

What is Water Security and Why is it Important?

Oksana Ogrodnik¹ and Jon Fennell¹

¹Integrated Sustainability Consultants Ltd., Calgary, Alberta, Canada

Abstract

Water is essential to the Canadian economy. Environment Canada estimates that 60% of Canada's GDP is directly dependent on water with vast majority of industry sectors heavily reliant on water to grow, operate and sustain business activities. The oil and gas industry, for example, relies heavily on water for resource extraction. Although this industry is not the largest water user in Canada, consumption is projected to significantly increase in the future. In Western Canada, where unconventional oil and gas development - shale gas in particular - has been called the future of energy supply in North America, the industry is vulnerable to reliable water supplies to facilitate the hydraulic fracturing required to access gases and liquids. As such, there is a direct correlation between economic productivity and water security.