

# New Royalty Framework

OCTOBER 25, 2007



# A message from Premier Ed Stelmach

"I made a commitment and I delivered."

I am proud to deliver *The New Royalty Framework* to Albertans. I know it is the right plan to secure Alberta's future. I made a commitment and I delivered.

The New Royalty Framework gives future generations of Albertans a fair share from the development of their resources. It gives stability and predictability to the oil and gas industry. And it assures investors that Alberta will remain an internationally competitive and stable place to do business.

The New Royalty Framework furthers my plan for Alberta's future — a plan to build communities, green our growth and create opportunity.

Together, we're building tomorrow.

PREMIER ED STELMACH

### CONTENTS

2 Executive Sum	ımary
-----------------	-------

- 5 Background
  GUIDING PRINCIPLES
- **7** Government Decision Summary
- 13 Implications
- 14 Next Steps
- 15 Glossary
- 16 APPENDIX ONE
  - A Summary of Decisions in comparison with the Alberta Royalty Review Panel's Recommendations

# **Executive Summary**

*The New Royalty Framework* is the culmination of detailed study and analysis, extensive consultation, thoughtful deliberation, and political commitment.

It fulfills the promise Premier Ed Stelmach made to Albertans to review Alberta's royalty structure for oil and gas and ensure Albertans are getting a fair return on their resources. The Premier initiated this review in February. It is a key element of his plan to build a stronger Alberta.

The New Royalty Framework is the right plan – it increases royalty rates while allowing industry to remain competitive. It recognizes that a vibrant energy sector provides jobs and tax revenue as well as royalties. The Framework will ensure Albertans continue to receive all of these benefits.

The *Framework* represents fundamental and necessary change to current royalty structures. It creates a system that is more sensitive to market value, and also one that better reflects the growing importance of unconventional oil and gas resources to the future prosperity and economic development of the province.

Through vigorous and sometimes tough debate, the Stelmach government used three principles to guide decision-making on Alberta's royalties:

- support sustainable economic development that contributes to a high quality of life for all Albertans now and into the future
- support a fair, predictable and transparent royalty regime
- align Alberta's royalty regime with overall government objectives.

The Stelmach government has taken action and kept the promise. Government analysts project royalties will increase approximately \$1.4 billion in 2010, an increase of 20% over revenues forecast for that year under the current regime.

All changes take effect January 2009 unless otherwise noted.

Here are the major changes to Alberta's royalty regime:

#### **Conventional Oil**

The government will simplify royalties for conventional oil, eliminating specialty royalty programs and "old and "new" tiers. Royalties will be set by a single sliding rate formula containing separate elements that account for oil price and well production. The formula will be applied monthly to match current royalty reporting.

Overall, royalty rates will increase from the current maximums of 30% and 35% for old and new tiers. The new rates will range up to 50%, and rate caps will be raised to Cdn \$120 per barrel.

#### **Natural Gas**

As with conventional oil, natural gas royalties will be set by a single sliding rate formula sensitive to price and production volume. Royalty rates, currently 5% to 35%, will range from 5% to 50%, with rate caps at Cdn \$16.59/GJ (gigajoule).

Some members of the Alberta Royalty Review Panel have conceded their report erred by not mentioning Alberta should keep a benefit for deep wells with high drilling costs. The Alberta government will retain and revamp the Deep Gas Drilling Program and will apply lower royalty rates over a wider price range for wells with less productivity. Although government royalties from these sources will be lower, overall benefits to the economy will be higher, as production from marginal wells creates more jobs and benefits Alberta's businesses and communities.

The government will eliminate "old" and "new" tiers, but will retain the Otherwise Flared Solution Gas Royalty Waiver Program (OFSG), which improves air quality through solution gas conservation.

#### **Oil Sands**

The government supports increasing Albertans' share of revenues from the oil sands. It will do so by increasing royalty rates rather than by imposing an industry-wide tax on oil sands production.

Currently, the base or startup royalty rate for oil sands is 1%. While the Alberta Royalty Review Panel supported keeping this rate, Alberta's new royalty regime will ensure Albertans get a greater share of oil sands revenues right from the start. Under the new system, the base rate will start at 1%, and increase for every dollar oil is priced above \$55 per barrel, to a maximum of 9% when oil is priced at \$120 or higher.

