of social support. All these elements together affected the social structure of the concerned community, the social resources available in the community, including support and mutual help, and the wellbeing of community members.

6. Limits of the research

Just like every study, this thesis had some limits. The first one, which is also probably the most important one, is related to sampling: the study population from which came our sample was a result of the participation to the information and consultation process of the BAPE. Indeed, this organisation is the one to deal with for anyone who is interested in the question of information in environmental conflicts in Québec. However, starting thusly from the BAPE resulted in our study population and sample containing much more opponents than supporters. Moreover, many opponents were making themselves very visible publicly (through demonstrations or interventions during public events, for instance), which allowed the researcher to more easily identify them. An important number of opponents took part in the research process with enthusiasm because they saw in it an opportunity to expose what they were going through. On the other hand, the researcher had to deal with the refusal to take part to the research of several supporters of the project (from the study population), even though we believe that a greater number of supporters in our sample could have enriched the collected data. However, as we already mentioned, we believe that we managed to circumvent this limit in different ways, among others by symmetrizing all network matrices (except one) during the analysis of the changes to the social structure.

We do not think that this imbalance between opponents and supporters in the sample has hindered the study, but it was definitely a limit to it that must not be neglected, because it speaks about the public participation of the BAPE, that was in this case the opponents' forum. Some will say that it is one of its flaws, since the BAPE gives too much importance to the opinion of what some consider a minority of people. By contrast, others could see in the BAPE the ultimate democratic safeguard, where representatives (elected or not) and developers are publicly imputable for their decisions and actions while facing a concerned population that needs to know. In this context, supporters of a project need a body such as the

BAPE less than the opponents, which could explain why they are less numerous taking part and expressing their opinion into it.

Another limit to the study lies in the moment when data was collected, i.e., in the time period that followed the public hearings of the BAPE. Hence, when participants were invited to talk about their relationships with other people in the study population, their answers were strongly influenced by the already well-established conflict. Data were thus collected in a very specific moment of the conflict (when tensions were especially high), but it is impossible to know if the results would be the same today. Readers are invited to keep in mind that these results depicted one of the most-tensed moment of the conflict.

7. Research paths to be explored

A research process is never entirely complete; often, findings bring up new questions. Since the doctoral venture still needs to be brought to an end, others will have to take over and explore these new research questions. We nevertheless consider important to write down some research ideas that emerged during the field observation, from the analyses or the findings, or simply because of our insatiable curiosity. Some of these ideas were already mentioned in the previous chapters or in the conclusion, but others are new. They are here gathered in a synthetized way with the only goal of leaving some trace of these ideas.

First, a question that emerged during the study and that remains unanswered today is: how do people take position when they are facing a new project in their environment? When exactly do they make up their mind in regard to a given project? Since an important proportion of them seem to be ready to make up their mind without apparently needing more information on the project, what makes them adopt a position? Is it a piece of information in particular? Is it the position adopted by others? Obviously, many people manage to make sense out of this position *a posteriori*, somehow succeeding in rationalizing their opinion. Hence, there are

reasons that motivate this opinion. However, new information concerning the project does not seem to have the influence we generally attribute to it. Moreover, people often seem to be guided by the position they adopted in their search for information, meaning finally that opinion comes before information. This affirmation is not mundane. Indeed, it would mean that a good information campaign and a transparent process – even though these would still need to be defined according to the context in which they take place – may have no effect on the position of a part of the population. The latter will be more influenced by trust and homophily than by information. Could this be where the duality of information, as object and as construction, takes all its sense? Data collected for this study do not allow exploration of these large questions, which would be worth a research process of their own probably more grounded in the field of psychology than this study could have ever been.

Second, it would be relevant to explore how to methodologically tie together the study of coping strategies, of social support, and of social cohesion in the context of environmental conflicts that cause social divide. We indeed showed that these elements were highly intertwined, that they influenced each other, but how to push this analysis further? From a technical point of view, sociometric questionnaires are especially time-consuming, such as would be a good questionnaire aimed at rigorously identifying the coping strategies put forward by concerned individuals. A participant that would accept to undergo such a research process would thus have to be ready to give a lot of his or her time, but also to be ready for a quite serious introspection. The data collected in such a study would however be particularly relevant. In this case study, the use of various coping strategies was observed during fieldwork and was confirmed during data analysis. We nevertheless regret that questions concerning coping strategies were not included in our interview grid. It is even more regrettable that the use of different coping strategies is directly influenced by social support in a community, which is itself influenced by social networks.

