Ministry of Energy, Mines and Petroleum Resouces

British Columbia Royalty Programs

Program Goals & Performance Measures

2017 Report

Economics and Market Development Branch,

Oil and Gas Division

February 2018

Table of Contents

Message from the Assistant Deputy Minister

British Columbia (B.C.) has an enviable position in the North American energy picture. Abundant and diverse resources are transforming the Province into a clean energy powerhouse. Natural gas has a key role to play in this context. As the cleanest burning fossil fuel, natural gas is poised to replace other more carbon intensive sources of energy worldwide, thus reducing greenhouse gas emissions and contributing to better local air quality, economic growth and access to energy in developing countries.

The Province has a series of natural gas royalty programs aimed at ensuring British Columbia's fiscal regime remains competitive with other jurisdictions, encourages development of natural gas and, in turn, increases direct revenue to the Province. A positive investment climate is key to create good jobs in the sector, revenues to the Province and the provincial economy.

B.C. royalty programs include lower royalty rates to encourage marginal and ultra-marginal natural gas wells, royalty credits for infrastructure development, a pilot program for royalty credits for upstream infrastructure that reduces upstream vented methane emissions (Clean Infrastructure Royalty Credit Program) which was run for the first time in 2016, royalty programs aimed at developing unconventional natural gas resources, which include royalty credits for deep gas exploration (deep well program), and the net profit royalty program.

In response to an Office of the Auditor General's recommendation in 2010 to divulge more information on the impact of B.C. royalty programs, the Ministry of Energy, Mines and Petroleum Resources (MEMPR) committed to prepare a Performance Measures Report every year to follow-up on the goals of the current royalty regime. This is the eighth report of its kind.

The Performance Measure Report addresses the questions of how British Columbia's royalty regime maximizes value to the Province, treats producers with equity, is easy to administer, and contributes to long-term investment.

The report also shows how B.C. royalty programs are helping to facilitate the development of the Province's natural gas industry through promotion of long –term investment in B.C. and support of new jobs creation in the Province.

This Performance Measures Report is not intended to be a static document. MEMPR welcomes feedback, comments and suggestions.

Inés Piccinino
Assistant Deputy Minister
Oil and Gas Division
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Introduction to B.C. Royalty Programs Goals & Performance Measures

British Columbia collects royalties on oil and natural gas produced from Crown leases[1]. The royalty regime is structured to maximize the amount of economic rent collected from produced oil and natural gas, while ensuring that producers are able to earn a fair return on their investment. B.C. strives to maintain a competitive royalty regime compared to other jurisdictions in Canada and the United States.

The goals of the current royalty regime are:

- *Values to the Province are maximized*: encourage resource development to the benefit of the Province in terms of maximizing royalties and taxes
- *Equity*: producers, large and small, are treated equally under the regime
- *Long-term investment*: the royalty regime is aimed at long-term investment by industry
- *Administrative Ease*: simple to administer and verify for government and industry.

Since June 2003, the Province introduced special royalty rates to encourage marginal and ultra-marginal natural gas wells, royalty credits for deep gas exploration, and royalty credits for infrastructure development. Specific programs aimed at developing unconventional resources, like the net profit natural gas royalty program, were also introduced. Most recently, the Province amended the *Petroleum and Natural Gas Act* to allow the Province to enter into long-term royalty agreements with upstream producers. A long-term royalty agreement (LTRA) specifies the royalty rate owed to the Province by a producer as well as a minimum amount of production that must occur each year, providing certainty for the Province and producers with regard to royalty payments. Only one LTRA was ever signed but it never entered into effect.

All of these programs help B.C.'s fiscal regime remain competitive with other jurisdictions, encourages development of natural gas and, in turn, increases direct revenue to the Province. A positive investment climate is also key to job creation in the oil and gas sector and helps the provincial economy.

Performance Measures Reporting Indicators

In response to a 2010 Auditor General's recommendation to divulge more information on the impact of B.C. royalty programs in oil and gas activity in B.C. to the public, MEMPR has committed to prepare a Performance Measures Report every year to follow-up on the four goals of the royalty regime.

Though it is possible to use a variety of indicators to report on the four goals, the selection of indicators in this report are based on three conditions:

(1) The indicators should be representative of the goals;

(2) The indicators should be readily available – moreover, if possible, data should be publicly accessible; and

(3) The indicators should be easy to understand by a non-technical audience.

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[1] Crown leases are oil and gas resources that private industry can develop in B.C. through entering into a tenure agreement with the Province.

Performance Measure #1: Values to the Province are maximized

Rationale

Goal 1 of B.C.'s royalty programs calls for the maximization of values to the Province; more specifically: "encourage resource development to the benefit of the Crown in terms of maximizing royalties and taxes."

The indicator is aimed at capturing the balance between generating incentives for investment in B.C.'s oil and gas industry and receiving a fair return for Crown resources.

Indicator

The indicator is called "Relative Royalty per mcf of marketable production in B.C. over Alberta" [RR(mcf)]. It is built using publicly available information:

- Natural gas and natural gas liquids royalties received by B.C. and Alberta, in millions of Canadian dollars, by fiscal year (available from government websites) – R_{BC} and $R_{AB.}$
- Marketable (commercially sold) natural gas production in B.C. and Alberta, in billions of cubic feet, by calendar year[2] (available from Canadian Association of Petroleum Producers) – Called P_{BC} and P_{AB}.

The indicator is built in the following manner:

(1) Royalties per mcf of marketable gas[3] in B.C.:
$R_{BC}(mcf) = R_{BC} / P_{BC}$

(2) Royalties per mcf of marketable gas in AB:
$R_{AB}(mcf) = R_{AB} / P_{AB}$

(3) Absolute difference between two factors ("Relative Royalty per mcf of marketable production in B.C. over Alberta"):
$RR(mcf) = R_{BC}(mcf) - R_{AB}(mcf)$

By introducing production in the analysis, the indicator adjusts for the fact that both provinces have different natural gas resources – and thus different productivity.

[2] Royalties are expressed in government fiscal years (April to March), while production is expressed in calendar years, as there is a lag for the Province to receive royalties corresponding to a certain production period. For example, natural gas production generated in January 2013 pays royalties to the Province in March 2013. By lagging royalty payments, the calculation matches the royalties received to the associated gas production.

