



Alberta Natural Gas and Conventional Oil Investment Competitiveness Study

Response to Industry Survey Questions

November 10, 2009



Key Points Summary

The Calgary Chamber of Commerce commends the Government of Alberta for undertaking the Natural Gas and Conventional Oil Investment Competitiveness Study. It has the potential to position the province more competitively to capitalize on its tremendous resource endowment, while restoring industry and investor confidence in the process.

At the heart of the Study is the opportunity to articulate a long-term vision of energy development in the province and create a forward-focused, stable, fiscal and regulatory regime that is globally competitive and responsive to technological change. The key outcome is attracting investment, creating jobs and ensuring economic prosperity for all Albertans.

The Calgary Chamber of Commerce represents over 2,300 Calgary-based businesses. As studies have shown, businesses of all sizes benefit directly and indirectly from oil & gas activity. To continue to build this prosperity the fiscal and regulatory review must position the province as a global leader in attracting capital and recognize the changing nature of the Western Canada Sedimentary Basin (WCSB) towards 'resource plays' (large unconventional oil & gas deposits that are regionally intensive) and enhanced oil recovery.

Important elements of a fiscal and regulatory regime to deliver efficient oil & gas production in an increasingly carbon-constrained environment should include:

- Securing a Return on Investment (ROI) for investors that reflects the level of risk taken.
- Ensuring predictability and stability to instill trust and confidence for investors.
- Providing economic incentives for the development of the widest range of energy opportunities available and fostering technological innovation and investment in R & D, with particular emphasis on reducing greenhouse gas emissions during production.
- Recognizing that different extraction methods (e.g. enhanced oil recovery, shale gas production, etc.) and the very nature of resource plays (from one off wells to entire scheme developments) result in fundamentally different operations and therefore require alternate fiscal and regulatory frameworks.
- Making improvement of the regulatory process a major ongoing priority with the goals of minimizing the regulatory burden and eliminating duplication and increasing collaboration between regulatory bodies to achieve outcome based assessments.
- Ensuring producers, large and small, are treated equitably.
- Fostering continuous improvement in environmental management.
- Providing responsive and equitable economic rent from resource development for Albertans.
- Providing an ongoing forum for constructive dialogue with industry to capitalize on emerging opportunities and encourage greater understanding of the impacts of any proposed regime changes.

We recognize that a parallel stream of regulatory review analysis is currently underway. It is extremely important that such a review takes place within the context of the key points above as this is an important component of overall competitiveness. Other variables include access to resources, geology, commodity prices, political climate, currency exchange rates, financial capital mobility and labour costs. These factors should be important considerations in developing the final regime.

Success of the Study also means establishing and maintaining a positive and trusting working relationship between the Department of Energy and industry, as the major joint stakeholders in maximizing the potential of Alberta's energy resources. Improved dialogue leads to better understanding of industry investment decisions and impacts of fiscal and regulatory decisions.



Recommendations

The Calgary Chamber of Commerce makes recommendations to the Government of Alberta in several key areas.

Communicate the Vision and Benefits of Energy Development

1. Articulate a vision of energy development in the province and outline the industry benefits to all Albertans as part of any changes to improve the competitiveness of the fiscal and royalty regime.

Target and Certainty

2. Set the goal to make Alberta the most competitive jurisdiction for oil & gas investment.
3. Restore investment certainty through fewer short-term, temporary measures.
4. Provide sufficient time (e.g. at least five years) before another major review, and that future reviews are inclusive of industry at the onset, and focus on ensuring the system continues to be current and responsive to technological change and long-term resource plays.

Fiscal and Regulatory Competitiveness

5. Compare Alberta's regime internationally to understand capital deployment alternatives.
6. Adjust the royalty regime to recognize that different extraction methods (e.g. enhanced oil recovery, shale gas production, etc.) and the very nature of resource plays (from one off wells to entire scheme developments) result in fundamentally different operations and therefore require alternate fiscal and regulatory frameworks.
7. Establish a royalty mechanism for the development of emerging unconventional resources (shale gas, tight oil) and enhanced oil recovery.
8. Ensure adequate upside investment return potential to compensate for investment risk, and encourage reinvestment by:
 - A. Reducing the initial royalty take to allow faster recovery of capital costs.
 - B. Reducing the steepness of the royalty curve (royalty rate increase as price and production increases).
 - C. Incorporate cost factors into the royalty structure to account for cost escalations as prices fluctuate.
9. Ensure data is 'real time' (up-to-date) and, as appropriate, consider external sources of data and financial modeling from world-class energy financial companies.
10. Consider a consolidated approach to environmental assessment, public and Aboriginal consultation for regions that are intensely developed.

