

Imperial Oil



Alberta Royalty Review Panel

Written submission

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Company overview

Imperial Oil is one of Canada's largest corporations and has been a leading member of the country's petroleum industry for more than 125 years. The company has been active in the Province of Alberta since the 1920s and is responsible for the Leduc #1 discovery in 1947, which served as the catalyst for the economic development of Alberta.

In addition to its conventional operations, Imperial has extensive experience in the Canadian oil sands. This submission will focus on the fiscal regime for the oil sands.

The company pioneered in-situ oil sands recovery research at its Calgary research centre, an effort which has continued for decades. Imperial's operations at Cold Lake began more than 40 years ago - it is now the largest thermal in-situ venture in North America. Cold Lake currently produces nearly as much bitumen as all other Canadian in-situ thermal operations combined, about 150,000 barrels per day. With respect to oil sands mining, Imperial owns a significant share of the Syncrude, the largest operation of its kind in the world. The company holds over 500,000 acres of undeveloped oil sands resource and is advancing a new 300,000 barrel per day development at Kearl. In 2006, Imperial was the second largest oil sands royalty payer in the province - with over one half billion dollars of royalties from its oil sands operations.

Imperial's success in the Canadian oil and gas industry has been brought about in part by the company's ability to take a long-term view of its operations, the industry and the marketplace. The company has operated in periods of high and low prices and has the view that the current oil sands fiscal regime is appropriate for Alberta. This view is based on its extensive oil sand investments and business and operating experience.

General principles and objectives - petroleum fiscal regime

Canada's and Alberta's fiscal regimes provide the legislative and regulatory basis for the distribution of petroleum income between governments and developers. From an

investor's perspective this framework is effectively the 'contract' that defines the share of benefits that developers receive for investing and taking risks. The mutual objective of both parties is the economic development of the province's hydrocarbon resources. In advancing development, companies such as Imperial assume considerable risk. They undertake research, design projects, invest capital, provide operating funds and ensure responsible abandonment including site restoration at the economic end of life of projects. These activities take place over decades exposing an investor to cycles of commodity price risk. The reward for undertaking these risks is revenue that accrues with the split between investors and the province defined by the fiscal regime.

Having a sound petroleum fiscal regime in place is critical and such a regime should incorporate the following principles:

- Flexibility and stability - flexible in that the fiscal regime automatically reacts to the price fluctuations that inevitably occur in a commodity industry; stable in that it can endure for the life of a project, being robust enough to withstand political or economic pressure on governments to adjust the system as conditions change
- Equitable - provide a share of projects' divisible incomes to governments and developers in a way that ensures developers' profit potential is consistent with the full costs of doing business and all the associated risks
- Simple to understand and administer
- Recognize unique characteristics of the resource type (i.e. natural gas, conventional oil, oil sands)
- Align government and industry interests for cost efficient operations and maximum economic recovery of the resource

Having an effective fiscal regime for the oil sands is vitally important to Alberta and Canada. Despite high levels of investment, the growth days of the conventional oil industry are over and with new discoveries harder to come by, this is an irreversible trend.

In many areas of the world, declining conventional production would be a harbinger of dwindling economic prospects. But that is not the case for Alberta. When the reserves of the oil sands are included, Alberta has produced only 10 percent of the oil that lies within provincial boundaries. There is demand for these resources since Alberta has access to the world's biggest continental market for oil and gas. Growing markets and the ability to supply these markets are two essential ingredients for sustainable growth and continued provincial prosperity.

The current generic oil sands royalty was adopted after extensive study by the National Task Force on Oil Sands. It was put in place to enable oil sands development, recognizing that this type of investment is characterized by long investment lead times and relatively high capital and operating costs. The objectives of the generic oil sands royalty system are:

- Maximize growth of the oil sands' contribution to gross domestic product
- Encourage industry efficiency
- Provide fiscal stability and avoid the need for ad hoc adjustments or “one-off” project arrangements or subsidies
- Provide fiscal structure such that economic growth objectives can be accomplished while still returning an equitable share of economic rent to governments

It has been very effective in meeting these objectives. The oil and gas industry of which the oil sands is a major component is an economic driver of the Alberta and Canadian economy providing high quality jobs, creating new businesses and developing new technologies. The Canadian Association of Petroleum Producers estimate that about 275,000 Albertans are employed either directly or indirectly by the oil and gas industry. The sector also accounts for about two-thirds of the province's exports and about 25 percent of the province's GDP.