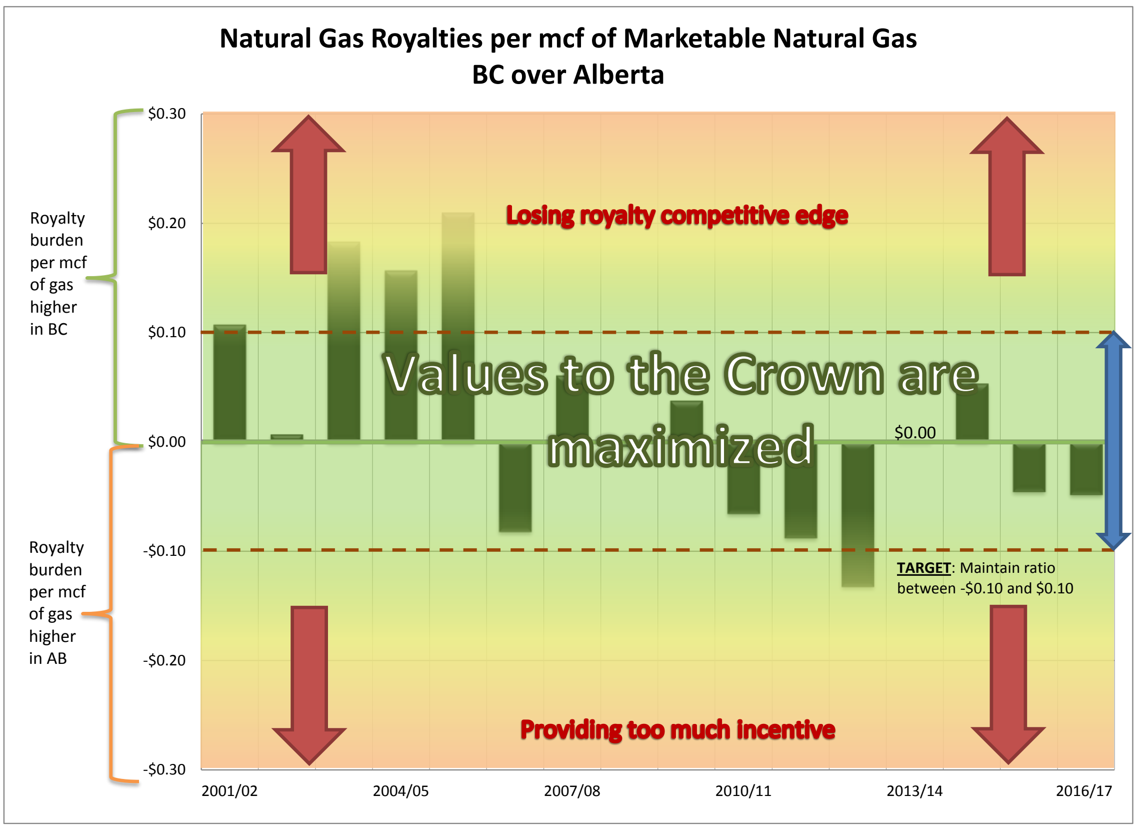
[3] Marketable gas means natural gas that is available for sale for direct consumption as a domestic, commercial or industrial fuel, or as an industrial raw material, or is delivered to a storage facility, whether it occurs naturally or results from the processing of natural gas.

Results

Royalties per mcf of production in B.C. [R_{BC}(mcf)] was \$0.09 in 2016/17. Depending on the year, producers have paid royalties to B.C. of between \$0.09 and \$1.95 per mcf of natural gas produced and sold to markets between 2000/01 and 2016/17. In Alberta, this range has moved from \$0.13 to \$1.74 per mcf.

Chart 1 below summarizes the results through time of the selected indicator. If B.C. and Alberta had identical royalty burdens per mcf of marketable production then RR (mcf) = 0. If RR (mcf) > 0, then B.C. is charging higher effective royalties than Alberta on a per mcf basis. If RR (mcf) <0, then B.C. is charging lower effective royalties than Alberta on a per mcf basis.

***Chart 1*: Indicator - Relative Royalty per mcf of marketable gas production**

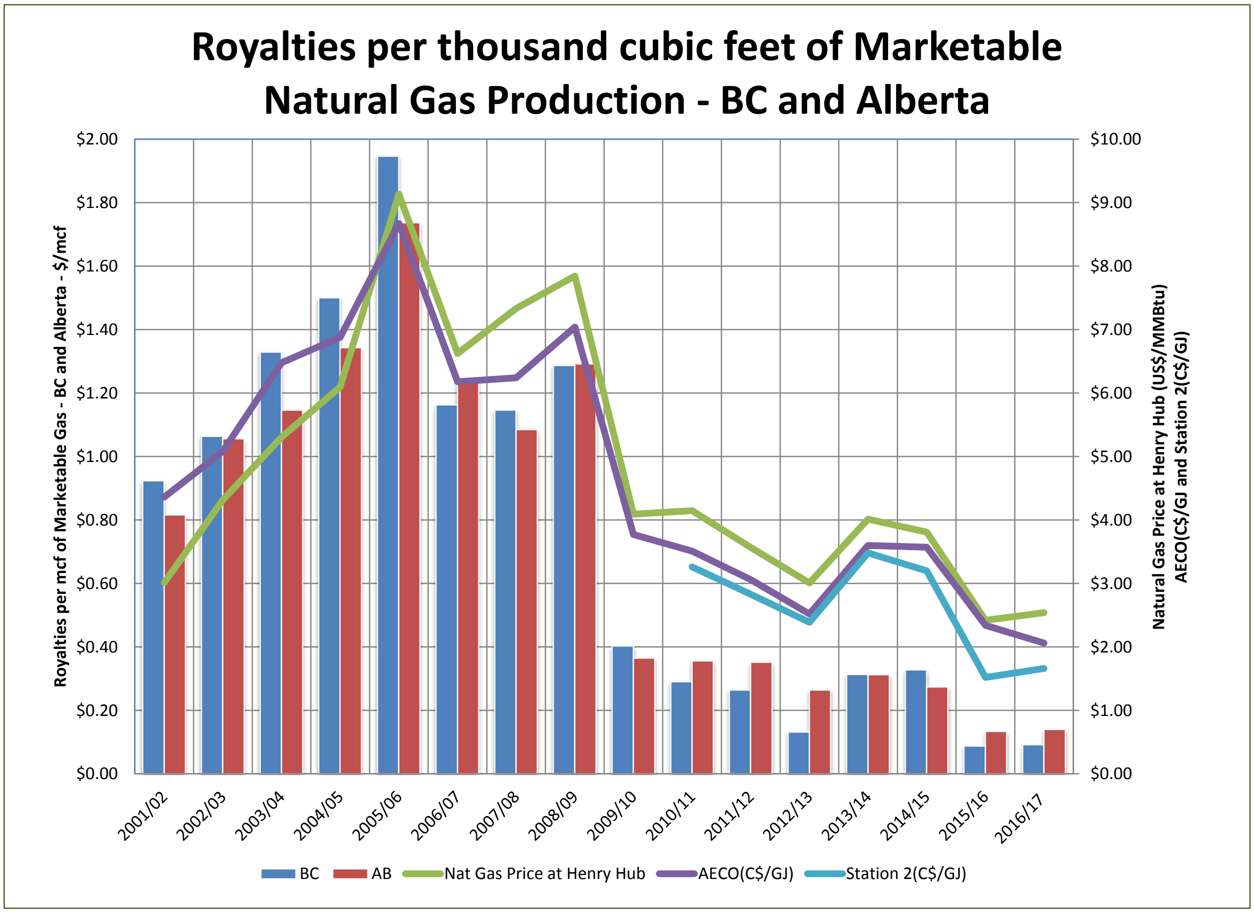


The data shows that RR(mcf) has moved in a range of -\$0.13 and \$0.21 in the period under analysis and was -\$0.05 in 2016/2017.