Fostering Technological Innovation

11. Encourage innovation and the development of new recovery and environmental technology through various tax, royalty and/or other incentives.
12. Maintain industry and government collaboration in energy research and development to share technological and cost risks (e.g. carbon capture and storage investment partnership).

Constructive Ongoing Dialogue

13. Create a permanent and ongoing forum for industry/government dialogue to address emerging issues, ensure understanding of industry investment decision metrics, and explore opportunities to capitalize on emerging resource development.



Introduction

The Calgary Chamber of Commerce represents over 2,300 Calgary-based businesses. The Chamber seeks to raise the consciousness and quality of public discourse on key policy issues confronting its members and stakeholders, through informed discussion grounded in fact and reasoned analysis.

Alberta's oil and gas sector represents a fundamental component of the broader provincial economy. It is estimated that 42 per cent of provincial GDP is derived from the oil and gas sector, with approximately 15 per cent (\$23 billion) as a result of direct mining and oil and gas activity.¹ The remainder of this contribution is attributable to downstream economic activity resulting from the oil and gas sector – both indirectly (through increased demand for geological, drilling, accounting and technological services) and through induced activity (such as increased consumption and investment associated with higher incomes and profits).

New analysis from the Canadian Energy Research Institute (CERI) forecasts that over the next 25 years oil & gas activities in Alberta will create a total GDP impact of \$2.9 trillion within Canada, providing total federal tax revenues of \$311 billion and \$189 billion in Alberta. Incremental employment gains are estimated to be 13,750 thousand person years within Alberta, and an additional 4,780 thousand person years across the country (reaching a total of 18,530 per thousand person years). In addition, oil & gas activity is expected to result in \$12 billion in royalties per year to the Government of Alberta. The study indicates a three-fold return to the Canadian economy for oil & gas investment in Alberta.² These government revenues and economic growth prospects could be jeopardized by a fiscal and regulatory regime that is uncompetitive.

The Alberta government is currently undertaking a review of the competitiveness of Alberta's natural gas and conventional oil sector, and has issued a survey to solicit industry feedback on the issue. This submission is structured in response to the industry survey questionnaire, included in the text box below, and is informed by the expertise of Chamber members and volunteers with significant experience and knowledge of the oil & gas and other affected sectors.

Alberta Natural Gas and Conventional Oil Investment Competitiveness Study 2009 – Industry Survey Questions

Overview

1. How would you define success for the Investment Competitiveness Study?
2. How do you see the natural gas industry changing in North America? How do you see the conventional oil industry changing in North America? What implications could these changes have for Alberta's industry in terms of:
 - Economic competitiveness?
 - Size of the industry (i.e. number of companies, level of drilling)?
 - Industry composition (i.e. majors, mid-caps, juniors)?
3. What impact will North American shale and tight gas have on Alberta's conventional natural gas sector? What, in your view, is the best approach to exploit Alberta's shale/tight gas resource?
4. What do you see as the role of government in positioning Alberta for ongoing success in order to remain profitable, sustainable and competitive in the future? What is industry's role?

¹ Mansell, Robert and Schlenker, Ron (2006). *Energy and the Alberta Economy: Past and Future Impacts and Implications*. Institute for Sustainable Energy, Environment and Economy. Available at: <http://www.iseee.ca/whatsnew/reports/reports.shtml>

² Canadian Energy Research Institute. 2009. *Economic Impacts of the Petroleum Industry in Canada*. Available online: <http://www.ceri.ca/documents/CERIIOSummaryReport.pdf>



5. How would you suggest the government find the balance between resource owners and natural gas and conventional oil industry?

Competitive Situation

1. Is investment in Alberta's natural gas and conventional oil industry competitive? Why or why not?
2. What your company's measures of profitability and success today?
3. Have you increased, decreased or kept your investment the same in Alberta in the last three years? What are your top three reasons for your investment decisions in Alberta? Have you increased your investment in other jurisdictions in the past 3 years?

Working Relationships

1. What is your perspective on the communications and relationship that exists between the Government of Alberta and industry?
2. How can the communication and relationships be improved? What can government do to improve this? What can industry do to improve this?

Discussion

Overview

1. How would you define success for the Investment Competitiveness Study?

The Calgary Chamber of Commerce commends the Government of Alberta for undertaking the Natural Gas and Conventional Oil Investment Competitiveness Study. It has the potential to position the province more competitively to capitalize on its tremendous resource endowment, while restoring industry and investor confidence in the process.

At the heart of the Study is the opportunity to articulate a long-term vision of energy development in the province and create a forward-focused, stable, fiscal and regulatory regime that is globally competitive and responsive to technological change. The key outcome is attracting investment, creating jobs and ensuring economic prosperity for all Albertans.