The net royalty, applied post-payout is currently 25%. In the future, it will start at 25% and increase for every dollar oil is priced above \$55 per barrel to 40% when oil is priced at \$120 or higher.

The government will not grandfather existing oil sands projects. The government is in discussions with Syncrude and Suncor, whose Crown agreements expire in 2016, to participate in the new oil sands royalty regime. The transition details will be worked out over the next 90 days. In the event the agreement cannot be reached, the government will take other measures to ensure a level playing field for all industry stakeholders.

The government will adopt a permanent generic "bitumen valuation methodology" by June 30, 2008, after consulting with stakeholders and independent advisors. It will apply to projects with insufficient third party sales of bitumen.

### **Value Added**

The Alberta government recognizes that to build a stable and prosperous future, the province must get the best economic return on the development of its energy resources. Alberta needs to add value to its exports and expand its economy by upgrading resources here in Alberta. By doing so, we will secure jobs and prosperity for future generations of Albertans.

The Alberta Royalty Review Panel recommended an upgrader credit of 5% as an incentive for industry to upgrade and refine in Alberta. Government analysis indicates the 5% credit would be ineffective. The government will consider other options, such as taking bitumen in kind rather than cash. Bitumen could then be used strategically to supply potential upgraders and refineries in Alberta.

### **Accountability**

The government will assess and make improvements in the systems, structures and resources supporting the collection, verification and reporting of provincial revenues arising from conventional oil, natural gas and oil sands.

Former Auditor General Peter Valentine will lead this project and will report to Premier Stelmach. The project will begin in November 2007 and will be completed by March 31, 2008.

# Background

The current royalty regime for oil and natural gas was developed in the early 1970s, and substantial changes were made in 1994.

Over the years, both the typical geology of pools being discovered and the way prices move in the world market have changed. A system that worked extremely well for oil prices up to \$30 per barrel and natural gas up to \$4/GJ (gigajoule) will not work as well for prices that can vary from \$5/GJ to \$14/GJ, and oil prices up to \$90/barrel. Costs have also changed over time as smaller and smaller pools tend to be found.

In 1997 the oil sands generic regime was created to encourage investment in the oil sands. This policy, along with higher prices and improvements in technology, has attracted close to \$60 billion of investment, and billions more in economic activity and tax revenue have benefited all Albertans.

But times change. A policy of lower royalties to maintain a minimum level of investment is no longer needed to attract investment to Alberta.

In February of this year, Premier Stelmach appointed the Alberta Royalty Review Panel. Premier Stelmach wanted to ensure Albertans are receiving a fair share from energy development and asked the Panel to provide advice. Premier Stelmach made the report public as soon as he received it, so it could receive the widest possible public debate.

Almost 9000 Albertans posted, faxed, phoned and e-mailed their views to the Government of Alberta. The Alberta Royalty Review Panel has had more than 640,000 hits to its website. Premier Stelmach appointed Ron Stevens, Deputy Premier and Minister of Justice, to meet with energy industry officials to ensure a shared understanding of the government's review process and give them an opportunity to provide their analysis of the impacts of the Panel's recommendations. Energy Minister Mel Knight led a technical analysis of the Panel's report to help decision-makers better understand the implications of their decisions.

All these pieces — the Alberta Royalty Review Panel Report, the Auditor General's Report, further public and industry feedback, as well as the technical analysis – were considered by government in this report.

### Guiding Principles

The government used three principles to guide its decision-making:

# 1. Support sustainable economic development that contributes to a high quality of life for all Albertans now and into the future.

Alberta's new royalty regime is a key element of Premier Stelmach's plan to build a stronger Alberta. The revenues generated from increased royalty rates will benefit current and future Albertans – one-third will go to provincial savings, with the remainder allocated to infrastructure and maintenance. The Framework encourages prosperity for Albertans in the long term and ensures that those who come after us receive a fair share of a well-managed and vigorous energy sector.

#### 2. Support a fair, predictable and transparent royalty regime.

The new royalty framework will help Alberta plan for a secure future by providing stability and predictability to business, and time to adjust to royalty changes.

Companies are investing billions of dollars in Alberta; they need to have a reasonable set of rules to play by if they are to compete internationally and contribute to the Alberta economy. Such rules require clear accountability and sound stewardship by government. This principle also supports fairness in sharing costs and benefits between owners and producers.

