

PUBLIC CONCERN AS A TRIGGER FOR A SHALE GAS SEA IN QUÉBEC

Michel Crowley, Ph.D., Associate Professor, *Center for research and expertise in evaluation* (Centre de recherche et d'expertise en évaluation - CREXE), *National School of Public Administration* (École Nationale d'Administration Publique), Québec, Canada. Email: michel.crowley@enap.ca

Nathalie Risse, Ph.D. Visiting researcher, CREXE, *National School of Public Administration*, Québec, Canada; Independent international consultant, and Writer and Editor for the International Institute for Sustainable Development (IISD) Reporting Services, Earth Negotiations Bulletin Team, United Nations Office, New York, USA. Email: risse.nathalie@gmail.com

This paper illustrates how the actions of civil society led to the implementation of a strategic environmental assessment (SEA) on shale gas exploration and production in Québec. After establishing the context, the paper presents the public concerns about shale gas development, the public hearing on the issue, the initiation of an SEA and the consultations on the SEA scoping document.

1. Context

Canada is a federation with distinct political jurisdictions: the federal government, ten provincial governments (including Québec) and three territorial governments. Each jurisdiction can enact laws and regulations concerning environmental issues, including (SEA) and the environmental impact assessment of projects (EIAs).

In southern Québec, EIAs are mandatory since 1980 for major projects. The EIA process includes public consultation and public hearing measures. This obligation is specified in the *Environment Quality Act* (Government of Québec, 1980a) and the *Regulation respecting environmental impact assessment and review* (Government of Québec, 1980b).

In Québec, discussions on including SEA as an official governmental planning tool started at the end of the '80s but no systematic SEA process has yet been adopted. However, various *ad hoc* initiatives that can be assimilated to SEAs have been carried out so far or are currently being conducted. SEA cases in Québec fall into two categories (Crowley and Risse, 2011):

- 1) Strategic mandates of the *Bureau of Public Hearings on the Environment* (Bureau d'Audiences Publiques sur l'Environnement - BAPE), an independent body dedicated to informing and consulting the public on projects or initiatives likely to have a major impact on the environment. The BAPE can initiate work on a strategic issue only if it receives a mandate from the Minister of Sustainable Development, Environment and Parks (*Ministère du Développement durable, de l'Environnement et des Parcs* -

MDDEP). Thus, in addition to carrying out the public information and consultation of projects subject to the EIA process, the BAPE can be given *ad hoc* mandates by the Minister under section 6.3 of the *Environment Quality Act* which states the Bureau can be asked to investigate on environmental matters submitted by the Minister¹. These strategic mandates have dealt with hazardous waste management (1988-1990), forest conservation (1991), waste management (1996-1997), water management (1999-2000), hog production (2003), and seismic surveys in the St. Lawrence (2004)².

- 2) SEAs *per se*: the SEA program on offshore oil and gas exploration and development in the Estuary and Gulf of Saint Lawrence started in 2009³ and the shale gas SEA initiated in 2011 that we will consider below.

2. Concerns about the shale gas industry

In simple terms, shale gas is natural gas trapped in sedimentary rocks or shale. Gas production is usually done by fracturing the shale by injecting under pressure large quantities of water with added chemicals, thus releasing the gas. Shale gas production is particularly developed in the United States (Texas, Pennsylvania, North Dakota, New York, in particular) and in some Canadian provinces (e.g. Alberta and Saskatchewan) (Bureau d'audiences publiques sur l'environnement, 2011).

Since the early 2000s, several companies have initiated exploration programs to assess shale gas production potential in the St. Lawrence River lowlands in southern Québec. This region is among the most populated areas of the province, its vocation is mostly agricultural and it is not generally perceived as a "resource region" where mining and energy production are significant. Moreover, gas exploration and production of this type are currently not subject to the Québec EIA process (Government of Quebec, 1980b).

Following the exploration campaigns mentioned above, several civil society stakeholders began in early 2010 to express concerns over the rapid development of this new industry. In light of unfortunate experiences elsewhere, particularly in the U.S., several stakeholders quickly requested that the Québec government impose a moratorium on shale gas exploration and assess the related risks, especially on the environment and on the quality of life of affected communities. Among the concerns raised are the impacts on water quality, particularly the contamination of aquifers, the nuisances for residents living near these facilities, the coexistence of industrial and agricultural activities, and how financial benefits from eventual shale gas production will be distributed⁴.