The Calgary Chamber of Commerce represents over 2,300 Calgary-based businesses. As studies have shown, businesses of all sizes benefit directly and indirectly from oil & gas activity. To continue to build this prosperity the fiscal and regulatory review must position the province as a global leader in attracting capital and recognize the changing nature of the Western Canada Sedimentary Basin (WCSB) towards 'resource plays' (large unconventional oil & gas deposits that are regionally intensive) and enhanced oil recovery.

Important elements of a fiscal and regulatory regime to deliver efficient oil & gas production in an increasingly carbon-constrained environment should include:

- Securing a Return on Investment (ROI) for investors that reflects the level of risk taken.
- Ensuring predictability and stability to instill trust and confidence for investors.
- Providing economic incentives for the development of the widest range of energy opportunities available and fostering technological innovation and investment in R & D, with particular emphasis on reducing greenhouse gas emissions during production.



- Recognizing that different extraction methods (e.g. enhanced oil recovery, shale gas production, etc.) and the very nature of resource plays (from one off wells to entire scheme developments) result in fundamentally different operations and therefore require alternate fiscal and regulatory frameworks.
- Making improvement of the regulatory process a major ongoing priority with the goals of minimizing the regulatory burden and eliminating duplication and increasing collaboration between regulatory bodies to achieve outcome based assessments.
- Ensuring producers, large and small, are treated equitably.
- Fostering continuous improvement in environmental management.
- Providing responsive and equitable economic rent from resource development for Albertans.
- Providing an ongoing forum for constructive dialogue with industry to capitalize on emerging opportunities and encourage greater understanding of the impacts of any proposed regime changes.

We recognize that a parallel stream of regulatory review analysis is currently underway. It is extremely important that such a review takes place within the context of the key points above as this is an important component of overall competitiveness. Other variables include access to resources, geology, commodity prices, political climate, currency exchange rates, financial capital mobility and labour costs. These factors should be important considerations in developing the final regime.

Success of the Study also means establishing and maintaining a positive and trusting working relationship between the Department of Energy and industry, as the major joint stakeholders in maximizing the potential of Alberta's energy resources. Improved dialogue leads to better understanding of industry investment decisions and impacts of fiscal and regulatory decisions.

2. **How do you see the natural gas industry changing in North America? How do you see the conventional oil industry changing in North America? What implications could these changes have for Alberta's industry in terms of:**
 - **Economic competitiveness?**
 - **Size of the industry (i.e. number of companies, level of drilling)**
 - **Industry composition (i.e. majors, mid-caps, juniors)**

Natural Gas - Trend Towards Unconventional Resource Development and U.S. Self-Sufficiency

Advancements in horizontal drilling and completion technology have allowed the industry to unlock trillions of cubic feet reserves of unconventional natural gas (shale gas, coalbed methane and tight gas). While the implications of this unconventional gas revolution are still being assessed, it has already meant a fundamental shift in both the supply outlook for natural gas and the scope of potential uses of the resource.

Emergence of U.S. Shale Gas

Fossil fuels (natural gas, coal and oil) supply about 85 per cent of U.S. energy with natural gas supplying about 22 per cent of the total. The contribution from natural gas is expected to remain constant for the next 20 years.

As approximately 50 per cent of Western Canada gas production is exported to United States, changes to the demand and supply dynamic of our largest trading partner will have a significant impact on Alberta's industry.³

The U.S. Energy Information Administration (EIA) projects that the United States has more than 1,744 trillion cubic feet (tcf) of technically recoverable natural gas, including 211 tcf of proven reserves (the discovered, economically recoverable fraction of the original gas-in-place). Technically recoverable unconventional gas (shale gas, tight sands, and coalbed methane) comprises 60 per cent of the onshore

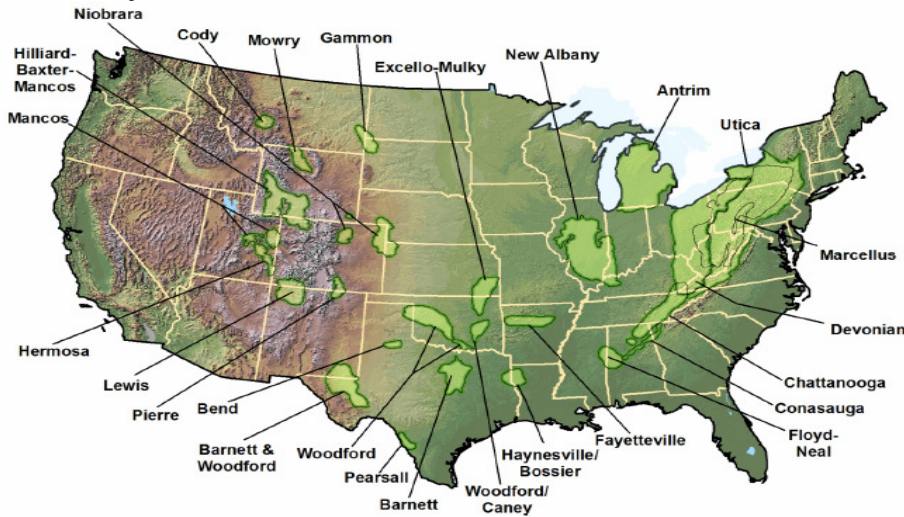
³ Canadian Society for Unconventional Gas (CSUG). 2009. *Shale Gas Resource Plays in North America Opportunities and Challenges*. Presentation to the NBF Energy Services Conference. September 14, 2009. Available: http://www.csug.ca/images/CSUG_presentations/2009/NBF%20luncheon%20presentation%20final.pdf