#### 3. Align Alberta's royalty regime with overall government objectives.

Premier Stelmach outlined the government's priorities in his television address Alberta: A Plan for the Future: building communities, greening our growth, and creating opportunities for long-term prosperity.

Alberta's jobs and prosperity will increasingly depend on the development of new sources of energy such as the oil sands and coal-bed methane. This Framework also supports the government's objective of maximizing recovery of existing known oil and gas resources.

# **Government Decision Summary**

The following is a summary of the government's new royalty regime. A complete listing of the Alberta Royalty Review Panel's recommendations, government response and rationale is attached in Appendix One.

#### **Conventional Oil**

Price-sensitive and volume-sensitive conventional oil royalty rates will become separate elements within a single sliding rate formula. New royalty rates will range from 0% to 50%, up from the current maximums of 30% and 35% for new and old vintages.

Royalties will be calculated on a monthly production rate as is done currently and as collected, reported and used by industry.

To simplify the royalty system, several special royalty programs will be eliminated:

- Third Tier Exploratory Well Royalty Exemption
- · Re-activated Well Royalty Reduction
- Low Productivity Well Royalty Reduction
- Horizontal Re-entry Well Royalty Program
- Experimental Project Petroleum Royalty

The new royalty formula will effectively deal with the economic issues these programs previously addressed. Oil project royalty programs like Enhanced Oil Recovery and the Innovative Energy Technology Program will be retained to encourage research and additional oil recovery.

The tiers in conventional oil that distinguish vintages based on the discovery date will be eliminated to simplify the system. Under current economic conditions the difference between tiers is no longer significant.

Rate caps on price will be raised for conventional oil to \$120 per barrel to ensure that the royalty system is sensitive over a broader range of prices. Currently maximums are reached at around \$30 per barrel for conventional oil. The new cap balances the royalty reductions at the low end of the production and price curve, thus contributing to a stable fiscal system.

#### **Natural Gas**

Price-sensitive and volume-sensitive gas royalty rates now become separate elements with a single sliding rate formula. New royalty rates range from 5% to 50%, up from ranges of 5% to 30% for new and 5% to 35% for old vintages. Changes to the price point at which lower royalty rates apply provide better protection to low productivity wells, also contributing to a more stable fiscal system.

For gas processing facilities, the government will move from using corporate effective royalty rates (CERR) to calculate costs of the Crown's share of capital to establishing facility effective royalty rates (FERR). This will improve the link of capital costs for natural gas to a particular facility. The Alberta Royalty Review Panel had recommended going to deemed or set fees, an approach tried before in Alberta, but it does not recognize significant actual cost differences in processing plants. While the FERR may initially be more administratively onerous on industry, it has the advantages of:

- not creating a disconnect with actual costs that are typical in a deemed fee system
- requiring less modification to the existing system
- moving cost calculations to the facility level.

For gathering and compression in Alberta, however, the government will continue to use set fees which do recognize actual costs.

The government will eliminate the tiers in conventional natural gas that distinguish vintages based on the discovery date to simplify the system. Under current economic conditions the difference between tiers is minimal.

The government will retain the Otherwise Flared Solution Gas Royalty (OFSG) Waiver Program and extend it to bitumen wells. This program was developed in consultation with industry and environmental stakeholders. It encourages solution gas conservation, rather than venting the gas, resulting in improved air quality. The OFSG program is part of an overall program that has contributed to about a 70% reduction in flaring across Alberta. Extending the OFSG program to bitumen wells makes the program more equitable and is consistent with the environmental intent of the program.

As well, the government will revamp the Deep Gas Drilling Program. Some members of the Alberta Royalty Review Panel have conceded their report erred by not mentioning Alberta should keep a benefit for deep wells with high drilling costs. Support for deep gas drilling is instrumental to the viability of gas development in Alberta. These deeper reserves are ten times the volume of natural gas reserves and remain to be developed.

The government will raise rate caps on the price of natural gas to Cdn \$16.59/GJ. The cap will ensure the royalty system is sensitive over a broad range of prices. Currently maximums are reached at around \$3.70/GJ for natural gas.

Royalties for natural gas liquids will now be set at 40% for pentanes, a change from 22-50% for old tiers and 22-35% for new. The new royalties for butanes and propane will be 30%, up from 15-30%.

