

Enhancing Assurance - The First 90 Days

Report to the Minister of Energy by
The Regulatory Enhancement Task Force
June 2010



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Message From The Chair

Mrs. Diana McQueen, Chair
Regulatory Enhancement Task Force

June 9, 2010

Honourable Ron Liepert
Minister of Energy
323 Legislature Building
10800 - 97 Avenue
Edmonton, AB T5K 2B6

Dear Minister Liepert:

On behalf of the Regulatory Enhancement Task Force, I am pleased to present this 90-day progress report on improvements to the Alberta oil and gas regulatory system that were committed to on March 11, 2010 in the *Energizing Investment* report.

It is my pleasure to work with members of the Task Force, Cal Dallas, Red Deer South MLA and Parliamentary Assistant for Alberta Environment, and Evan Berger, MLA for Livingstone-Macleod and Parliamentary Assistant for Alberta Sustainable Resource Development. The Task Force is also grateful for the ongoing support of Mr. Gerry Protti as an industry advisor.

Over the last three months we have met with numerous stakeholders with an interest in a fair, efficient, and effective regulatory system in Alberta, including environmental groups, municipalities, the oil and gas industry, and government officials. I would also like to commend the work of Alberta government officials at the departments and agencies that have contributed to the regulatory enhancements contained in this report.

The Task Force looks forward to delivering to you a final report by December 31, 2010 with recommendations for oil and gas regulatory enhancement in Alberta.

Sincerely,

Mrs. Diana McQueen
MLA for Drayton Valley-Calmar
Parliamentary Assistant for Energy

Executive Summary

Energy is an essential part of Alberta's economic future. Over the next 25 years, upstream oil and gas development in Alberta has the potential to add \$2.5 trillion in new economic activity, creating millions of person-years in jobs and contributing to sustained prosperity for our province.

To realize these substantial benefits, Alberta must continue to attract significant levels of oil and gas investment. As part of broad efforts under the *Competitiveness Act*, the Government of Alberta is working to position Alberta as one of the most competitive places in North America to invest in upstream oil and natural gas development.

In March, the Government of Alberta released *Energizing Investment: A Framework to Improve Alberta's Natural Gas and Conventional Oil Competitiveness*, which identified a series of actions for improving Alberta's competitive position. These included a comprehensive review of Alberta's regulatory system for oil and gas, and making specific enhancements to the system in the near-term.

The government appointed a Regulatory Enhancement Task Force to oversee review and improvement of Alberta's regulatory system, and instructed the Task Force to issue a progress report within 90 days.

Enhancing Assurance: The First 90 Days identifies how Alberta government ministries and agencies are pursuing a comprehensive review of Alberta's regulatory system for oil, natural gas and oil sands development. It illustrates successes that have been achieved on specific enhancements, and the process that will be followed to realize broader improvements.

Alberta's regulatory system is intended to support the development of Alberta's oil, natural gas and oil sands, while providing assurance in three key areas: protection of the environment, public safety, and resource conservation. Alberta Environment, Alberta Sustainable Resource Development, and

the Energy Resources Conservation Board (ERCB) are responsible for various aspects of oil and gas regulation. Alberta Energy is responsible for administering Crown mineral rights and royalties.

To be regarded as a competitive destination for oil and gas investment, Alberta needs to have a regulatory system that is flexible, modern, efficient and effective. It must be a system that places an appropriate level of accountability on resource developers, with requirements that meaningfully support environmental protection, public safety, and resource conservation. It must also place a focus on achieving outcomes, and provide developers with the flexibility to use innovative approaches and new technologies that will help achieve those outcomes.

The Regulatory Enhancement Project is a review of the oil and gas regulatory system, being overseen by the Task Force that is examining how to enhance Alberta's regulatory system so that it meets these objectives. A cross-ministry team is undertaking a comprehensive review of Alberta's regulatory system, and determining how it can be renewed to best achieve outcomes and provide assurance to Albertans.

The Regulatory Enhancement Project has identified key issues and barriers. The project has also begun a stakeholder engagement process with industry, landowners, environmental organizations and other groups with interests, expertise and experience in resource development. The views of stakeholders will help the project identify solutions and opportunities for improvements.