The Oil and Gas Association of Québec held public information sessions on this energy option in 2010. These sessions did nothing to convince the public about the safety of the industry

¹ More information on the BAPE is available at: <http://www.bape.gouv.qc.ca/sections/english/>

² The BAPE reports related to these mandates can be found online at: www.bape.gouv.qc.ca

³ For further details on this SEA program see : <http://www.sea.gouv.qc.ca/index.asp>

⁴ For an overview of these concerns as perceived by a particularly vocal environmental group, the *Association québécoise pour la lutte contre la pollution atmosphérique (AQLPA)*, see (<http://www.aqlpa.com/>).

particularly for those populations in areas targeted for exploration⁵. At the same time, the issue was the subject of heated debates involving environmental groups, politicians, academics and the industry. Many of these debates were taken up in the media where shale gas web pages were set up⁶. Furthermore, committees were formed in several regions in order to voice the concerns of the local communities. Also, a collective regrouping more than 160 scientists from higher education and research institutions has launched a major website on shale gas where technical information, opinions and position papers can be found and discussed⁷.

This generalized perception on the shale gas issue was later confirmed by the Québec Sustainable Development Commissioner (Auditor General of Québec, 2011) who found that the government mishandled the issue, particularly by:

- Not meeting its own responsibilities under the Québec *Sustainable development Act* (Government of Québec 2006) and the *Environment quality Act* (Government of Québec, 1980a);
- There being no clear alignment between shale gas development and territorial planning priorities;
- The late implementation of government mechanisms for public participation (see below);
- Acting without a clear view on how to ensure that the State and the general population reap adequate economic benefits from this collective resource;
- A lack of a coordination between the principal ministries involved;
- The deliverance of drilling permits by the Ministry of Natural resources and Wildlife without ensuring beforehand that environmental safeguards were in place;
- Weaknesses in the control done in the field by the relevant ministries.

3. The BAPE public hearing on the shale gas industry

Bowing to the repeated demands that a public debate on the issue be held, the Minister finally mandated the BAPE in September 2010 to conduct an inquiry and public hearing on the sustainable development of the shale gas industry in Québec.

Usually, these mandates are accompanied by a government background document that is useful as a starting point for public discussion (e.g., by taking stock of problems and potential solutions, or by stating a government position). It is perhaps an indicator of the haste with which the decision on holding the public hearing was made that, even if the issue is broad in scope and technically complex, no such government document was available for consultation at the onset of the mandate. Moreover, the six month time frame (September 7, 2010 to February 28, 2011) was much shorter than the usual 12 months or so for similar mandates.

⁵ See for example, <http://www.radio-canada.ca/nouvelles/societe/2010/09/28/002-gaz-schiste-troisieme-seance.shtml>.

⁶ See for example, <http://www.radio-canada.ca/nouvelles/Economie/2010/09/23/011-gaz-schiste-accueil.shtml> et <http://www.ledevoir.com/moteur/gaz-de-schiste/>

⁷ See the *Collectif scientifique sur la question du gaz de schiste* website at <http://collectif-scientifique-gaz-de-schiste.com/>)

During its mandate, the BAPE had inputs from 85 experts from government, academia and the private sector and received 199 memoranda from the public. In its report released on March 8, 2011, the BAPE found that there were several major issues for which it could not find a satisfactory answer, especially in regard to the risk of groundwater pollution. Therefore, the BAPE proposed that in "the present context of the shale gas industry in Québec, a strategic environmental assessment is therefore a necessary element of both an informed decision and improved social acceptability. It should proceed in spite of development pressures arising from any increase in North American gas prices, which are relatively low at the present time". (Bureau d'audiences publiques sur l'environnement, 2011, p. 224).

4. The initiation of the SEA

The government acted quickly on this recommendation and, in May 2011, appointed a committee made up of 11 persons from government, municipalities, academia, industry, civil society and environmental groups to conduct an SEA on the shale gas industry. During the committee's mandate all hydraulic fracturation activities are suspended. (Ministère du Développement durable, de l'Environnement et des Parcs, 2011)

Inclusion of two members from the shale gas industry raised early concerns about the committee's credibility. In June, one of these two members resigned from the committee stating that he felt he was in a position of conflict of interest with respect to the committee's mandate.

The committee's mandate covers the four objectives proposed in the BAPE report (Comité de l'évaluation environnementale stratégique sur les gaz de schiste, 2011, p. 11):

1. *Assess the socioeconomic relevance of developing the resource with a view to maximize the State's revenues;*
2. *Assess environmental impacts and risks and define acceptable thresholds and mitigation measures;*
3. *Prepare regulations concerning the environmental assessment of gas projects;*
4. *Assess the relevance of setting up scientific monitoring observatories to continuously acquire knowledge on the matter. [our translation]*

Moreover, the MDDEP established the Strategic assessments coordination Bureau (*Bureau de coordination des évaluations stratégiques*) that will act as a logistical, scientific and technical support to the committee and will coordinate government action related to this SEA. The Bureau is also mandated to develop policies and guidelines for the strategic and scientific management of SEAs in general (Ministère du Développement durable, de l'Environnement et des Parcs, 2011).

