



# **Regulatory Enhancement Project**

Technical Report December, 2010



#### **NOTICE TO READER**

This document, known as the "Technical Report", has been prepared as part of the Regulatory Enhancement Project (REP). The objective of the REP was to examine ways of ensuring Alberta's regulatory system for upstream oil and gas is modern, efficient, performance-based and competitive, while maintaining Alberta's strong commitment to environmental management, public safety and responsible resource development in the public interest.

The REP consisted of a number of integrated processes including engagement of stakeholders and First Nations, project task team work such as system design, and project management.

The Technical Report is presented in 3 sections:

- **Section 1 Background and Examining the Issues**: Provides the reader with background information on the REP and an overview of identified issues with the current system. This Section provides context for subsequent Sections of this report.
- **Section 2 Potential System Enhancements**: Provides a detailed overview of the strategic and supporting enhancements that were considered by the project team. Chapters in Section 2 address the issues identified in Section 1.
- **Section 3 The Enhanced System**: The descriptions, analysis, and conclusions drawn from Section 2 are used to determine the composition of an enhanced Policy Assurance and Policy Development System. Considerations and implications for the implementation of the preferred system enhancements are also provided.

The report includes a framework for implementation; however the primary focus of the report is on enhancements to the current system. Enhancements will be reviewed and considered by the Government of Alberta before final decisions on implementation are made.

Appendices accompany the Technical Report, including a glossary of terms (Appendix A).

The Project has been supported by Meyers Norris Penny (MNP) and Sierra Systems.

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# SECTION 1: BACKGROUND AND EXAMINATION OF THE ISSUES

Section 1 of the Technical Report provides the reader with background information on the Regulatory Enhancement Project (REP). This Section provides context for subsequent Sections of this report.

**Chapter 1 – Introduction** – The purpose and objectives of the REP are presented. An outline of the scope of the review, how the project was governed, and a listing of the principles used during the project are provided.

**Chapter 2 – The Current System** – Outlines issues and challenges with the current system, as identified by Government, stakeholders and First Nations. These issues are grouped into strategic opportunities that help direct the enhancements that are proposed for the system.

**Chapter 3 – A Policy Development and Policy Assurance System** – A high-level overview of an enhanced *Policy Development and Policy Assurance System* is presented.

#### 1 Introduction

#### 1.1 BACKGROUND

The Government of Alberta's vision of the future is an innovative and prosperous province where Albertans enjoy a high quality of life built on vibrant communities and a healthy environment.

This vision informs many strategic provincial policies, including the *Provincial Energy Strategy*, *Land-use Framework*, and *Water for Life*. These high-level policies set outcomes for development in Alberta that guide the delivery and assurance of policy across the province.

The Government of Alberta is also currently engaged with First Nations in a review of Alberta's First Nation Consultation Policy on Land Management and Resource Development and associated guidelines and is committed to consulting with First Nations in accordance with this Policy.

To deliver on the Government's vision, it is important that Alberta has a competitive climate for investment. As part of broad efforts under the *Alberta Competitiveness Act*, the Government of Alberta is working to enhance Alberta's competitiveness.

A recent review of Alberta's investment competitiveness in upstream oil and gas¹ has highlighted the opportunity to enhance Alberta's current regulatory system for upstream oil gas. Over the years, regulations around natural resources have built up incrementally in response to increasing activity on the landscape. Today, Alberta's regulatory system is complex, lacking integrated policy or policy development, and involving multiple regulators with largely uncoordinated delivery.

The introduction of place-based planning under the Land Use Framework exemplifies the need to enhance the current system and bring about an efficient and effective *Policy Development* and *Policy Assurance System* that can help achieve Alberta's desired social, economic and environmental outcomes.

## 1.2 THE REGULATORY ENHANCEMENT PROJECT (REP)

#### 1.2.1 Purpose

Sponsored by Alberta Energy, the REP was undertaken by a team of government representatives from Alberta Energy, Alberta Environment, Alberta Sustainable Resource Development (SRD), the Energy Resources Conservation Board (ERCB) and Alberta Justice and Attorney General.

The Regulatory Enhancement Project (REP) is a cross-ministry initiative of the departments of Energy, Environment, Sustainable Resource Development (SRD), Justice, and the Energy Resources Conservation Board (ERCB). Energy, Environment, and SRD make up the "Sustainable Resource and Environmental Management" ministries (SREM).

The objective of the REP was to examine ways of ensuring Alberta's regulatory system for upstream oil and gas is modern, efficient, performance-based and competitive, while

<sup>&</sup>lt;sup>1</sup> Those activities which occur for the exploration, extraction, transportation, and processing of oil and natural gas from the initial acquisition of petroleum and natural gas leases and licenses, through to the sales outlet at oil and natural gas facilities.

maintaining Alberta's strong commitment to environmental management, public safety and responsible resource development in the public interest.

The REP has focused on developing an enhanced **Policy Development and Policy Assurance System** for upstream oil and gas. That is, the system used by government to develop sound public policy for upstream oil and gas, and to assure the intended results of those public policies are being achieved.

Albertans wish to realize the full benefits of Alberta's oil and gas resources, but they expect development to occur responsibly. This includes minimizing environmental impacts, protecting public health and safety, and conserving Alberta's resource base.

The REP has taken a "big picture" view. It has considered how Alberta's system should best be structured to deliver these results, while ensuring Alberta remains a competitive place to invest.

The project was divided into five phases (Table 1.1), with Phase 1 initiated in the fall of 2009. The Readiness Tasks in Phase 2 were completed in March 2010 and formed the foundation for Phase 3 – System Design. Phases 4 and 5 occurred after the completion of Phase 3.

Table 1.1 – Five phases of the Regulatory Enhancement Project

Phase	Timeline	
Phase 1 – Project Start-Up	Fall 2009	
Phase 2 – Readiness Tasks	Fall 2009 – March 2010	
Phase 3 – System Design	March 2010 – September 2010	
Phase 4 – Validation and Testing	October 2010 – December 2010	
Phase 5 – Implementation Strategies and	October 2010 – December 2010	
Recommendations		

#### 1.2.2 Scope

The REP involved a comprehensive review of the processes used by the Alberta government to develop, implement and ensure compliance with provincial policies around upstream oil and gas development. It examined:

- Current Alberta-based regulations for upstream oil and gas activities in Alberta, including oil sands and site-based activity:
- Upstream oil and gas regulatory functions in the Alberta Departments of Energy, Environment, SRD and the ERCB;
- All current natural resource management strategic policies (eg. policies related to air, land, water, recreational land and rural communities including the Provincial Energy Strategy, Land Use Framework, Water for Life, and others) as they impact upon oil and gas policy development and regulatory delivery;
- Consideration of related Government of Alberta initiatives through the Regulatory Project Advisor Group;
- System design recommendations:
- The subsurface tenure retention process;
- Consideration of federal regulatory alignment issues.

The following areas were specifically beyond the scope of REP:

First Nations consultation processes;

- Setting of policy or outcome thresholds, targets, or standards for environmental, economic, social, or other factors;
- Sectors outside of oil & gas beyond the in-scope activities listed above;
- Pipelines beyond the in-scope activities listed above;
- Recommendations for the federal regulatory system;
- Implementation of system design components;
- Forest-sector regulations;
- Regulatory functions of the Alberta Utilities Commission and the National Energy Board;
- The subsurface tenure acquisition process.

The REP considered the critical factors and requirements for implementation of recommendations, but not the actual implementation of proposed enhancements.

Important to note is that the REP did not examine specific policy choices established by the Alberta government around upstream oil and gas development. Rather, the REP examined the overall system used to support those choices.

The REP also did not include an examination of First Nations consultation processes. The Government of Alberta is currently engaged with First Nations in a review of Alberta's First Nation Consultation Policy on Land Management and Resource Development and associated guidelines and is committed to consulting with First Nations in accordance with this Policy. The Government is committed to fulfilling its legal obligations to First Nations.

#### 1.2.3 Principles

At the start of the project, six principles were established to guide the development of an enhanced system. These principles were also to serve as benchmarks against which potential system enhancements could be evaluated. The six REP principles are:

- 1. **Effective:** An effective system is able to demonstrate the integration of policy through the achievement of multiple outcomes expressed in multiple policies, resolve gaps, conflicts, and issues within *Policy Development and Policy Assurance*.
- 2. Efficient: An efficient system optimizes the effort required (cost, time, quality) by both the proponent and the public, makes oversight effort commensurate with risk of the activity, standardizes processes, interfaces and business rules, reduces the duplication of assurance effort, and coordinates and aligns decisions to reduce potential conflicts.
- **3. Adaptable:** A system that is adaptable can accommodate new policies or issues without a system redesign, encourages innovation as standard practice, and communicates information through the system to generate new policy.
- **4. Predictable:** A predictable system is responsive and easy for proponents and the public to understand, has clear accountability for decisions, and enables decisions to be made in accordance with the planning timelines for activities.
- 5. Fair: The fairness of the system speaks to procedural fairness, the availability of independent adjudication where it is required and clear communication and understanding of the issues that have been considered.

6. **Transparent:** Transparency indicates that the information used and the process followed to make a decision is available to all and that the system itself enables openness, communication, and accountability.

#### 1.2.4 Project Governance

The REP governance structure was composed of a series of groups, each with differing levels of responsibility and oversight (Table 1.2, Figure 1.1).

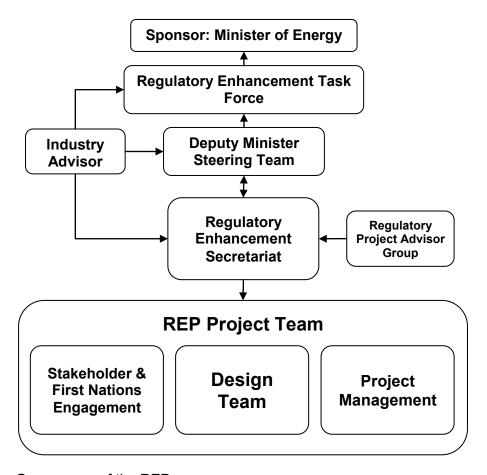


Figure 1.1 – Governance of the REP

Table 1.2 - Governance of the REP

Government of Alberta Group	Role
Sponsor: Minister of Energy	Senior official responsible for championing and overseeing delivery of the project.
Regulatory Enhancement Task Force	Responsible for providing recommendations to the Minister of Energy based on REP findings.
Deputy Minister Steering Team	Provided oversight for the Project. Provided guidance to the project teams and to review, approve advice, proposals, recommendations, analyses, or policy options for Ministers.
Project Lead	Responsible for project organization, day-to-day issue resolution, and ensuring the project is delivered on time, within budget and in

Government of Alberta Group	Role
	accordance with the project's deliverables. Reports to the Steering Team and acts as Steering Team's representative.
Regulatory Enhancement Secretariat	Assist the Project Lead in providing general project oversight, in additional to managing their respective project responsibilities and managing project support staff and resources to ensure successful completion of project deliverables.
Regulatory Project Advisor Group (RPAG)	This group is a forum for communication and information sharing about the objectives, timelines and outcomes of regulatory projects outside of the REP.
REP Design Team	The goal of the Design Team is to assess the current system, develop potential system enhancements, and suggest preferred system enhancements.
Stakeholder and First Nations Engagement Team	To assist in the preparation, facilitation, and reporting on all stakeholder and First Nations engagement activities.
Project Management Team	To assist in the day-to-day project management activities including scheduling, status reporting, and documentation support.

