



# **Community Wind in Quebec and France : Constraints, Opportunities and Development Prospects for Communities**

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# Work plan

## 1. Conceptual framework, overview and methodology

- Conceptual framework and main research questions (concepts of energy policy and social acceptance)
- Overview of wind energy development in Quebec and France
- Methodological approach

## 2. Findings- Institutional barriers

## 3. Findings- Development opportunities

## 4. Conclusion - Prospects

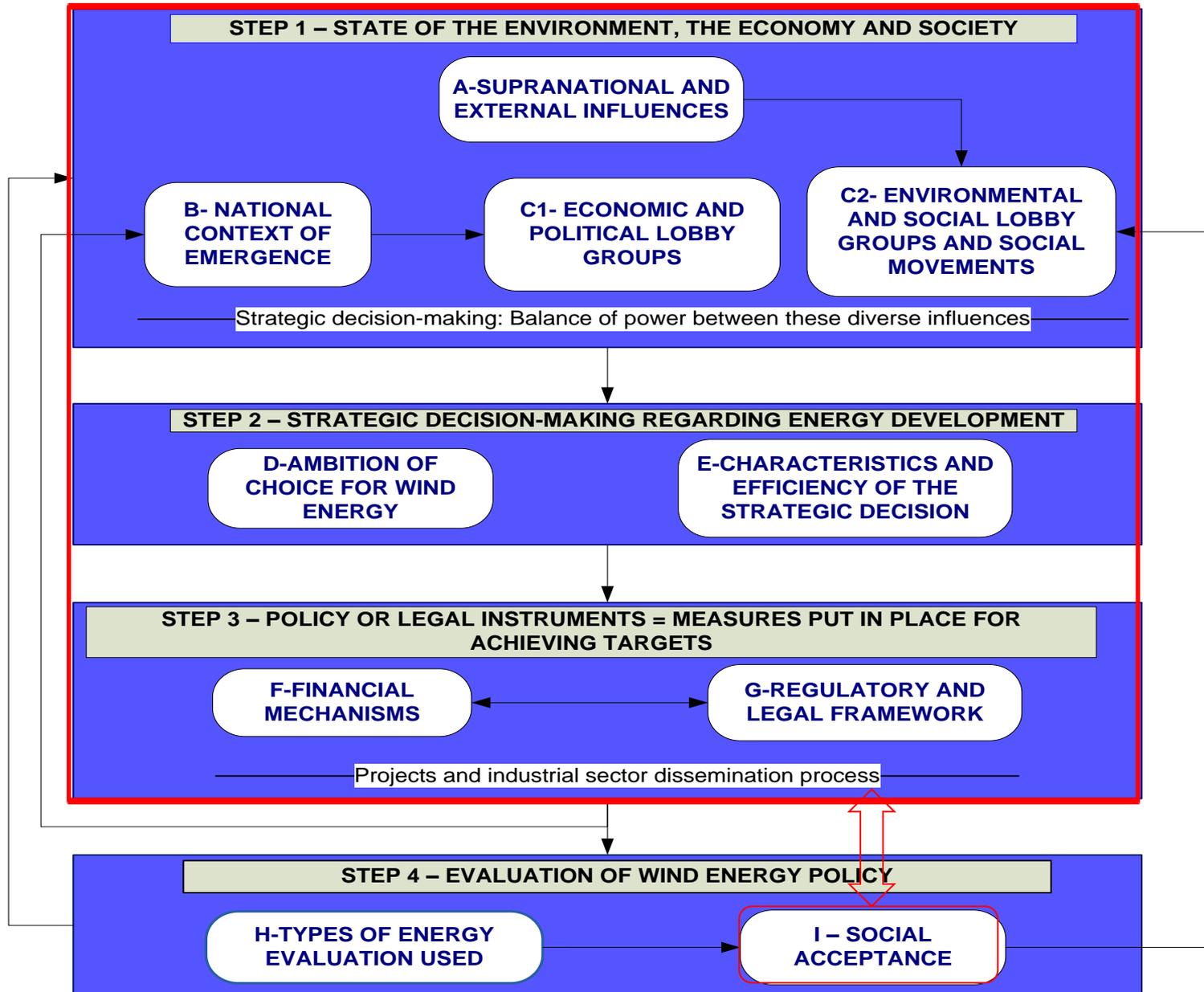


# 1.1) Conceptual framework

- **Assumption and main questions**

- **Assumption** : Opposition to wind energy projects does not depend solely on local factors, but also on institutional determinants.
- **Main questions (MQ)1** : What are the different components involved in the development of a wind energy policy (EP)?
- **MQ2** : What are their interactions with social acceptance (SA) in Quebec and France?
- **MQ3** : How to evaluate a wind EP in terms of SA?