recoverable resource (see Figure 1 for major U.S. shale basins). At 2007 U.S. production rates, about 19.3 tcf, the current recoverable resource estimate provides enough natural gas to supply the U.S. for the next 90 years. Other estimates of the shale gas resource extend this supply to 116 years.⁴

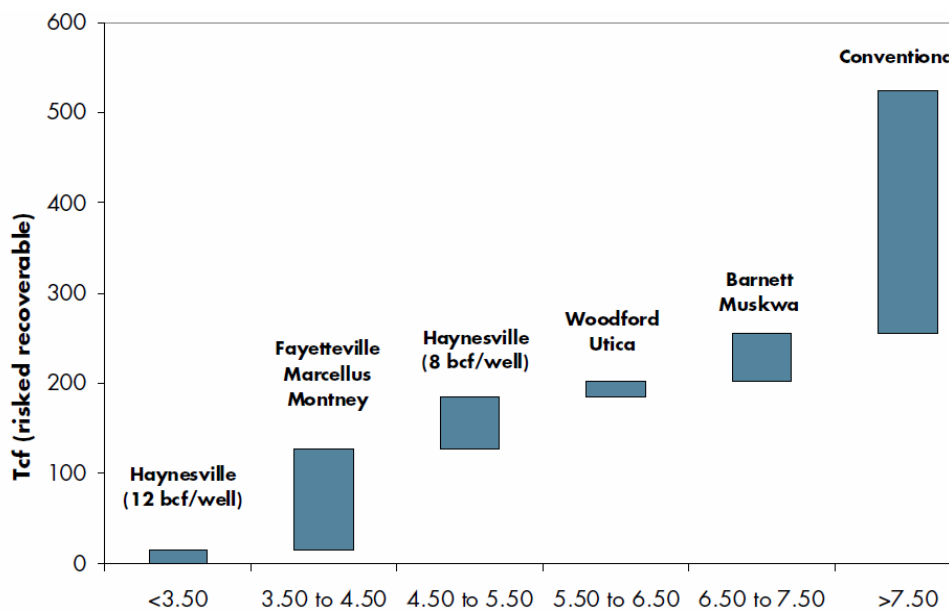
Analysts forecast that by 2011 most new U.S. reserves growth (50 – 60 per cent, or approximately 3 bcf/day) will come from unconventional shale gas reservoirs. Four shale gas plays (the Haynesville, Fayetteville, Marcellus, and Woodford) may hold over 550 tcf. Shale gas deliverability is expected to grow from 8 bcf/d to 25 bcf/d over the next decade.⁵ Although this forecast is based on a U.S. \$8 per million British thermal units (mmtbu) gas price, and would need to be adjusted given the current lower price environment, the potential is significant.

Figure 1 – Major U.S. Shale Basins



Source: U.S. Department of Energy

Figure 2 – Comparison of Shale Gas and Conventional Supply Costs



Source: Macquarie. 2009. *The Shale Gas Revolution: The Bear Market Balancing Act*. Presentation to the Canadian Society for Unconventional Gas. May 20, 2009

⁴ U.S. Department of Energy. 2009. *Modern Shale Gas Development in the United States : A Primer*. April 2009. Available online.: http://fossil.energy.gov/programs/oilgas/publications/naturalgas_general/ShaleGasPrimer_Online_4-2009.pdf

⁵ Macquarie. 2009. *The Shale Gas Revolution: The Bear Market Balancing Act*. Presentation to the Canadian Society for Unconventional Gas. May 20, 2009



Due to lower drilling costs, lower royalties, proximity to market, and premium exchange values, U.S. shale plays have a distinctive production cost advantage to Canada's reserves. A number of the unconventional natural gas basins in United States have better economics than Canadian shale gas plays and conventional gas production (see Figure 2).