## 1.3 SYSTEM DESIGN

## 1.3.1 Purpose and Approach

The REP System Design was undertaken as in Table 1.3.

Table 1.3 – System Design Approach

Table 1.5 Cystem Design Approach				
Step	Description			
Initiate System Design	<ul> <li>Background information was used to develop a clear understanding of the project and its objectives. Included a review of other jurisdictions.</li> <li>Establish the REP principles for an enhanced <i>Policy Development and Policy Assurance System</i>.</li> </ul>			
Identify issues and challenges	<ul> <li>Information from stakeholders and First Nations, other Government of Alberta initiatives, and a system-level review of an entire upstream oil and gas project lifecycle were used to identify key issues and challenges with the current system.</li> <li>Identified issues were presented and discussed with stakeholders and First Nations and amended or adjusted as necessary to reflect the input received.</li> </ul>			
Develop potential system enhancements	<ul> <li>A number of potential system enhancements were discussed and developed to mitigate or eliminate the identified issues and challenges.</li> <li>Each enhancement was assessed for its ability to achieve or embody the REP principles.</li> <li>Periodically throughout the project, the range of potential system enhancements were presented to and discussed with stakeholders</li> </ul>			

Step	Description
	and First Nations. Input from these sessions was used to further the development of the potential system enhancements.
Identify preferred system enhancements	<ul> <li>From the range of potential system enhancements explored, a set of preferred system enhancements was identified based on the project assessment and analysis, input from several discussions with stakeholders and First Nations, and guidance from senior Government of Alberta officials.</li> </ul>
Create an implementation framework	<ul> <li>An implementation framework was developed to outline the high-level considerations for implementation of the preferred system enhancements.</li> <li>The framework may assist with the future implementation of the preferred system enhancements.</li> </ul>

A number of existing Government of Alberta (GoA) initiatives informed the REP in Table 1.4. To the degree possible, these initiatives informed the assessment of the existing system and guided the development of potential system enhancements.

Table 1.4 – Some Existing GoA initiatives that informed REP.

Table 1:1 Come Existing Continuatives that informed the 1:				
Initiative	Lead			
First Nations Consultation Policy and Guidelines	Aboriginal Consultation Coordination Group			
Review				
Regulatory Inquiry	Alberta Utilities Commission			
Enhanced Approval Process	Sustainable Resources Development			
Clean Air Strategy	Environment			
Climate Change Strategy	Environment			
Cumulative Effects Management System	Environment			
Integrated Monitoring Evaluation and Reporting	Environment			
Framework				
Unconventional Gas Project	Energy Resources and Conservation Board			
Energy Strategy	Energy			
Land-use Framework	Land Use Secretariat, Advisory Councils			
Regulatory Alignment Project	Treasury Board			
Water for Life	Environment			

#### 1.3.2 Stakeholder and First Nations Engagement

Throughout the process, Stakeholder and First Nations engagement was used to elicit a wide range of opinions and feedback for consideration. This information has been used to strengthen and deepen the level of analysis performed to ensure a multi-dimensional scan of the various enhancement opportunities associated with the *Policy Development and Policy Assurance System*.

Engagement sessions were also organized with Alberta's First Nations to present REP information and to discuss views of various system aspects, issues and potential solutions. These sessions were held on August 12, 2010, September 16-17, 2010, and October 1, 2010.

In addition, numerous stakeholder sessions were convened to similarly provide information and gather input on the upstream oil and gas *Policy Development and Policy Assurance System*. Stakeholders and First Nations sessions occurred according to Table 1.5.

Table 1.5 – Stakeholder Engagement Sessions

Stakeholder & First Nation Engagement	Session	Date		
Issues and Opportunities				
Municipalities and Municipal Associations	Briefing/Workshop	May 19		
Environmental Non-Governmental	Briefing/Workshop	May 19		
Organizations (ENGO)				
Landowners and Landowner Associations	Briefing/Workshop	May 21		
GoA Ministries and Agencies	Briefing	May 21		
Landowners and Landowner Associations	Briefing/Workshop	June 24		
First Nations	Briefing/Workshop	August 12		
Oil & Gas Industry	Briefing/Meeting	March 21 & June 21		
System Enhancement Options	_			
GoA Ministries and Agencies	Workshop	August 11		
Landowners and Landowner Associations	Workshop	August 12		
/ENGOs/ Municipalities and Municipal				
Associations /First Nations/Oil & Gas				
Industry	M/s alvele s a	O- 14- 1-4- 1-4- 1-4- 1-4- 1-4- 1-4- 1-4		
First Nations	Workshop	September 17 & 18		
ENGO	Workshop	September 23		
Landowners and Landowner Associations	Forum	October 1		
/ENGOs/ Municipalities and Municipal				
Associations /First Nations/Oil & Gas				
Industry/GoA Ministries and Agencies				
Additional Meetings & Submissions				
All	Meetings/Website	March 31 – October 15		

A listing of all organizations that were invited to a Stakeholder Engagement session can be found in Appendix 1A.

A summary of input gathered through the engagement process is set out in the report, Regulatory Enhancement Project: Stakeholder and First Nations Engagement Summary

It is not within the mandate of REP to make recommendations on the First Nations consultation process, and it has not done so.

The Government of Alberta is currently engaged with First Nations in a review of Alberta's First Nation Consultation Policy on Land Management and Resource Development and associated guidelines and is committed to consulting with First Nations in accordance with this Policy. The Government is committed to fulfilling its legal obligations to the Alberta's First Nations. Any enhancements resulting from the REP will need to be coordinated and aligned with other GOA initiatives, including the current Policy and guideline review.

#### 2 THE CURRENT SYSTEM

#### 2.1 BACKGROUND

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

- **Environment** Managing Alberta's vital environmental resources, air, land, water, and biodiversity.
- **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.

In Alberta's current regulatory system, responsibilities and authorities are distributed among several government entities:

- Alberta Environment develops policies regarding Alberta's air and water resources and the reclamation and remediation of oil and gas facilities. The department also acts as a regulator in these areas.
- Alberta Sustainable Resource Development (SRD) develops policies regarding
   Alberta's forest resources, biodiversity, land-use and the management of public lands,
   and regulates these same areas.
- Alberta Energy develops policies regarding Alberta's energy resources and is responsible for managing Crown mineral rights and royalties.
- The **Energy Resources Conservation Board** (ERCB) is responsible for regulatory delivery around oil and gas development activities.

#### 2.1.1 Review of the Current System

As a starting point from which to develop potential system enhancements, the current system was assessed to identify the issues and challenges that were impeding its effectiveness and efficiency. In many cases, opportunities were identified for further analysis and also to inform the development of potential system enhancements. This assessment included identifying and assessing regulatory requirements, alternate delivery methods, and the tools required.

A system-level review of the entire regulatory lifecycle for upstream oil and gas was undertaken to identify and assess opportunities for improvement. This review focused on conventional and unconventional oil and gas, in situ oil sands, enhanced oil recovery, and mineable oil sands. This analysis was supplemented with the input received from stakeholders and First Nations, and from information from previously completed reports.

The following processes were reviewed:

- Bidding & Tenure;
- Surface Rights Acquisition;
- Engagement;
- Water Licenses & Approvals;
- Well Licensing, Facilities & Gathering Systems:
- ERCB Scheme Approvals;

- Alberta Environment's Environmental Protection and Enhancement Act Approval Process;
- Sustainable Resource Development (SRD) Public Lands disposition process;
- Construction, Drilling & Operations;
- Compliance & Enforcement;
- Monitoring, Evaluation & Reporting;
- Closure.

#### 2.2 STAKEHOLDER AND FIRST NATIONS INPUT

The following is a summary of issues regarding the current system identified through the stakeholder and First Nations engagement process.

#### Simplification of the System

The structure and processes of the current system are perceived as being onerous, complex and uncoordinated among multiple government ministries and agencies. Participants suggested creating a single point of contact between interested parties and government ministries and agencies to improve access to and navigation of the system. In addition, better coordination of approvals, monitoring and compliance processes was discussed as a way to reduce complexity.

#### **Enhance Policy Clarity**

There are concerns that Alberta's natural resource policies are often not clear and not well aligned or integrated. Participants highlighted the need to establish formal processes to ensure consistency and alignment as government develops policy and assures that the intended results of those policies are being achieved.

#### **Improve the Public Interest Process**

Public engagement processes are perceived as having room for improvement. A common and proactive approach to public engagement and defining the common interest is preferred. This would include identifying and addressing public issues and concerns during policy development.

#### **Increase Accountability**

There is a perception that industry and government need to be more responsible for ensuring environmental, social and economic outcomes are achieved. To improve government accountability, participants said, roles and responsibilities among ministries and agencies should be clarified, and there should be performance measures and standards for the system.

#### **Better Knowledge and Information Sharing**

It is challenging to access relevant and easy-to-interpret information in the current system, including information about the environmental and safety performance of the oil and gas industry. Participants advocated the use of technology to increase accessibility of knowledge and information both within and outside of government.

#### **Promote Risk Management**

The current system does not adequately use scientific evidence to determine the potential risks to the environmental and public safety. Participants suggested that a common and evidence-based risk system be used in the system to appropriately select regulations and other policy assurance instruments, such as performance-based approaches, to improve risk management. In addition, participants identified that industry must be provided the opportunity to innovate and continually improve its environmental performance.

#### 2.3 ISSUES AND OPPORTUNITIES

A detailed assessment of the current system was completed. This was informed by analysis of current processes for policy assurance, the input of stakeholders and First Nations, and various previous reports and background documents. The assessment focused on upstream oil and gas development, where individual projects range in complexity, potential risk, and locations within Alberta.

While many issues and opportunities of varying scale and scope were identified, the following main groupings of issues and opportunities were identified.

#### 2.3.1 Integration in Policy Development

Within the current system, individual Government departments and agencies largely function independently of one another with limited coordination. This independence is a reflection of the distinct mandates of different ministries and agencies.

Over time, it has been recognized that a more integrated approach would enhance delivery in all areas of the system. This was identified in "Alberta's Commitment to Sustainable Resource and Environmental Management" (SREM policy framework, issued in 2001)<sup>2</sup>.

Opportunity: To enhance integration in policy development and provide clear policy guidance to regulators.

This suggests the need for a mechanism to promote coordinated and integrated development of natural resource policies. Having clear, consistent policies would avoid policy gaps and policy confusion. Clearly communicating the intent of these policies to regulators would promote consistent application of these policies in respect of upstream oil and gas development activities.

This issue and opportunity is discussed in Chapter 4 – Policy Development and Integration.

#### 2.3.2 Structure of Regulatory Functions

Currently multiple ministries and agencies have regulatory responsibilities for various aspects of upstream oil and gas development and at various points in the project lifecycle. Each ministry or agency operates independently with different requirements for information. This introduces complication, repetition and duplication of effort to the system. It can result in different parts of the system working toward different goals.

Opportunity: Clarify responsibility for regulatory functions and simply the structure to reduce overlap and complexity.

There is an opportunity to better coordinate regulatory functions in the upstream oil and gas project lifecycle. Bringing consistency to processes would help reduce overlap and duplication. Simplifying the structure would clarify responsibilities and accountabilities for these functions.