By the end of 2010, the Regulatory Enhancement Project will make recommendations to the Government of Alberta on how to best align provincial policies around oil, gas and oil sands; and how to implement a renewed policy assurance system for the province that is flexible, modern, efficient and effective.

In addition to this comprehensive system-level review, Alberta's regulatory agencies have identified, acted upon and achieved several near-term enhancements to Alberta's current system. Considerable work has been undertaken by government officials, not only over the last 90 days but over the past several months to make these changes, which include:

- Pilot work towards a system of coordinated compliance inspections;
- Successful streamlining of Pre-Disturbance Assessments for oil sands developments;
- Simplification of sub-surface well spacing requirements;
- Improved access to information and regulations;
- Clarification and simplification of regulatory publications;
- The elimination of obsolete and expired regulatory publications; and
- Harmonizing regulations with other provinces.

The ERCB, as an example, has undertaken several enhancements as part of its new strategic plan, and has reduced its regulatory publications from 205 to 164 through an ongoing program initiated in 2004. An additional 10 publications are in the process of being eliminated in the near term.

These near term enhancements are already resulting in improvements to Alberta's regulatory system. These include savings in time and cost for both industry and the Government of Alberta, while protecting public safety, conserving resources and ensuring industry complies with high environmental standards.

Near-term enhancements will simplify requirements and improve timeliness, and will result in major benefits to industry and government, including:

- Substantial annual financial savings to industry which can be re-invested into the Alberta economy, including an estimated savings of between \$80 million and \$170 million from a number of ERCB initiatives alone¹;
- Reductions in time delays and associated delay-related costs;
- Elimination of the need for between 250 and 300 applications per year to the ERCB reflecting the use of new technologies²; and
- Improved clarity and navigability of rules and regulations.

The cost savings from regulatory efficiencies that are reinvested in Alberta will benefit hundreds of communities and thousands of businesses in the province through increased jobs, economic activity and provincial revenues.

The Government of Alberta is collaborating with industry and the research community on several fronts, to build knowledge regarding new technologies and innovations that will help achieve our energy and environmental objectives. This includes research and demonstration projects in carbon capture and storage, re-use of water in tailings, and integrated clean gas production.

The first 90 days of action have been productive. Real and substantial progress has been made in improving Alberta's regulatory system. Alberta's regulatory agencies are on track to renew the regulatory system to provide greater clarity, predictability, certainty and efficiency, consistent with the goals of *Energizing Investment and Alberta's Competitiveness Act*.

¹ Preliminary estimates provided by industry for ERCB initiatives related to harmonization of well spacing for Development Entities 1 and 2, simplifying coal-bed methane (CBM) control well requirements, and harmonization of regulations.

² Harmonization of well spacing for Development Entities 1 and 2

Introduction

Energy development is expected to remain a cornerstone of Alberta's future economic growth. Over the next 25 years, upstream oil and gas development in Alberta has the potential to add \$2.5 trillion in new economic activity, creating millions of person-years in jobs and contributing to sustained prosperity for our province.

Realizing the full economic benefits of our oil and gas resources depends on Alberta's ability to continue attracting significant levels of investment. As part of broad efforts under the *Competitiveness Act*, the Government of Alberta is working to enhance Alberta's competitiveness.

In response to changes in the marketplace, Alberta Energy led a study of Alberta's investment competitiveness for oil and gas development. The study involved considerable technical analysis and the input of energy investment stakeholders, placing focus on natural gas and conventional oil.

In March, the government reported to Albertans in *Energizing Investment: A Framework to Improve Alberta's Natural Gas and Conventional Oil Competitiveness*, which summarized the major findings of the competitiveness study.

It outlined a series of actions and initiatives to **position Alberta as one of the most competitive destinations in North America for upstream oil and gas development.**

Improving the Regulatory System

A key issue identified in *Energizing Investment* was the need to improve Alberta's regulatory system.

Today Alberta demonstrates a strong commitment to safeguarding the environment, public safety and its resource base, through a variety of legislation, regulations and policies. Our regulatory system is aimed at ensuring oil and gas development happens in an orderly and responsible manner.

Over time, however, numerous changes to requirements and processes have resulted in a

complex regulatory system. Making the regulatory system less complicated, more efficient and more effective will help position Alberta as a competitive place to invest in upstream oil and gas development.