The government will eliminate the option to use the Corporate Average Price (CAP) to determine natural gas royalties. CAP is a labour-intensive manual process used only by a small number of royalty payers. Natural gas can be reflected by a single reference price since it is processed to become relatively homogeneous. Use of the single reference price will provide an administrative saving to both industry and government.

#### **Enhanced Oil and Gas Production**

In 2005-06 the province's revenue from natural gas was 58% of total energy revenues.

Currently, new reserves of natural gas that can be easily developed form only 20% of Alberta's potential future production. The rest require enhanced means of development, such as deep or horizontally drilled wells. They are found in special formations, such as coal beds and shale. These reserves tend to have low productivity, but represent the future of the natural gas industry in Alberta. In the coming decades, jobs and prosperity will increasingly depend on unconventional oil and gas sources.

To encourage exploration and production, the Alberta government will apply somewhat lower royalty rates over a wider price range to low productivity reserves. As well, as noted previously, the government will revamp the Deep Gas Well Drilling Program.

The government will implement "shallow rights reversion" to maximize extraction of the resource. Under this policy, mineral rights to shallow gas geological formations that are not being developed would revert back to the government and be made available for resale.

Oil development has the potential for similar opportunities. Currently we leave 70% of oil in the ground. Government will continue to support investment in new technologies, such as using carbon dioxide to recover oil. This would not only benefit the economy, but carbon dioxide capture and sequestration would enhance the environment.

In the short term, there is a cost to supporting enhanced oil and gas production, but in the long term it will bring jobs and business opportunities to Alberta, securing our future and giving Albertans a bigger piece of an even bigger pie.

#### Oil Sands

Rather than impose a new tax, government will increase base and net royalty rates to achieve similar results.

Currently, the base or startup royalty rate for oil sands is 1%. While the Alberta Royalty Review Panel supported keeping this rate, Alberta's new royalty regime will ensure Albertans get a greater share of oil sands revenues right from the start. Under the new system, the base rate will start at 1%, and increase for every dollar oil is priced above \$55 per barrel, to a maximum of 9% when oil is priced at \$120 or higher.

The net royalty, applied post-payout is currently 25%. In the future, it will start at 25% and increase for every dollar oil is priced above \$55 per barrel to 40% when oil is priced at \$120 or higher.

The government will not grandfather existing oil sands projects. The government is in discussions with Syncrude and Suncor, whose Crown agreements expire in 2016, to participate in the new oil sands royalty regime. The transition details will be worked out over the next 90 days. In the event that agreement cannot be reached, the government will take other measures to ensure a level playing field for all industry stakeholders.

The government will eliminate the provincial portion of the Accelerated Capital Cost Allowance (ACCA) for oil sands projects, consistent with the federal government's recent elimination of the allowance.

The government will adopt a permanent, generic bitumen valuation methodology (BVM) after consulting with stakeholders and independent advisors. This methodology will be determined by June 30, 2008, and will be used wherever there are non-arm's length transactions. Where there are arm's-length sales at market price that price will be used. The development of the valuation method will include consideration of methods to deal with commodities that trade in markets that are not well functioning.

The government already has comprehensive rules and enforcement procedures for oil sands projects and eligible expenditures. However, the government will review and, if required, improve procedures. This policy aligns with others already being pursued by the government for enhanced cost and operating reporting requirements.

#### **Value Added**

The Alberta government recognizes that to build a stable and prosperous future, the province must get the best economic return on the development of its energy resources. Alberta needs to add value to its exports and expand its economy by upgrading resources here in Alberta. By doing so, we will secure jobs and prosperity for future generations of Albertans.

The Alberta Royalty Review Panel recommended an upgrader credit of 5% as an incentive for industry to upgrade and refine in Alberta. Government analysis indicates the 5% credit would be ineffective. The government will consider other options, such as:

- taking bitumen in kind rather than cash. Bitumen could be used strategically to supply potential upgraders and refineries in Alberta. The Crown would share in potential gains (and risks) in the upgrading, refining and petrochemical markets, and optimize its royalty share.
- advocating for adjusting pipeline toll differentials that currently may have an
  effect of subsidizing bitumen exports.
- expediting conditional regulatory approvals for projects with value-added content, while maintaining our strong environmental controls.

 investing in specific infrastructure projects, including investments in infrastructure for regional industrial development, and potentially carbon dioxide removal and storage.

