

# THE EFFECTIVENESS OF FRACKING DISCLOSURE REGIMES IN CANADA<sup>1</sup>

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## THE EFFECTIVENESS OF FRACKING DISCLOSURE REGIMES IN CANADA

### Key Messages

In response to the rapid adoption of hydraulic fracturing and horizontal drilling (collectively, “fracking technology”) over the past few decades, some provincial governments have developed legislation and regulations to delimit, monitor and safeguard fracking practices. Among these rules are guidelines requiring fracking companies (“operators”) to disclose a wide array of fracking-related information to the regulators that oversee these activities. This information serves several purposes, and has the potential to provide the public with timely and useful information regarding the activities that take place in their communities and potential harms that may result.

In this report, we provide an analysis of existing disclosure regimes in the four Canadian provinces where fracking is actively taking place: Alberta, British Columbia, Manitoba and Saskatchewan. We assess the effectiveness of these disclosure practices, benchmarked against current theoretical and empirical scientific knowledge. Our analysis yields four main conclusions, summarized below.

#### ***In Some Provinces, Regulation Provides a Good Basis for Public Disclosure***

Alberta and British Columbia, the provinces with the greatest fracking activity, have strong legislative structures that require operators to disclose information to regulatory bodies. Subsequent reports to the public are based on this information. Moreover, websites currently in use such as BCOGC.ca, AER.ca and Fracfocus.ca provide good infrastructure in terms of accessibility. However, even in Alberta and British Columbia, disclosure regarding some fracking-related issues has not received specific regulatory attention, and in Manitoba and Saskatchewan, relevant regulations are almost non-existent.

#### ***Legislation Specifying Public Disclosure of Information Related to Hydraulic Fracturing is Minimal***

The vast majority of current relevant legislation covers operator-to-regulator disclosure, and not regulator-to-public disclosure. In fact, only two regulatory provisions (both in British Columbia) require the Oil and Gas Commission to report directly to the public on fracking-related risks. Although various provincial websites enable public inquiry into additional issues, the Canadian public largely lacks regular, legally mandated reporting on fracking issues.

#### ***Information that is Disclosed to the Public is Difficult for Ordinary Citizens to Access and Comprehend***

Although websites currently in use such as AER.ca, BCOGC.ca and Fracfocus.ca provide good infrastructure for public disclosure, an additional layer of processing is required to make data easily accessible. At the same time, possibly one of the most conspicuous pitfalls of disclosure systems is the overuse of scientific jargon or language that is otherwise obscure for potential users. We found that almost none of the information that is currently available to the public has been disclosed in a manner that is meaningful to non-specialists.

#### ***Public Disclosure and Access Should be Promoted Despite Scientific Uncertainty***

Regulation related to public disclosure need not necessarily depend on the status of ongoing scientific endeavours to unveil the actual risks that fracking poses. Rather, we recommend that decision-makers and public policy leaders adopt a precautionary approach that provides greater public awareness while scientific certainty is being pursued

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## EXECUTIVE SUMMARY

Hydraulic fracturing (commonly known as “fracking”) is a technology employed in the production of oil and gas from shale. Over the last decade, many thousands of wells have been drilled worldwide; in Canada they currently dot the landscape of four provinces, with exploratory wells drilled in several others. Potentially, existing reserves in the country can provide a significant portion of Canada’s future energy demands. At the same time, fracking is associated with an array of environmental impacts such as water consumption and contamination, induced seismicity, noise and air pollution, and others. Because fracking technology has been widely employed for only a decade, many of its potential environmental impacts are still unknown or uncertain.

Regulators in Canada and elsewhere employ an array of policy tools to ensure that extractive activities, both traditional and emergent, are conducted within accepted guidelines. Regulators primarily rely on tools such as permitting processes and ongoing inspection and monitoring. In addition, certain provinces have also established legislation and put in place disclosure channels that provide some data about ongoing fracking activity. Overall, however, it is unclear whether the policies and platforms currently employed in Canada contribute to meaningfully informing residents about local fracking activity.

In this study, we analyzed the entirety of existing disclosure regimes in Canada that are salient to fracking. Our goal was to aid regulators in developing effective public disclosure policy by identifying the strengths and weaknesses of current legislative frameworks and their attendant channels of provision. Our findings, we believe, might be particularly beneficial at the current, nascent stage of right-to-know policy development.

Our research design employed the following methodology: First, we reviewed extant literature on what makes public disclosure effective, and alternatively, what are the common obstacles that hinder its success. Based on this review, we developed a theoretical model according to which effective information disclosure hinges both on the content that is provided as well as on how it is provided. Specifically, according to this model, the comprehensibility of information and its granularity are important for determining the quality of the content, and accessibility and timeliness are important for determining the effectiveness of information provision channels.

We then used these criteria to inform our assessment of current regulatory regimes in each of the four provinces where fracking is conducted commercially: Alberta, British Columbia, Manitoba and Saskatchewan. In particular, we focused our attention on four key environmental impact issue areas related to fracking activity: water consumption, water contamination, inducement of seismic activity and potential damage to the quality of life of nearby communities. Mapping the current disclosure regimes in each of the active provinces along these issues allowed us to produce a general assessment of effectiveness. As a final step, we shared our findings with the relevant regulatory agencies in the four provinces analyzed, and integrated their responses into our report.

Our analysis yielded four main conclusions:

***1. In Some Provinces, Regulation Provides a Good Basis for Public Disclosure***

In Alberta and British Columbia, the legislative framework that moderates operator-regulator disclosure provides a solid foundation upon which subsequent regulator-public disclosure can be constructed. The law in these provinces mandates operators to provide a fairly detailed account of water consumption, water contamination (in terms of fluid composition) and induced seismicity. Other issues, such as fluid disposal and quality of life effects, however, do not receive comparable regulatory attention. By contrast, in Manitoba and Saskatchewan relevant regulation is almost non-existent. Because public disclosure relies almost solely on information held by the government, this clearly hinders the prospects of encouraging the public in these regions to be well-informed about fracking related risks.

***2. Legislation Specifying Public Disclosure of Information Related to Hydraulic Fracturing is Minimal***

There are currently only two regulatory provisions in the entire country requiring the regulator to report directly to the public on fracking related risks, both of them in British Columbia. The rest of the information that is provided by operators is either subsequently submitted on a voluntarily basis through channels such as AER.ca, BCOGC.ca and Fracfocus.ca, or remains available only to the regulator. This state of affairs leaves the public largely devoid of consistent and legally mandated access to relevant information.

***3. Information that is Disclosed to the Public is Difficult for Ordinary Citizens to Access and Comprehend***

We emphasize that merely setting-up legislation related to public disclosure does not guarantee effectiveness. In particular, current disclosure practices are lacking in terms of both how the data are provided as well as their actual content. In terms of provision, although the various websites overall provide a good infrastructure, the data they contain could be offered in a more user-friendly format so as to promote accessibility. In terms of content, it is doubtful that the general public can easily understand the data in their current form. To this end we recommend, among other mechanisms, that regulators develop an ordinal scale of risks, for example one that is based on a color-scheme and on clear, non-technical language

***4. Public Disclosure and Access Should be Promoted Despite Scientific Uncertainty***

Finally, we stress the public's right to be aware of the potential risks imposed by fracking. Information provision should not be biased by the current state of scientific knowledge, nor should it await the results of ongoing or future studies designed to clarify the actual severity of hazards. We urge decision-makers and public policy leaders to adopt a precautionary approach, prioritizing the provision of at least rudimentary information about nascent concerns even before the attainment of full scientific consensus about their severity.