Capital investments in the oil sands in 2007 are projected to reach about \$17 billion, over 35 percent of the \$45 billion in total that is invested by industry. The stability of the fiscal system and confidence in the Alberta's investment climate has been a key contributing factor in this development.

To ensure the best years in this industry lie ahead, not behind, it is important that these conditions endure. Alberta has world-class oil sands resource and with world-class terms, development can continue. The Canadian Energy Research Institute estimated in a 2005 report that the oil sands can generate some \$885 billion in GDP activity in the 20-year period from 2000 to 2020. This benefits not only Alberta but Canada too - about \$150 billion will be spent on supplies and services from the other provinces.

Addressing the key questions of the Panel

How does Alberta's royalty system compare to other oil and gas producing jurisdictions taking into account investment economics and industry returns and risks in Alberta?

About 150 countries have fiscal regimes for oil and gas activities. These different regimes define how profit from a project is divided between the investor and the government. Some fiscal regimes are simple with only a tax component, others apply tax and royalty and others have complex splits that vary under different circumstances. Since many countries have enacted multiple regimes, there are literally hundreds of possible comparisons.

There are three general observations when comparing Alberta's oil sands royalty system to other jurisdictions.

First, most fiscal regimes around the world are applied by the national government and the funds collected go into the national treasury. This is not the situation in Alberta where the province has constitutional jurisdiction for oil and gas. To appropriately compare Alberta's royalty system to others, all levels of government and all forms of government revenue from activities in Alberta must be included - provincial bonus payments, royalties, provincial income taxes, federal income taxes, and GST.

Second, nations with developed economies such as the G7 generally impose lower levels of government take than developing nations such as Venezuela, Nigeria, Angola and Indonesia. Developed economies provide many of the goods and services used by their domestic petroleum industry so the multiplier effect of development is substantial. That is certainly the case in Alberta. The GDP multiplier for development activities is 2.37; for production activities it is 1.51 (Canadian Energy Research Institute - October 2005). Put another way, many parts of Alberta business rely on oil sands development. The province benefits from this collective activity and it is in the province's interest to have fiscal terms that enable oil sands development.

Third, governments impose lower levels of government take for resources that are costly to develop or produce. Many other nations around the world provide improved profit splits to encourage investment in more challenging types of resource. For example, nations in West Africa improved the profit split to investors for deepwater development since these opportunities were unattractive under the terms that applied onshore or in shallow water. To encourage oil sands development, Alberta's system has a one percent royalty initially that increases to a 25 percent share of profits with the timing of this shift dictated by the cumulative profitability of the project. Other countries have incorporated similar provisions with a low initial government share to encourage the development of higher cost fields.

There are three general approaches that are used to compare fiscal systems. One method compares the government share of a project over its entire life. Government take is the share of pre-tax profit (i.e. pre-tax profit equals project revenue minus exploration,

development, production and abandonment costs) of a project that is received by governments. The government share for a typical Alberta oil sands project is about 50 percent. If a venture is profitable, half the cumulative profit goes to the Alberta and federal governments as taxes and royalties and half is retained by the investor.

On this measure, Alberta's oil sands regime was ranked 79th against 324 regimes worldwide by Pedro van Meurs, a recognized international expert on the subject. Put another way, 78 regimes provided a more favourable share to investors, 244 provided a more favourable split to the host country.

This outcome is not surprising. Oil sands investors face challenges that are more formidable than many investment opportunities in other countries. The initial capital investment is higher for in-situ and mining projects than for most conventional developments. The initial production rate is lower than for a conventional project with comparable reserves, thereby extending the period to payout. The price realized for bitumen is lower than conventional crude because of the lower yield of high value products such as gasoline and diesel. The energy costs associated with an oil sands project can be many times higher than for a conventional development. With these characteristics, oil sands projects need terms better than the global average to attract investment.

A second approach is to compare the terms for countries producing heavy oil in significant quantities. Here the comparison list gets much shorter. There are many deposits of heavy oil around the world but in only two areas, Venezuela and Alberta, has there been substantial development over the past 10 years. In part, this is due to the size and quality of the resource in these two countries but equally important is that each established a fiscal regime for heavy oil. Traditionally, the government take in Venezuela was high and for many years, no heavy oil was developed. In the 1990's, to encourage investment, Venezuela introduced a fiscal system for the oil sands with levels of government take similar to Alberta. The response by investors was the development of four heavy oil projects producing in aggregate about 600,000 barrels per day. Over the past few years,

the Venezuelan government has been changing the fiscal and participation rules for private investors -- during this period, there has been no additional oil sands investment.