For example, several opportunities exist to:

- Make the regulatory system easier to navigate for investors, energy producers, landowners and other interested Albertans;
- Improve coordination and information sharing among Alberta government ministries and regulatory agencies to reduce duplication of effort;
- Address differences in feedback, information, application and consultation requirements among regulatory agencies;
- Improve consistency among regulatory agencies in the development and application of rules to ensure clarity and regulatory certainty; and
- Improve application response times of Alberta regulators to reduce turnaround and related costs.

To pursue these opportunities, *Energizing Investment* established a Regulatory Enhancement Task Force, chaired by the Parliamentary Assistant for Energy, to oversee a comprehensive review of Alberta's regulatory system.

As a foundation for broader improvement of the regulatory system, *Energizing Investment* identified a number of areas in which near-term enhancements should be made to the system.

The Task Force was directed to issue a progress report within 90 days regarding:

- the process and timelines for comprehensive review of the regulatory system;
- work to realize near-term enhancements; and
- efforts by the Government of Alberta to support and facilitate the deployment of new technology.

Taking Action

Enhancing Assurance: The First 90 Days provides a progress report from the Regulatory Enhancement Task Force to the Minister of Energy.

This report identifies how the Alberta government is pursuing a comprehensive review of Alberta's regulatory system for oil, natural gas and oil sands development. It illustrates successes that have been achieved as part of this ongoing work, and the process that will be followed to achieve broader improvements.

In addition, the report identifies how Alberta government ministries and agencies are working together collaboratively and constructively to reduce duplication, simplify processes and clarify expectations on the part of industry, regulatory agencies and Albertans.

Creating Enhanced Overall Assurance

Today there are several Government of Alberta ministries and agencies involved in resource development.

The regulation of oil, gas and oil sands development is overseen and managed by Alberta Environment, Alberta Sustainable Resource Development (SRD) and the ERCB. Each has responsibility for various aspects of the approval, construction, operations, monitoring, compliance, abandonment and reclamation of resource projects. Alberta Energy is responsible for administering Crown mineral rights and royalties.

Alberta's regulatory system is intended to support the development of Alberta's resources, while providing assurance in three key areas:

Environmental protection

Protecting Alberta's air, water, land and biodiversity by ensuring that these vital environmental resources are managed appropriately.

Public safety

Ensuring development does not compromise the health and safety of the general public.

Resource conservation

Preventing waste of Alberta's resources from inappropriate practices (e.g., unnecessary flaring of natural gas) and providing for orderly development of oil and gas reservoirs in ways that ensure optimum recovery and equity.

It is important that Alberta's regulatory system be **efficient**. It must recognize important assurance functions, while minimizing overlap and reducing duplication of effort.

The regulatory system must also be **effective** in providing assurance to Albertans. This means placing an appropriate level of accountability on resource developers, with requirements that meaningfully support environmental protection, public safety, and resource conservation.

At the same time, Alberta's regulatory system needs to be **modern** and **flexible** to allow for innovation. It must place a focus on the outcomes Albertans wish to achieve – for the environment, for public safety, and for resource conservation – and enable industry to deploy new technologies, approaches and tools to achieve those outcomes.

Creating this clear, flexible, modern, efficient and effective regulatory system is the driving goal behind the Regulatory Enhancement Project (REP), which is undertaking a comprehensive review of the regulatory system as called for in *Energizing Investment*.

Led by Alberta Energy, the REP has been established to make recommendations for a renewed and integrated policy assurance system that will support Alberta's overall investment competitiveness while assuring the protection of the environment and public safety, and the conservation of resources.

The REP team includes representatives from Alberta Energy; Alberta Environment; SRD; the ERCB; and Alberta Justice and Attorney General.

The focus of the REP is on broader system-wide enhancement, and **determining what the overall policy assurance and regulatory system should look like**. All options are on the table for consideration.

The objective is to renew and enhance Alberta's system so that it sets appropriate accountabilities and requirements for industry; uses integrated, aligned and efficient processes; and enables developers to work towards desired outcomes for environmental protection, public safety and resource conservation.