Given these cost dynamics and the decline of conventional natural gas resources in Canada and Mexico and increasing domestic demand, the U.S. Energy Information Agency predicts that U.S net imports of natural gas will decline from 16 percent of supply in 2007 to 3 percent in 2030.⁶

Canadian Potential – Unconventional Gas

Current estimates of the unconventional natural gas resource potential in Canada are several hundred tcf, which greatly exceeds the remaining conventional natural gas potential in Canada. Canadian natural gas production is broadly split between conventional, coalbed methane (CBM) and shale gas. Western Canadian conventional natural gas, currently about two-thirds of production, is expected to decline to one-third by 2020. In its place, will be production of unconventional resources such as tight gas, shale gas and CBM. The Montney tight/silt gas and Horn River shale gas in northeast B.C. are the primary areas in Canada for this development today.⁷

While large-scale production of unconventional gas has not yet been achieved in Canada, interest has dramatically increased since 2007. Companies have spent over \$2 billion in northeast British Columbia to establish land positions in the shale gas plays of the Horn River Basin and the Montney. With the application of new technologies, many companies are now exploring for potential shale gas deposits not only in Alberta and British Columbia, but also in Saskatchewan, Ontario, Quebec, New Brunswick and Nova Scotia. At this time, Alberta is the only province with commercial scale coalbed methane production.

The Canadian Association of Petroleum Producers conservatively estimates that unconventional natural gas production in Canada could grow from about 1 bcf/d today to 5 bcf/d by 2020.

Conventional Oil – Trend Towards Enhanced Oil Recovery; U.S. Climate Change and Energy Security Concerns

U.S. Supply

Long-term development of conventional oil in North America is mainly a function of world oil prices and technology development. According to the U.S. Energy Information Agency, increases in American crude production is extremely sensitive to world crude oil prices, as the remaining domestic resources generally require more costly secondary or tertiary recovery techniques, which are uneconomic when the oil price is low.⁸

The EIA predicts an increase in U.S. production, reversing the trend of decline. This is mainly due to increased use of CO₂ enhanced oil recovery techniques, exploitation of oil from the Bakken shale formation, and the start up of liquids production from oil shale. Total onshore production of crude oil is forecast to increase from 2.9 million barrels per day in 2007 to 4.1 million barrels per day in 2030. Deepwater discoveries in the Gulf of Mexico will also play a major role in U.S. production gains.⁹

⁶ U.S. Energy Information Agency. *Annual Energy Outlook 2009 with Projections to 2030*. . Release Date: March 2009. Available online: <http://www.eia.doe.gov/oiaf/aeo/gas.html>

⁷ National Energy Board. 2009. Canada's Energy Future. October 2009. Available online: <http://www.neb-one.gc.ca/clf-nsi/nrgynfntn/nrgyrprt/nrgyfr/2009/nfrstrctrchngchllng2010/nfrstrctrchngchllng2010-eng.pdf>

⁸ U.S. Energy Information Agency. *Annual Energy Outlook 2009 with Projections to 2030*. . March 2009. Available online: <http://www.eia.doe.gov/oiaf/aeo/gas.html>

⁹ Ibid.



U.S. Climate Change and Energy Security Concerns

The convergence of environmental concerns, energy security and green job creation as key themes in policy-making discussions in the United States represents a potential transition from the current primarily fossil fuel driven nature of electricity and transportation fuel markets in North America. This presents a particular economic and technological challenge to Alberta given the role of hydrocarbon development and export in our energy system and economy.

U.S. proposed climate change and energy legislation currently includes transborder charges and indirect costs associated with the allowance allocation to U.S. buyers of energy intensive products. This legislation is expected to pass (i.e. both the House and the Senate) in early 2010 and will affect Alberta's production.

Both the Governments of Alberta and Canada must work to ensure Canada's energy has free and unencumbered access to U.S. markets. Canada's natural gas resources can be viewed as a valuable energy bridge to a cleaner and more secure energy future.

With growing concerns about U.S. reliance on foreign sources of energy and a rising demand for energy from the emerging economies of China, Japan, Korea, and Taiwan, it is prudent for Canada to look at diversification of customer markets. Proposed pipeline projects such as the Northern Gateway Pipeline and Kitimat LNG terminal could provide options for producers to export oil & gas to Asian markets and improve Canada's position in future negotiations with the United States. A key element to diversifying markets will be timely regulatory decisions for pipelines. It will also involve working closely with federal departments and agencies and the Government of British Columbia to remove any impediments to project development.