Interpretation of Results

Chart 2 shows the evolution of R_{BC}(mcf) and R_{AB}(mcf) from 2000/01 to 2016/17. The chart includes natural gas prices at Henry Hub (green column) to demonstrate the evolution of R_{BC}(mcf) and R_{AB}(mcf) follow the general price trend in North America. The chart also demonstrates the correlation (and differences) between natural gas prices at natural gas hubs in Alberta (AECO) and B.C. (Station 2) and the amount of royalties per mcf of marketable natural gas collected in B.C. as compared to Alberta.

<u>Chart 2</u>: Royalties per mcf of Marketable Natural Gas Production in B.C. and Alberta

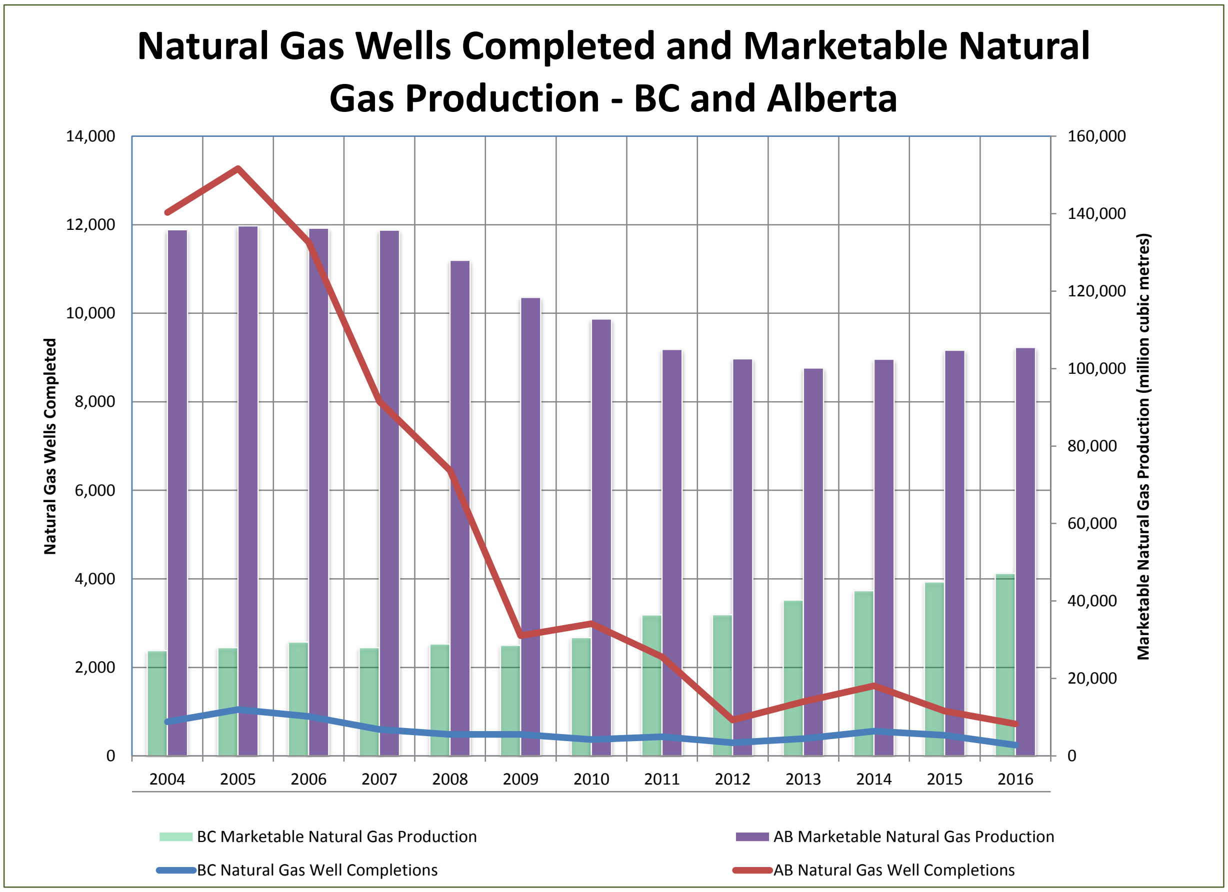


In both 2015/16 and 2016/2017, AECO prices were on average much higher than Station 2 prices, approximately $0.82/Giga Joule (GJ) and $0.40/GJ higher, due to pipeline maintenance and capacity issues in B.C., which in turn contributed to the lower R_{BC} than R_{AB}.

With regards to the impacts of effective royalty rates on R_{BC} and R_{AB}, there are a number of interrelated factors to consider, including (but not limited to) marketable natural gas production and number of natural gas wells completed (see chart 3 below). Increasing natural gas production in B.C. in the last 6 years, despite the slow decline in the number of annual natural gas wells completed during the same period, reflects the fact that unconventional natural gas wells for shale and tight gas have emerged as the primary new source of production. Unconventional natural gas wells typically produce more natural gas than conventional natural gas wells.

In Alberta, natural gas production generally declined over the last decade due to the large decline in the number of natural gas wells completed in the same period, but has begun to rise in the last few years because of increased unconventional natural gas activity.

Chart 3*: *Natural Gas Wells Completed and Marketable Natural Gas Production



Both Alberta and B.C. have seen an increase in natural gas liquids production as a result of the rise in unconventional natural gas wells completed in both provinces.

The above factors, including differences in the market price hubs the two provinces can access and the effective royalty rates, contributed to the variability of royalties charged per mcf in B.C. as compared to Alberta.

As with any indicators dealing with maximizing values, the indicator has some challenges:

- The indicator measures B.C.'s "maximization" of revenues using a relative measure (comparison with Alberta). Thus, it is as susceptible to B.C.'s royalty policy changes as to Alberta's. The introduction of Alberta in the analysis tries to capture the fact that B.C. does not move in an isolated world in which it can determine royalty rates without consequences. Capital is mobile, and as such, investors can decide to move their capital to other jurisdictions.
- Alberta is the historical competitor in terms of B.C.'s upstream investment. As unconventional development has become more important, B.C. is now also competing more and more with

other United States and Canadian jurisdictions. The indicator does not capture those changes, but provides a framework for further analysis.