There are many ways to assure outcomes are met. Regulation is one way but it is not always the most effective or appropriate tool. Prescriptive regulation can be costly and discourages innovation. That is why the REP has defined the regulatory system more broadly as a policy assurance system.

We need to consider a full range of tools as part of the tool box government uses to achieve desired policy outcomes.

It is important to note that the REP will not address what Alberta's desired outcomes should be; these are being established through other government initiatives, such as the *Land-use Framework* and the *Cumulative Effects Management System*. Instead, the REP is looking at how the system should be designed to best deliver those outcomes.

Nor is enhancing the regulatory system's overall efficiency and effectiveness "watering down" the system. Alberta's high environmental standards remain in place, reflecting the value and importance Albertans put on protection of the natural environment.

An important question being considered is what is the best way to achieve the outcomes we want? The possibilities cover a broad continuum from command and control approaches to performance based systems. The policy assurance tools and approaches being considered include prescriptive regulations, but also other tools such as performance standards, incentives, market-based mechanisms, codes of conduct, certification systems, and comprehensive auditing that can be used to assure outcomes.

Selecting which tools to use will depend on examining the potential consequences of activities. For example, performance-based regulations may be appropriate in cases where risks are relatively low and can be reasonably managed. In other cases where risks are higher, the answer might be tighter requirements and more prescriptive regulation.

Government is also giving consideration to what organizational structure would best deliver policy assurance. Again there is a continuum of possible answers, from coordinated delivery to a one-window approach or even to a single-regulator. All of these options are on the table and are being seriously examined.

With these objectives in mind, the REP will make recommendations to the Government of Alberta in the following three areas:

- **Policy Integration Framework** Recommendations to resolve any gaps, overlaps, inconsistencies and duplications in Alberta's strategic provincial policies around the oil, gas and oil sands sectors, and potentially other resource sectors.
- **Policy Assurance System** Recommendations for a renewed policy assurance system with performance measures and benchmarks. This will help position Alberta as one of the most competitive destinations in North America for upstream oil and gas investment and will advance Alberta's economic, social and environmental objectives.
- **Implementation Strategies** Recommendations to implement the enhanced policy assurance system.

Towards an Effective System

The REP has already achieved considerable progress in a short period of time.

Reviewing the landscape

- The REP team has identified a number of key challenges and opportunities for improvement in Alberta's current policy and regulatory systems. These include opportunities to reduce duplication and resolve process inconsistencies between regulatory agencies; better align and integrate government policy initiatives and processes; and provide greater adaptability and flexibility in the system.
- The team has conducted a high-level overview of Alberta's regulatory delivery processes, including a jurisdictional comparison, and has reviewed strategic policies and directions around the management of resources.
- A review of possible or available policy instruments has been undertaken, including an

examination of their potential application within a re-engineered policy assurance system.

Engaging with stakeholders

- The REP began stakeholder engagement activities in April 2010; these will continue through November 2010.
- The engagement of stakeholders is assisting the REP in confirming systemic issues requiring attention and review, and in developing design principles for an improved and more effective regulatory system. The views of stakeholders will inform the development of recommendations to the Government of Alberta on proposed solutions.
- The REP has engaged representatives from the oil and gas industry and related associations, since these groups are directly affected by the regulatory system. This has included industry executives, operational and regulatory experts. Input will be sought from representatives of various groups, associations and organizations outside of the oil and gas industry, which may have key public interests in Alberta's regulatory approach. These include First Nations organizations, landowners, municipalities, and environmental non-government organizations.
- Stakeholder engagement has included representatives from those ministries and agencies involved in the REP, as well as representatives from other ministries.
- An online tool has been developed to solicit written feedback on the REP process, and to provide a means of keeping stakeholders informed of the REP's progress.

Achieving Timely Results

The REP has set an ambitious schedule for its work. This reflects the need to enhance the effectiveness of the regulatory system in a timely fashion, in order to augment Alberta's investment competitiveness.

The progress to date outlined above includes completion of the project start up and reviewing the current regulatory landscape (phases 1 and 2 of the REP). The results of these phases will be used to support subsequent phases.