Western Canadian Sedimentary Basin (WCSB) –Opportunities for Enhanced Oil Recovery in Alberta

After peaking in the 1970s, WCSB conventional oil production is predicted to continue the historical decline of about three per cent per year, consistent with a maturely developed basin. Currently, only about 27 per cent of light oil and 15 per cent of heavy oil is recovered in Alberta.¹⁰ The Energy Resources and Conservation Board estimates that improvements in technology could improve the current average recovery efficiency by 26 per cent.¹¹

Western Canada is well positioned to be a leader in carbon capture and storage (CCS). The unique storage potential of the WCSB along with the Government of Alberta and industry partnership (\$2 billion from the government to be at least matched by industry) to fund research and development of CCS facilities is a strong step towards developing new industrial capacity.

The Alberta Carbon Capture and Development Council sees big potential for CO₂ enhanced oil recovery. With a price of \$75 per barrel of oil, the Council estimates that sufficient capacity exists to store 450 megatonnes (Mt) of CO₂ and produce an additional 1.4 billion barrels of oil from conventional reservoirs. This represents a doubling of the province's conventional oil recovery. It would result in \$105 billion in additional revenue during development and generate \$11 - \$25 billion in additional provincial royalties and taxes.¹² If half of the CO₂ storage capacity was used in Alberta (225 Mt), Alberta would more than meet its climate change reduction target of a 14 per cent absolute reduction (200 Mt) in greenhouse gas emissions by 2050.

¹⁰ Government of Alberta. 2009. *Energeconomics - Understanding royalties*. Available online: http://www.energy.gov.ab.ca/Org/pdfs/Energy_Economic.pdf

¹¹ ERCB. *Alberta's Energy Reserves 2008 and Supply/Demand Outlook 2009-2018*. Available online: http://www.ercb.ca/docs/products/STs/st98_current.pdf

¹² Alberta Carbon Capture and Storage Development Council. 2009. *Accelerating Carbon Capture and Storage Implementation in Alberta*. March 2009 -Final Report. Available online: http://www.energy.gov.ab.ca/Org/pdfs/CCS_Implementation.pdf



3. What impact will North American shale and tight gas have on Alberta's conventional natural gas sector? What, in your view, is the best approach to exploit Alberta's shale/tight gas resource?

The fundamental question in the design of the fiscal and regulatory regime to encourage exploitation of Alberta's shale and tight gas resources is: what is the outcome that is desired?

The Chamber believes that the end goal, based predominantly on the potential for new economic growth and reduced environmental impacts associated with gas (i.e. combustion of natural gas results in 50 per cent less greenhouse gas emissions), is fully developing the potential of this resource. Due to the technological risk and costs associated with this resource, a unique fiscal structure is recommended, similar to the oil sands, where there is a pre-payment and post-payment element. This is similar to the *Net Profit Royalty Program* created in B.C. to maximize development of economically marginal resources. The B.C. program is directed at development of expensive resources that are not commercially viable under existing royalty programs and either technically complex or remote from existing infrastructure. Eligibility for this program is determined through a Request for Applications (RFA) process.¹³

4. What do you see as the role of government in positioning Alberta for ongoing success in order to remain profitable, sustainable and competitive in the future? What is industry's role?

The Calgary Chamber of Commerce views the role of the government as setting competitive fiscal and regulatory framework to maximize the benefit of Alberta's resources. This framework must acknowledge that capital is transferable and will flow to the jurisdictions that offer the most competitive risk-adjusted returns. It must offer a long-term and stable framework to reduce political risk premiums.

The Chamber views the role of industry as developing the technical expertise to safely and with minimal environmental impact produce Alberta's oil & gas resources. This role includes a commitment to continuous improvement and technology development.

It is a responsibility of industry, government and Albertans to develop a vision of energy development in the province and design the fiscal and regulatory framework to accomplish this. Both parties must continue to educate Albertans on the tremendous contribution that the oil & gas industry makes to improve the quality of life in the province.

5. How would you suggest the government find the balance between resource owners and natural gas and conventional oil industry?

Balance is about creating a vision of energy development in the province that reflects the perspectives of industry, government and Albertans. The fiscal and regulatory environment is a tool that enables this vision. Without robust discussion, and understanding of what we are trying to achieve, there is a greater chance for fragmented thinking and conflict over the fiscal, regulatory and environmental terms.

In the definition of a complex and potentially divisive concept such as 'balance' in the context of Alberta's oil & gas fiscal regime, it is important to adhere to a set of principles for decision-making. The Chamber submits the following for consideration:

- The fiscal regime should provide companies with a competitive rate of return on capital investment to attract private producers. Return on capital investment should be considered in the context of the risk involved, the investment opportunities available in other jurisdictions and the rate of capital mobility.
- Producers, large and small, should be treated equitably.
- The royalty regime needs to encourage long-term investment by industry and, therefore, should be stable and predictable, consistently applied, and responsive to technological change.
- The royalty regime should be simple to administer and verify, and be informed by 'real time' industry data.