<sup>&</sup>lt;sup>2</sup> SREM refers to the Sustainable Resource and Environment Ministries, represented by the departments of Alberta Energy, Alberta Environment and Alberta Sustainable Resource Development). It was established in the late 1990s to further develop and implement the policy framework, "Alberta's Commitment to Sustainable Development and Environmental Management". Deputy Ministers of the three departments agreed to meet regularly to discuss matters of joint concern and to work together to collectively address policy matters that crossed mandates.

This issue and opportunity is discussed in Chapter 5 – Structure of Policy Assurance Delivery and in Chapter 7 – Decision Reviews.

#### 2.3.3 Public Interest Considerations

In the current system, each entity uses different protocols for engaging members of the public. This makes it confusing for landowners and other stakeholders to determine how and when to best provide their input into the policy development and decision-making processes.

Opportunity: Provide for enhanced engagement of public interests to inform policy development and focused consideration of interests in policy assurance (i.e. regulatory delivery).

This issue and opportunity is discussed in Chapter 6 – Public Interest Considerations.

#### 2.3.4 Assurance Tools

The current system uses a limited suite of Assurance Tools. Assurance Tools are methods or processes that can be used to provide oversight on one or more development activities. The need for a broader set of Assurance Tools is required to reflect the increasing variety of activities and the complexity of landscapes on which those activities are occurring.

Opportunity: Examine the selection process for tools and increase consideration for a broader set of tools.

Improving the set of Assurance tools might require:

- A clear process for determining what tools can or will be applied to which activities.
- Clear information and reporting requirements relating to particular types of tools.

This issue and opportunity is discussed in Chapter 8 – Policy Assurance Tools.

#### 2.3.5 Risk-Management Approach

The current system includes the assessment of risks associated with an activity or group of activities. These assessments are not systematically applied, clearly structured, or consistent in their application. To a large degree, the assessment of risk is exercised through the discretion afforded to decision-makers.

Opportunity: Develop and use a systematic risk-management approach to inform the development of policy and the operation of the assurance system.

The application of a consistent, systematic risk-management approach might require:

- A clear understanding by agencies, proponents, and the public of what risk is and how it is being managed.
- Integration of a single risk-management approach.
- A broader set of Assurance Tools and instruments to mitigate or eliminate risks and achieve policy outcomes
- A means to encourage innovation and new practices along with a way to manage their potential risks.

This issue and opportunity is discussed in Chapter 9 – Risk-Management Approach.

## 3 A POLICY DEVELOPMENT AND POLICY ASSURANCE SYSTEM

#### 3.1 OVERVIEW OF AN ENHANCED SYSTEM

Based on identified issues, challenges and opportunities for improvement in the current system, the REP has envisioned an enhanced *Policy Development and Policy Assurance System* (an "Enhanced System") for upstream oil and gas.

The Enhanced System has two main components: the *policy development* component and the *policy assurance* component (Figure 2.1). Each has clear roles and responsibilities.

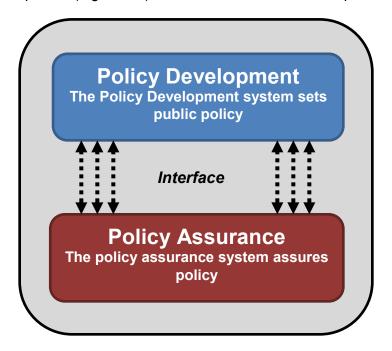


Figure 2.1 – Schematic diagram of the *Policy Development and Policy Assurance System*.

#### 3.1.1 The Policy Development Component

The Government of Alberta develops policy as a means of articulating its most important interests and values. Policies signal where the Government intends to focus its attention and authority.

Initiatives such as the *Land-use Framework* and *Water for Life*, set broad provincial policy direction which then guides the development of more detailed policy, or planning tools such as regional land-use plans. In many cases, broad policy directions are expressed in legislation. Legislation may elaborate on specific purposes and goals and establish roles and responsibilities including authority to act, decide, make regulations, or enforce. Legislation may also contain specific or general requirements for authorities or regulated entities.

Regulations, standards, and guidelines provide further direction regarding what activities will be assured and how these activities will occur. These also provide the basis on which the compliance of regulated entities will be evaluated.

The *policy development* component addresses matters of resource allocation, where the right to use or capture a public resource is granted to a private interest for economic benefit to both the

Province and proponent. Policy direction identifies what resources are available for use and what rights are granted.

In general, the *policy development* component of the system sets desired outcomes and direction and provides guidance to the policy assurance system.

#### 3.1.2 The Policy Assurance Component

Many activity or site-specific decisions reside in the *policy assurance* component. These decisions are usually supported by planning, where relevant information about a proposed development (including scale, timing, costs, impacts, risks, and opportunities) informs a decision-maker.

The *policy assurance* component also includes compliance and enforcement mechanisms which are used to encourage and compel the behavioral changes needed to achieve the regulatory requirements. Compliance and enforcement activities generally involve: monitoring, education, prevention, continuous improvement and enforcement including penalties. An effective compliance and enforcement program will usually involve some combination of these activities.

#### 3.1.3 Interface

Several common elements also provide an interface between the two components. These elements inform and support the two components, helping the overall system remain adaptable and continuously improve. This includes the use of a risk-management approach.

The ability to assess problems and risks enables the entire system to adapt over time to changing circumstances, technology advancement, experience, costs, or other variables. The systematic assessment of problems and risks will provide guidance for the development of new policy, as well as direct the types of assurance tools to be used in a given instance to best achieve a particular policy outcome.

The interface also facilitates two-way communication between the policy development and policy assurance stages.

#### 3.2 OTHER LINKAGES

There are other parts of the system that are outside of the SREM departments. Examples include:

- Cultural and historical sites must be considered and are administered through the ministry of Alberta Culture and Community Spirit.
- Where upstream oil and gas development is permitted in parks and heritage rangelands,
   Alberta Tourism, Parks and Recreation administers these activities.
- First Nations consultation is undertaken in accordance with the Government of Alberta's First Nations Consultation Policy on Land Management and Resource Development, as led by Alberta Aboriginal Relations.
- Potential for human health affects is determined in relation to upstream oil and gas activities and is considered by Alberta Health and Wellness.
- The federal government is involved in consideration of environmental assessment and authorizations for fish habitat, aquatic habitat, migratory birds, navigable waters, and greenhouse gas and trans-boundary air emissions and may include First Nations consultation on federal matters.

• Authorizations are also required from municipalities, such as travel on municipal roads and development permits.

These areas should be considered and addressed during the implementation process.

# SECTION 2: POTENTIAL SYSTEM ENHANCEMENTS

Section 2 of this report provides a detailed overview of the enhancements that were considered by the project team. Each chapter in this section details the nature of each of the opportunities identified in Section 1.

The chapters have been presented in two categories to assist with the understanding of the new system.

**Section 2A** – These chapters outline system enhancements, each of which has two or more potential alternatives that were considered by the REP team.

**Section 2B** – Each chapter provides an overview of a system enhancement concept that will be included in the design of an enhanced system, regardless of the alternatives selected from among those outlined in Section 2A.

The alternatives selected from among those outlined in Section 2A, together with the enhancements outlined in Section 2B, generate the Enhanced System.

# **SECTION 2A**

Section 2A contains detailed descriptions and alternatives for the following topics:

**Chapter 4 – Policy Development and Integration** – Examines the *policy development* component, and presents potential enhancements to ways the Government of Alberta develops natural resource policies.

**Chapter 5 – Structure of Policy Assurance Delivery** – Examines the *policy assurance* component, and presents potential enhancements regarding the organization and structure of regulatory functions in the new system.

**Chapter 6 – Public Interest Considerations** – Examines potential enhancements regarding public interest considerations.

**Chapter 7 – Decision Review** – Provides an overview of the current decision review and appeals system.

### 4 Policy Development and Integration

#### 4.1 Introduction

Public policy is a governing set of principles given force and effect by elected officials in order to meet and fulfill recognized public needs and obligations. Policy is made in the name of "the public' and is interpreted and implemented by both public and private stakeholders. Policy sets out what government intends to do and chooses not to do.<sup>3</sup>

Given today's busier and more complex landscape, it is essential that policies and policy outcomes around natural resource development are clear, consistent and integrated. They must reflect a balance of perspectives and work together effectively, without gaps or conflicts.

As identified by participants in the REP engagement process, there is an opportunity to enhance the integration of policies, and provide clearer policy guidance to regulators.

#### 4.1.1 Types of Policy

There are many types of policies (Figure 4.1). High-level strategic policy has been developed to guide Government of Alberta ministries and to help Alberta achieve its desired social, economic and environmental outcomes. Other types range from over-arching policies that could impact many programs and initiatives; to operational or administrative policies that are focused on how an organization delivers its functions, including internal management of the organization. Program policies are often used to establish guidelines and targets, and to employ resources to achieve specific results.

#### **Key Factors**

In the review of the current state, three key factors that affect the development and the integration of policy were identified. These factors include:

 Policy scope: Historically, policies have been divided into subject matter, economic sectors, ministries and legislation. A current and continuing trend is for governments to create encompassing policy frameworks through which policies and policy outcomes may be considered holistically and in a more integrated manner.



Figure 4.1 – Types of Policy

- Policy levels: There are various types of policy levels ranging from statements of strategic or societal direction, down to administrative policies which guide internal management processes. To the extent possible, policies at all levels should be consistent and reinforcing.
- Adaptability over time: Changes in results, circumstances and priorities must be
  reflected in policies over time. This may result in new or modified policies, the need for
  broader scope of integration, or simply changes in how policies are implemented.

<sup>&</sup>lt;sup>3</sup> Policy Development Process: Guidance for Alberta's Public Service, June 2008.

#### 4.1.2 Challenge

In order to focus the discussion of potential enhancements, the challenge was framed as:

What enhancements can be made to ensure policy development and integration is clearly understood, consistently applied, adaptable, and can reduce unresolved policy conflicts or gaps?

#### 4.1.3 Approach

The REP evaluated the current *policy development* process, determining how integration is understood and manifested in the current system, and identifying opportunities to improve the process and the integration of existing and emerging policies.

The evaluation continued by assessing the *policy development* process against the requirements of the *policy assurance* component to meet the REP principles.. This assessment also focused on the need for policy integration and for ensuring consistent interpretation and delivery of policy intent at the *policy assurance* stage.

#### 4.2 **EXAMINING THE ISSUES**

Policies regarding natural resources are currently developed by Alberta Energy, Alberta Environment and Alberta Sustainable Resource Development. Through the SREM forum, the three departments regularly engage in collaborative work to identify and address policy priorities.

However, the entire suite of natural resources policies has arisen incrementally over many years. Not all policies have been developed through the SREM process, and they are neither as consistent nor aligned as they should be.

Identified issues included the following:

#### Limited interaction during policy development

Interaction among the SREM departments during the development of policy is largely informal. This results in a lack of overall policy coherence, potential competition among policies, and implementation challenges. There is a need to more fully integrate policies to enable Alberta to be competitive and achieve desired social, economic and environmental outcomes.