A third approach is to examine whether future returns for investors in the Alberta oil sands are comparable to other worldwide opportunities. Goldman Sachs released a report in February 2007 which compared 170 projects around the world being advanced by private investors. These projects would develop 286 billion barrels at a total investment cost of US\$1,220 billion. Thirteen Canadian oil sand projects were included in the comparison, representing 13 percent of the total resource studied. The report concluded that the bottom decile of the projects, that is, those with the lowest return to investors is dominated by the Canadian oil sand projects. Goldman Sachs stated they believe these projects are close to overall industry's marginal investment opportunities since the oil sand projects evaluated have the lowest profit to investment ratios of the categories studied (gas, deepwater, traditional, heavy oil, LNG, GTL, exploitation) and the highest upside and downside sensitivity at higher and lower oil price scenarios. This analysis is supported by recent announcements suggesting delays of oil sands projects and mixed operating results from large steam assisted gravity drainage projects over the past five years, some of which have only just started to generate positive earnings.

The profitability of future projects will be impacted not only by fluctuating commodity prices and costs but also the cumulative effect of CO₂ legislation from the Alberta and federal governments. The cost of meeting new CO₂ legislation was not included in the analysis above.

The conclusion from these comparisons is that Alberta's royalty system is competitive with other jurisdictions. It is one of the enabling factors in developing a resource which largely lies fallow around the world to the benefit of the province and its citizens.

Certainly, the province's reputation for stability and economic transparency is a further positive factor.

Is Alberta's royalty system sufficiently sensitive to market conditions?

The current system is sufficiently sensitive to market conditions.

The system is self balancing. As commodity prices increase, government revenues increase. As commodity prices decrease, government revenues decrease preventing premature abandonment or less than optimal economic recovery.

Certainly, Albertans benefit in many ways when market conditions are favourable for oil sands. Direct royalty payments from the oil sands have totaled about \$6 billion over the last 10 years. Oil sands royalty payments for fiscal year 2006-07 will be \$2.4 billion, up more than 1,100 percent since 2003-04. Lease bonus bids, a generally ignored component of fiscal payments by oil sands developers, are estimated to total about \$1.3 billion for 2006-07. In total, the amount the Alberta government will receive from oil sands royalties and lease sales in 2006-07 will total a record \$3.7 billion.

In 2006, royalty payments from Imperial's oil sands operations alone were over \$500 million, nearly 25 percent of the provincial total for oil sands. The royalty payment from Cold Lake was about \$375 million reflecting the size, maturity and efficiency of this operation. The company's 25 percent share of royalty payments from Syncrude was over \$150 million. Syncrude completed an expansion of its operations, costing over \$8 billion in the second half of 2006.

Projects that have paid out are providing an equitable share of total net cash margin to governments at 50 percent (i.e. income taxes and royalty). Royalties on these projects are 25 percent of cash flow or 14-17 percent on the basis of total revenue.

Conversely, when commodity prices fall, profits will decrease. Royalties and taxes will decrease proportionately thereby ensuring that Alberta's energy companies are able to remain financially viable during downturns. A flat royalty rate on revenue by comparison is regressive - when prices are low, government take increases as a percentage of profit.

Is the current revenue minus cost system for oil sands royalties optimal?

The current revenue minus cost system for oil sands royalties is optimal - it bases the royalty payment on the value of bitumen and after the minimum royalty period, on the net pre-tax cash flow derived from a development.

It is important for investors that royalties on the province's bitumen resources are based on the bitumen value before upgrading. Royalties are a payment to the resource owner for the value of their resource. The market value of Alberta's bitumen resource is lower than lighter crude oils due to the expense involved in converting it to a useable product such as gasoline or an intermediate product such as 'synthetic crude'. This conversion is a manufacturing operation carried out in facilities such as upgraders or refineries. All manufacturing operations in Canada are taxed at the same level and none pay resource royalties. Bitumen cannot be transported directly to remote refineries - it must be blended with lighter petroleum streams to reduce its viscosity to a level that enables pipeline transportation. These bitumen blends are sold in a transparent, liquid market to third parties. Because there are market prices for the bitumen blend and the lighter product, the bitumen market value can be reliably calculated for royalty purposes.