5. The consultations on a scoping document

On October 28 2011, the committee released a draft SEA implementation plan which corresponds to a scoping document (Comité de l'évaluation environnementale stratégique sur les gaz de schiste, 2011). The public was invited to comment the document online during a 45 day period from November 10 to December 23 2011. Four information sessions facilitated by a nonpartisan and impartial organization were held between December 12 and 15 2011.

During these information sessions, several participants reiterated their concerns about the risks associated with shale gas exploration and production. Also, the committee's credibility and independence was again questioned because of the remaining member from the shale gas industry. The committee indicated that the technical studies outlined in the work plan will be done by universities and public organizations and will be available to the public, thus, in its opinion, ensuring the production of unbiased information.

Finally, it was felt that the consultation period was too short and the timing (just before the Christmas holidays) not conducive to the preparation of documented comments on the issue by the public. On December 13 the committee announced that the consultation period would be extended to January 15.

The committee will analyze comments made during the consultation period and issue a statement on how they will be taken into consideration in its definitive work plan. The public will also be consulted on the committee's two interim reports (May 2012 and May 2013) and on its final report (November 2013).

6. Conclusion

Public participation related to environmental issues was legally framed in Quebec in 1978 with the creation of the BAPE. This means that stakeholders from civil society have acquired over the last thirty years or so extensive experience in public participation, including developing a procedural and technical expertise that promotes an effective intervention in cases likely to generate strong reactions of citizens.

However, as the BAPE can act on strategic issues such as shale gas development only when the Minister requests it, civil society must be vigilant and exert relentless pressure on the government in order to be heard. Clearly in this case, civil society has had a major influence in setting the political agenda and initiating the SEA. It is hoped that the ongoing SEA can adequately and transparently characterize environmental, economic and social factors issues associated to the shale gas development in Québec, thus contributing rigorous analyses to a public debate that has so far been highly polarized. As an indicator of ongoing public resistance to shale gas development, it should be noted that, as of March 2012, over 27 000 persons had signed a form indicating that they will not accept any shale gas drilling on their land⁸.

⁸ See <http://blogues.radio-canada.ca/rive-sud/2012/03/13/signatures-gaz-schiste/>

References

Auditor General of Québec, 2011. *Report of the Auditor General of Québec to the National Assembly for 2010-2011: Report of the Sustainable Development Commissioner - Highlights*. http://www.vgq.qc.ca/en/en_publications/en_rapport-annuel/en_fichiers/en_Highlights2010-2011-CDD.pdf

Bureau d'audiences publiques sur l'environnement (BAPE), 2011. *Sustainable Development of the Shale Gas Industry in Québec. Inquiry and Public Hearing Report*. Excerpts from report 273. http://www.bape.gouv.qc.ca/sections/rapports/publications/bape273_excerpts.pdf

Comité de l'évaluation environnementale stratégique sur les gaz de schiste, 2011. *Plan de réalisation de l'évaluation environnementale stratégique sur les gaz de schiste*, Québec, 76 pages. <http://ees-gazdeschiste.gouv.qc.ca/wordpress/wp-content/uploads/2011/10/plan-de-realisation-eesvf.pdf>

Crowley, M. and N. Risse (2011). *Strategic Environmental Assessment (SEA) in Québec : a work in progress*, Proceedings of the International Association for Impact Assessment special meeting on Strategic Environmental Assessment, Prague, September 21-23. <http://www.iaia.org/SpecialMeetings/prague11/proceedings/papers/SEA%20in%20Quebec-MCrowley-NRisse-Paper-final-Sept10-2011.pdf>

Government of Québec, 2006. *Sustainable development Act* R.S.Q., chapter D-8.1.1. http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=2&file=/D8_1_1/D8_1_1_A.html

Government of Québec, 1980a. *Environment Quality Act*, R.S.Q., chapter Q-2, updated to 1 August 2011. http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=2&file=/Q2/Q2_A.htm

Government of Québec, 1980b. *Regulation respecting environmental impact assessment and review*, R.R.Q., c. Q-2, r. 23. <http://www.bape.gouv.qc.ca/sections/documentation/Q-2-r23-anglais.pdf>

Ministère du Développement durable, de l'Environnement et des Parcs, 2011. *Composition du comité de l'Évaluation environnementale stratégique*, Press release, May 12. <http://www.mddep.gouv.qc.ca/infuseur/communique.asp?no=1857>