#### Gaps and Overlaps in Policy

As part of its analysis, the REP reviewed strategic level policies that outline Government's vision (Appendix 4A). These policies are intended to collectively work toward achieving long-term sustainability of social, economic and environmental outcomes. Examples include the Provincial Energy Strategy, Water for Life, Alberta's Strategy for Sustainability, and the Land-use Framework. The review revealed few gaps in policies at the strategic level, but gaps were more evident more evident at the operational and administrative policy levels.

#### **Tension among Policy Outcomes**

The complex nature of public policy often results in policies with inconsistent outcomes. A single natural resource may be subject to multiple uses or be affected by multiple activities, The opposing policy outcomes create a tension that is difficult or potentially impossible to reconcile into specific and clear directions for regulators.

#### **Timeliness of Policy Development and Renewal**

The development and renewal of policy often proceeds on a longer time cycle than that required by regulators. Policy making tends to be episodic and long-term, whereas *policy assurance* is continuous with individual project proposals advancing within relatively short time frames. For example, several technological advancements can occur within the time required to make a single change in policy.

This presents a risk that the *policy assurance* stage will make decisions using outdated policy directions or policies that have not been integrated with other natural resource policies.

There is also no formal mechanism to facilitate communication between the *policy assurance* and *policy development* stages regarding policy issues.

#### 4.3 POTENTIAL SYSTEM ENHANCEMENTS

Potential system enhancements were explored for improving policy integration.

#### 4.3.1 Scope of Policy Development Interaction

To effectively align Government of Alberta resource policies, there must first be a common understanding of what types of policy interactions are possible and the degree to which interaction is practical and achievable. The degree of policy alignment achieved depends on the type and level of interaction among policy developers. Possible degrees of interaction can be described as follows<sup>4</sup>:

- Policy cooperation. Policy developers cooperate with each other, but only to
  accomplish their own goals. Interactions may be informal, and the organizations remain
  largely independent. Each organization generates its public policies individually, with a
  limited degree of consideration for other organizations.
- Policy coordination. Policy developers work together to make joint decisions.
   Interactions are more formal, and the organizations become somewhat inter-dependent on each other. Coordination aims at adjusting policies in order to make them mutually reinforcing and consistent.
- Policy integration. Integration aims at producing joint policy, especially policies with cross-ministry objectives, such as sustainable development. It requires a high level of collaboration, formal interaction and mutual inter-dependence. Policy integration is complex.

#### 4.3.2 Authority for the Integration Function

The integration function needs to be developed and there are two alternatives as to where the integration function will reside:

- Formalizing the integration function within existing authorities; or
- Formalizing the integration function through the establishment of an integration authority separate from existing authorities.

#### Formalizing the integration function within existing authorities.

One alternative is to formalize the integration function within existing ministries. The function would use existing guidance to develop and communicate policy issues between affected

<sup>&</sup>lt;sup>4</sup> Evert Meijer and Dominic Stead, Policy integration: what does it mean and how can it be achieved? A multidisciplinary review, 2004 Berlin Conference on the Human Dimensions of Global Environmental Change.

ministries, develop new cross-ministry policies where required, and provide integrated outcomes for *policy assurance* delivery.

Formalizing this function might include direct connection of integration processes to ministry business processes, development of integration-specific performance measures for the various agencies, and using existing groups (e.g., SREM Deputy Ministers, Executive Council, etc.) to provide oversight and ongoing guidance.

# Formalize the integration function through the establishment of an integration authority separate from existing authorities.

A second alternative is the establishment of an integration authority that uses a formalized integration function (as above) in its operations. This authority could provide governance and accountability for ongoing integration of natural resources policies. It would also provide a mechanism for communicating the intention of integrated policies to the *policy assurance* stage.

Possible attributes of this authority include:

#### Principles:

- Ability to work independently across SREM departments and policy assurance organizations.
- Authorized by senior government levels.
- Provided with "terms of reference" or mandate that is accepted by SREM departments. This role could be formalized by legislation.
- o Consideration of the Government of Alberta's Risk Management Approach.
- Terms of reference outlining accountabilities and performance requirements.

#### Responsibilities:

- Providing internal accountability for joint activities involving more than one ministry.
- Facilitating and compelling policy integration.
- Facilitating development of public engagement mechanisms for policy development.
- Contributing to the interface between the policy development and policy assurance stages.
- Supporting external accountability through monitoring and reporting.

#### Governance:

- The SREM Deputy Ministers (or equivalent senior executives) will oversee the policy integration process and the authority, and held accountable for results.
- Linking to other ministries as needed and as well to other bodies for the purpose of ensuring a government-wide overview.

#### 4.3.3 Supporting Enhancements

The following concepts will be included as part of the *Enhanced System*. They will support the system enhancements as described above.

**Problem-Solving Function:** To assist the collaboration of the SREM departments in *policy development*, an enhanced problem-solving function is required. This function would include a process to nominate important problems for priority attention, and a process through which departments would work together to address them. The problem-solving function would be enacted by the integration authority or would be part of the formal integration function.

**Performance Measures for Integration:** Performance measures specific to integration and the continuous improvement of policy development are required. Both the *policy development* and *policy assurance* stages will need to develop, adopt, and apply common measures of integration that are understandable and can respond to changes that affect the overall system.

#### 4.4 ASSESSMENT

#### 4.4.1 Defining Integration

From the three potential scopes for interaction (as outlined in §4.3.1), "Policy integration" is the most coherent. Using this degree of alignment, the system is less likely to exhibit gaps, conflicts, or display competing demands and mandates.

Sustaining policy integration across the SREM departments, and between the *policy development* and *policy assurance* stages of the system, is an important issue. Integration functions must be ongoing into to support Alberta's long-term competitiveness. It is critical that integration occurs across all policy levels, from strategic to administrative. For these efforts to be effective, policy integration should be an activity for which the ministries are individually and jointly accountable.

#### 4.4.2 The Integration Function

Both alternatives – a formalized integration function within existing authorities; and a separate integration authority body – were considered for the *Enhanced System*. Each potential enhancement was assessed against the REP principles, as outlined in Table 4.1.

Table 4.1 – Assessment of Formalized Integration Function and Integration Authority

	System Formalized Integration Function Formalize the integration function				
Attribute	within existing authorities	through the establishment of an integration authority separate from existing authorities			
Effective	<ul> <li>A formal process will ensure that all relevant Government of Alberta policies are appropriately considered for integration.</li> <li>The formalized function will allow for the resolution of issues among ministries. It can facilitate the selection of trade-offs where necessary.</li> <li>The function can seek to identify potential issues among levels of government and assist in problem solving to mitigate them.</li> </ul>	<ul> <li>All elements of the formalized function can be used by the integration authority to ensure the same effectiveness gains.</li> <li>Resolve tensions of outcomes more effectively.</li> </ul>			
Efficient	<ul> <li>The formalized function will mainly consist of a number of processes to help coordinate policy development and integration.</li> <li>Responsibility to enact and monitor the processes will be on identified individuals within each affected ministry.</li> <li>Individuals may not be available full-time to complete policy integration processes.</li> </ul>	<ul> <li>A formal body will be responsible for enacting and monitoring all integration processes.</li> <li>This body will be available full-time and will be entirely focused on policy integration.</li> <li>More able to deal with matters in a timely manner</li> </ul>			
Adaptable	Changes to how the formalized integration function operates will require responsible parties to increase their allotted time to the processes. There is a chance that these individuals will not be able to accommodate the changes.	The integration authority can be scaled more easily because staff members are focused entirely on policy integration.			
Predictable	The individuals in each ministry that enact the processes will be accountable for their decisions related to policy integration.	The formal body will oversee, facilitate and assure policy integration.			

System Attribute	Formalized Integration Function within existing authorities	Formalize the integration function through the establishment of an integration authority separate from existing authorities
Fair	All ministries will be appropriately represented when the policy integration functions are used.	The formal body can be made up of all ministries and can associate with outside stakeholders if necessary.
Transparent	The nature of this approach decreases the amount of openness in the system.	A formal body would have increased transparency because of its structure.
Other Value	Formally defined processes may strengthen the relationship between elected policy makers and the policy development process provided by ministry staff.	<ul> <li>Formally defined processes may strengthen the relationship between elected policy makers and the policy development process provided by ministry staff.</li> <li>The integration authority enhances the ability of the public service to develop more integrated options for consideration by elected officials.</li> </ul>

#### 4.5 SUMMARY AND CONSIDERATIONS

Enhanced policy integration can be achieved through a clear definition of policy integration and a formalized function for integration either within or outside current ministries.

Based on the alternatives presented, the following considerations will be made when designing the *Enhanced System*:

- The scope of policy integration; and
- Accountability for the policy integration function.

The implementation of any enhancements will depend on several factors, including:

- Strategic shifts in organization, risk-management approach, selection of Assurance Tools, and public interest that are being contemplated throughout the REP (and described in subsequent chapters).
- Implementation of new forms of policy and policy implementation, such as Land-use Framework, Regional Planning, Cumulative Effects Management, the First Nations Consultation Policy and Guidelines Review.
- The likely emergence, at least transitionally, of hybrid approaches to *policy assurance* across various sectors (e.g., single regulator for upstream oil and gas, but not for other sectors).
- Increasing pressure to publicly demonstrate the efficacy of the province's policies and policy assurance processes in achieving the province's desired social, economic and environment outcomes.

Enhancements for Policy Development and Integration, along with all other enhancements, can be found in Chapter 11.

## 5 STRUCTURE OF POLICY ASSURANCE DELIVERY

#### 5.1 Introduction

Policy assurance functions relating to oil and gas are currently distributed among Alberta Environment, SRD and the ERCB. All three perform *policy assurance* functions throughout the project lifecycle, but with limited coordination.

While this approach has worked for many years, the structure of policy assurance delivery must facilitate a higher degree of coordination, integration, planning and management than in the past.

The Alberta government has commenced a number of policy initiatives to help our province plan and manage development in ways that balance our social, economic and environmental objectives. These include the *Land-use Framework;* the adoption of a *Cumulative Effects Management Approach;* and enhanced use of *Integrated Land Management.* 

Consistent with these initiatives, policy assurance delivery around upstream oil and gas must be appropriately structured to meet today's complex needs.

#### 5.1.1 The Challenge

In order to address the potential for structural enhancements, the challenge is as follows:

What enhancements can be made to the structure of the Assurance system to align with defined system principles?

Opportunities were also sought to identify where a structural change to *policy assurance* could improve the performance of the system through better alignment, reduced duplication and variability, simplified access to the system for project proponents and the public, and streamlined decision-making processes.

Only those agencies that deliver policy assurance were considered in the development of potential system enhancements.

#### 5.1.2 Approach

As a starting point for analysis, the REP considered a general model of different regulatory delivery levels (Figure 5.1) that could be used in the policy assurance stage.

The model describes a continuum of models. These range from coordinated delivery (the state of the current system), through aligned delivery, one-window contact, multi-agency integrated delivery, and a single regulator. Over this continuum, effectiveness and efficiency improve with increasing levels of alignment and integration.

