

Economic Benefits



QUESTERRE ENERGY CORPORATION • AUGUST 2011

ECONOMIC BENEFITS OF UTICA SHALE DEVELOPMENT

- Between 5,000 and 19,000 new jobs can be created each year by this industry from 2015-2025.
- The local production of natural gas would reduce Québec's trade deficit by between \$800 million and \$3 billion a year.
- Municipalities could collect in excess of \$25 million every year in fees and property taxes on facilities
- With commercial success, every \$100 million spent on Québec goods and services by this industry creates \$58 million of wealth
 - This does not include \$12 million of additional benefits that would be induced by this activity

The Utica shale can create significant economic benefits for the province of Québec. In full field development, these could include \$280 million to over \$1 billion of wealth creation per year and over 5,000 to 19,000 new jobs annually as conservatively estimated by Secor Group in their study published in 2010. Furthermore, the local production of natural gas would reduce Québec's trade deficit by between \$800 million and \$3 billion a year.

The more important benefits, excluded by the Secor study, are from the development of new businesses and the expansion of existing business in Québec to provide the goods and services necessary for the industry.

BENEFITS OF A LOCAL SERVICE SECTOR

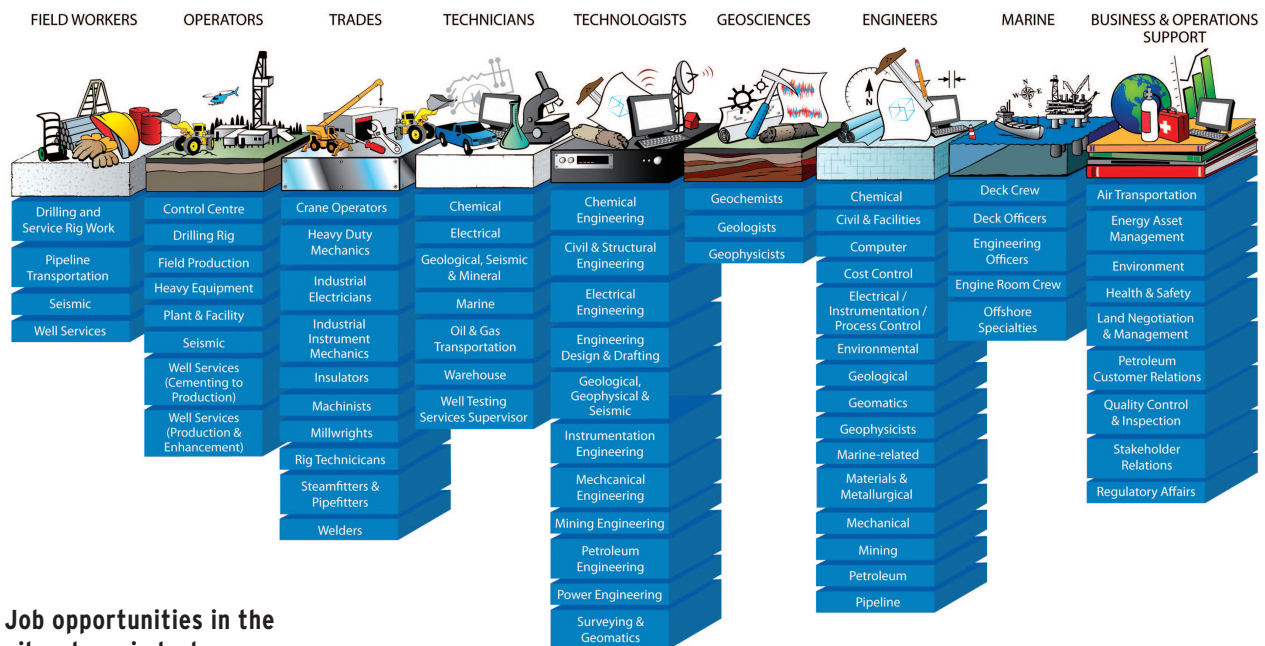
Local goods and services are essential to the successful development of the Utica shale in Québec. By eliminating the transportation charges from Western Canada, industry will be able to reduce costs and achieve the economies of scale necessary to be profitable.

Québec could become a regional service sector for eastern Canada

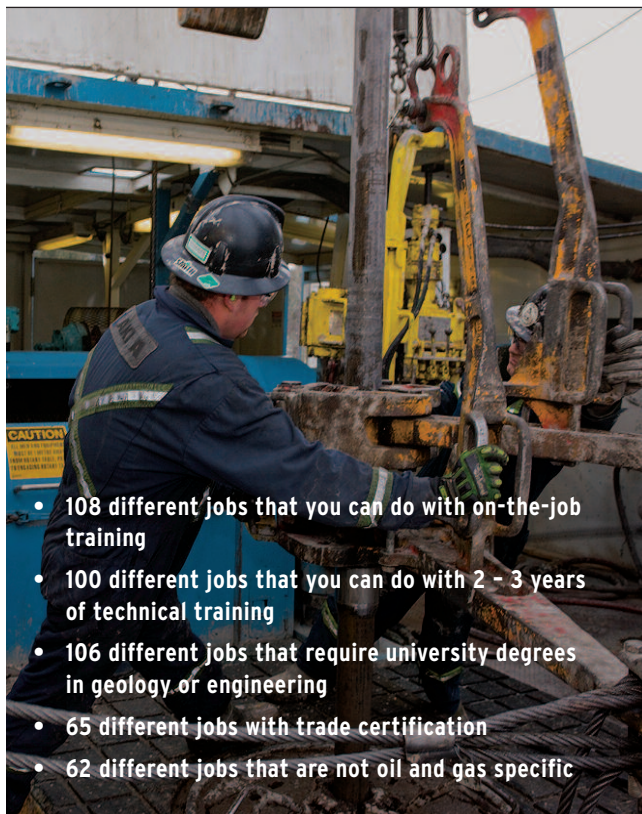
The creation of a local service sector will ensure that the forecasted economic benefits become a reality. The growth of this sector will see that a larger proportion of the total spent on the Utica is spent directly in Québec, further enhancing these benefits. This new industry could expand to serve not only Québec but also neighboring provinces such as New Brunswick where shale gas development is beginning.