Phases 3 to 5 of the REP will focus on system design, testing and recommendations, including continued stakeholder engagement. These phases will identify opportunities to modernize the regulatory system. While the project will not be constrained by current and past policies and practices, it will be informed by previous regulatory review findings and will accommodate the practical realities presented by the regulatory system's complex operating environment.

Project Milestones

- **Phase 3** - April-September 2010 – This phase will focus on system design and the development of recommendations relating to the Policy Integration Framework and the Policy Assurance System. These will consider:
 - gaps, overlaps and inconsistencies in Alberta's current policies regarding natural resource management; and
 - regulatory enhancement to position Alberta as a competitive place to invest, and as a leader in resource conservation, environmental protection and public safety, and the orderly development of resources.
- **Phase 4** - October-November 2010 – This phase will involve testing and validation of phase 3 results.
- **Phase 5** - November-December 2010 – This phase will focus on the development of implementation strategies and final recommendations to the Government of Alberta.

Achieving Near-Term Enhancements

In addition to comprehensively reviewing the regulatory system, the Alberta government has identified and pursued many near-term enhancements to the system. The near-term enhancements are helping improve the efficiency and effectiveness of the current regulatory system, while maintaining high standards of assurance for environmental protection, public safety and resource conservation.

These enhancements will also augment Alberta's investment competitiveness in upstream oil and gas development. They are expected to yield significant benefits for government and industry.

The full benefits from regulatory enhancements affect literally hundreds of communities and thousands of businesses. Every dollar saved through regulatory efficiencies can be reinvested into Alberta. For every one dollar of energy investment there is an estimated \$1.44 GDP increase to the province. Increased economic activity and jobs also increase provincial revenues which support the programs and services that matter to Albertans.

The near-term enhancements include the specific areas identified in *Energizing Investment*, as well as additional opportunities identified and acted upon by Alberta government ministries and agencies.

Several near-term enhancements undertaken by the ERCB, which focus on unconventional gas and oil sands developments, have resulted from initiatives undertaken as part of its new strategic plan. These ERCB improvements complement and align with the activities of the Regulatory Enhancement Task Force.

Progress by Alberta government regulators on all of the near-term enhancements is provided below, including notable accomplishments and impacts.

Enhancements Specified in *Energizing Investment*

- Processes for commercial in-situ oil sands approvals**

Requirements for in-situ oil sands development are being made more comprehensive, clearer, and more like conventional development. Alberta regulators are working together to pursue a number of changes to provide a more effective application process for in situ oil sands developments that will provide greater certainty to the process and the timelines required. This work includes sharpening the focus and relevance of application requirements, thereby reducing the number of supplementary information requests. A new ERCB Directive that will clarify requirements and improve the process for amendment applications is also being developed.
- Harmonization of well spacing**

The use of new technologies such as horizontal, directional and pad drilling means that additional subsurface areas can be drilled using the same well site on the surface. Repetitive applications for well spacing are no longer needed in large areas of the province (Development Entities 1 and 2) where higher well densities are frequently required to target lower productivity reservoirs. ERCB Bulletin 2010-07 revised and harmonized the subsurface well spacing regulations in Development Entities 1 and 2, and standardized target areas. This simplification will eliminate the need for 250 to 300 well spacing applications per year, resulting in estimated annual savings of \$3 million per year which can be reinvested in the Alberta economy.³ In addition, new subsurface well spacing applications no longer require notification to surface landowners, reducing confusion and frustration on the part of landowners. The ERCB continues to maintain its comprehensive landowner notification

³ Preliminary estimates provided by industry.

requirements for surface development applications, such as a proposed well, pipeline or facility.

- **Pre-Disturbance Assessments (PDAs) for oil sands development**

The Alberta government has standardized PDA submissions and has developed a guideline that details PDA requirements. Developers remain legally required to submit PDAs before construction begins, and must continue to meet high environmental standards. The streamlined process will reduce the current delay in the beginning of construction.

- **Coordinated compliance inspections**

Coordination of inspections of facilities that are regulated by multiple regulators such as the ERCB, SRD and Alberta Environment, will mean joint inspections can be done versus multiple inspections from each agency. Two pilots were held involving joint sour gas plant inspections, which determined that integrated and coordinated inspection of large jointly-regulated facilities is feasible. The pilot results will inform the development of a full scale plan for coordinated compliance inspections, which will reduce workplace disruptions and the resulting costs to employers. A cross-training program is also being developed, which will enable Alberta inspectors to better identify key risk and compliance issues during inspections.