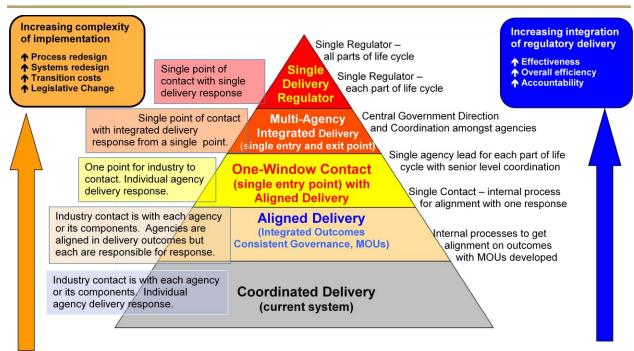


Figure 5.1 – General model of Regulatory Delivery Levels

Using the general model as a foundation, the levels of integration depicted in the diagram were adapted into three discrete structural enhancement options (as described in §5.3). These options were assessed against the state of the current system and relative to the REP principles.

#### 5.1.3 The Current State

Policy assurance functions relating to upstream oil and gas are currently distributed among Alberta Environment, SRD and the ERCB (as in chapter 2.1). All three regulatory agencies perform *policy assurance* functions throughout the project lifecycle, but generally operate independently of one another (as depicted in Figure 5.2). Each of the regulatory agencies delivers a separate suite of policy assurance processes concerning different aspects of upstream oil and gas development.

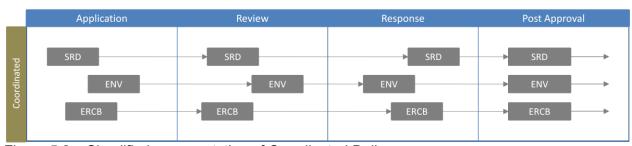


Figure 5.2 – Simplified representation of Coordinated Delivery

Each regulatory agency delivers these processes at each stage of the upstream oil and gas project lifecycle, with limited coordination. Coordination is often specific to a particular process, and is not the result of systematic attention to coordinated results.

#### **5.2** Examining the Issues

Based on input gathered from stakeholders and First Nations, and internal Government of Alberta consultations, the following major issues were identified:

#### **Multiple Agencies and Processes**

As described, the current system consists of three independent but largely uncoordinated regulatory agencies. While these agencies deliver regulatory functions in different policy areas, they deliver similar regulatory processes. This arrangement results in duplication of effort, and the need for project proponents to seek multiple authorizations or permits through multiple applications for a single project.

There are also multiple points of contact and interface processes in the current system. Existing regulatory agencies vary considerably in how they interact with project proponents, including their application requirements, the provision and management of data and information, and their capability to manage contact with proponents throughout the project lifecycle.

In addition, there is considerable variability in how data and information is acquired, shared and accessed across the numerous agencies. Many agencies have in-house subject matter specialists, databases, geo-spatial repositories, and linkages to practitioner communities that are generally not shared or are inaccessible between agencies.

#### **Consistency and Alignment**

The lack of consistency between the processes used by existing regulatory agencies contributes to the complexity of the current system. It results in reduced predictability and increased compliance costs for both industry and government. The lack of alignment and consistency among the numerous agencies has been resulting in inconsistent decisions and conditions for upstream oil and gas development activities. Even when common approaches are applied, there are often varying degrees of interpretation and discretion applied by the regulatory agencies in making decisions.

#### Scope of Delivery

Over time, the current system has become responsible for delivering a large number of functions, some of which have competing interests. The increase in scope is a main cause of the consistency and alignment issues outlined above. The system has become too complex to easily navigate and requires a thorough review in order to improve efficiency and effectiveness.

#### 5.3 POTENTIAL SYSTEM ENHANCEMENTS

The REP Team developed three specific enhancement options for structure of policy assurance delivery:

- One Submission
- One Window
- Single Regulator

Common to each of these three enhancement options is the concept of a single point of contact (i.e. a "single window") between the *policy assurance* stage and external parties. Attributes of an ideal single contact are as follows:

• It is both an interface (i.e., a single point of contact) and a process (i.e., navigation through the policy assurance system).

- It provides a regulated party with a "client manager" whose role is to provide a single person contact for all functional matters including information, applications, decisions, compliance, monitoring and enforcement.
- It is a portal (preferably electronic) for information management. This includes obtaining
  information about process rules, submitting an application, receiving a permit and
  providing information to support monitoring and compliance throughout the project
  lifecycle. It could also provide information about an appeals process if one is in place.
- It hands inquiries from stakeholders and members of the general public.
- It could be implemented in different ways, depending on which structural option is desirable.

#### 5.3.1 One Submission

One potential enhancement to the structure of policy assurance delivery is to provide access to the system via a single window and then coordinate and align the review requirements and processes across the existing three regulatory agencies (depicted in Figure 5.3).

The One Submission alternative is proposed to address and alleviate the significant challenges associated with the application and review stages of a project, where proponents must adapt to multiple application processes and information requirements submitted to multiple agencies.

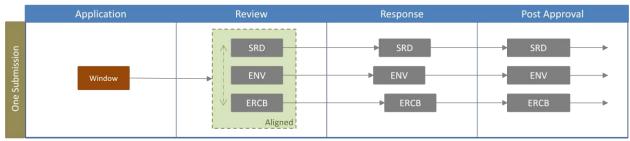


Figure 5.3 – Simplified representation of One Submission enhancement option.

One Submission proposes that applications are submitted through a single window, where proponents have a single entry point to all three regulatory agencies. The window may be established as a separate entity from the three regulatory agencies, or it may be incorporated into one of the three existing regulatory agencies.

Further, this option suggests that regulatory agencies conduct a highly aligned review of applications received via the single window. Alignment in this component is internal to the three agencies and may be achieved through joint reviews, delegation of authority for certain types of projects, or some other mechanism. An aligned review of projects requires the integrated application information that results from a single window submission.

Following an aligned review, each regulatory agency provides a separate response and undertakes post-approval activities independent of the other regulatory agencies. Coordination across regulatory agencies would benefit from alignment at the application and review stages, but there would be no explicit efforts to align decisions or post-approval activities.

#### 5.3.2 One Window

The One Window enhancement option builds upon the direction established in the One Submission option. The One Window option extends alignment of regulatory agencies through all stages of the project lifecycle – application, review, response, and post approval (as depicted

in Figure 5.4). This aims to address the challenges of multiple processes and requirements throughout the project lifecycle.

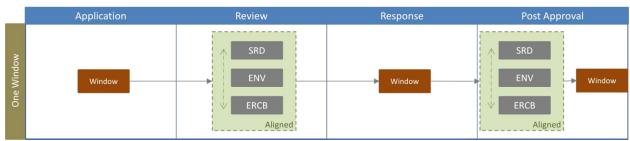


Figure 5.4 – Simplified representation of One Window enhancement option.

One Window utilizes a single point of contact for all interactions between the project proponent and the three regulatory agencies, although the administration of the window may differ at various stages of the regulatory process. This approach simplifies contact between the system and stakeholders at the application, response, and post approval stages.

Strong alignment across the three regulatory agencies is conducted in the review stage and is carried forward to post approval activities. In this option, the alignment is contained in each agency with strong interdependency amongst agencies.

#### 5.3.3 Single Regulator

The third potential enhancement option, Single Regulator combines all of the policy assurance functions currently undertaken by the three regulatory agencies into a single delivery structure (as depicted in Figure 5.5). This enhancement option is intended to address the challenges of multiple agencies and processes as well as consistency and alignment in regulatory decisions and post-approval activities.

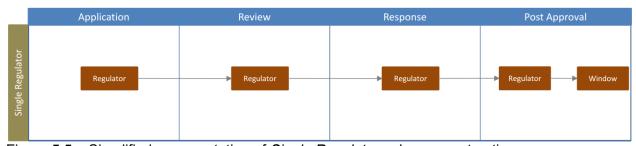


Figure 5.5 – Simplified representation of *Single Regulator* enhancement option.

The Single Regulator option envisions a single entity having unified responsibility for the regulatory functions required to issue upstream oil or gas project approvals, and to monitor compliance with approvals.

#### **5.4 ASSESSMENT**

While they all feature the common element of providing a "single window", the proposed structural enhancement options each involve unique considerations. (Compared in Figure 5.6 and Table 5.1). Generally, the progression from One Submission to One Window to Single Regulator corresponds with increased alignment and improved integration of policy assurance functions throughout the project lifecycle.

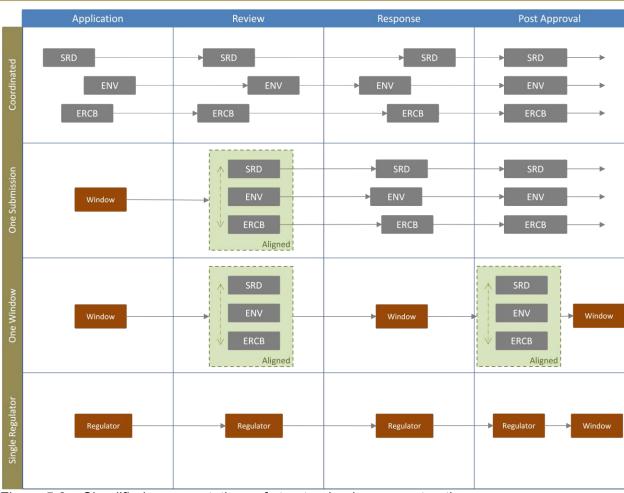


Figure 5.6 – Simplified representations of structural enhancement options.

Table 5.1 – Approach of each structural enhancement option for stages of the policy assurance process.

Stage	Application	Review	Response	Post Approval	Ongoing contact
One Submission	Integrated	Aligned	Independent or Coordinated	Independent or Coordinated	Independent or Coordinated
One Window	Integrated	Aligned	Integrated	Aligned	Integrated
Single Regulator	Integrated	Integrated	Integrated	Integrated	Integrated

To facilitate a comparison of the three proposed structural enhancement options, each option was compared to the current state and assessed against the REP principles. An assessment of the options is set out in Table 5.2.

Table 5.2 – Assessment of each structural enhancement option against the Principles of the Regulatory Enhancement Project.