The current revenue minus cost system is optimal because it self adjusts across a wide range of outcomes. No two oil sands developments are identical. The value of bitumen varies from project to project, the cost of developing the resource depends on the recovery method selected and operating expenses vary with recovery methods and different operating parameters. Not only do these factor change between different projects but they also change over time. Today, while the value of bitumen is higher than in years past, development and operating expenses are also much higher.

The difference between the bitumen revenue and these costs is the margin realized by the investor. The current system effectively applies an additional tax to this margin or the pre-tax profit generated by a development.

This is the optimal type of fiscal regime for both the investor and the province. Marginally economic projects with high costs are not unduly penalized helping ensure their development. And for projects with higher profitability, the remittance to the province is greater.

Which programs built into the existing royalty system should be retained or strengthened, and which should be adapted or eliminated?

The two most important elements built into the existing royalty system are the structure of the system and the level of government take.

The current royalty system is predominantly a net cash flow based system, enabling the development of oil sands projects which are characterized by high initial costs and lower margins. The lower initial government takes resulting from a minimum royalty of one percent recognizes the long period that the investor's substantial capital outlay is at risk. The post-payout net revenue royalty rate of 25 percent provides significantly higher takes for the remainder of the project life. When industry dynamics are favourable, government revenues increase. When industry dynamics are unfavourable, government takes decrease in line with the overall profitability of the venture. These characteristics provide strong alignment between government and developer interests.

The combined total provincial and federal government take of about 50 percent is at a competitive level when judged against the fiscal regimes in developed economies and the fiscal regimes that have resulted in oil sands development. This level of government take does not provide investors with windfall profits - the return from new oil sands developments is lower than other significant opportunities worldwide in the deepwater, gas, LNG and other investment classes.

There is one area where the existing system could be enhanced. Although there are a number of projects underway in Alberta, much of Alberta's substantial oil sands resource cannot be economically developed with today's prices and the current fiscal terms. To unlock this remaining resource, technology development is required. It is recommended that the types of oil sands research eligible as a deductible cost for royalty purposes be expanded.

How does the tax treatment of the oil and gas sector compare to other sectors and jurisdictions?

Profitable non-resource businesses in Alberta are subject to a provincial tax rate of 10 percent. In the period where the net revenue royalty is in effect, resource companies remit more than three times the revenue to the Alberta government than a non resource business. This does not include up front payments to acquire leases made by energy companies nor greenhouse gas emissions expenditures that apply to the larger energy projects in the province.

What are the possible economic and fiscal impacts of any possible changes to the royalty and corporate tax systems?

Recently, high commodity prices have resulted in record earnings for a number of oil and gas companies, which has lead to an overall public perception that the sector is guaranteed a consistent and uninterrupted strong future. History has shown that this is not likely to occur since commodity prices cycle over time. In addition, a closer examination will show that Alberta's oil and gas industry is facing a number of challenges that contribute to uncertainty in the sector. Some changes have been made unilaterally that diminish the attractiveness of the terms going forward. The federal and Alberta governments have announced that they are proceeding with new environmental regulations for greenhouse gases and other air emissions that will place added costs on the industry. These costs are scheduled to increase over time. This year, the federal government removed the accelerated capital cost allowance for oil sands projects (this allowance affected the timing

but not the magnitude of the total taxes received), which will impact negatively on project economics.

While prices are higher today than historic norms, the reality is that costs have also escalated. The combination of higher costs and a lower quality resource are already challenging and higher payments in the form of royalty increases will only contribute further to this challenge.

If the province moves to increase royalties, that factor along with other government initiatives that have stronger impacts in three to four years, will clearly make some projects unattractive to investors. Their development will be deferred unless either technology advances or industry conditions improve. Because of the significant spin off benefit derived from the oil sands industry, this would not be in the province's best interests.

How should existing resource development be treated if changes are made to the fiscal regime?

Imperial has invested billions of dollars in recent years at Cold Lake and Syncrude. These investments were made on the assumption that the existing fiscal system, adopted after extensive consultation, would endure.

If changes are made to the fiscal regime, these projects should be "grandfathered" that is, their terms should not change.

Imperial would reiterate that it does not believe it is in the best interest of the province to change the oil sands royalty regime. But if changes are made, with a clear eye on the cumulative impacts over time considering all the public policy initiatives announced or planned, the new fiscal regime should be levied on new projects preferably with the new terms phased in over time.