¹³ Government of British Columbia. 2009. *British Columbia Royalty Programs*. Presentation at the Unconventional Gas Technical Forum. April 2009.



- An industry-government forum should be established to provide ongoing and constructive advice to capitalize on emerging resource development opportunities.

Competitive Situation

1. Is investment in Alberta's natural gas and conventional oil industry competitive? Why or why not?

The Concept of Government Take and the Impact on Resource Development

Before determining where to invest their capital, companies consider the various payments (including royalties, taxes and fees) made to government for resource development. The total of all of these payments is often referred to as "government take". If this take is deemed too high, companies are likely to invest elsewhere. If government take is set too low, the government may not share enough of the benefits. The level of government take is one factor of many that influence development. Access to resources, geology, commodity prices, political climate, currency exchange rates, and labour costs are also important factors.¹⁴

Economic theory suggests that the resource owner should capture the full portion of the return beyond what is deemed a "reasonable return" for the developer. Reasonable return is often defined as the minimum return required to reward a developer for the risk taken in developing the resource. It is difficult for the government to understand the level of risk and therefore adjust the level of government take accordingly.

The decision on the optimal government take, while ultimately dependent upon on the values and priorities of government and citizens, needs to be cognizant of the competitiveness of the regime relative to other jurisdictions. It is anticipated that the technical data stream of the Competitiveness Study will provide important analyses and comparisons of economic factors across jurisdictions. Chamber members have expressed particular concern that unconventional natural gas production is more competitive in Quebec, Montana and British Columbia.

2. What your company's measures of profitability and success today?

The Calgary Chamber of Commerce, representing a wide range of companies from small to large-sized businesses in a multitude of industries, measures success with respect to overall economic, social and environmental prosperity. The oil & gas sector makes a significant contribution to Alberta's achievement in these areas.

Success to the Chamber means leading Canada on a number of key indicators including:

- **Economic:** employment rates, wages, GDP growth and productivity.
- **Social:** educational attainment, low crime rates, interprovincial migration and housing affordability.
- **Environmental:** water quality, regional air quality and greenhouse gas emission intensity.

3. Have you increased, decreased or kept your investment the same in Alberta in the last three years? What are your top three reasons for your investment decisions in Alberta? Have you increased your investment in other jurisdictions in the past 3 years?

The Chamber recognizes the importance of maintaining a positive overall investment climate for Alberta's oil and gas industry. Throughout the royalty review process in 2007, the Chamber cautioned that major changes risked undermining investor confidence and capital flight. We recommended no change to Alberta's oil and gas royalty system as the regime compared favourably to other jurisdictions, was responsive to market conditions, and reflected the unique structural and investment realities of the sector. Our members urged the government to proceed cautiously, given the importance of the industry to the

¹⁴ Alberta Energy. 2009. *Alberta's Royalty System –Jurisdictional Comparison*. Available online: http://www.energy.gov.ab.ca/Org/pdfs/Royalty_Jurisdiction.pdf



provincial economy as a whole, the sensitivity and higher risk profile of investment, and the political uncertainty already surrounding the industry (e.g. climate change regulation and changes to the federal Accelerated Capital Cost Allowance).

During any policy implementation it is critical to monitor the impacts. The Fraser Institute's *2009 Global Petroleum Survey* has identified investor concerns. While not a factual comparison across regions, the survey does indicate general perceptions of petroleum executives. As we know, perception influences capital deployment. Alberta now ranks 92nd out of 143 regions in attractiveness for oil and gas investment, a significant decline from the 2007 ranking of 18th. Alberta currently lags behind Nova Scotia, Ontario, Quebec, British Columbia and Newfoundland and Labrador, as jurisdictions that petroleum executives prefer to do business in. Alberta now ranks as the least attractive region, on fiscal terms, in both Canada and the United States, and 11th worst (of 143) in the world.¹⁵

Further evidence of negative impacts include land sales, a leading indicator of investor confidence and activity. Recent data indicates declines in land sales, as well as in drilling activity. In 2008, Alberta raised \$937 million from oil & gas land sales, down from over \$1 billion each year from 2004-06. The 2008 figure is in contrast to land sales of \$2.66 billion in B.C. and \$1.12 billion in Saskatchewan.¹⁶

While the Chamber acknowledges that economic realities and the emergence of major resource plays in other jurisdictions are, at least in part, responsible for the decline in oil and gas investment in Alberta, this should not prevent the government from considering changes that more competitively position (or restore) Alberta's most important industry.