Third, social network analysis (SNA) revealed itself to be an especially relevant tool to analyse the social impact of a development project. It allowed to innovate by assessing the importance of the social divide. However, to actually use SNA as an analysis tool – maybe even a prevention or management tool for social impacts – many questions still need to be answered: is there a best time to perform SNA? What type of relationships should be analysed to accurately assess the social impacts; only the ones that carry social support or other types as well? Furthermore, is SNA only a tool that can be used only *a posteriori*, i.e., when social division is already established? If the answer to this last question is positive, then it is important to think of a way the tool can be used upstream, by developing and testing different ways to do so. One solution could be to map the community, thus borrowing knowledge from the earth sciences, to identify not the individuals, but the groups that could be vulnerable to a new project. It is highly probable that, by trying to act upstream, SNA would be more macro and would concentrate more on groups, on stakeholders, rather than on individuals themselves.

Fourth, and this is, according to us, the most important question that this thesis leaves unanswered: how did the relationships in the concerned community evolve since the interviews and how will they evolve in the future? A longitudinal study would allow understanding the social impacts of social division in the long term. In practical terms, is it possible to do a longitudinal study on a conflict without feeding resentment and thus, social division? In the same way, what are the ethical implications of such a study? We believe that researchers must not neglect the social impacts of their own study process, especially when these impacts are themselves the focus of the research! Nevertheless, now that the results of this study have been presented to many participants, theirs reactions give us insights to judge the relevance of a longitudinal study. Indeed, several people expressed an intense desire for this study to keep going on, to the great surprise of the researcher herself! These people said that the relationships evolved a lot since 2010 and that the new social structure was already different than the one revealed by this study. For instance, during the public meeting where results were diffused, some said they were now experiencing more solitude because they were tired of repeating again

and again the same stories and feelings with neighbours and friends. According to them, the immediate solution was to renounce these meetings to avoid the topic, creating isolation in return. This would be a new step in the social structure's evolution that was absolutely not observed during the interviews, since people had then created a fair amount of new relationships, as well as had intensified many existing ones. Of course, such an invitation to pursue the study has to be taken seriously, especially because it is a request formulated by members of the concerned community. However, this invitation also brings new questions, for instance, on the study population to be targeted, on the way to recruit participants, on the preparation of interview grids, etc., but also on the social implications of this second of research. We have to admit that it is nevertheless a very appealing scientific challenge.

Finally, the last question that could have been explored in this thesis is related to the role of women in an environmental conflict such as the one studied here. Is their role different than the one of men? For instance, we saw that many men were among the most-cited sources of information by participants, but no women. Why were women less considered as sources of information? Also, observation allowed reporting that, in 2009-2010, practically no women played the role of leader in the conflict, and this, in the developer's team, among the elected representatives, and among citizens. Does it mean that no women among all the ones that were involved in the conflict (although they were numerous in the study population) had the competences, the will or just the possibility to play such a role? A participant suggested that women may have stayed behind because they are the ones who hold relationships together and maintain social fabric, far from the public struggles. Could that be it? However, several opponents reported on the contrary that the women's involvement in the opposition movement corresponded to the radicalization of the position on both sides. Could we interpret this, then, too mean that women are more radical than men in conflicts? Some comments heard during the interviews – said by participants, but also by members of their family present in the room and who were attending the interview – might go in that direction. Hence, the question is still intact: do women contribute to the radicalization of the positions or are they, on the contrary, the ones

that maintain social fabric? A more semantic analysis would be worth it in this context. The discourse of everyone – men and women – would be especially rich to explore. However, these questions may probably be far from the immediate interests and concerns of the people involved in such a conflict, although this does not mean that the answers are not relevant to better understand conflicts. Therefore, the researcher would have to seriously reflect on the way to address these issues in a context such as the one studied here.

8. Practical suggestions

With a concern for clarity, the different practical suggestions presented along the thesis are grouped here. The majority of these suggestions were already presented in the document, but some of them were purposely kept obscured in order not to override the scientific content. Therefore, this section has the objective of insisting on some practical conclusion that can be drawn from this study. We consider that these ideas are parts of a whole and consequently, that they concern every stakeholder of the wind sector, from the population to the highest authorities, as well as the industry. Nevertheless, the suggestions are organized according to the type of actors mainly concerned, in the following order: the developers, the local and regional authorities, the citizens themselves, Québec's government, and finally, the agencies (the BAPE and public health agencies, among others) in charge of environmental impact assessments of development project.