### **Freehold Mineral Rights Tax**

The government will review the federal mineral rights tax to ensure it is fulfilling its intended objectives. Freehold mineral rights for these reserves are held by individuals not the province. Current taxes cover the province's cost of administering the regulatory system.

### **Accountability**

The government is determined that royalties will be collected within an equitable, flexible and competent administrative framework. It will initiate a project to assess and make improvements in the systems, structures and resources supporting the collection, verification and reporting of provincial revenues arising from conventional oil, natural gas and oil sands.

#### This initiative will:

- provide clarity on the goals of the province's non-renewable resource revenue regime.
- ensure the government has the systems and processes in place to assess the performance of royalty policy and collection for non-renewable resources.
- ensure complete and timely reporting to Albertans on royalties collected.

Former Auditor General Peter Valentine will lead this project and will report to Premier Stelmach. The project will start in November 2007 and will be completed by March 31, 2008.

This initiative will fully respond to the recommendations made by Alberta's Auditor General in his recent report.

### **Expenditures on Environmental Protection**

Any discussion of programs and policies in the energy sector cannot be made without considering the environment. The Alberta government is committed to greening our growth:

- Alberta already is the first jurisdiction in North America to place real and measurable limits on large industrial plants that produce about 70% of greenhouse gas emissions.
- Recently, the government announced that instead of looking at the environmental
  impacts of industrial development on a project by project basis, for the first time,
  it will assess the overall impacts to land, air and water and set regional limits.
- Alberta has a comprehensive strategy for protecting our water, and we will soon be introducing a framework to better manage the competing demands on Alberta's landscape.
- And earlier this year, Premier Stelmach asked the Minister of Energy to develop
  a comprehensive energy strategy, one which will ensure the sustainable
  development of the province's resources in an environmentally responsible
  manner, making full use of innovations such as near zero-emission coal.

To encourage responsible resource management, the government will continue to assess and recognize any new environmental fees or levies as an eligible cost of doing business, and therefore deductible in determining royalties on oil sands projects.

# **Implications**

The estimated increase in royalties will be \$1.4 billion dollars, a 20% increase over royalty revenues projections under the current system. These projections are based on the same assumptions the Alberta Royalty Review Panel used to reach its 2010 projections.

Yearly royalty revenues can be volatile, and are solely dependent on price and production levels for each of the commodities. Revenues could be higher or lower than the levels projected for 2010.

The recommendations will decrease royalties on 88% of conventional gas wells at a price of \$6.00/mcf (compared to 82% based on the Panel recommendations). The 57% of conventional oil wells paying less remains unchanged from the Panel recommendation.

In 2010, additional revenues from the government's new royalty program are forecasted to be:

Gas \$470 million
Conventional oil \$460 million
Oil sands \$470 million
TOTAL \$1,400 million

Government forecasts are less than those projected by the Alberta Royalty Review Panel for natural gas because of changes to encourage production from low producing gas wells and revamping of the Deep Gas Royalty Program. In the short term, there is a cost to such support, but in the long term it will bring jobs and business opportunities to Albertans, securing our future and giving Albertans a bigger piece of an even bigger pie.

Former Auditor General Peter Valentine will establish government benchmarks as part of his review of Alberta's accountability systems.

Corporate and personal tax implications were not estimated by the Alberta Royalty Review Panel and have not been estimated by the government at this time. However, we anticipate there will be reduced tax revenues from corporate income in the short term.

Currently low natural gas prices are causing a modest slowdown in economic growth and some job loss. The government does not expect any significant immediate economic impacts from its royalty changes. Industry has over a year to adjust its operations and address implementation issues.

# **Next Steps**

As the title of this report indicates, this is a framework for Alberta's new royalty regime. As the government further develops the new royalty regime, adjustments may be made to ensure there are no unintended consequences to its decisions. Both the public and stakeholders will be consulted should significant adjustment be necessary. This is in keeping with Premier Stelmach's commitment to open, transparent government.

