BRITISH COLUMBIA'S OIL AND NATURAL GAS ROYALTIES

CANADA'S OIL & NATURAL GAS PRODUCERS

OVERVIEW

The oil and natural gas resource of British Columbia belongs to the people of British Columbia. In the absence of billions of dollars of industry investment, government would not have the financial or technical means to develop the resource on behalf of and for the benefit of British Columbians. Development of this resource is a partnership among industry, Indigenous peoples and government, which creates more than 10,000 jobs[1] in the province and provides government with hundreds of millions of dollars annually to help provide the services British Columbians rely upon every day.

Responsible oil and natural gas development has been an economic cornerstone of British Columbia since the 1950s and the industry has been a partner in generating economic growth for British Columbians. The technology and expertise to develop this resource, such as horizontal drilling, has changed over the decades and has increased the amount of natural gas that is technically and commercially recoverable. Over the years this has resulted in increased private investment, more workers with well-paying quality jobs, growing provincial revenues and investment in research and development carried out at B.C. universities.

Ongoing collaboration among government, Indigenous peoples and industry is necessary to ensure British Columbia is a global climate leader and continues to create jobs, advance Indigenous reconciliation, and generate greater prosperity for all British Columbians through government services supported by resource development revenues.

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The British Columbia government has structured its oil and natural gas royalty regime to maximize the public share (economic rent) collected from produced oil and natural gas, while ensuring producers can earn a fair return on their investment. Government reviews this regime annually and publishes a *Performance Measures Report* that provides details about the current royalty regime and compares that data against established measurable indicators and targets[2]. This government report concludes “B.C.s royalty programs achieved the goal of maximizing the amount of economic rent collected while ensuring that producers can earn a fair return on their investment.”

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BRITISH COLUMBIA’S RESOURCE: DEEP AND TECHNICAL

The British Columbia royalty regime consists of several targeted programs to address specific characteristics of the resource. Programs are designed to encourage additional investments, including building the extensive water and natural gas treatment facilities required for production, as well as investments in clean technologies to further improve environmental performance. One of these programs, the Deep Well Royalty Credit Program, is targeted to attract investment and promote the development of British Columbia’s extensive and deep unconventional resource. In exchange for a defined amount of royalty deductions to cover the extra development cost of British Columbia’s deep resources, industry invests heavily into the province, an average of more than $5 billion annually. Royalty programs like the Deep Well Royalty Credit Program do not require any upfront investment of public money, and these substantial industry investments have generated significant ongoing employment and government revenues.

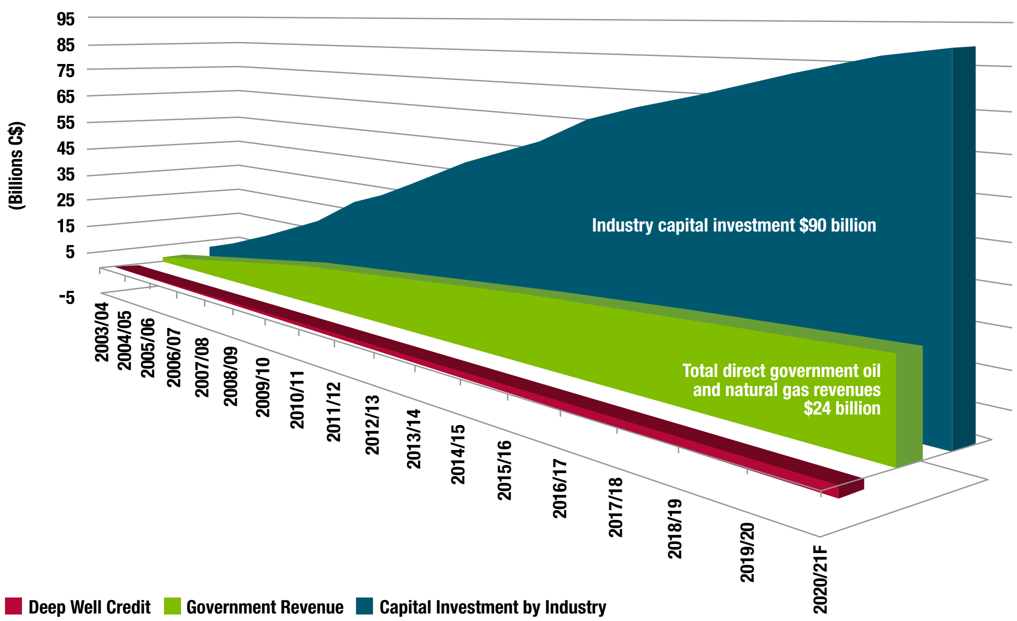
British Columbia’s Deep Well Royalty Program was initiated in 2003 and since its inception government reports indicate that industry has accumulated approximately $2.9 billion of unused deep well royalty credits. Without context, it is understandable that many people may have questions about the management of the province’s royalty regime and wonder whether government is getting a fair return on its resource.

