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Advocacy coalitions and wind power development: Insights from Quebec

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ABSTRACT

This article addresses the issue of wind energy acceptance in the Canadian province of Quebec and, in particular, the impact of different models of wind power development on the degree of social acceptance. We show that the dominant advocacy coalition, which favors a hard path energy development in general, enforces a large-scale development of wind energy. Two other coalitions – a soft path coalition and a nationalist coalition – oppose this development, but not wind energy *per se*. We argue that difference in belief systems explains their opposition rather than planning issues or NIMBY concerns. We also contend that, despite its predominance over (wind) energy policy, the hard path coalition is willing to learn and make concessions towards the soft path coalition, but not towards the nationalist coalition.

1. Introduction

Interest in renewable energies is increasing with the threat of climate change and unstable oil and gas prices. Getting more and more competitive, the wind power industry is expanding worldwide. Fierce debates in local communities reveal however that this "green" energy is not universally accepted. Yet, until the 1990s, the actors involved – promoters, political authorities and investors – have disregarded potentials for conflict. Even though opinion polls suggest a high level of wind energy acceptance (e.g., CBS, 2007), consent cannot be taken for granted when one moves from the general level of supporting a renewable technology to the tangible level of investment and site planning. The Canadian province of Quebec, where the media broadly covered the opposition against several wind farm projects, is a good illustration of this tension between overall acceptance and local reluctance.

Wind energy, like other renewable energies, displays specific features that may cause conflicts. First, renewable energy facilities are smaller and more fragmented than conventional power plants, so siting requires that a greater number of decisions be made. Second, because they are generally more decentralized and situated closely to residential areas, the esthetic and environmental impact of these facilities is more direct for residents. Third, renewable energies often face "unfair competition" from well-established technologies because external costs are rarely internalized in the energy sector; acceptance is therefore based on a choice between short-term costs and long-term benefits (Wüstenhagen et al., 2007).

In the Quebec context, there is a fourth issue, namely the question of wind energy nationalization. Hydro-Quebec, the province-owned public utility, showed no interest in developing its own wind power expertise – thus being obliged to buy it from private promoters (Turcotte, 2006) – and is legally required to submit wind power projects to calls for tenders (Quebec, 2001). These circumstances stirred up controversy right from the outset because for some it meant a departure from an electricity nationalization policy that had been in place since the 1960s, while for others, the call for tenders emphasized the sole criterion of profitability.

Scholars from different disciplines have analyzed the issue of wind power acceptance along three main dimensions: environmental concerns, planning processes and territorial development, and public opinion and attitudes. For Wolsink (2007), environmental concerns are the most important issues with regard to wind energy development. British and Irish studies suggest that these concerns are subjective and partly defined by sociological factors such as personal technological knowledge (Sustainable Energy Ireland, 2003), being exposed to specific media coverage (Boyle, 2004), and the opinions of friends and the next of kin (Devine-Wright, 2005). Environmental concerns may also be related to issues of stroboscopic effects, solar reflection on wind blades, and noise. Again, subjectivity seems to influence even noise perception: Pederson and Persson Waye (2004) find that the extent of noise perception is related to people's opinion of the visual impact of wind towers.

The processes of planning and territorial development raise other acceptance issues. Decision processes frequently lack coherence and vary greatly from one region to another (Birnie et al., 1999; Price, 2004). Moreover, developers often look for non-industrialized land with a high esthetic value, which alters the use of land and leads to

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a reshaping of landscapes (Fortin, 2006). Regarding public attitudes and opinion, several studies looked at the "not in my backyard" (NIMBY) phenomenon, trying to explain the difference between universally favorable public opinion and opposition at the local level. These different studies' conclusions, however, do not converge: for some, NIMBY is characteristic of local populations, whereas others warn against the oversimplification of a matter that is much more complex (Bell et al., 2005; Wolsink, 2006). Moreover, public perception can change over time: some studies show that social acceptance of wind energy increases from the stage of planning to the beginning of operation (e.g. Dudleston, 2000; Wolsink, 2007). Simon and Wüstenhagen (2006) find that direct participation of the local population in the decision-making process lowers opposition.

These examples point out that various factors have been analyzed to explain the lack of wind power acceptance. However, one factor has not been studied empirically: the impact of socio-economic models of development on wind power acceptance. This is a potentially important factor because patterns of wind power development changed over time: there is a worldwide trend from small-scale to large-scale wind power facilities as the size of towers and wind farms, the power of wind turbines, and the presence of financially strong actors capable of large capital investments indicate (Szarka, 2007).