The new royalty regime takes effect in January 2009. A lead time of one year is required to ensure the appropriate legal framework and administrative systems are in place, and new accountability measures are identified. Changes to numerous pieces of legislation are required including the Mines and Minerals Act, the Petroleum Royalty Regulation, the Oil Sands Royalty Regulation, and the Natural Gas Royalty Regulation, to name a few. Government information systems, administrative procedures and audit functions will need substantial changes to accommodate the new royalty regime.

The accountability review will begin in November 2007 and be completed by March 31, 2008. Implementation of the new accountability initiatives is set to begin in May 2008.

# Glossary

#### **Bitumen Valuation Methodology (BVM)**

a formula used to calculate the value of bitumen for the purposes of calculating royalties.

#### **Bitumen**

the heaviest, thickest form of petroleum as found in Alberta's oil sands.

#### **Coal-bed Methane**

natural gas found in coal seams. It is still in the early stages of development in Alberta and may help meet the growing demand for natural gas.

#### Conventional crude oil

petroleum found in liquid form, which can pumped without processing or dilution.

#### Deep gas

refers to natural gas from wells drilled to depths greater than 2,500 metres.

#### **Freehold Mineral Tax**

is a tax levied by the Government of Alberta on the value of oil and natural gas production from non-Crown lands

#### **Natural Gas Liquids (NGLs)**

liquids obtained during production of natural gas comprising ethane, propane and butane.

#### Ring fence

refers to the definition of an oil sands project and the eligible expenditures deemed necessary for operation.

#### **Royalties**

the price that the owner of a natural resource charges for the right to develop the resource.

#### **Royalty-in-Kind**

refers to the Crown receiving resources, such as bitumen, in lieu of cash royalties.

#### **Synthetic Crude**

a product similar to crude oil, created by upgrading bitumen from oil sands.

#### **Payout**

in reference to oil sands projects, the point when the developer has recovered capital costs plus 6% return on the investment.

#### **Primary wells**

refers to wells producing heavy oil in areas designated as oil sands.

#### Value added

the upgrading or refining of resources into products of a higher value (e.g. synthetic crude, petrochemicals, plastics)

#### Vintage

refers to the date of discovery which is used to determine how conventional oil and natural gas royalties are calculated under the province's current system. Also refered to as "tiers."

### **APPENDIX ONE**

## A Summary of Decisions in comparison with the Alberta Royalty Review Panel's Recommendations

PANEL RECOMMENDATION	GOVERNMENT DECISION	RATIONALE		
Implementation				
1. Implement Recommendations in July 2008	<b>Reject</b> Implement in January 2009	A lead time of one year is required to ensure the appropriate legal framework, administrative and accountability systems are in place.		
Conventional Oil				
2. Royalty rates are determined by a single sliding rate formula with separate elements sensitive to price and production volumes. New royalty rates range from 0% to 50%	Accept with modification This is a change from current royalty rates.	Albertans will receive a greater royalty share at higher oil prices.		
Royalties are calculated on a <b>daily</b> production rate.	<b>Reject</b> Royalty will be calculated on a monthly production rate instead of the daily rate suggested by the Panel.	Moving to a per day calculation would add administrative complexity and cost with no apparent benefit. Information is currently collected on a monthly basis.		
3. Several special <b>royalty programs be</b> eliminated.	Accept Eliminate the following well-based oil royalty programs:  Third Tier Exploratory Well Royalty Exemption  Re-activated Well Royalty Reduction  Low Productivity Well Royalty Reduction  Horizontal Re-entry Well Royalty Program  Experimental Project Petroleum Royalty.	Simplifies the current royalty system.  The government's new royalty formula will effectively deal with the economic issues addressed by these programs.  Oil project royalty programs like, Enhanced Oil Recovery and the Innovative Energy Technology Program will be retained to encourage research and additional oil recovery.		
Eliminate the tiers in conventional oil that distinguish "vintages" based on discovery date.	Accept	Simplifies the current royalty system. Allows officials to focus on more value-added activities.  Under current economic conditions the difference in royalties between tiers is no		
5. <b>Rate caps</b> on price be <b>raised</b> for conventional oil to Cdn \$120/barrel.	Accept Ensures the royalty system is sensitive over a broad range of prices.  Current maximums are reached at around \$30 per barrel.	Improves Albertans' share at higher prices.		