- The indicator assumes that both jurisdictions receive basically the same price for their natural gas. Though this could be a topic of discussion (proximity to consumer markets, transportation tariffs, and different heat value of gas composition can distort this assumption), it is generally accepted that United States and Canadian jurisdictions face a very similar price environment in the medium or long terms. Chart 2 demonstrated that both provinces royalties charged per unit of gas generally move almost in unison against the benchmark natural gas price used in North America – Henry Hub). However, as Chart 2 illustrated, in the short term, like 2015/16 and 2016/17, market prices in relatively close price hubs (AECO in Alberta and Station 2 in B.C.) yielded very different absolute market prices, and hence contributed to differences in royalties per mcf of natural gas produced collected by the two provinces.

It is important to emphasize that the indicator should not be used in isolation to conclude that B.C. should increase/decrease royalty rates. This indicator should be looked at in conjunction with market share and investment indicators to be able to draw significant conclusions about B.C.'s competitiveness. The differences in the cost of extracting different natural gas resources, flow rates, reservoir characteristics, etc. are not captured by this indicator.

Performance Measure #2: Equity

Rationale

Goal 2 of B.C.'s royalty programs calls for ensuring equal access to royalty programs; more specifically: "producers, large and small, are treated equally under the regime."

B.C.'s royalty programs uphold the values of fairness and equal access to create an even playing field for all oil and gas companies. Equity is maintained through the process in which the royalty programs are administered. Industry participation in most royalty programs is determined automatically (based on qualifying criteria), while access to some royalty programs is determined by competitive direct industry application.

Indicator

The selected indicator is called "Producer Equity Ratio in B.C." [PER_{BC}]. It is built in the following manner:

(1) Total number of producers paying natural gas royalties, by fiscal year – TP_{BC}

(2) Number of producers who participate in at least one of the following royalty programs (marginal, ultra-marginal, deep, infrastructure, or net profit) – PP_{BC}

(3) Ratio of both factors:
$PER_{BC} = \{ PP_{BC} / TP_{BC} \} \times 100$

This ratio tells us the percentage of royalty payers in B.C. that have accessed B.C.'s royalty programs. A high ratio of companies participating in royalty programs demonstrates equity, as programs are accessible to all companies. Some companies have drilled wells that do not meet the qualification criteria established for any of the royalty programs.

The goal of ensuring producers have equal access to B.C.'s royalty programs is key to building investor confidence. The producer equity ratio provides a good indication of how many producers have participated in B.C. royalty programs. While a low PER_{BC} could occur in any given year (e.g. if companies do not meet the qualification criteria of at least one royalty program), maintaining PER_{BC} above the most recent five-year average (2012-2016) of 91 percent is considered to be a reasonable target for this indicator.

A company's participation in a royalty program depends on the characteristics of their wells and infrastructure. Table 2 summarizes how a determination is made regarding whether a company participates in each of B.C.'s royalty programs[4].

[4] Please note The Ministry of Finance (MFIN) is responsible for collecting B.C.'s oil and gas royalties and administration of the royalty programs.

Table 2: Industry Access to B.C. Royalty Programs

Natural Gas Royalty Program	Accessibility
Low productivity	MFIN automatically determines eligibility and calculates rates based on producer well information.
Marginal	MFIN automatically determines eligibility and calculates rates based on producer well information.
Ultra-marginal	MFIN automatically determines eligibility and calculates rates based on producer well information.
Deep	MFIN automatically determines eligibility and calculates rates based on producer well information.
Infrastructure	Company must submit application following a Request for Applications issued by MEMPR. MEMPR determines eligibility based on pre-determined criteria through a competitive process.
Net Profit	Company must submit application following a Request for Applications issued by MEMPR. MEMPR determines eligibility based on pre-determined criteria through a competitive process.
Clean Infrastructure	Company must submit application following a Request for Applications issued by MEMPR. MEMPR determines eligibility based on pre-determined criteria through a competitive process.

Results

Since the inception of B.C.'s royalty programs that started in 2003, more than 50 percent of all royalty payers have participated in a royalty program. In 2003/04, the producer equity ratio (PER_{BC}) was 56.2 percent, which means that out of the 73 companies paying royalties, 41 companies accessed a royalty program. This ratio has increased to over 91 percent in the last five fiscal years, and was 91 percent in 2016/17 (out of the 101 companies paying royalties, 92 accessed at least one royalty program). The few companies that did not participate in the program are mostly operating conservation gas wells or producing associated gas out of oil wells (conservation and associated gas wells by royalty rate design pays royalties at lower rates).

In 2016/17 72 companies had wells that qualified for the low productivity program, 67 and 57 companies had wells that qualified for the marginal and ultra-marginal programs respectively. The new wells aiming at developing unconventional resources in the B.C.'s Montney play generally qualify for the deep program and (if successfully in competitive applications) the infrastructure development program (see page 14 for more information). In 2016/17 57 companies had wells that qualified for the deep program.