Regulatory Enhancement Project.					
System Attribute	One Submission	One Window	Single Regulator		
Effective The structure of the Enahnced System will be effective if it supports:  • achieving multiple outcomes stated by multiple policies • resolution of issues and support to decision making • harmonization of approach across jurisdictions	Greater joint effort and consideration by regulators as a group at the application stage Harmonization most likely relating to front-end processes only Less effective because the ability to organize into "cross-functional units" is more difficult.	<ul> <li>Increased alignment to include post approval including compliance and enforcement</li> <li>Increased alignment across stages provides stronger vehicle for addressing harmonization</li> <li>Decreased effectiveness because of the difficulty in organizing multiple regulatory agencies into "cross-functional units"</li> </ul>	<ul> <li>Full integration at all stages of policy assurance.</li> <li>Single regulator most able to harmonize as it has "the whole service delivery picture"</li> <li>Increased effectiveness resulting from the potential to organize into "cross-functional units"</li> </ul>		
Efficient The structure of the Enhanced System will be efficient if it:  • optimizes the effort required by all parties (time, quality, cost)  • reduces duplication of regulatory effort  • coordinates and aligns decisions to reduce potential conflicts  • expends effort relative to the risk of an activity or group of activities  • supports the standardization and automation of business rules	<ul> <li>Efficiency gains are limited to the application/review stage of a project lifecycle</li> <li>Alignment success is limited by the degree to which agencies are compelled to participate.</li> <li>Moderate to large increase in regulatory agency efforts required to improve and maintain coordination and consistency in process and decision making</li> <li>Moderate reduction of industry effort because of reduced duplication, fewer entry points into the system, and clearer requirements at the application stage</li> <li>Moderate reduction in time and cost for industry to prepare applications and regulatory agencies to process applications the alignment of the submission process.</li> <li>Alignment of effort to risk is difficult because of multiple agencies with multiple approaches to applying risk</li> <li>Standardization and automation can only be applied at the approval phase, but is complicated by multiple regulatory agencies due to lack of alignment.</li> </ul>	<ul> <li>Efficiency gains are realized throughout a project's lifecycle</li> <li>Alignment success is limited by the degree to which agencies are compelled to participate.</li> <li>Large increase in regulatory agency efforts required to improve and maintain coordination and consistency in process and decision making</li> <li>Large reductions in industry effort because of reduced duplication, fewer agencies to interact with, and clearer requirements.</li> <li>Large reductions in time and cost for industry to prepare applications and regulatory agencies to process applications through better alignment of regulatory agencies.</li> <li>Good ability to share professional resources across disciplines</li> <li>Improved ability to utilize risk through alignment of risk approach across agencies</li> <li>Improved standardization and automation because of a single window throughout lifecycle and alignment across multiple regulatory agencies</li> </ul>	<ul> <li>Efficiency gains are realized throughout a project's lifecycle</li> <li>Large short-term increase in effort by regulatory agency to establish infrastructure, processes and procedures (coordination and consistency)</li> <li>Long term decrease in resources will be needed by the regulatory agency because procedures and processes have been established.</li> <li>Large reductions in industry effort because of reduced duplication, fewer agencies to interact with, and clearer requirements.</li> <li>Large reductions in time and cost for industry to prepare applications and regulatory agencies to process applications</li> <li>Highest ability to utilize professional resources across disciplines</li> <li>Greatly improved ability to utilize risk through use of a risk-management approach applied within one agency</li> <li>Greatly improved standardization and automation through use of a single agency throughout lifecycle</li> </ul>		
Adaptable The structure of the	The ability to adapt and innovate will be improved	<ul> <li>Adaptation will affect all aspects of the system and all aspects of a</li> </ul>	<ul> <li>Most highly adaptable because of only one organization (and its</li> </ul>		

System Attribute	One Submission	One Window	Single Regulator
Enhanced System will be adaptable if it:  can accommodate change to the system without significant redesign  encourages and supports innovation within the policy assurance system (e.g., process)  enables knowledge generated in the policy assurance system to inform the policy system	application stage changes.  The standardized application process used by regulatory agencies will improve the ability for coordination to adequately handle complex projects and large volumes of applications.  The ability to adapt will not improve for other stages of a project's lifecycle.	project's lifecycle  Regulatory agencies will improve their ability to coordinate how their processes will adapt to the volume and complexity of projects in the system.  Coordination of regulatory systems should improve the ability to handle large volumes of project applications.  Adaptation will be hampered by the infrastructure associated with multiple agencies (e.g., different information systems)  Improves capability to negotiate innovation among regulators	processes) are involved in the change.  The regulatory agency can easily adapt to the volume and complexity of projects in the system because there is a single "decision stream"  All change pieces accommodated within one organization and one set of information systems  Innovation can be more uniformly attached to single organization and culture  Large improvement in the ability to transfer information and knowledge to the policy system.
Predictable The structure of the Enhanced System will enable predictable decision- making if:  • parties understand the system and how it works  • there is clear accountability for decisions  • enables decisions to be commensurate with planning horizons (timing)	<ul> <li>Greater clarity for industry and regulatory agencies in the application phase of a project's lifecycle</li> <li>One entry point for industry proponent (only for application phase)</li> <li>No improvement to clarity throughout the regulatory system because there are multiple authorities in the system residing in different agencies and divided accountabilities for decisions.</li> <li>Fixed application timing can be used with aligned review</li> </ul>	Improved clarity and understanding for industry throughout project lifecycle because industry is dealing with a one window contact  Short to medium term reduction in clarity and understanding for regulatory agencies as processes are established  Long-term improvement in clarity for regulatory agencies as the system becomes established  Improvement in certainty because of common information, procedures, and application of regulatory "rules"  Reduced clarity throughout the system because there are multiple authorities in the system residing in different agencies and divided accountabilities for decisions  Fixed application timing can be improved by greater alignment between regulators	<ul> <li>Single authority and accountability for decisions</li> <li>Improved clarity and understanding for industry throughout project lifecycle because industry is dealing with one regulatory agency</li> <li>Fixed application timing can be established throughout the system with single regulator</li> </ul>
Fair The structure of the Enhanced System will enable fair decisionmaking if it:	No improvement in ability to communicate the rationale for a particular decision, because there are multiple decision- makers involved in any	Moderate improvement in ability to communicate the rationale for a particular decision, because multiple decision-makers have	Large improvement in ability to communicate the rationale for a particular decision, because there is one decision-maker.

System Attribute	One Submission	One Window	Single Regulator
<ul> <li>enables a clear understanding of the rationale for a decision</li> <li>enables procedural fairness</li> </ul>	decision  No improvement in procedural fairness because there has only been improvement in the application phase  The procedures and processes will remain organized by resource vs. by sector.	aligned their process and intents in advance of a decision  • Some stakeholders may perceive reduction in procedure fairness through aligned processes  • Moderate improvement in procedural fairness because there is alignment of procedures, process, and decision-making	Some stakeholders may perceive reduction in procedural fairness as they might "get lost in a big regulatory process"     Large improvement in procedural fairness because there is one decision-maker
Transparent The structure of the Enhanced System will enable transparent decision-making if:  • information about processes and content is available to all  • it enables openness, communication, and accountability	Consistent information about front-end processes.	Consistent information about all interfaces with regulators     Ministries may be perceived as less individually accountable because of alignment requirements.	<ul> <li>Consistent information about interfaces with single regulator</li> <li>Ministries may be perceived as less accountable because of delivery is by a common regulator.</li> <li>Potential for the perception of less credibility from the public if the regulator is focused on one sector.</li> </ul>
Other Value	May provide some clarity for non-industry stakeholders around industry submission standards.      Maintains departmental expertise on resource allocation and management (oil and gas, water, public lands etc)	<ul> <li>This has the appearance of Single Regulator to non-industry stakeholders.</li> <li>May confuse all stakeholders in who and how the decisions are actually made.</li> <li>Reduces amount of individual line agency responses – progress tracked through one agency and approvals could come through one agency</li> </ul>	<ul> <li>This option provides the simplest and clearest structure for decision making. This will be more easily understood by non-industry stakeholders.</li> <li>Creation of a single regulator approach of upstream oil and gas industry poses significant issues for the regulatory processes that remain in place for other industries. How is the integrity/consistency of those systems maintained if administered by multiple agencies</li> </ul>

#### 5.4.1 Other Considerations

To support the selection of a structural model, Table 5.3 outlines a number of other considerations for each of the three alternatives. These considerations are categorized by:

- Cultural Change
- Human Resource Capacity
- Information Systems
- Legislative Change
- Compliance and Enforcement

- Transition Factors
- Costs

Table 5.3 – Other considerations for each structural enhancement option.

	Table 5.3 – Other considerations for each structural enhancement option.		
Factor	One Submission	One Window	Single Regulator
Cultural Change	Minimal, as it only applies to the approval stage, and there is already some work being completed to improve the current situation.	<ul> <li>Moderate to large cultural changes to ingrain the requirement and rationale for integrated operations</li> <li>Cultural change required in the post approval stage as well, but there is some work already being completed.</li> <li>Organizational change for the line agencies used to dealing directly with the proponents; cultural change – will require education and acceptance by the line agencies</li> </ul>	<ul> <li>Large cultural changes requiring clear leadership with rationale for why the changes are occurring</li> <li>Cultural change would occur in all ministries, as processes are moved, and will involve migrating staff which is challenging.</li> <li>Very clear policy direction is required.</li> <li>Very clear understanding of roles and responsibility is needed.</li> <li>Cultural change for line agencies as will require training and acceptance of new process.</li> </ul>
Human Resources Capacity	Some additional staff will be required to accept the submissions and coordinate input from the respective ministries	Staffing of critical decision paths will be important (i.e., water decisions need the support to ensure a timely overall authorization).  There is a potential for improvements to human resources through increased job satisfaction and broader training for job functions  Potential for increase job complexity because of the integration and coordination requirement across agencies.	Staffing and provision of appropriate expertise in subject matter areas. These may be transferred from existing ministries or additional personnel may be required if the expertise is needed in both places There is a potential for improvements to human resources through increased job satisfaction and broader training for job functions The location of agencies and staff, as well as blended-roles would need to be clearly laid out.
Information Systems (IT)	<ul> <li>Require a very clear application process.</li> <li>Tracking system required.</li> <li>Moderate costs over the short term, reducing over the longer term as IT systems and practices evolve.</li> </ul>	<ul> <li>Require a very clear regulatory process supported by a common IT system.</li> <li>Tracking system required.</li> <li>Large costs over the short term, reducing over the longer term as IT systems and practices evolve.</li> </ul>	Require a very clear regulatory process supported by a comprehensive IT system. Tracking system required. Large costs over the short term, reducing over the longer term as IT systems and practices evolve. Marginally higher costs than One Window.
Legislative Change	Legislative changes will likely only relate to what needs to be in the one submission	<ul> <li>The extent of legislative change will depend on how "alignment' is undertaken (i.e., if all</li> </ul>	Will require legislative changes to various acts and regulations to combine many individual

Factor	One Submission	One Window	Single Regulator
		have some public engagement process and same public appeal process)  • Will require significant regulation changes	departments activities  •
Compliance and Enforcement	Possibilities of inconsistent responses to non-compliance among regulators, as these are conducted separately by each regulator.	Will require significant dialog and agreement among the various regulators in order to achieve a consistent response.	Consistent response for oil and gas sector but a possibility of inconsistent response for similar activities by regulators for the other sectors.
Transitional Factors / Sequencing	Low likelihood that agencies and government departments will seek to return to status-quo (i.e., "off-ramp") because the scope of change is limited to the application phase with relatively little demand for ongoing efforts to maintain alignment and participation.      Less complex transition because all changes are focused on the application stages of the regulatory process.	High likelihood that agencies and government departments will seek to return to status-quo because of the demand for ongoing efforts to maintain alignment and participation.      More complex transition because all many changes are required in multiple agencies with a high degree of coordination required before changes	High likelihood that agencies and government departments will seek to return to status-quo because of the difficulty and significance of the changes required     Complexity of transition may be variable because the overall requirement for coordination before change is less prevalent. Transition dependant on leadership and culture shifts.
Costs	<ul> <li>Significant initiation costs.</li> <li>Costs limited to front-end process.</li> <li>Cost of transition may not be able to be covered by existing regulatory budgets.</li> </ul>	<ul> <li>Significant initiation costs.</li> <li>Some costs will be related to structuring the one window.</li> <li>Costs may be shared among aligned ministries.</li> </ul>	<ul> <li>More significant transition cost to move to single regulator.</li> <li>The incremental cost between one window and single regulator is low.</li> <li>Costs may be shared between aligned ministries and industry.</li> </ul>

#### 5.5 SUMMARY AND CONSIDERATIONS

Bringing about an Enhanced System will require a change to the structure of *policy assurance* delivery. Based on the alternatives presented, the following considerations will be made when designing the Enhanced System:

- The structural model for the regulator(s); and
- Functions of the policy assurance stage.