- **Unconventional gas and tight oil data confidentiality**

Making sure we have the right balance in handling the information industry gives to government will build confidence in Alberta as a competitive place to invest. Confidentiality provisions will need to balance the interests of developers with the value of having such data in the public domain. The ERCB has initiated discussions with industry regarding appropriate confidentiality provisions for unconventional gas and tight oil data. Finalized provisions are expected to be in place by early 2011.

Additional Enhancements Realized

Several additional enhancements identified by Alberta's regulatory agencies will bring increased clarity, efficiency and effectiveness to the regulatory system.

- **Area Operating Agreement**

A framework for a consistent process and level of information for government and industry to work from is being created. This will improve the way in which the use of Alberta's public lands is approved. SRD, in partnership with the Canadian Association of Petroleum Producers (CAPP), is building on the Area Operating Agreement to achieve an enhanced approval process for upstream oil and gas operations on public lands. The enhanced approval process will be more streamlined and efficient. It will provide clear standards and guidelines for industry planning and operations and make IT enhancements for reporting and processing applications electronically and identifying landscape sensitivities. The enhanced approval process is targeted for introduction in fall 2010.

- **Simplifying of coal-bed methane (CBM) control well requirements**

Rules put in place for developing an understanding of coal-bed gas resources have been updated to reflect the knowledge that has been learned about this unconventional gas resource. Several years of experience with the CBM control well program have revealed opportunities for improvement. On April 1, 2010, the ERCB approved Directive 062, which clarified and simplified control well requirements, bringing all CBM development under the same testing requirements. This is expected to save gas producers approximately \$18 million per year and these savings can be re-invested into the Alberta economy.⁴

⁴ Preliminary estimates provided by industry.

- **Shale gas control well requirements**
The ERCB is reviewing all aspects of unconventional gas regulation, including the type and quality of shale gas data required. While the review is underway, the ERCB will issue a bulletin that clarifies interim shale gas data requirements, providing clarity to developers and guidance to investors regarding Alberta's future approach to unconventional gas regulation.
- **Shale gas data reports**
The ERCB released six reports on shale gas properties of prospective geological formations, for a total of thirteen reports since 2009. Alberta is one of very few jurisdictions where this kind of data is released into the public domain for use by industry. This information is being actively used by exploration companies to identify shale gas prospects in Alberta and by service companies to adapt drilling and completion technologies to Alberta shales. Having high quality data and information readily available enhances Alberta's competitiveness.
- **Interim relief from CBM annual pressure testing**
The requirement for information from industry that is costly to gather and may be of questionable value is being reviewed. Consultation with industry raised legitimate questions about the quality and usefulness of this data relative to the costs of its collection. While the overall quality and value of the data is reviewed over the next few months, the ERCB has relieved industry of this requirement, resulting in cost savings for gas producers.
- **Horizontal wells in unconventional reservoirs**
The use of new technology to develop unconventional resources is being encouraged through a review that could reduce the need for a number of applications. The ERCB is looking at ways of simplifying subsurface spacing requirements for horizontal wells in unconventional reservoirs. This could reduce the number of applications to the ERCB, resulting in time and cost savings while maintaining high resource conservation and reservoir equity standards. The ERCB expects to consult with stakeholders in June and finalize requirements by December 2010.
- **Shutdown of Balzac Gas Plant**
The Balzac Gas Plant is scheduled to be retired no later than August 31, 2011. Rather than a traditional approach to the shutdown, wherein each agency pursues its work under separate rules and timelines, Alberta Environment and the ERCB will take a coordinated approach. This will reduce the number of plant visits, enable inter-agency sharing of knowledge and expertise; and result in speedier decommissioning. The experience gained from this collaboration will inform broader efforts to reduce overlaps and duplication of regulatory functions.
- **Memorandum Of Understanding on First Nations consultation information**
A Memorandum of Understanding will facilitate the ERCB receiving information on SRD's consultation decision-making under *Alberta's First Nations Consultation Policy on Land Management and Resource Development*. This will support the ERCB in making timely decisions on whether First Nations may be directly and adversely affected by applications made to the ERCB through the provisioning of information.
- **Coordinated First Nation consultation approach**
In an effort to give industry and First Nations more clarity and improved process around consultation, Energy, Environment and SRD are implementing a coordinated First Nation consultation approach, starting with environmental impact assessments. This coordinated approach means that the three ministries are working together to provide more consistent direction to industry regarding First Nations consultation that interfaces across the