### **Natural Gas**

6. Royalty rates are determined by a single sliding rate formula with separate elements sensitive to	Accept with modification  New royalty rates will range from 5% to 50%.	Significantly increases the government take at higher gas prices.
price and production volumes New royalty rates range from 2% to 50%.		Coal bed methane, tight gas, and shale gas represent important future gas resources for Alberta, but they are not highly productive. These wells will be subject to lower royalties at a wider price range to ensure the continued development of these unconventional gas reserves.
7. Crown deem a fee for processing to apply to all gas processing facilities in the province, with adjustments for different types of plant production (e.g., wet, dry, sweet)	Reject Establish a facility effective royalty rate (FERR) rather than the recommended deemed fee. The current system uses a corporate effective royalty rate (CERR)	Moves cost calculations to the facility level, better connecting costs to facility. Requires less modifications to the existing system.
8. Eliminate the tiers in conventional natural gas that distinguish "vintages" based on discovery date.	Accept	This change simplifies the system. Under current economic conditions the difference in royalties between tiers is minimal.
9. No panel recommendation on <b>shallow gas.</b>	The government will implement "shallow rights reversion" to maximize extraction of the resource. Under this policy, mineral rights to undeveloped geological formations above zones that are being developed would revert back to the government and be made available for resale.	This change would allow for development of currently undeveloped resources consistent with government's objective of maximizing recovery of known gas resources. This would allow for capture of increased royalty revenues for Albertans.
10. Several special <b>royalty programs be</b> eliminated.	<ul> <li>Accept A number of well-based oil royalty programs will be eliminated. The following gas royalty programs will be retained and revamped:  Otherwise Flared Solution Gas Royalty Waiver Program. It will be extended to bitumen wells.</li> </ul>	The OFSG program was developed in consultation with industry and environmental stakeholders. It encourages solution gas conservation, rather than venting the gas, resulting in improved air quality. The OFSG program is part of an overall program that has contributed to a 70% reduction in flaring across Alberta. Extending the OFSG program to bitumen wells makes the program more equitable and is consistent with the environmental intent of the program.
	<ul> <li>Deep Gas Drilling Program.         Some revisions will be required to the current program to reflect the change in the royalty formula.     </li> </ul>	The deep gas drilling program is instrumental to the viability of gas development in Alberta.  Although royalties from unconventional gas will be lower, overall benefits to the economy will be higher, as production from marginal wells creates more jobs and benefits Alberta's businesses and communities.
11. <b>Rate caps</b> on price be <b>raised</b> for natural gas to Cdn \$16.59/GJ.	Accept Currently the maximum rate is reached just above \$3.70/GJ.	Improves Albertans' share at higher prices.
12. Treating <b>natural gas liquids</b> (propane, butanes, pentanes plus) as oil. Treat ethane as natural gas.	Reject  Maintain the status quo for ethane and apply fixed royalty rates for propane, butane and pentanes to maximize their economic contribution to Alberta.	Ethane is already treated as natural gas.  The panel recommendation is not justified by current drilling economics. Implementation would result in a considerable revenue loss for Alberta. There is no logical tie between the production and markets for oil and natural gas liquids.
13. <b>Eliminate</b> option to use Corporate Average Price (CAP) to determine natural gas royalties.	Accept	This is a minor change from the existing system. It is a labour-intensive manual process. Its elimination will result in administration savings to both industry and government.

### Oil Sands

14. Base Royalty	rate to	remain	at	1%.
------------------	---------	--------	----	-----

#### Reject

Implement a sliding rate structure where the base rate increases from 1% when the West Texas Intermediate (WTI) price is at \$55 per barrel to 9% when WTI reaches \$120.

At high prices the province will receive higher revenues from oil sands development. Albertans will receive a greater share from oil sands development.

Ensures all components of the royalty system are price sensitive.

15. **Increase net royalty** rate from 25% to 33%.

#### Reject

Implement a sliding rate structure where the net royalty rate increases from 25% when WTI price is at \$55 per barrel to 40% when WTI reaches \$120.

Albertans will receive a greater share from oil sands development.

Ensures all components of the royalty system are price sensitive.

### 16. Implement a new Oil Sands Severance Tax:

- 0% for price less than \$40/bbl
- 1% at \$40/ bbl
- Increase by 0.1% for each dollar per barrel increase
- Maximum of 9%.

#### Reject

Royalties are a right of ownership. Other jurisdictions use severance taxes to meet their revenue need because they do not own the resources. Alberta's fair share is not based on revenue needs, but ownership rights.

