NATURAL GAS DEVELOPMENT IN BRITISH COLUMBIA





British Columbia (B.C.) has an abundant natural gas resource which is transforming the Province into a global clean-energy powerhouse. As the cleanest burning fossil fuel, natural gas can reduce global GHG emissions and address local air quality by displacing coal and other fuels used for heat and power in China, India and Southeast Asia.

Source: WHO 20191

CHANGED MARKET CONDITIONS

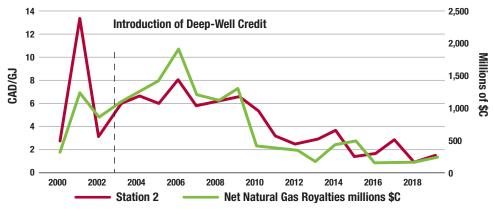
Changes in market conditions have impacted oil and natural gas investment in Canada and government revenues. Innovation in natural gas development and lack of new markets in the last decade have resulted in an overabundance of supply and depressed prices for natural gas across North America, particularly in Western Canada.

Royalty payments to the B.C. government are linked to natural gas prices so the decline in royalty revenues is the direct result of a significant decline in natural gas prices since 2006. Royalties received by government closely track the market price of natural gas. For example, a 25-cent change in the natural gas price impacts government revenues by \$30 million to \$50 million annually. B.C.'s benchmark Station 2 has fallen 80 per cent in the last decade.

Source: Estimate from BC budget

FALLING STATION 2 PRICES FROM 2000 TO 2018

Source: Bloomberg and estimates from BC budgets



resource requires
billions of dollars
annually in industry
investment to
bring natural gas
to market, and
create economic
and social benefits,
jobs and affordable
energy for British
Columbians.

Developing this

1. In 2016, 4.2 million people died due to poor ambient air quality; an additional 3.8 million died as the result of indoor air pollution Source: WHO (2019) https://www.who.int/ airpollution/en/







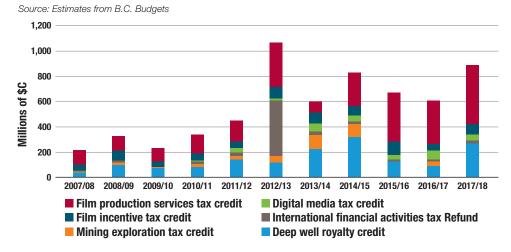
Over this same period, oil and natural gas operations in British Columbia have progressed to incorporate more robust and stringent environmental and social requirements. Examples of this include implementation and extension of a new tax on carbon, expansion of shared decision making consistent with UNDRIP and greater stakeholder engagement and participation. These developments are progressive and celebrated as world leading. They have also imposed new and greater cost on industry and impacted B.C.'s competitiveness. Royalty credits are a means for the Province to offset these new costs to maintain competitiveness while demonstrating leadership on environment and social priorities of the government.

ROYALTY CREDITS

Royalty credit programs take into account unique development and production costs for natural gas in the province. Royalty credit programs, similar to other government programs such as the Film and Production Tax Credit Program, are intended to maintain competitiveness, stimulate additional investment, and build a strong sustainable provincial economy. For comparison, the Film and Production Tax Credit Program amounted to \$550 million in 2017/18, compared with \$270 million in Deep-Well Royalty credits. Film and TV production invested \$3.4 billion in 2017/18 and the upstream oil and natural gas industry (excluding LNG) invested \$4 billion in 2017. The oil and natural gas industry pays millions of dollars in corporate, municipal, carbon and sales taxes annually in addition to paying hundreds of million in royalties annually.

TAX CREDIT MECHANISMS USED TO PROMOTE COMPETITIVENESS

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ROYALTY CREDITS ARE NOT SUBSIDIES

A royalty credit program is designed to bring shared benefit to government and industry and is not a subsidy from government to industry in fact, credits are earned by industry. The Deep-Well Royalty Program, for example, is a royalty credit that encourages producers to develop deeper, higher cost, resources that require additional capital investment.

All wells in B.C. that have received a Deep-Well Credit must pay a minimum royalty regardless of credits that may be available. The specific minimum royalty rate varies by the depth and cost of the well. A non-producing well cannot use credits. When a well comes to the end of its productive life, strict regulations are in place to ensure wells are properly decommissioned. Industry is responsible for all decommissioning and reclamation costs.

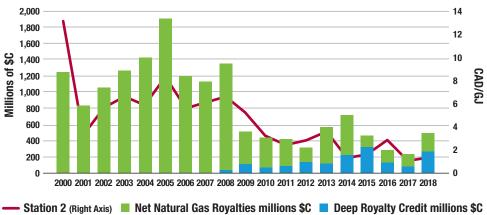
When natural gas prices are high, royalties are high. A prolonged period of low natural gas resulted in lower royalties. Lower prices, combined with sustained high drilling cost and continued royalty payments has resulted in an accrual of unused Deep-Well Royalty credits.

Government and industry share in the upside and downside of the changing resource market place. Access to new markets for B.C. natural gas, such as exports of liquefied natural gas to Asia, could increase production and prices. Improved volumes and price will help address the stock of unused royalty credits, increase royalty revenues that are used to support government services, keep British Columbians working and reduce global GHG emissions.



NATURAL GAS PRICES AND ROYALTY REVENUES

Source: Bloomberg and BC budget estimates 2,000







THE CANADIAN ASSOCIATION OF PETROLEUM PRODUCERS (CAPP)

represents companies, large and small, that explore for, develop and produce natural gas and crude oil throughout Canada. CAPP's member companies produce about 80 per cent of Canada's natural gas and crude oil. CAPP's associate members provide a wide range of services that support the upstream crude oil and natural gas industry. Together CAPP's members and associate members are an important part of a national industry with revenues from crude oil and natural gas production of about \$101 billion a year. CAPP's mission, on behalf of the Canadian upstream crude oil and natural gas industry, is to advocate for and enable economic competitiveness and safe, environmentally and socially responsible performance.