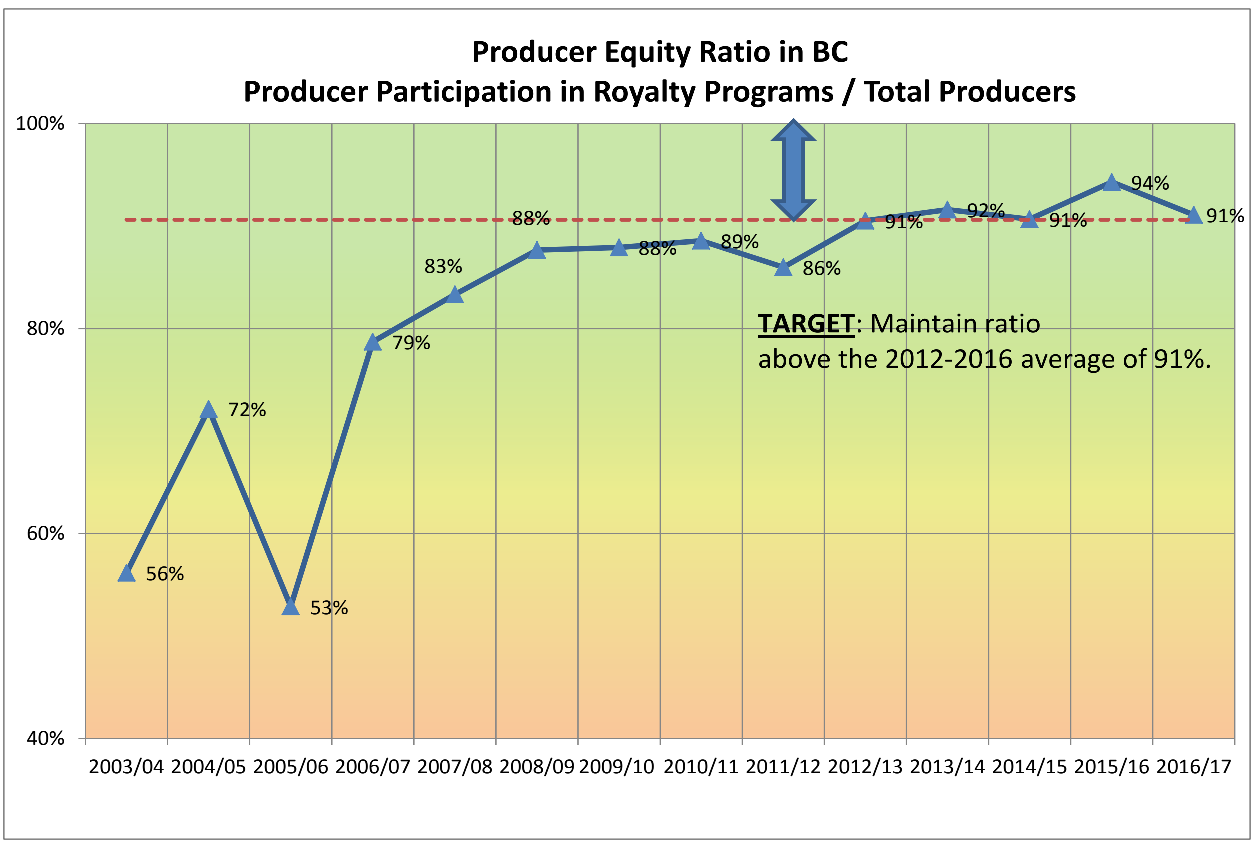
Interpretation of Results

Table 3 and Chart 4 demonstrate the number and percentage of producers that have participated in B.C.'s natural gas royalty programs from 2003/04 to 2016/17.

Table 3: Industry Participation in B.C. Royalty Programs

	total # of producers paying royalties	# of producers who participate in a royalty program	Ratio	# of producers who DO NOT participate in a royalty program	Ratio
2003/04	73	41	56.2%	32	44%
2004/05	79	57	72.2%	22	28%
2005/06	87	46	52.9%	41	47%
2006/07	155	122	78.7%	33	21%
2007/08	150	125	83.3%	25	17%
2008/09	162	142	87.7%	20	12%
2009/10	149	131	87.9%	18	12%
2010/11	140	124	88.6%	16	11%
2011/12	107	92	86%	15	14%
2012/13	116	105	91%	11	9%
2013/14	119	109	92%	10	8%
2014/15	118	107	91%	11	9%
2015/16	105	99	94%	6	6%
2016/17	101	92	91%	9	9%
Average of last 5 years			91%		

Chart 4: *Producer Equitable Access to Royalty Programs in B.C.*



The Infrastructure Royalty Credit Program

Through the Infrastructure Royalty Credit Program, upstream oil and gas producers, regardless of their size, can apply for a deduction from the royalties they pay to the Province. The purpose of the program is to facilitate increased upstream oil or natural gas exploration and production in under-developed areas; and extend the drilling season to allow for year-round activity. This credit can be as much as 50 percent of the cost of constructing roads or pipelines. The program operates through a competitive Request for Application process that evaluates road and/or pipeline applications and has a rigorous evaluation process.

Between 2004 and 2017, British Columbia's Infrastructure Royalty Credit Program has been offered through 16 different installments to oil and gas companies resulting in more than 248 new or upgraded all-season roads and pipeline projects in B.C., which speaks to the strong interest in the program by industry. The Province has approved the 2018 installment of the program to enhance competiveness and increase investment certainty by industry.

From 2006 to 2017, about 43% of all applications were approved. Internal Ministry data shows that small producers saw 47% of their applications approved, medium producers 48%, and large producers 39%. In terms of the shares of the total credits approved (the program has a fixed annual allocation of royalty deductions available), small producers accounted for 33%, medium producers 24%, and large producers 43%.

Table 4: Summary of Applications and Approvals from 2006 to 2017

Producer Size	**Approved**	**Total Applications**	**Percent Approved**
Small	72	154	47%
Medium	60	123	48%
Large	91	237	39%
Total	**223**	**514**	**43%**

Performance Measure #3: Long-term Investment

Rationale

Goal 3 of B.C.'s royalty programs calls for ensuring long-term industry investment in B.C.; more specifically: "the royalty regime is aimed at long-term investment by industry."

Industry evaluates a variety of factors when determining where to invest their capital budget. Some of those factors include geological characteristics of the resource, closeness to markets and business climate. While there are some factors the government cannot control (e.g. resource characteristics or geographic proximity to markets) the one thing a jurisdiction can impact is its business climate. Royalty regimes fall under the category of business climate – having a competitive royalty regime is key to maintaining industry investment levels in the Province.

Indicator

The indicator selected for this measure is called "Relative Investment in B.C." [RI_{BC}]. It is built using publicly available information:

- Cash expenditures (capital investment) of the upstream petroleum industry in B.C. and Canada, in billions of Canadian dollars, by calendar year, excluding oil sands (available from the Canadian Association of Petroleum Producers) – II_{BC} and $II_{CAN.}$
- Capital investment is the sum of two components:
    - exploration investment – which includes expenditures on geological and geophysical, drilling and land (i.e. bonus bids); and
    - development investment – which includes expenditures on drilling and well completions, field equipment, enhanced oil recovery (EOR) and gas plants.

The indicator is built in the following manner:

(1) Industry capital investment in B.C.: II_{BC}
(2) Industry capital investment in Canada: II_{CAN}
(3) Ratio of both factors:
$RI = \{II_{BC} / II_{CAN}\} \times 100$