The selection of a new structural model will depend on many considerations as were outlined in the assessment portion of this chapter.

Enhancements for the Structure of Policy Assurance, along with all other enhancements, can be found in Chapter 11.

#### 6 Public Interest Considerations

#### 6.1 Introduction

Public interest considerations are an important part of the overall system, to inform the developing of policies and to inform project-level decision-making.

Public interests that are advanced by parties can generally be classified as either common interest matters or private interest matters.

Common interest matters typically involve input on broad policy issues that apply to all upstream oil and gas activities. For example, policy issues such as environmental management, water use, or land-use. These are issues that should inform *policy development*.

Private interest matters relate to issues or concerns that a specified party has regarding a specifically proposed upstream oil and gas development activity. These are issues that inform decisions made at the *policy assurance* stage. Determinations of "standing' are used by each regulatory agency to determine the participation rights that are afforded to different stakeholders in relation to private interest matters.

Public engagement is the means by which input is requested and collected from interested parties. Participants in the REP engagement process stressed that an Enhanced System needs to include a public engagement framework that is meaningful, robust and enables appropriate parties to provide input into policy development and policy assurance.

#### 6.1.1 Challenge

What enhancements can be made to the Policy Development and Policy Assurance System to ensure the appropriate public-interest matters are being considered at the right level, sufficient amounts of public engagement are afforded, and that private interest matters are dealt with fairly?

#### 6.2 Examining the Issues

The following issues have been identified:

#### **Common Interest Matters**

In the current system common interest matters are often raised during the review of individual upstream oil and gas projects. In general, regulatory agencies are intended to review individual projects using established policies for guidance. The regulatory agencies are typically not able to effectively review the policies themselves. As a result, there can be significant effects on the efficiency and effectiveness of the system.

#### **Private Interest Matters**

Currently, all regulatory agencies consider private interest matters as part of project level decisions. An issue arises when participation rights are not strictly defined or differ amongst regulatory agencies. These differences can cause delays in the process and impede coordination of information and decisions across regulatory agencies.

#### **Public Engagement Opportunities and Coordination**

Currently, public engagement is conducted by individual agencies for multiple purposes, often without coordination across or within agencies. Stakeholders identified this lack of coordination as an issue, as it leads to ineffective and inefficient use of participants' time and effort. It can also result in stakeholders being over-engaged on some issues and under-engaged on others.

In the current system, it is difficult for interested parties to determine when and how to best provide input into policies and decisions. When regulatory proceedings are seen by stakeholders as the primary venue for public engagement, three topics or situations arise:

- 1. **Private Interest** discussions that typically relate to matters of competing private interests for a specific project. Parties wish to express concerns about their private interests in relation to other parties with private interests.
- 2. **Common and Private Interest** discussions that relate to matters where parties believe that the application of an established public policy may not be in their private interests.
- 3. **Common Interest** discussions where parties may seek to disagree with public policies in general terms. These situations are often not related to a specific project.

The presence of all three types of discussion at regulatory hearings leads to procedural complexity and inefficiency, as regulatory agencies attempt to balance this diverse input in light of procedural fairness, transparency and accountability.

#### 6.3 POTENTIAL SYSTEM ENHANCEMENTS

#### 6.3.1 Common Interest Matters

Common interest matters are most informative during policy development, when policy developers are balancing social, economic and environmental considerations and associated trade-offs. Enhancing public engagement on common interest matters at the *policy development* stage would better enable parties to provide input into policy development. It would also improve the efficiency at the *policy assurance* stage.

There are two alternatives for enhancing consideration of common interest matters in policy development:

- 1. All common interest matters will only be considered at the *policy development* stage.
- 2. Common interest matters will be considered mainly at the *policy development* stage, with specified matters remaining at the *policy assurance* stage.

#### 6.3.2 Private Interest Matters

Better defining participation at the *policy assurance* stage would enhance engagement of private interest matters. Enhanced consideration of common interest matters at the *policy development* stage enables the scope of public engagement at the *policy assurance* stage to be more focused and more coordinated. This would lead to increased efficiency and effectiveness.

Four options are explored for focusing public engagement at the *policy assurance* stage. These are a combination of provisions in existing legislation and new proposals:

 Legitimate Interests: Any party that has a legitimate interest in a project is afforded participation rights. These interests would be defined by the legislation that governs private interest.

- 2. **Directly Affected**: Only those parties that are directly affected, as defined in legislation, would be granted participation rights.
- 3. **Directly and Adversely Affected**: Parties must be directly and adversely affected by a development to be granted participation rights.
- 4. **Specified by Legislation**: Only the parties as set out in legislation would be afforded participation rights.

#### 6.3.3 Public Engagement

The potential enhancements described above require changes to public engagement processes at the *policy development* and *policy assurance* stages. Enhanced processes for public engagement at the *policy development* stage should enable public engagement processes at the *policy assurance* stage to be more coordinated and more focused. Overall, public engagement would be more efficient and effective in informing policies and project level decisions.

Enhanced public engagement in the development of policy would:

- Engage those directly affected as well as the public;
- Be an ongoing, long-term commitment based on two-way communication;
- Involve Albertans at a point in the process where their input can be most effective:
- Identify and discuss important issues and use outcomes of engagement in meaningful ways;
- Employ processes designed to suit the issue and the audience.

Varying methods of engagement are needed to obtain representative views of Albertans and stakeholders.

#### 6.4 ASSESSMENT

The following tables categorize the alternatives for enhancing public interest considerations:

#### 6.4.1 Common Interest Matters

Table 6.1 – Assessment of Common Interest Enhancements

A. Considered in Policy Development Only	B. Specified Consideration in Policy Assurance	
Creation of policy and disputes arising over interpretation of policy would be dealt with only by policy developers.	Limited specified role of policy assurance stage to look at matters of common interest (i.e. inquiry power, joint panels with federal authority, etc.)	
Rationale		
<ul> <li>Reduced effort for regulator and proponent as public engagement takes place only in policy development.</li> <li>Improved efficiency of both policy development and assurance as common interest matters would only be addressed in policy development and not multiple times in policy assurance.</li> <li>Increased pressure on the policy development stage, and the requirement for more frequent reviews, updates and enhancements of policy, and more tools for public engagement.</li> <li>Focused accountability at the policy development stage, and not reconsider common interest matters case-by-case.</li> </ul>	<ul> <li>Recognize that there may be some circumstances where policy developers need the assistance of the regulator in evaluating public interest considerations</li> <li>Can manage residual lack of policy</li> <li>May create uncertainty and confusion as to who is responsible for creating and interpreting rules/policies and what specific policies are subject to interpretation resulting in escalation of legal challenges.</li> <li>Defined boundaries about delegated interpretation could help both regulator and policy developers to understand what is expected of them, and when.</li> <li>Could provide support for regulator and policy</li> </ul>	

A. Considered in Policy Development Only	B. Specified Consideration in Policy Assurance	
	developers to evolve a more standardized approach.	
Implementation Considerations		
Requires the policy development stage to have a clear and timely mechanism to create policy and for resolving disputes over the interpretation of policy that relate to common interest matters.	Requires clear description of what common interest matters would be subject to review by regulator     Roles and responsibilities would have to be clearly defined	

#### 6.4.2 Private Interest

Table 6.2 – Assessment of Private Interest Enhancements

A. Legitimate Interest	B. Directly Affected	C. Directly & Adversely	D. Specified
Parties with legitimate interests, including outside the immediate vicinity of site specific development may participate.	Only directly affected parties may participate	Only directly and adversely affected parties may participate	Parties with participation rights are specifically named in legislation
	Rationale		
<ul> <li>Most discretionary and flexible</li> <li>Least predictable</li> <li>Upstream oil and gas development activities may create broad impacts outside immediate vicinity</li> <li>Increased effort for all parties to determine "legitimacy"</li> <li>Most transparent (if defined as "open")</li> <li>More public involvement in project-level decision-making</li> </ul>	Reduces regulatory and industry effort by limiting participation to "site specific", while still allowing broad range of views.     Reducing scope may limit ability of regulator to resolve issues     Requires effort by objecting parties to demonstrate directly affected by project	<ul> <li>Improves efficiency and timeliness by further reducing effort.</li> <li>Focuses only on demonstrated negative consequences that are directly linked to development.</li> <li>Still enables broad range of "site specific" views.</li> <li>Reducing scope may limit ability of regulator to resolve issues</li> <li>Requires extra efforts by objecting parties to demonstrate direct and adverse impact</li> </ul>	<ul> <li>Least level of discretion and flexibility</li> <li>Most predictable and timely.</li> <li>Potentially narrowest scope of issues</li> <li>May not be effective in situations where more flexibility is actually required; not as robust.</li> <li>Least effort required to determine whether party has standing</li> <li>Most consistent with option to narrow discretion on private interest determination</li> </ul>
	Implementation Considerations		
<ul><li>Increased staffing</li><li>Changes to legislation</li></ul>	Changes to legislation	Changes to legislation	<ul><li>Changes to legislation</li><li>Potentially less staffing</li><li>Public education</li></ul>

#### 6.5 SUMMARY AND CONSIDERATIONS

The engagement and consideration of public interests is a key component of an Enhanced System. Enhancements will be affected by the following considerations:

- What stage common interest matters will be considered;
- How participation rights for private interest matters will be defined;
- Management of public engagement processes.

#### REGULATORY ENHANCEMENT PROJECT: TECHNICAL REPORT

The implementation of any enhancements will depend on several factors, including:

- Type of structure chosen for *policy assurance* delivery.
- Policy integration at the *policy development* stage.

Enhancements for Public Interest, along with all other enhancements, can be found in Chapter 11.

#### 7 DECISION REVIEWS

#### 7.1 Introduction

A significant function of the *policy assurance* stage is the review of applications and information regarding an upstream oil and gas project and the rendering of an initial decision on whether the proponent can conduct the activity, along with associated terms and conditions.

A second, equally important type of decision that occurs at the *policy assurance* stage is a review. A review is a process where the initial decision is reviewed and potentially altered.

#### 7.1.1 Challenge

In order to address the potential for enhancing decision-making, the challenge is as follows:

What process should be used to ensure an effective and fair review of decisions in the policy assurance system?

At a foundational level the *policy assurance* stage should be organized to provide all parties involved with an opportunity to raise their concerns and settle disputes that advance the principles of procedural fairness, transparency, and accountability.

#### 7.1.2 Current State

In the current system, there are several types of review processes used by the current regulatory agencies responsible for upstream oil and gas:

- Energy Resources Conservation Board: The initial decisions made by the ERCB are subject to review and variance by the ERCB and an appeal to the Court of Appeal on matters of law and jurisdiction.
- Environmental Appeals Board (EAB): The EAB provides an opportunity to appeal certain decisions made by Alberta Environment. In some limited cases the EAB is the final decision maker; in others the Minister of Environment is the final decision maker of the appeal. There is a judicial review opportunity to the Court of Queen's Bench.
- Surface Rights Board (SRB): The SRB is responsible for delivering timely and fair
  decisions for Right of Entry and related compensation. Compensation Orders may be
  appealed to the Court of Queen's Bench where the matter is treated as a new hearing.
  The Court of Queen's Bench may uphold or vary the SRB Compensation Order.
  Decisions of the Court of Queen's Bench may be appealed to the Court of Appeal.