The service sector creates 10 times as many jobs as the producers

A study by the Canadian Energy Research Institute assesses that the oil and gas services industry in Canada accounts for \$65 billion dollars or 5% of national GDP. It employs nearly 800,000 people or almost 10 times more than oil and gas producers. Québec currently makes up 5% or \$3 billion of this industry largely representing its fabrication industries for oil and gas equipment.



Graphic courtesy of the Petroleum Human Resources Council of Canada



The majority of jobs in the service sector are jobs Québécois can do today

WEALTH CREATION FOR QUÉBEC

Government revenue during development is projected by Secor to range from \$120 million to \$484 million per year with personal income and other taxes accounting for between 30% to 40% of these amounts. These exclude the benefits of a local service sector as well as provincial corporate income taxes or municipal property taxes.

Using the assumptions for the base case from the Secor study and the existing fiscal regime, Questerre estimates that provincial and federal corporate income taxes over the life of the project will total \$2.1 billion with provincial royalty income of \$2 billion. On a large scale development case, provincial and federal corporate income taxes could total as much as \$8 billion with royalties of \$7.3 billion to the Québec government. The development of a local service sector would ensure that a greater proportion of the wealth created would remain in Québec, further increasing government tax revenues.*

A local service sector further increases government revenue through personal and corporate taxes

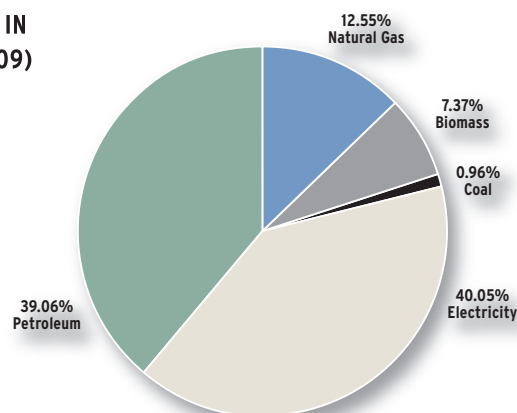
Another source of income for municipal governments would be well fees and property taxes on the value of the facilities. Questerre estimates these revenues could range between \$375 million to \$1.4 billion.

REDUCTIONS IN ENERGY IMPORTS

Québec currently consumes 187 Bcf of natural gas annually. 100% of this gas is imported primarily from Western Canada.

Almost 50% of Québec's energy needs are satisfied by petroleum and natural gas. In 2006, 11% was natural gas imported from Western Canada at a cost of \$2 billion. The remaining 38% was oil imported primarily from Algeria, Norway, eastern Canada, the United Kingdom, Mexico and Venezuela.

ENERGY USE IN QUÉBEC (2009)

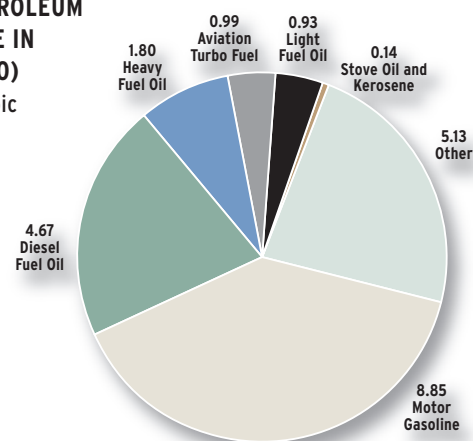


Source: MRNF

These oil imports include heavy fuel oil, a highly polluting low-grade fuel. It is second only to coal as a carbon intensive fuel. In 2010, Québec was the largest user of heavy fuel oil and accounted for almost one third of Canada's consumption.

REFINED PETROLEUM PRODUCT USE IN QUÉBEC (2010)

(millions of cubic meters)



Source: Statscan

Natural gas from the Utica shale represents a much cheaper and environmentally friendly alternative to heavy oil fuel, diesel and gasoline. According to Gaz Métro, over the last twelve years in Québec, natural gas on average has been 16% to 20% cheaper than oil and 24% to 30% cheaper than electricity for small to medium sized businesses.

Domestic supply of natural gas could encourage new local industries

The development of a domestic supply of natural gas would also provide the incentive to stimulate growth of industries such as fertilizers and methanol that use natural gas as a key raw material.

*The Government of Québec has announced its intention to review the existing royalty regime.