Today, most of British Columbia’s oil and natural gas resources, such as those in the Montney Basin and Horn River Basin shale formations, are found at very deep locations, 1.4 to 3.8 kilometers underground[3]. Accessing resources at these depths requires extra effort and cost, and for this reason there is a well-established royalty credit program intended to stimulate private investment in the development of the province’s publicly owned resources. To be eligible for the Deep Well Royalty Credit Program a well must meet specific criteria outlined in regulation. The program stimulates producers to reach and produce these deep resources. Without such a program these deep British Columbia resources could not be competitively developed in today’s natural gas market.

As a result of British Columbia’s competitive royalty system, billions of dollars of new private investment flow into the province annually, and as a consequence industry pays hundreds of millions of dollars in royalties each year. These royalties are paid in addition to corporate taxes, property taxes, and sales taxes, which over the years account for billions of additional dollars to government[4].

Companies must commit significant new capital into developing British Columbia's deep oil and natural gas resource to be eligible to earn royalty credits to offset the higher drilling and completion costs associated with deep wells. A representative deep British Columbia natural gas well could produce for 20 to 30 years, be 2.7 kilometres in total depth and cost an estimated $5 million to drill and complete[5]. In this example the well would be eligible for $531,000 of deep well royalty credits to apply against future royalties[6]. If the well failed to produce any natural gas, the credits can never be used and have no value. Any newly drilled producing well in British Columbia always pays a minimum royalty. Once the earned deep well credits are deducted to zero over time, standard royalties continue to be paid. The accumulation of this type of royalty credit is an indicator of low commodity prices, which have negatively impacted both producers and government revenues. Even at low prices, however, millions of dollars of royalties are paid monthly and represent an important and ongoing source of revenue needed to help fund government services. For the resource owner and investor, the risk and reward represent a fair exchange.

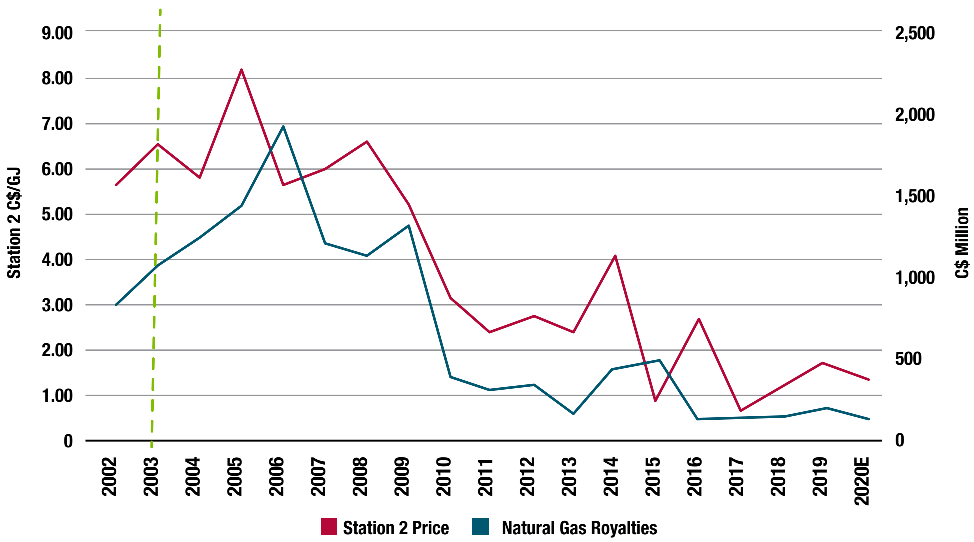
DEEP WELL ROYALTY CREDIT VS REVENUE AND SPENDING (CUMULATIVE)