# 1.1) Conceptual framework – EP



Source : (Feurtey, Forthcoming, 2014)

## 1.2 Overview of wind energy

	FRANCE	QUEBEC			
FINANCIAL MECHANISMS	FIT	1 <sup>st</sup> call for tender (CT)	2 <sup>nd</sup> CT	3 <sup>rd</sup> CT	4 <sup>th</sup> CT
OBJECTIVES	19 GW in 2020	3.5 GW in 2015			
STATUS (as of December 2013)	8140 MW installed	Finished	In progress (10/15)	In progress (1/12)	Accepting Proposals
COMMUNITY OWNERSHIP	10/400 (2011)	Primarily controlled by outside stakeholders		1/2 30% - 1/2 50%	≥ 50%

- From this initial observation, the objectives of this presentation are to understand :
  1. The evolution in the type of ownership ;
  2. How local authorities were contacted and were able (or unable) to participate in project development ;
  3. The role that community wind could hold in the future in Quebec and France.



### 1.3) Methodological approach

- **Qualitative and comparative research. Two national case studies : France and Quebec in onshore wind.**
- 72 individual interviews with key informants (36 in each case). Four categories of stakeholders :
  1. Political/institutional;
  2. Professionals;
  3. Pressure groups;
  4. Promoters.
- Data collection conducted in Quebec in Fall 2010 and in France in Fall 2011.
- Final version of thesis submitted and defended in Spring 2014 at UQAR.



## 2.1 Findings - Institutional barriers

- **Before 1998** : One player in virtual monopoly, emergence of a single actor and a prominent industry : Hydro-Québec (HQ) and hydro (92%) in Quebec; Électricité de France (EDF) and nuclear (80%) in France. Not much wind power.
- **1999-2000** : Deregulation of electricity production, opening to the private sector and beginning of wind energy in Qc and Fr.
- **2000-2005** : Governments force established economic actors to develop wind power creating a positive energy context and responding to endogenous mobilizations in Quebec (regional Gaspesian movement in 2000 and Anti-Suroît movement in 2004) or exogenous pressures in France (role of the European Union). This transition occurred by the use of different policy instruments : FITs (in Fr) and calls-for-tender (CT) (in Qc).
- **2005-2010** : Beginning of the local protests following the implementation of the first projects in France and Quebec. Financial and regulatory and adjustments are requested.



## 2.1 Findings - Institutional barriers

- Confronted to a closed and polarized decision making process controlled by HQ or EDF (neo-corporatism), the ability of the stakeholders to have a pro-community wind regulatory environment emerge depends on the balance of power between the pro-community lobby and the established economic forces and the government in place, and therefore on the nature of local opposition :

1. **Quebec** : the balance of power was favorable for wind power until 2010 and resulted in a compromise in the community CT, or 3<sup>rd</sup> CT.
2. **France** : balance of power unfavorable for wind power when right-wing governments were in power between 2005-2012 : the regulatory framework became more and more complex under the influence of anti-wind lobby. 8



## 2.1 Findings - Institutional barriers

- **However, these power relations are dynamic and also depend on the evolution of the national energy and political contexts :**

1. **In Quebec**, wind energy has developed in a favorable energy window between 2000 and 2010 when it was believed that Quebec needed new electricity production. In 2014, the government launched a 4<sup>th</sup> CT to sustain industrial jobs created in Gaspésie. What will be the role of wind power in the EP after 2015, in a context of electrical surplus and low export costs?
2. **In France**, the political window for wind power is again positive since the election of the Hollande government in 2012 : simplification of the regulatory framework is underway and the legal uncertainty on FITs has been lifted. This should cause an increase in the annual implementation of wind farms.