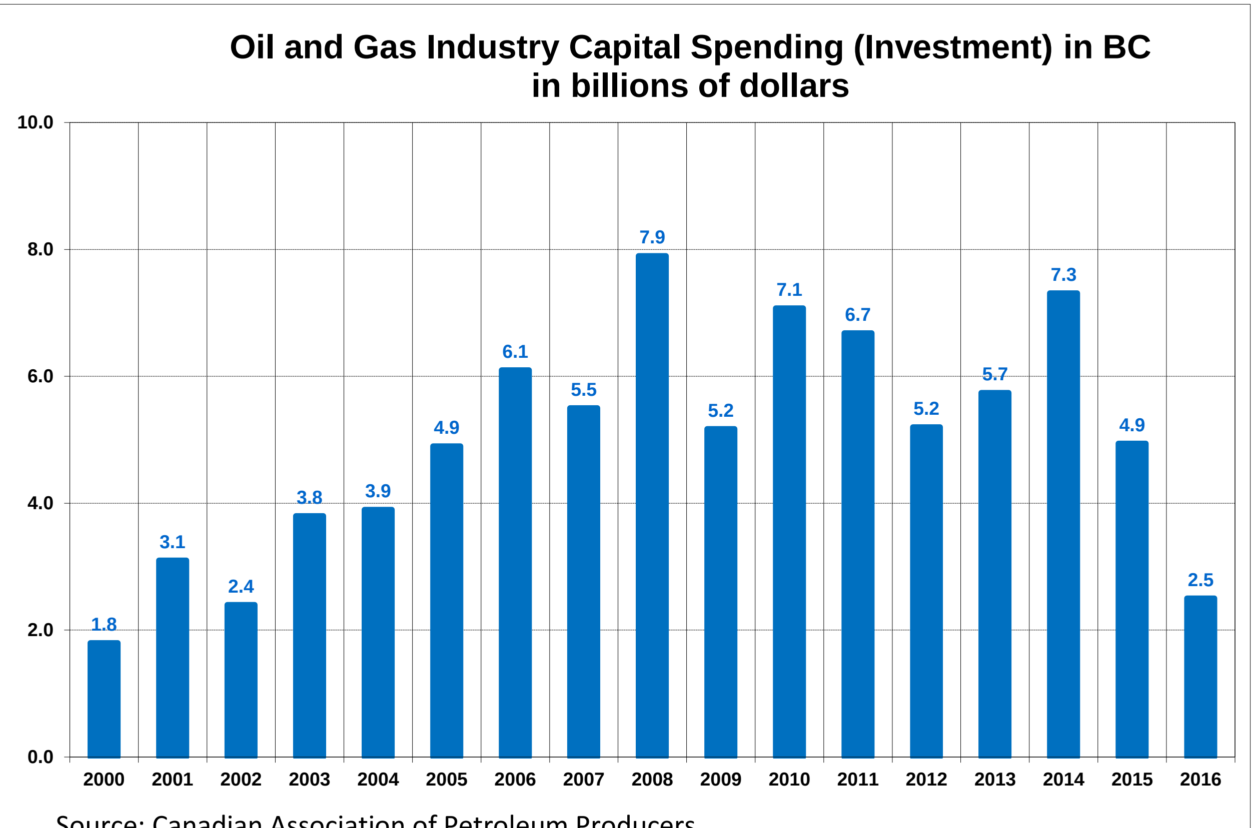
By evaluating investment as a ratio, impact of price on exploration and development is removed as all jurisdictions in Canada and the United States face a similar natural gas price environment. However, since the measure and data includes investment in both oil and natural gas, changes in the relative price between crude oil and natural gas will have an impact. Some provinces like B.C. have mainly natural gas resources, while Saskatchewan has mainly oil resources. Alberta, the largest producer of both oil and natural gas respectively in Canada, has more equal endowments of oil and natural gas resources.

One of the concerns with using industry capital investment as a performance measure for royalty regimes is that the government does not have "direct" control over industry investment decisions, nor endowments of oil resource versus natural gas resource. All the government can do is to facilitate a competitive investment environment to attract dollars to B.C., with a target to maintain the relative investment indicator at or above its 2012-2016 average of 13.8 percent. While this indicator is considered to provide fair evidence of the relative attractiveness of B.C.'s resource and royalty regime, a measure that isolates only natural gas investment would be preferable. At this time, the means to generate such a measure does not exist.

Results

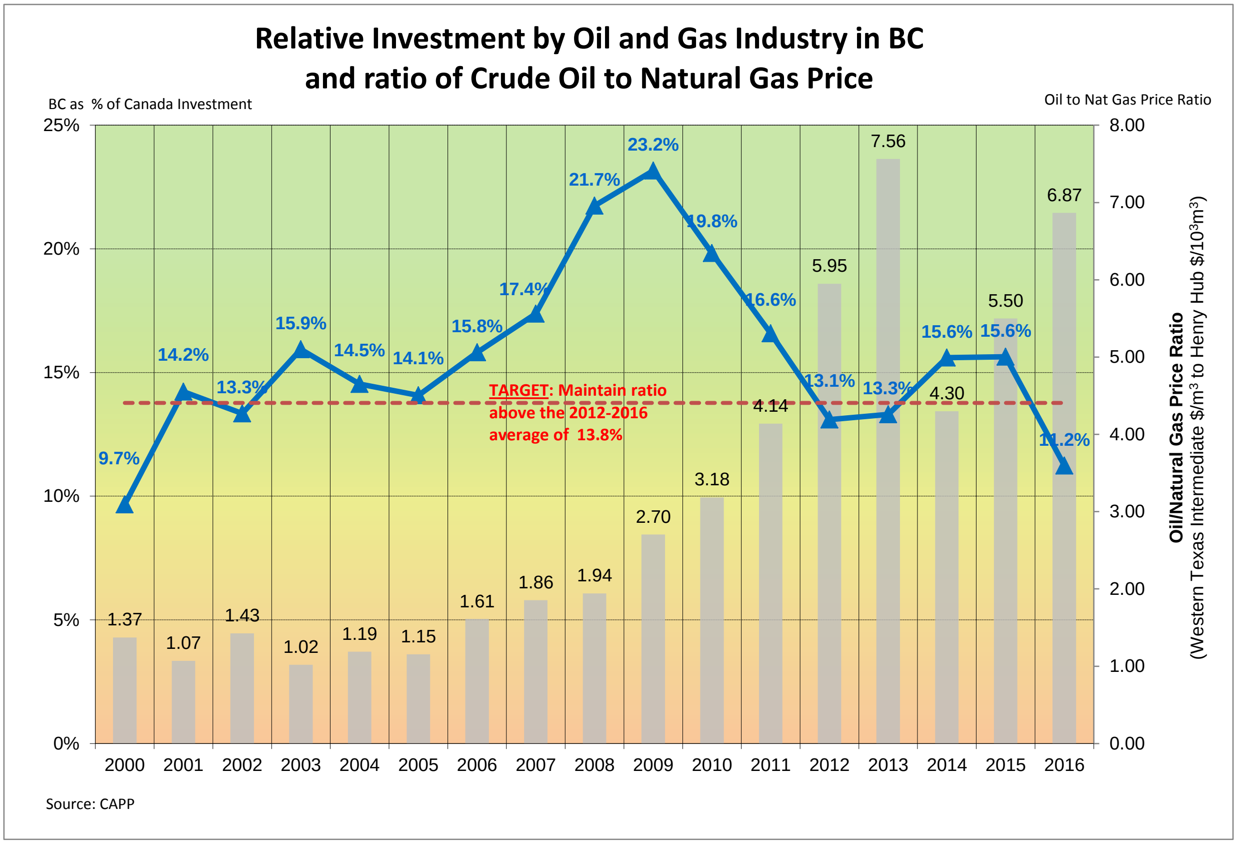
Chart 5 and chart 6 demonstrate the oil and gas industry's capital spending (investment) on exploration and development in B.C. including investment figures and relative ratios to Canada from 2000 to 2016:

***Chart 5*: Capital Investment on Exploration and Development in B.C. by the Oil and Gas Industry**



Source: Canadian Association of Petroleum Producers

Chart 6: Investment on Exploration and Development in B.C.