By introducing a price sensitive base royalty rate, Alberta can obtain more revenue upfront, especially at high prices.

 Recognize any environmental fees or levies as eligible cost of doing business.

#### Accept

Government already allows this for costs directly related to oil sands projects.

- 18. Introduce a **tradable royalty credit** at a rate of 5% of eligible capital expenditures on additional upgrading capacity in Alberta:
- · Requires EUB approval.
- Requires that a new Bitumen
   Valuation Methodology be in place.
- Credit is transferable.

#### Reject

Implement royalty in kind for bitumen (rather than cash).

Continue work on the Value-Added Strategy to determine most effective tools to encourage value-added product development in Alberta. Upgrader credit may be one option to consider within this review.

Other tools may be more effective at encouraging value-added activity in Alberta.

Upgrading may be less critical than expanding refining or other value added activities.

Numerous upgrading projects are already likely to go ahead in Alberta without the need for the special incentive, particularly if independent bitumen supply is available.

 Elimination of Accelerated Capital Cost Allowance (ACCA) for oil sands projects.

#### Accept

The government will eliminate the provincial portion of the ACCA for oil sands projects, consistent with the federal government decision.

20. Adopt permanent, generic "bitumen valuation methodology" (BVM) by June 30, 2008 to replace all other BVMs and alternative valuations.

All bitumen to be subject to this valuation system.
Consult independent advisor.

#### Accept with Modification

Accept the use of a formula-based approach as an option for the permanent BVM.

Reject the application of the permanent BVM to all bitumen produced in the province.

A formula based approach is only required for nonarm's length transactions. Where there are arm's length sales at market price, the market price will be used.

PANEL RECOMMENDATION	GOVERNMENT DECISION	RATIONALE
Oil Sands continued		
21. Cost Rule Clarification  Encourage the Government of Alberta to comprehensively and extensively review and tighten, if required, current rules and enforcement procedures to ensure that absolutely clear, transparent, auditable and appropriate definitions exist for projects and eligible expenditures.	Accept	Aligns with initiatives/policies already being pursued by government for enhanced cost and operating reporting requirements.
22. Recommendation against grandfathering on the grounds of fair treatment for all participants	Accept	This ensures a level playing field for all industry stakeholders.
The panel did not make a specific recommendation on the treatment of the Crown Agreements, which it felt was "beyond the scope of the Panel's work."		The government is in discussions with Syncrude and Suncor, whose Crown agreements expire in 2016, to participate in the new oil sands royalty regime by 2009. The transition details will be worked out over the next 90 days. In the event agreement cannot be reached, the government will take other measures to ensure a level playing field for all industry stakeholders.
23. Eliminate the option to elect <b>oil sands administrative status</b> for primary wells in certain areas.	Reject	For many heavy oil projects in the region, the economics and development conditions are similar to oil sands, and primary wells may become part of a project that is in-situ. Conventional rates are not appropriate for these situations and would not improve recovery efficiency. The generic royalty regime encourages enhanced recovery from primary wells.
24. The existing schedule of <b>escalating rentals</b> begin in the sixth year of any agreement (lease or license) and that no deductions be allowed in the calculation of escalating rentals.	Reject	Six years is a short time frame for evaluating, planning, obtaining regulatory approvals and developing complex projects. The shortened time frame could lead to acceleration of activity and further strain Alberta's infrastructure.
Freehold Mineral	Rights Tax	
25. Flat 6% tax apply regardless of level of production. Retain the base exemption of \$1,600  Accountability	Reject	The Panel did not provide any significant rationale for moving to the flat tax system. Freehold mineral rights are owned by individual Albertans not the Crown. Royalties recover Albertans' share of Albertans' resources. Current taxes cover administrative costs of managing the process. Elimination of low productivity rate reductions could lead to well abandonment and oil and gas being left behind that could have been extracted. The government will review the freehold mineral rights tax to ensure it is fulfilling its intended objectives.
26. Royalties are collected within an equitable, flexible and competent administrative framework.	Accept Initiate a review to improve the systems and structures used to collect, verify and report non-renewable resource revenues received by the Province of Alberta.	Government is committed to a sound, accountable system for collecting royalties.

19

the Province of Alberta.