Firstly, wind developers can conclude from this study that the desire to control information is a risky strategy, notably because it can lead to important opposition. Indeed, if the developer of a project such as the one presented in this thesis needs to control information to a certain extent, especially in the first phases of its project, it is essentially because the developer is only one player in a highly competitive market. In Québec, this situation seems to be amplified by the choice of developing

the wind sector via calls for offers made by Hydro-Québec. This way of doing puts different actors of the industry in strong competition with each other and on really short delays in order to keep only the best projects. In the second call for offers of 2000 megawatts launched by Hydro-Québec and from which comes the wind farm project presented here, the state-owned company received proposals for wind farms that would have produced all together 8000 megawatts. This means that many proposed projects never became reality. Therefore, it may appear normal to a developer not to diffuse information about its project too early in the process, because this project is for many years only an idea on drawing boards. In our case study, prospection, negotiation, and project development undertaken between 2004 and 2008 could have never led to the project as it is constructed these days, because the project could very well not have been selected by Hydro-Québec. Therefore, this desire to control information – although it seems partially justified on business grounds – is a strategy whose impacts are unpredictable. Here, the fact that the venue of the project was for a long time not revealed to the population fed opposition later on, but also the perception that the developer was untrustworthy. Anyway, once the opponents' group seized the news, it spread in informal networks, becoming therefore especially hard to control by the developer, notably. Finally, between a developer that stayed silent and opponents that shouted, a part of the population heard more the opponents' shouts. Moreover, in doing so, the opponents gave a voice to the developer, but this voice was probably not the one it would have given itself if it had been more active in diffusing its version of the story.

Furthermore, before the first wind farms appeared on Québec's territory, these projects were – and still are for some – relatively unknown. Many people know the technology, but can hardly figure out what a wind farm can look like in a given environment. In such a context, maps and visual simulation of wind turbines have quite a special importance. For some, it is when they saw sufficiently precise maps showing the wind turbines, or when they saw photos and videos of wind turbines already implemented elsewhere, that they suddenly made their mind, in favor or against the wind farm. These images, which were parts of what we called information-objects in this thesis, are thus essential to launch the sensemaking

process. Besides, these people might be open to the idea of implementing wind turbines on a given territory, but not everywhere. For instance, they might want to preserve some specific landscapes, habitats or attractions of a region by preventing the installation of wind turbines in very specific places. Some regions along the Saint-Lawrence River have done just that and forbidden wind turbines between the river and the road 132 that follows the river, because this road is famous for the exceptional viewpoints it offers. In order to make important decisions about the territory, developers need to make available for the concerned actors the different necessary maps and images, and this, as early as possible in the developing process of the project. Of course, this has to be done while taking into account the different environmental, economic, strategic, – and so on –, constraints that developers have to face. In fact, this way of doing could contribute to the elaboration of improved projects, because they would be developed in partnership with different actors of the concerned region.

Also, top-down models that exclude some people from the decision process of projects carry risks for the developers. As we already presented it, collaborative approaches, where there is a true willingness to inform, consult, and include all stakeholders, reduce the risks of opposition. We need however to be clear; they do not completely eliminate these risks. It would be utopian to believe it. Nevertheless, in many cases, inclusive approaches proved to be successful in terms of dialogue with stakeholders and acceptability of projects. Moreover, according to several observers of environmental conflicts, from academia or from the world of consultancy, developers could benefit much from collaborative approaches, at least much more than they might believe. Indeed, opposition such as the one described in this thesis, but also observed elsewhere in the world, induces delays in the development of projects and therefore, it brings costs. On top of that, it can contribute in spreading a negative image of a developer or even of the whole industry. Delays, costs, negative image are generally not among the objectives of a developer, regardless of its sector. Therefore, including the population (or at least the most involved actors) early in the development process of a project may represent benefits at the end of the line for a developer that may possibly face less

opposition, especially if it has in parallel developed dialogue mechanisms in case of unplanned events or problems.

Besides, it appears to be essential that local and regional authorities draw from this thesis the conclusion that they have to play a proactive role in the diffusion of information. The wind farm presented in this document was not an idea of the local actors; it rather felt from the sky in their backyard. Indeed, no representative (elected or not) solicited the wind prospectors in order to interest them in their region for the development of wind energy. On the contrary, they rather were approached by the developers, from which they remained dependent for informing the population. Initiatives to inform the population, in public information sessions or through written documents specifically dedicated to the wind farm, were unfortunately insufficient. Did the local and regional authorities even have the answers to the questions, increasingly numerous, coming from some citizens? Still today, it is hard to judge if the authorities had in their possession the information some citizens were claiming access to and if they voluntarily omitted to diffuse them or if they were not able, for diverse reasons, to diffuse information. It seems that representatives were rapidly overwhelmed by the events, by the size of the wind farm that was under planning in their territory and by the conflict that it created in their communities. Be that as it may, the tremendous responsibilities that fell on the shoulders of the local and regional authorities because of the wind farm project would have been worth for them to look for external means to properly manage such a situation if they did not have the necessary internal resources to deal with it. Even more so, there are reasons to question the role of the government in the development of the wind sector in Québec since several new responsibilities with important consequences were then in the backyard of local and regional authorities. Hence, they might not have had the resources to manage efficiently these responsibilities.