Interpretation of Results

As seen in Chart 6, B.C.'s market share of upstream industry investment has remained consistently above 10 percent since 2001. It varied between 2000 and 2016 mainly due to the fluctuations in crude oil to natural gas prices ratios – oil and gas industry investment in Canada generally shifted from natural gas to crude oil to benefit from the relatively higher oil prices in years when the ratio was high. The decline of investment observed in 2016 was the result of industry reacting to reduced commodity prices for natural gas; industry either deferred or reallocated investment dollars to oil focused projects in other jurisdictions.

Over the next 20 years, demand for natural gas and natural gas liquids is expected to rise and B.C. is positioned to compete for a share of the global market. B.C.'s market share of upstream natural gas industry investment is expected to reflect that growth in the future.

Performance Measure #4: Administrative Ease

Rationale

Goal 4 of B.C.'s royalty programs calls for ensuring administrative ease of the royalty regime; more specifically: "simple to administer and verify for government and industry."

From government's perspective, the importance of having a royalty regime which is simple and easy to administer is two-fold:

- to ensure Crown royalties can be calculated accurately; and
- to ensure stakeholders properly understand the "rules" of oil and gas investment in the jurisdiction.

From an industry perspective, it is important to fully understand the royalty and regulatory frameworks of the jurisdiction in which they are planning to do business. Oil and gas activities are major projects which involve millions to billions of dollars of investment. Complex regulatory or royalty frameworks which are not clearly documented or explained create uncertainty for industry.

Indicator

One way to measure the administrative ease and simplicity of a royalty regime is to conduct a survey of oil and gas companies.

The Fraser Institute conducts an annual survey of petroleum industry executives and managers around the world regarding barriers to investment in various jurisdictions. The last study, entitled Fraser Institute Global Petroleum Survey 2017 (Survey)[5], received responses from 333 individuals, providing sufficient data to compare 97 jurisdictions worldwide.

For Canada, six provinces were included in the survey. The survey was distributed to managers and executives in the upstream petroleum and natural gas industry (processers, marketers and distributers of oil and natural gas were not surveyed) and was administered between May 24, 2017 and July 28, 2017.

The survey was designed to capture the opinions of upstream oil and gas companies regarding the level of investment barriers in jurisdictions with which they were familiar about. Respondents were asked to rate how 16 different factors influence company decisions to invest in various jurisdictions. These factors included areas such as taxes, regulations and regulatory enforcement.

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[5] The 2017 survey is available on the Fraser Institute website at https://www.fraserinstitute.org/sites/default/files/global-petroleum-survey-2017.pdf.

The Survey's "Fiscal terms" factor includes licenses, lease payments, royalties, other production taxes, and gross revenue charges, but not corporate and personal income taxes, capital gains taxes, or sales taxes. While not specifically designed to determine administrative ease of a royalty system, this factor is most closely related to the administrative ease performance measure.

For the Fiscal terms factor, respondents were asked to select one of the following five responses that best described each jurisdiction they were familiar with:

1. Encourages investment.
2. Not a deterrent to investment.
3. Mild deterrent to investment.
4. Strong deterrent to investment.
5. Would not pursue investment due to this factor.

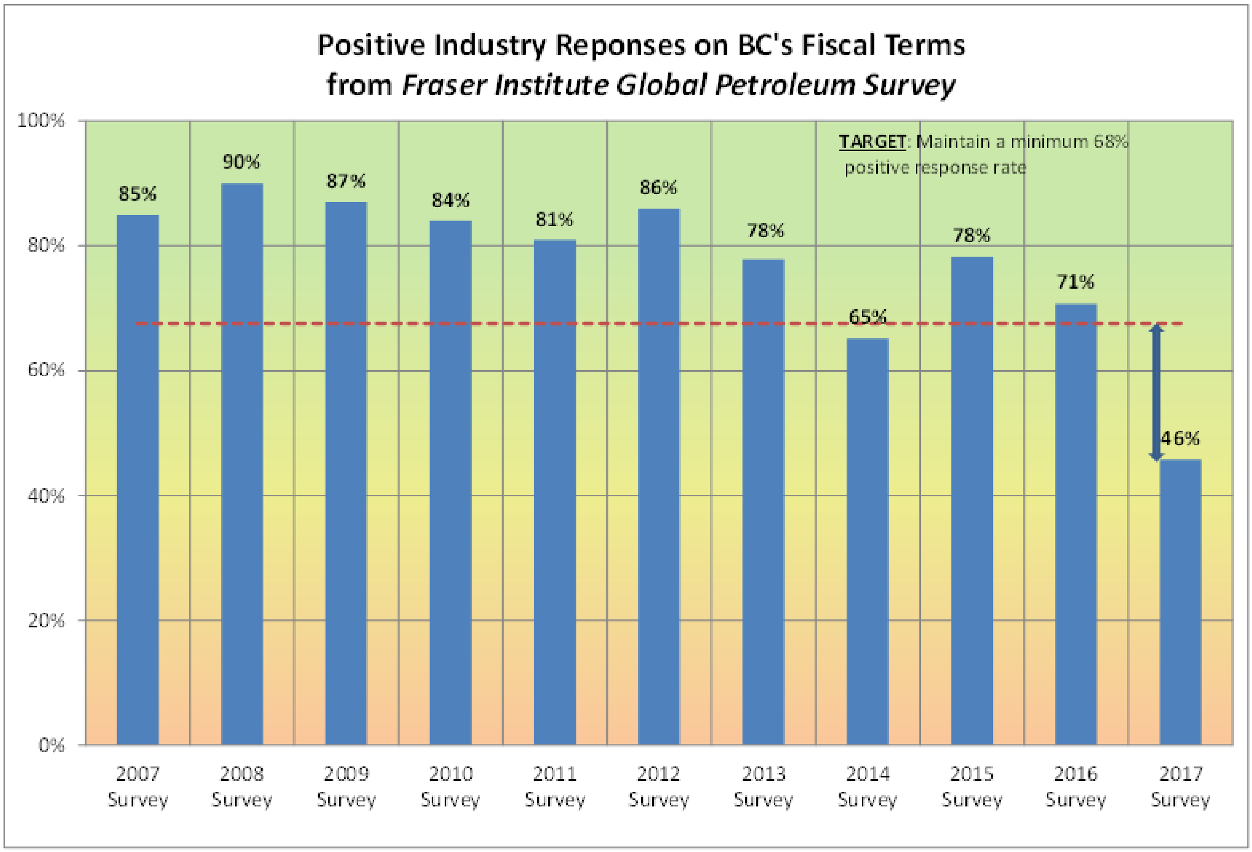
If a jurisdiction has high scores for responses 1 and 2, this means the jurisdiction has a positive fiscal environment, which could be interpreted as having a positive royalty framework (it is simple and easy to administer) from an investment perspective. That is, the jurisdiction would be more attractive for oil and gas investment.