business of the three ministries. The goal is to provide clear First Nations consultation direction on behalf of all three ministries to industry earlier on in the regulatory process which in turn will provide First Nations the opportunity to raise consultation concerns in a timely manner. Ultimately, this coordination should eliminate duplication of consultation activities that consume First Nation's and industry's time and efforts.

- **Application guidance package**

Alberta Energy, Alberta Environment, SRD and the ERCB are developing an application guidance package, which will provide industry with a clear explanation of the current application process for upstream oil and gas developments. The web-based guide will include descriptions of the planning, consultation and application requirements for wells, pipelines, facilities, plants and roads. In developing the guide, SRD and ERCB have identified and are working to align requirements and processes.

- **Consolidation of regulatory publications**

The sheer number of publications that tell industry and other stakeholders what the rules are has created a complex web to navigate. A strategic objective of the ERCB is to clarify and consolidate regulatory requirements over the next three years. The ERCB is working to consolidate Interim Directives, Information Letters and associated guides, and eliminate obsolete requirements as appropriate. Starting in 2004 the ERCB has reduced the number of regulatory publications from 205 to 164, resulting in less “red tape” for industry and stakeholders to sort through. An additional 10 publications are in the process of being eliminated in the near term.

- **Consolidation of pipeline requirements**

Confusion has sometimes been created by having multiple regulatory publications for the pipeline industry and this is being addressed. The ERCB is consolidating Directives, Information Letters, interpretive documents and reference tools relating to pipelines into a single, consistent and clear Pipeline Directive. The consolidation will also separate and clarify the regulatory requirements for pipelines, resulting in better guidance to industry and less red tape.

- **Directive 057 rescission**

As a part of the consolidation of regulatory publications mentioned above, this requirement around the fencing of oil and gas facilities was found to duplicate what was being achieved though another publication. A review of surveillance and enforcement activities over the past six years has found no substantive evidence to suggest Directive 057 has enhanced public safety to any greater degree than the requirements already contained in the Oil and Gas Conservation Regulation.

- **Harmonization of regulations**

Harmonizing some natural gas testing requirements with British Columbia will result in the adoption of best practices and significant industry savings. The ERCB is working with the British Columbia Oil and Gas Commission, CAPP, and BC Revenue to harmonize liquid gas ratio testing requirements in Alberta and British Columbia. When complete, these changes will save gas producers in the two provinces between \$60 million and \$150 million each year,⁵ with the majority of those savings being realized by Alberta producers, and these savings can be re-invested into the Alberta economy. This initiative demonstrates how inter-provincial cooperation has the potential to significantly enhance Alberta's investment competitiveness.

⁵ Preliminary estimates provided by industry.

Enabling Technology and Innovation

As noted in Energizing Investment, technology and innovation will play a key part of Alberta's energy future.

The development and deployment of new technologies has been at the heart of our province's success in developing our significant oil sands resources. Alberta has much opportunity for further growth in bitumen production and associated value-added industry (such as upgraders and refineries).

There are significant opportunities as well in unconventional gas development, including Alberta's vast deposits of CBM and shale gas. Tapping these resources will require the use of innovative technologies, such as horizontal drilling and multi-stage fracturing. Similar technologies will be needed to enhance recovery from Alberta's remaining conventional oil resources, which are substantial.

"Our province must support and encourage the further development and deployment of technology to reach our economic, energy and environmental objectives."

-Energizing Investment

Technology will also be essential for protecting, maintaining, enhancing the health and beauty of our natural environment. As our province looks to effectively manage its landscapes and natural resources, developers will need to use innovative approaches to reduce their environmental footprint and work within established thresholds.

Optimizing the recovery of Alberta's oil, gas and oil sands resources, while safeguarding Alberta's air, water, land and biodiversity, will require continuous improvement in the way we do business. Resource developers will need to apply new knowledge and deploy new and innovative approaches that can help achieve these goals.