Chamber industry roundtable discussions have identified serious declines of certainty and investment trust in the industry and financial community. Since the introduction of the new royalty framework, political risk in Alberta has been perceived in some quarters as comparable to Russia, Central and South America and the Middle East. In a 2010 pre-budget survey of Chamber membership, "Competitiveness of the Resource Royalty Framework" was rated as a top three provincial priority.

Top Three Reasons for Investment

The Calgary Chamber of Commerce submits that the first consideration in investment decisions is certainty. Companies make investments in good faith and under the assumption that the underlying terms of the investment will not be arbitrarily changed. Once the fiscal terms are altered, confidence and trust of investors in the jurisdiction erodes, and is very difficult to regain. Jurisdictions that lack certainty command a political risk premium. This risk premium increases the overall rate of return a company requires to invest, potentially making other investment opportunities more attractive. Capital flows to the jurisdictions offering the greatest opportunity for return on a risk adjusted basis.

The second major consideration in investment decisions is rate of return for the risk taken. There must be a reasonable return for the company to invest. During capital budgeting, companies compare the rates of return of projects to select which one(s) to pursue in order to generate maximum return or wealth for shareholders. There must be sufficient investment upside for investors to justify expenditures. If the anticipated rate of return is not commensurate to the risk, the project will not be funded resulting in a lost economic opportunity.

The third main consideration is the opportunity for companies to have constructive dialogue and establish trust with the entity setting the fiscal and regulatory environment in which it operates. Uncertainty and surprise decisions make it difficult for companies to plan, execute and meet shareholder expectations. Unanticipated changes can have a detrimental effect on the profitability of a company's operations. Willingness to dialogue with industry on key policy decisions reduces this uncertainty and allows companies to provide valuable information on impacts and unintended consequences.

¹⁵ Fraser Institute. (2009). *Global Petroleum Survey 2009*. Available at: <http://www.fraserinstitute.org/researchandpublications/publications/6765.aspx>

¹⁶ *Calgary Herald* (January 8, 2009). *Land sale prices hit 10-year low*. Available at: <http://www.sepac.ca/pdf/articles/2009/Calgary%20Herald%20-%20090108.pdf>



Working Relationships

1. What is your perspective on the communications and relationship that exists between the Government of Alberta and industry?

Chamber members expressed concern with the level of discord between the Department of Energy and industry and the number of divisive conflicts in Alberta (i.e. industry/public, urban/rural, etc.). This is particularly evident throughout the regulatory approval process, creating challenges for businesses to invest and create jobs, and for the province to reach its full economic potential.

Government could play a pivotal role in aligning interests and creating a vision of success for Alberta. Development of regional plans within the Provincial Land Use Framework process could provide an opportunity for a balanced and integrated forum for determining economic, social and environmental outcomes, leading to less litigious, confrontational and polarized discussions.

2. How can the communication and relationships be improved? What can government do to improve this? What can industry do to improve this?

Government Initiative

The Chamber believes that one area that could lead to better dialogue and decision-making is the use of timelier data by the Department of Energy. Members stated that Department data is often outdated (two to three years old at best), which does not allow accurate analysis of the 'real time' landscape in which companies operate. As a consequence, the province risks making uninformed decisions that could have severe adverse impacts on its most important industry, and makes effective dialogue between the two parties extremely difficult. It is recommended that the Department of Energy partner with industry in accessing external data and financial modeling from world-class energy financial companies.

Chamber members also expressed concern with the skills capacity of Department of Energy personnel. In general, it is imperative that Department staff possess sufficient skills and expertise on emerging resource development issues and work with relevant stakeholders to adopt a forward looking and collaborative vision of energy development for the province.

Finally, it was suggested that the K – 12 education system appears to lack sufficient curriculum regarding the energy industry and the important economic role it plays in Alberta's prosperity. This may be an opportunity to provide information to help the younger generation better understand energy and environmental issues in the province.

Industry Initiative

The industry can play an important role in communicating with elected officials the need for greater resources in the Department of Energy. It can also be an active participant in the consultation processes underway or upcoming, including active involvement in development of regional plans within the Provincial Land Use Framework.

Calgary Chamber of Commerce Initiative

The Chamber offers a unique and holistic perspective as our membership encompasses the oil & gas sector and businesses directly or indirectly affected by the industry. It also includes a mix of small, medium and large-sized businesses which captures a wide range of viewpoints, enabling our policy recommendations to appeal to a broader range of stakeholders.

The Chamber is committed to providing an inclusive forum for dialogue and discussion on key issues. We intend to provide constructive feedback to elected officials and key government decision-makers to highlight areas of concern and capitalize on emerging opportunities. Our policy committees, comprised of



industry practitioners, provide a valuable avenue for discussion. In addition, through professional events production, the Chamber offers a platform for industry and government leaders to discuss the vision of energy development in the province and the prosperity that is created.