Also, it is important to underline here the responsibility of citizens to stay informed of what is going on in their community. To do so, attending local authorities meetings and paying attention to local news and public advices (which, admittedly, would definitely need to be made more accessible and palatable to those who are not

versed in the writing of municipal regulation!) would be a preliminary step. Actually, the idea is inviting people to pay more attention to decisions that concern them. For some, it may sound obvious, but staying up-to-date on public affairs requires time and efforts, and it is too often an activity that we sacrifice to the whirlwind of everyday life. Problems appear when these public affairs catch up with us. However, others believe that the people they have elected to represent them will necessarily act toward the collective interest and for the greater good. The great majority of representatives probably do. But collective interest and greater good are invoked by every side in an environmental conflict, meaning that these notions are elastic, and some people's perception of the collective interest is not always the same as that of others. Therefore, the case study reported in this document reminds citizens that they would benefit from showing some vigilance toward the actions of some people representing the population. Far from wishing to promote a witch-hunt, this suggestion relies on the observation that, too often, a great part of the population is not interested in public affairs and even shows apathy toward it. When a conflict arises, the awakening is only more brutal.

Furthermore, there is a need to repeat the paradoxical situation already presented about the double role that plays Québec's government in the development of the wind sector. Indeed, this government gave strong support to this energy sector by launching three important calls for offers over a few years, which really created a boom in the industry. Governmental support to the principle of wind energy and desire of a fast and considerable development of the sector are thus clear. However, at the end of the public consultation process of the BAPE, the government is the final judge of every single project selected by Hydro-Québec. This duality puts the government in the awkward position of promoting this energy while making the final decision on projects. Is it an impartial judge, since it already claimed loudly and strongly its support to the global idea? Therefore, a part of the opponents' arguments questioning the strategic choices made by Québec in developing the wind sector (be it the timing of this development, its necessity, but also its control by private actors in a sector of activities that is generally perceived as a state monopoly) did not necessarily find an understanding ear from the government. Indeed, bowing to these

arguments could have been interpreted as an acknowledgement of the inappropriateness of some political choices. This conclusion of the dual role of the State does not contribute only in making any opposition to wind energy difficult, but it also puts a lot of pressure on every public consultation structure such as the BAPE. These structures therefore become forums dominated by critics and opponents instead of eliciting social participation. In this case study, the BAPE was indeed the last democratic bulwark for the opponents to the project, which transformed this forum in their ultimate opportunity to be heard, to the detriment of a more inclusive and maybe more fruitful debate. The impact on the public consultation tool that is the BAPE must not be neglected because it leads to erosion in trust people may have toward this institution. Moreover, if, as in the case presented here, the government's final decision was for a long time coming and was at the end favorable to the project, the lack of institutional trust may unfortunately become generalised to many people. This conclusion was also made in the United Kingdom in the case of controversial wind farms. Québec is therefore not an exception and consequently this dual role of the government in the development of this sector, and the impacts it has on the public consultation processes, must be taken seriously.

Finally, the last two practical suggestions that we would like to put forward in this thesis are probably the two most important. They target decision-makers, whatever level they act on, but especially external observers in charge of judging the environmental impact assessment process, such as the BAPE and public health agencies, among others.

The first suggestion is not new. It was indeed repeatedly presented, but since changes are slow to occur, we judge that it should be reiterated in these pages. We thus join our voice to those who are saying that it is essential to include citizens as early as possible in the planning of development project. As time goes by, citizens have less and less possibility to influence the process. Consequently, the potential for intense opposition increases, because citizens see their capacity to modify the project to maybe accommodate a greater number of people considerably decreased.

When the door is shut to compromise, opposition can easily become more intense. By including population upstream, some conflicts might be prevented.

The second suggestion is, for its part, more original. It results from the knowledge acquired in this thesis on the impacts of social division on a community. We call for the integration of social impact assessment in the process of environmental impact assessment in Québec. This suggestion appears to us as even more important since social impacts of a project such as the one reported here may arise as soon as prospection begins, thus from 2004 in this case. Given that environmental impacts, for their part, arise only with the first phases of construction (in 2011 in this case study), a first step would be to acknowledge that social impacts occur before environmental impacts. Most importantly, if, for some reasons, the wind farm would have not happened, there would have been no environmental impact, but there were already social impacts during data collection in 2010. Of course, social impacts would have evolved. They might even have disappeared in some cases. Once again, only longitudinal data could shed light on these possibilities. In this thesis, we proposed an assessment of social division, knowing that this is only one dimension of social impacts. We shall not claim to know the best way to take social impacts of development projects into account. The field is rapidly growing and Québec could be inspired by what is done, to different degrees, elsewhere in the world, especially in countries where social impact assessment is compulsory. To integrate social impact assessment in the process of environmental assessment could allow identifying potential and verified tension zones or conflicts, as well as different communities that are more vulnerable to the proposed project. In sum, we can only plead in favor of a greater consideration of social impacts for every development project, and not only for wind farms.

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