Response from the Pembina Institute to remaining public questions from the Select Committee Regarding the Risks and Benefits of Hydraulic Fracturing public proceedings January 31, 2014

March 2014

## What is the source of the water data? Is there any independent monitoring of water use and verification of FRAC FOCUS data?

The water data used in this presentation comes from a variety of sources including the B.C. Oil and Gas commission, the Alberta Energy Regulator, and several publication looking at US water use. FracFocus.ca is a BC oil and gas commission initiative and is monitored and verified by the BC OGC.

## How much financing does the Pembina Institute get from the oil and gas industry?

The majority of our revenue is project-specific and comes from two main areas. Research and public education grants account for about 45% of our revenues, as does fee-for-service contracts. The remaining 10% of our revenue comes from a variety of sources, including donations. We do not receive direct core funding (i.e., to cover administration) from any source. For more information on our sources of revenue please visit: http://www.pembina.org/about/revenue

## Can the technology to recycle 96% of the water used be applied to every hydraulic fracturing operation?

There are many aspects of a hydraulic fracturing operation that determine how much recycled water can be used and how many times it can be re-used. Technologies do exist that can be applied broadly, although it can become costly to do so in every case. It may not be technically feasible to achieve a recycle rate 96% in all applications.