GOVERNMENT ROYALTIES REFLECT MARKET CONDITIONS

The value of royalty payments the British Columbia government receives from natural gas producers in the province is determined by the volume and price of natural gas as set out in the *Petroleum and Natural Gas Royalty Regulation*[7]. When prices are high, government benefits by collecting more royalties and when prices are low the converse is true. This demonstrates a well-balanced, competitive risk-sharing mechanism between resource owner and industry. Even with increased industry activity, more jobs and greater volumes being produced, falling natural gas prices can result in lower total royalties. As the price of drilling a well generally does not fluctuate with the price of the commodity, this arrangement results in a risk sharing between the resource owner and the producers.

BC NATURAL GAS ROYALTIES AND STATION 2 NATURAL GAS MARKET PRICE



According to a Business Council of British Columbia study titled "Which private sector industries pay the bills for British Columbia?" oil and natural gas jobs are the most productive jobs in British Columbia's economy by the measure of real GDP per hour work. The upstream oil and natural gas industry is a significant contributor to the British Columbia economy and will be a cornerstone industry in British Columbia's economic recovery from the COVID-19 crisis.

The relationship between government royalties and natural gas commodity prices is illustrated in the graph above. Prices at British Columbia's market trading hub known as "Station 2" are measured in dollar per gigajoules (C$/GJ), shown against the scale on the left axis. Annual royalties paid by industry, in millions of dollars, are shown by the line against the right axis. The graph shows the synchronized relationship between royalties and natural gas prices. For example, when the natural gas price peaked at $8/GJ in 2006, industry paid $1.92 billion in royalties. Natural gas prices have been trending down and have declined nearly 80 per cent since that time. Drilling and production costs have not declined in a similar way. Notwithstanding difficult market conditions and competition from jurisdictions without British Columbia's climate leadership, industry paid nearly $200 million in 2019 while still employing thousands of workers and investing billions of new capital needed to responsibly develop the province's resources.

To remain competitive, British Columbia must maintain a competitive royalty regime and fiscal environment, or risk losing investment at a time when the economy is struggling to recover from the pandemic and growing government debt. Capital investment shifting to other jurisdictions (referred to as carbon leakage), would result in worse environmental outcomes globally, fewer jobs for British Columbian workers and reduced government revenues.

Sources:
1. CERI, 2019
2. https://www2.gov.bc.ca/gov/content/industry/natural-gas-oil/oil-gas-royalties
3. https://www.nrcan.gc.ca/our-natural-resources/energy-sources-distribution/clean-fossil-fuels/natural-gas/shale-and-tight-resources-canada/british-columbias-shale-and-tight-resources/17692
4. Source: CERI, 2019
5. https://calgaryherald.com/business/energy/lower-costs-drive-drilling-boom-in-bellwether-montney-shale-formation-in-northwest-alberta-bc/
6. Under regulated schedule, credit is calculated on total depth, which is calculated as vertical plus horizontal portion of a well.
7. https://www.bclaws.ca/civix/document/id/complete/statreg/495_92