The goal of a royalty regime that is simple to administer and verify for government is important for attracting capital and building investor confidence. While the Fiscal terms indicator is not specifically designed to measure this goal, it is a relatively good measure to use and a reasonable target for the indicator is a positive response rate of 68 percent, which is the average rate of the last five years (from 2013 to 2017).

Results

The oil and gas industry considers B.C. to be less favourable in terms of fiscal terms in the latest survey, with a 46 percent positive response in 2017 versus 71 percent in 2016. For B.C., the percentage of positive responses has ranged between 46 percent and 78 percent in the last five annual surveys conducted by the Fraser Institute:

***Chart 7*: Industry Perception of B.C.'s Fiscal Framework**

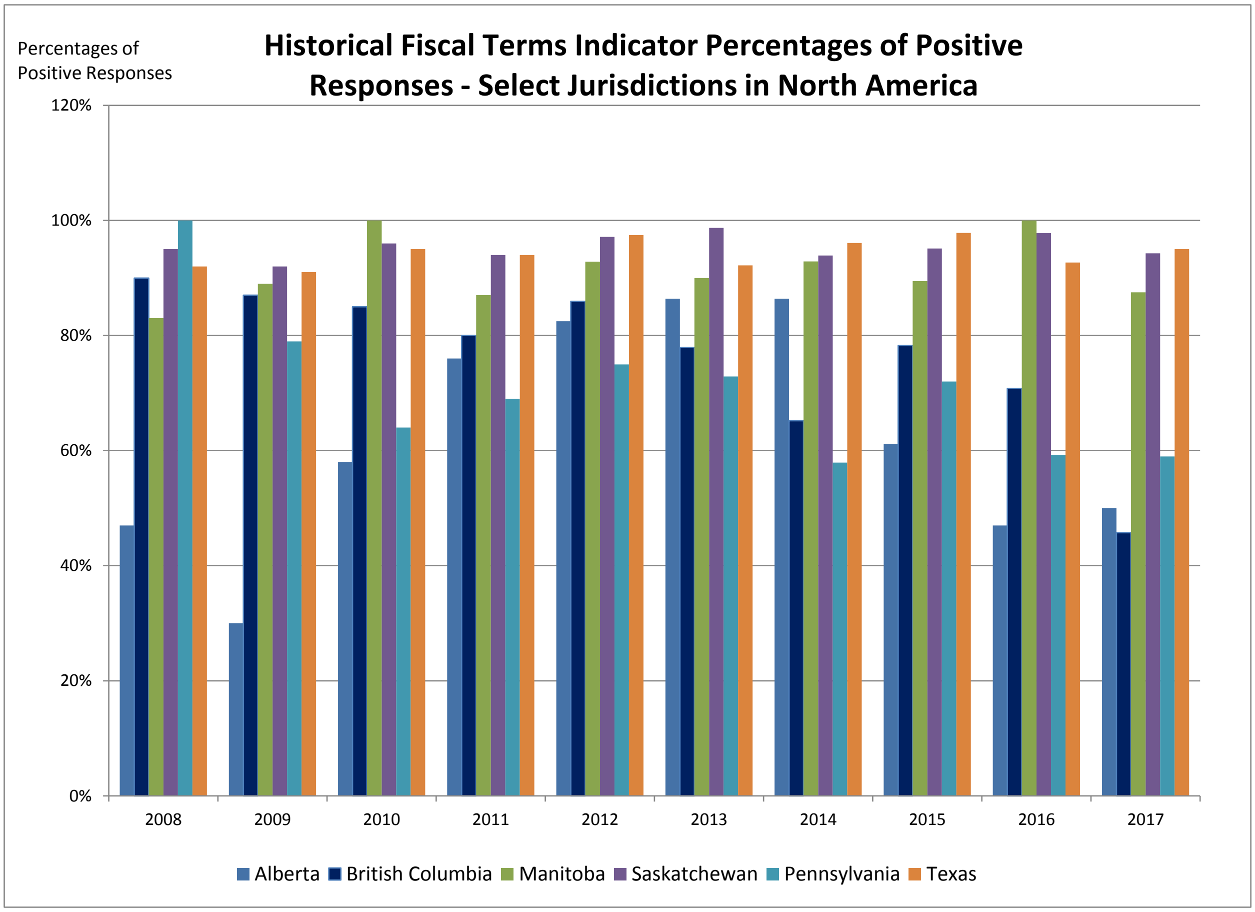


Interpretation of Results

As B.C.'s fiscal framework did not undergo any major changes between 2016 and 2017, the increased negative survey results for fiscal terms can be explained by concerns from investors about certainty following the change in provincial government. Most of the other survey questions also received low scores compared to 2016.

Chart 8 below displays the percentages of positive responses in fiscal terms for select North American jurisdictions, including key competitor jurisdictions to B.C. in natural gas production and sales. In 2017, the percentages of positive responses for the fiscal terms factor were relatively stable in Alberta, Pennsylvania and Texas as compared to 2016. These three jurisdictions are key natural gas producer competitors to B.C. in terms of natural gas. Saskatchewan and Manitoba have slightly lower percentages of positive responses for the fiscal terms factor in 2017 vs. 2016. These two jurisdictions are mainly crude oil producers.

<u>Chart 8</u>: Historical Fiscal Terms Indicator Percentages of Positive Responses - Select Jurisdictions in North America



Conclusion

In response to the Auditor General's recommendations to share more information with the public about the impact of the province's royalty programs, this Performance Measures Report provides information on the impact of B.C. royalty programs in oil and gas activity and the follow-up on the four goals of the current royalty regime:

- *Values to the Province are maximized*: a balance between incenting investment and providing a fair return to B.C. has been achieved when comparing B.C. to Alberta to maximize values to the Province.
- *Equity*: high ratio of companies participating in the royalty programs, which demonstrates equity, as programs are accessible to all companies.
- *Long-term investment*: high ratio of industry investment in B.C. vs. industry investment in Canada, which demonstrates the relative attractiveness of B.C.'s natural gas resources and programs. However, it is impacted by relative oil to natural gas prices and hence investment swings between the two commodities.
- *Administrative Ease*: in 2017 B.C. received lower scores in Fiscal terms in the Fraser Instituter Global Petroleum Survey, mainly reflecting the industry sentiment at the time of survey (which happened around the time of B.C. provincial election) regarding potential uncertainty.

Our commitment is to generate these reports every year. As this is a work in progress, suggestions and comments are welcome, and can be sent to:

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