"Alberta's regulatory agencies should be knowledgeable about new technology for upstream oil and gas development and open to innovation..."

-Energizing Investment

Alberta's regulatory system needs to be flexible enough to enable the adoption and deployment of new technologies in a timely manner. Not only must it facilitate the use of innovative practices and processes in upstream oil, gas and oil sands development but it must also foster innovation that will improve our ability to protect the environment and meet or exceed expected environmental outcomes.

Accordingly, the regulatory system must employ processes to accommodate new technologies and methods, while considering the related benefits, impacts and risks. This way, the regulatory system is always in a position to facilitate adaptation and improvement on the ground in a timely manner, while ensuring appropriate control of risks to the public, environment and resource base.

The Government of Alberta is working on a number of fronts to build knowledge about new technologies and innovations in resource development. For example:

- Heartland Area Redwater Project**
 Alberta Innovates-Technology Futures is working on this major technology demonstration of large-scale carbon dioxide (CO₂) storage. Now in its second phase of development, the project is one of the most advanced carbon storage initiatives taking place in North America. Knowledge and experience gained from this project will assist the Alberta government in developing a regulatory framework for carbon capture and storage projects in the province.

- **Improving Water Management and Use**
The Alberta Water Research Institute⁶ has entered into a world-class research agreement with GE Water & Process Technologies, to share knowledge and test technological solutions to better manage and sustain Alberta's water resources. One of the first projects is research into biological processes that can accelerate the de-watering of oil sands tailings. Once proven, this approach could lead to recovery and re-use of more water from tailings.
- **Clean Gas for Clean Power**
The Government of Alberta is supporting a demonstration project operated by Swan Hills Synfuels, which will use in situ coal gasification technology to manufacture clean synthetic gas from deep coal seams. The gas will be used to generate power from a plant near Whitecourt outfitted with carbon capture technology. The project will capture and store 1.3 million tonnes of CO₂ per year, which will be sold to other producers who will store and use it to enhance recovery from deep oil reservoirs. This project is an example of the kind of integrated, innovative energy production envisioned by Alberta's *Provincial Energy Strategy*. Knowledge gained from the project will help shape Alberta's regulatory framework.

The results of research and development projects will inform ongoing improvements to Alberta's regulatory system, which will foster technology deployment to optimize resource recovery and enhance environmental performance.

In addition, the Government of Alberta is supporting and collaborating on many other research and development projects in areas such as:

- oil sands treatment technologies;
- adapting the use of alternative energy sources such as geothermal and biomass;
- life cycle analysis of oil from oil sands resources; and
- bitumen upgrading technology.

⁶ Now part of Alberta Innovates-Energy and Environment Solutions.

Conclusion

Since the release of *Energizing Investment*, Alberta government ministries and agencies have made considerable progress in enhancing the effectiveness of Alberta's regulatory system.

In the first 90 days, Alberta's regulatory agencies have accelerated their efforts to work in cooperative fashion, and have collaborated to great effect. Opportunities to improve alignments between regulators are being identified and action taken. Access to information is being improved. Industry and all Albertans with interest in oil and gas development are benefiting from clearer, more consistent guidance about how resource development projects are reviewed, approved, monitored, and overseen.

The Alberta government is working collaboratively with industry and the research community to build knowledge about new technologies and innovations that will help our province achieve its energy, economic and environmental objectives.

All of this effort has laid a strong foundation for further work, as the REP undertakes a comprehensive review of Alberta's regulatory system. Through the REP, Alberta government ministries and agencies are examining how to enhance Alberta's overall policy assurance and regulatory system for the long term.

These efforts will result in a clear, flexible, modern, efficient and effective regulatory system that places appropriate and meaningful accountabilities with industry, and places a focus on effectively achieving outcomes.

As the Regulatory Enhancement Task Force moves forward in its work, there is optimism and confidence about the future. With continued collaboration, Albertans will benefit from a regulatory system that supports the development of Alberta's oil, gas and oil sands resources, while delivering the results they expect – a healthy natural environment, the protection of public safety, the conservation of resources, and a competitive investment climate.