Given the importance of the industry to Alberta and Canada, should the current government wish to revisit the principles or key components of oil sands royalties, the process should be similar to the 1996 task force initiative and appoint public officials from the province and the federal government and invite academia, the private sector and others to participate in a transparent process.

Imperial's recommendations to the panel

Imperial recommends not changing the principles behind the current oil sands royalty system or the royalty rates for the following reasons:

- The system is meeting its objectives and is aligned with characteristics of the oil sands business.
- The principles behind the current system are sound and meet all of the characteristics of an effective petroleum fiscal system. It was the product of extensive study by the National Task Force on Oil Sands Strategies. The recommendations were developed in a transparent manner with the engagement of public officials, academia and the private sector. Subsequently industry has invested billions of dollars in both in-situ and mining projects in the oil sands. Any change to the rules of the game after investments have been made could have serious negative implications for investor confidence in Alberta.
- Development of oil sands resources is challenging at any time and the current situation is no different. Although the price of bitumen is higher than it has been in the past, costs have also escalated resulting in margins that are not as profitable as many would surmise. The combination of higher costs, the cumulative impact of other government initiatives and effects will squeeze profitability particularly for lower quality resources. Higher taxation in the form of royalty increases will only increase the challenge.

At a more detailed level the following are recommendations on individual components:

- Revenues - royalty rates should continue to be based on the value of Albertans oil sands resource (i.e. bitumen), not the final manufactured value of petroleum products such as gasoline or an intermediate product such as 'synthetic crude'. The market for Canadian heavy oil and bitumen blends is a developed market with considerable liquidity and has transparent prices that are publicly available. Not all bitumen is sold on the open market - some volumes are processed in a resource producer's upgrader or refinery. Various transparent mechanisms that are accepted in local and international markets can be used to determine this transfer price to the satisfaction of the province.
- Costs - The definition of the allowed cost that is required in a net revenue royalty system can be a source of contention between developer and government and if not addressed diligently can cause complexity. Further clarification of costs should be undertaken. This will require cooperation between industry and government and may involve considerable work from both parties. Examples of costs that should be considered include:
 - Support services costs - A simplified mechanism should be developed to include directly attributable but allocated support service costs. Directly attributable support service costs are a valid cost of doing business and should be allowed in the royalty calculation. However, a simplified mechanism is required to allow for these costs.
 - Climate change costs - The cost of complying with regulatory requirements to mitigate the risk of climate change could be a significant cost of oil sands development in future. These costs should be fully recognized in the royalty calculation. In particular, payments to the proposed Alberta climate change and emissions management fund should be recognized.
 - Abandonment and reclamation - The costs of abandoning and reclaiming oil sands operations are substantial. A large portion of these will be incurred on a cash basis after projects are no longer generating revenues. Being a cash-based royalty system, a mechanism is required to ensure that these costs are allowed. This mechanism should be harmonized with any environmental

regulatory requirement for developers to provide cash or financial guarantees to ensure that cash funds are available for reclamation.

- Research - Research and technology is as important to oil sands development as exploration is to the conventional oil and gas business. In the 40+ years that Imperial has undertaken research and developing technology for in-situ and mining, funds from the conventional business has underwritten a considerable portion of this work. Mechanisms to encourage research should be incorporated into the royalty system. At the very least, all research costs directly associated with projects should be allowed, whether or not these are remote from a project location. Additional opportunities to foster research should be investigated. (e.g. the U.K. method of encouraging offshore exploration through the "leaky ring fence" whereby exploration costs associated with other developments can be brought into an existing "ring fence" that is unassociated with the exploration.)
- Allowing expansions to a project "ring fence" is a fundamental component of the current system that should be retained but clarified. An expansion should be determined by its physical characteristics and not by either a developer's or government's preferences in terms of the timing or economics of a project's royalty payments. The Alberta Government can help by clarifying its interpretation of the eligibility of additional operations that will be considered expansions:
 - Physical integration (the most important determinant of an expansion)
 - Geographical location (proximity of an expansion to the "base" project)
 - Producing formation(s) allowed in a single project
 - Number of recovery technologies allowed in a single project.
 - Timing constraints (if any) on expansions

Finally, given the importance of the industry to Alberta and Canada, should the current government wish to revisit the principles or key components of oil sands royalties, the process should be similar to the 1996 task force initiative and appoint public officials from the province and the federal government and invite academia, the private sector and others to participate in a transparent process.