Using the example of Quebec, this article addresses the choice among development models as a decisive factor of wind energy acceptance. Borrowing from Lovins' (1977) distinction between soft path and hard path energy development, we distinguish three advocacy coalitions that support different development models: a hard path coalition (HPC), a soft path coalition (SPC), and a nationalist coalition (NC); this latter is built around the Quebec-specific issue of electricity nationalization. This political configuration is a key to understanding social acceptance of wind energy projects. We argue that the ruling HPC, in line with its general hard path energy policy, enforces a large-scale development of wind power. The other two coalitions oppose this development, favoring either a soft path development or a national wind energy policy, but both are marginalized in the decision-making process. We argue that the opposition of these advocacy coalitions can be explained by their belief systems, which differ from the dominant advocacy coalition, rather than by issues of planning, environmental or NIMBY concerns. The belief system of the opposing advocacy coalitions makes clear that the lack of social acceptance for wind farms does not reflect a radical challenge to wind energy *per se*, but expresses their opposition against the specific model of wind development defended by the dominant coalition.

The Advocacy Coalition Framework (ACF), in association with Baumgartner and Jones' (1993) notion of policy monopoly, contributes to understanding why the HPC is able to enforce the apparently least favored model of wind energy development in Quebec. It also helps to explain why, despite its predominance over (wind) energy policy, the HPC is willing to learn and make concessions towards the soft path coalition, but not towards the nationalist coalition.

2. Conceptual and methodological approach

2.1. Models of development and belief systems: hard path vs. soft path

Despite its important potential for wind energy development, it is only after the turn of the millennium that the Quebec government became seriously interested in this renewable resource. In 2004, after public mobilization torpedoed a planned gas-fired power plant, the Liberal government announced that it would launch major wind energy projects across the province as part of its strategy to increase domestic electricity production. But opposition to wind farms also picked up gradually, culminating in heated political debates between 2006 and 2008. Mayors spoke out either in support of or against projects in their municipality. Academics and political leaders filled the media with opinion letters and interviews: between 2003 and 2008, the number of articles devoted to wind energy in the Quebec press went from 3 to 88 a year (Jegen, 2008). Three groups caught the media's attention. In one camp were the government officials, utility managers, business leaders, and large environmental NGO's who supported the development of these projects. In the other camp were loosely organized citizen groups who opposed them. In between, voices were increasingly heard, especially but not exclusively around the main opposition party, the *Parti québécois*, that called for the nationalization of wind energy.

Amory Lovins' typology of socio-economic and technological choices is useful to qualify advocacy coalitions built around different belief systems in Quebec's energy policy sector. In the 1970s, Lovins distinguished two options for energy development: a *hard path* and a *soft path*. The former favors a rapid development of high technology to increase energy supplies, while the latter promotes energy efficiency and renewable energies "matched in scale and in energy quality to end user needs" (Lovins, 1977: 24). The soft path favors a more decentralized approach of supply, and social and economic risks related to technology are lower than the ones related to the hard path. These paths rely not only on different technological choices, but imply also different beliefs about social and political organization. For instance, the soft path contains a vision of sustainable development at the local level, as Baker et al. (1997: 11) summarize:

> Technology that is keeping with natural laws, small in scale, understandable to lay people and workable and maintainable by local resources and labor. This is also closely connected with a belief in community empowerment achieved through generation of community or "grass roots" consciousness, and improvement in environmental quality through co-operative endeavors and local initiatives.

By contrast, the hard path believes first and foremost in cheap "bulk power", that is, in large-scale, centralized and low-cost electricity production. Szarka (2007: 6) notes that

> this option has resulted in a production-oriented culture of output maximization and of driving down costs in a bid for efficiency. Centralized "bulk power" has been based on particular institutional frameworks, typically involving (until the recent past) government intervention and top-down planning often through the medium of nationalized companies.

Nowadays, the hard path grants a more important role to private entrepreneurship than to state interventionism because the liberalization of energy markets altered the role of the state from the 1980s on. Looking at the evolution of wind power development, Szarka (2007: 36) distinguishes three models: the "Danish model", characterized by small-scale capitalism, local ownership, and utilities in the background; the "Spanish model", characterized by large-scale capitalism, national ownership, and utilities in the foreground; and the "international utility model", characterized by large-scale capitalism, international ownership, and utilities as owners of subsidiary wind power firms (e.g. development in France and the UK). In the language adopted here, only the "Danish model" is compatible with Lovins' soft path, while the "Spanish model" and the "international utility model" mirror hard path beliefs.