## 2.1 Findings - Institutional barriers

- The supranational constraint of liberalism is an other constraint that influences the type of ownership, because wind power in France and Quebec began with the apparition of this new economic trend, that influences the use of financial or legal instruments.
- The Quebec case study shows that call for tenders may encourage community participation if and only if a minimum % of local participation is required in the selection criteria. However, the dynamics of development did not really change with **the 3<sup>rd</sup> community CT, as it favors private promoters first, followed by the municipal sector and finally cooperatives.**



### 3 Findings - Development opportunities

- **In Quebec**, the first socio-economic innovation was the cooperation of municipal actors at a sufficiently large territorial level to enable their economic participation in HQ CTs:
  - **During the 3<sup>rd</sup> CT (2011)** : Example of the Régie Inter-municipale de l'Énergie de la Gaspésie (Régie) : 40 M\$ and 100 MW at 50%.
  - **During the 4<sup>th</sup> CT (2014)** : Example of the Alliance Éolienne de l'Est, a partnership between the Régie (1/3) and the Société Énergie Éolienne Bas-Saint-Laurent (2/3) : 120 M\$ and 300 MW at 50%.



### 3 Findings - Development opportunities

- The realization of the **Val-Eo** project (24 MW, 75% community-owned), the only cooperative that was able to obtain a purchase contract with HQD, is the second source of social innovation in Québec.
- This project brings a solidarity coop and a limited partnership (LP) together, accounting for more than 100 individual and/or collective members and partners, including two municipalities and one MRC, totalling **\$70M in investment**.



### 3 Findings - Development opportunities

- **Éolienne en pays de Vilaine** : The Béganne wind farm is the first community wind project (80% community owned, 8 MW) that emerged in France in 2014 thanks to the contribution of **Énergie partagée**, a national investment citizen fund.
- Perhaps the cooperative movement in Quebec should learn from this experience and also work to create such a **citizen national fund**? Could it not also seek to enlarge its territorial scope, like the Quebec municipal sector, by encouraging more **inter-cooperation**?

## 4 Conclusion - Prospects

– **Strategic decisions and mobilization of actors are dynamics and evolve with the historical-institutional context :**

- **In Quebec**, the denunciation of the CT development model by private multinationals in 2006-2009 evolved toward the current issue of electric surplus and of low export electricity costs. Will the government double the share of wind power in the future 2016-2025 EP as called for by the industry? If so, what share will be given to community wind?
- The 4<sup>th</sup> wind energy is interesting because it diversifies the type of ownership while having a maximum cost of 9 ¢/kWh; but, **why not include the cooperative movement with FITs or CTs separate from municipalities?** Wouldn't it be a good idea to further develop wind power in the Grand-Nord using CT in which HQP could also bid?

## 4 Conclusion - Prospects

- In France and Quebec, the majority of respondents are in favor of a more shared wind development model where the different types of proponents (private, cooperative, municipal and state) could participate. We believe this could be done through a **hybrid model** that combines the advantages of CTs and FITs, the challenge being that the wind sector be acceptable both nationally and locally.
- Although this development model is widely supported by respondents, the role that it could take in the future will depend on the political will to support it and on the mobilization of social actors, because of the financial and legal barriers that still exist, especially for citizens.

# Thank you for your attention. Questions ?

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## References :

- Feurtey, Évariste\* et Carol Saucier (2014a). « L'éolien communautaire et distribué au Québec : acceptabilité sociale, contraintes, conditions et perspectives de développement ». Dans Hammond Ketilson, Lou et Robichaud Villettaz, Marie-Paule (dir.), *Le pouvoir d'innover des coopératives : textes choisis de l'appel international d'articles scientifiques*. Lévis: Sommet international des coopératives, Québec, pp. 257-272, <http://www.sommetinter.coop/cms/home/etudes-et-articles/articles-scientifiques.html>
- Feurtey, Évariste (2014b). « Conception et validation d'un modèle d'analyse et de suivi pour une politique durable et acceptable de l'énergie éolienne – une étude comparative France Québec ». Thèse de doctorat en sciences de l'environnement, Université du Québec à Rimouski, Rimouski, 660 p.





<b>CRITERIA</b>	<b>INCONVENIENCES FOR COMMUNITIES</b>	<b>ADVANTAGES FOR PRIVATE SECTOR</b>
<b>Risks</b>	From 150 to 750 k\$ in venture capital	Risk mitigation on several projects
<b>Equity</b>	Down payment difficult to gather (\$1.5M/MW)	Economies of scale and low bidding prices
<b>Time allowed</b>	Consensual project? Consultation?	Financial and technical resources to move fast
<b>CT criterias</b>	Costs and experience >> SA	Graft projects
	Lack of local control for the 3 <sup>rd</sup> CT	
	Municipalities > cooperatives	