#### 7.2 EXAMINING THE ISSUES

Currently, each regulatory administers its own decision review process in accordance with its respective enabling legislation. These processes differ in their functions, procedural requirements, and the statutory thresholds of who can participate in review processes.

The lack of consistency and alignment amongst existing decision review processes contributes to complexity, ambiguity and confusion for project proponents, stakeholders, and the public.

#### 7.3 POTENTIAL SYSTEM ENHANCEMENTS

A potential system enhancement relating to the decision review function has not been fully explored and more analysis is required to clearly understand how current appeal processes, such as the Environmental Appeals Board and Surface Board could be consolidated.

Consideration of the issues to better define a potential system enhancement will have to include who is responsible for conducting reviews, what type of function is undertaken, and the role of the Courts in any decision review.

#### 7.4 SUMMARY AND CONSIDERATIONS

An Enhanced System will require change to the decision review process currently used. To a large degree, these changes depend on the potential enhancements selected elsewhere in the system, specifically the structure of *policy assurance* delivery.

Enhancements to Decision Reviews, along with all other enhancements, can be found in Chapter 11.

### **SECTION 2B**

Section 2B contains descriptions of the following supporting enhancements for the new system:

Chapter 8 – Assurance Tools - An overview of the assortment of Assurance Tools is provided.

**Chapter 9 – Risk-Management Framework** - An overview of the inherent risks in upstream oil and gas development and the corresponding ability for the Government of Alberta to proactively assess and manage these risks is presented.

**Chapter 10 – Performance Measures** - A discussion of the need for performance measures and a framework for using them is provided.

#### **8** Assurance Tools

#### 8.1 Introduction

Policy assurance can be achieved in a number of ways using different kinds of Assurance Tools. These range from use of detailed and prescriptive regulations, to the use of benefits structures that promote the achievement of desired outcomes.

In the current system, Alberta uses a spectrum of approaches for the regulation of upstream oil and gas. While many of these take the form of prescriptive regulations, in most circumstances regulators have the ability to consider equivalent approaches proposed by industry provided the same level of protection is assured.

The wide range of capacities presented by the regulated parties, from small scale or short-term operators to large-scale or long-term operators, requires the use of a similarly broad spectrum of Assurance Tools so that approaches are both flexible and effective.

For the purposes of REP, Assurance tools are divided into four broad categories:

- Command and control
- Economic
- Self-regulation
- Cross-Cutting

A detailed description of Assurance Tools is included in Appendix 8A.

These categories are not exhaustive, but they represent some of the most common approaches used for assuring policy outcomes. When used in combination, tools within these broad categories can result in a myriad of different variations and subcategories.

#### 8.1.1 Challenge

When an Assurance Tool is implemented or changed, the resulting approach needs to be able to demonstrate that it will be effective, efficient, and result in the achievement of desired policy outcomes. It must also be introduced in a way that is easily understood by both the regulated parties and the public. All Assurance tools need to be effective for current conditions and into the future.

The review and discussion of the role and application of Assurance Tools was based on the following challenge:

How can we enable the use of a broader variety of Assurance Tools? How can the most efficient and effective tool be selected for a given circumstance?

#### 8.1.2 Approach

The REP assessed and examined the range of potential Assurance Tools through a literature review. Additional analysis was conducted to further differentiate types of Assurance Tools and their potential use in an Enhanced System.

#### 8.2 Examining the Issues

The following issues were identified in relation to Assurance Tools.

#### **Tool Usage**

The current system uses a limited suite of Assurance Tools which may be focused on a select activity or group of activities.

#### **Tool Selection**

Currently there is no consistent, defined process for selecting the most appropriate Assurance Tool. There is also little flexibility in the current system to adjust the application of Assurance Tools for different stages in a project lifecycle or to achieve desired outcomes.

#### Communication

Changes in assurance approaches often change the balance of obligations, risk, roles and responsibilities, and workload for the regulatory agency and the regulated parties. In most cases, when an Assurance Tool is selected or altered, the nature, rationale and potential implications of the Assurance tool are not clearly communicated within the regulatory agency or to the regulated party. This leads to inconsistency in the application of Assurance Tools.

#### 8.3 POTENTIAL SYSTEM ENHANCEMENTS

#### 8.3.1 Enabling broader tool usage

Examination of a broader suite of Assurance Tools will allow for potential efficiency and effectiveness gains in achieving desired policy outcomes. Shifting to a larger toolbox can help to reduce regulatory burden on regulated entities and may promote innovation. It may also raise the need for an accepted, consistent and transparent method of Assurance Tool selection, as well as a way to communicate the effectiveness of these tools to the public and industry, who are more accustomed to a command-and-control approach.

#### 8.3.2 Consistent Approach to Tool Selection

The selection of Assurance Tools should be guided by several factors, including a *risk-management approach*. Other approaches, such as cost-benefit analysis, may also be considered to guide the selection of an appropriate Assurance Tool. Using a consistent selection process will improve efficiency and effectiveness.

#### 8.4 ASSESSMENT

A number of conclusions and consensus views were extracted from a literature review, including the following:

- 1. There is considerable momentum (worldwide) to investigate and implement a wider range of instruments to achieve policy outcomes and compliance.
- Most authors advocate a shift to more results, performance, goal-oriented, or outcomesbased instruments.
- 3. Health, safety and environment protection (social versus economic regulation) are most often cited as the drivers for instrument change.
- 4. All instruments have pros and cons and appropriate selection and application is context and design specific.
- 5. Assuming it is concluded that intervention is required; instruments with the least intervention that will achieve the desired result are to be preferred.
- 6. Instruments mixes are often desirable but some mixes are incompatible.

- 7. Moving away from traditional command and control instruments is not a trivial exercise and all players regulators, regulated entities and others must adapt.
- 8. Risk and risk tolerance are important factors in instrument selection.
- 9. The selection and implementation of new instruments requires training and a formal review process to ensure operating areas make progress.
- 10. The act of reviewing instruments can be a valuable exercise even if no change is implemented.
- 11. Performance measurement is critical to implementation success but traditional measures may not be adequate to evaluate new instrument types, and true cost/benefit analysis can be difficult to perform.
- 12. Empirical evidence respecting the success of alternate instruments is limited or lacking. In some instances instrument change has resulted in temporary rather than sustained improvements.
- 13. The demographics of regulated entities are an important consideration in instrument design, which should include the equitable distribution of burden.
- 14. Stakeholders hold different views on whether regulation should be for protection, enabling or both.
- 15. Despite the valid criticisms of prescriptive "command and control" regulation, many acknowledge it still has its place and may be the preferred option.

#### 8.5 SUMMARY AND CONSIDERATIONS

Given potential efficiency and effectiveness gains, the use of a broader suite of Assurance Tools is suggested. The selection of appropriate Assurance Tools to achieve desired policy outcomes should be informed by a *risk-management approach*.

Enhancements to Policy Assurance Tools, along with all other enhancements, can be found in Chapter 11.

#### 9 RISK-MANAGEMENT FRAMEWORK

#### 9.1 Introduction

Risk is defined as uncertainty in the ability to achieve goals or outcomes, and is a combination of the likelihood and consequence of a risk event occurring. A formal *risk-management* approach is a transparent and systematic way to manage risk by ensuring the risks associated with activities are understood, evaluated, and appropriately managed.

Risk management is not about eliminating risks. It is about determining the best means to reduce the potential effect of risks to an acceptable level. Government, industry, and society all employ processes to reduce risk. Residual risk will always remain even after of the implementation of risk-reduction measures, since it is impossible to fully eliminate risk.

Risk management enables governments to ensure that the level of regulatory oversight is appropriate for the risk. Activities posing greater risk may require more oversight, while those that pose less risk may be managed with assurance tools that best reflect the nature and level of risk.

While the SREM departments and the ERCB currently use *risk management* to varying degrees in their work, they each do so independently. The current system does not use a systemic or consistent approach.

#### 9.1.1 Challenge

The efforts of REP focused its assessment on the following challenge:

How can Alberta more effectively use risk management to support policy development and integration, policy assurance, and tool selection?

#### 9.1.2 Approach

To assess risk management in Alberta and develop potential enhancements for the *Policy Development and Policy Assurance System* relating to risk management, REP examined the Assurance functions that take place throughout an entire upstream oil and gas project lifecycle, for both large and small projects. In addition, the Assurance functions for existing, new and emerging upstream oil and gas operations were reviewed to determine and assess the nature of risks involved; the methods used, and identify opportunities for system enhancements. This review included conventional and unconventional oil & gas, mineable and in situ oil sands, and enhanced oil recovery.

#### 9.2 Examining the Issues

The following issues were identified:

#### **Inconsistent Approach to Risk Management**

While the Government of Alberta currently uses *risk management* to reduce the potential impact of risks associated with the development of Alberta's natural resources, there is no consistently applied approach.

**Informing Policy Development and Integration** 

Risk management has a limited focus during the development of policy. This is due to of the absence of a coordinated *risk-management approach* that can inform policy development and integration. A formalized integration function should include a strong consideration of risk management.

#### **Informing Tool Selection**

The lack of a coordinated *risk-management approach* also suggests that Assurance Tools and the associated oversight and effort are not adequately matched with the potential risk of an activity. A clearer and more common understanding of the nature of the risk would inform more tailored selection of appropriate Assurance Tools.

#### 9.3 POTENTIAL SYSTEM ENHANCEMENTS

#### 9.3.1 Creation of a REP Integrated Risk Management Framework

The REP Integrated Risk Management Framework was developed as part of REP system design to provide guidance for a holistic Government of Alberta approach to managing risk (Appendix 9A). The Risk Management Framework will enable a better understanding of the nature of the risks associated with natural resource developments and more systematic management of activities and risks.

Based on the ISO 31000<sup>5</sup> Risk Management Standard, the Risk Management Framework is a step toward a common *risk-management approach* throughout the Enhanced System. The ISO Standard provides an excellent foundation through a structured process to consider a variety of risks. ISO is recognized by industry and governments worldwide.

The Risk Management Framework will use common risk criteria for all components of the system. Risks will be assessed using consequence and likelihood tables that may include analytical tools such as "risk bowties". These results will inform decision making.

#### 9.4 ASSESSMENT

The Risk Management Framework was assessed for its ability to:

- Support the development of integrated policy from a Government of Alberta perspective;
   and
- Select the most appropriate Assurance Tools.

#### 9.4.1 Supporting Integrated Policy Development

In a complex policy environment where different departments develop policy independent of one another in order to achieve certain outcomes, conflicts among policy are likely. Adopting the Risk Management Framework would contribute to the prioritization and development of integrated Government of Alberta policy.

In this context, the Risk Management Framework becomes one of the tools used to consider policies, assess existing policies for conflicts, and mitigate or manage conflicts among policy outcomes. The information used to assess risk will support effective decision-making by identifying specific risks and mitigation for social, economic and environmental outcomes. This approach would also support better management of capacity and resources for more proactive management of emerging issues.

<sup>&</sup>lt;sup>5</sup> ISO 31000 is intended to be a family of standards relating to risk management codified by the International Organization for Standardization. The purpose of ISO 31000 is to provide principles and generic guidelines on risk management.

#### 9.4.2 Assurance tool selection

The application of the Risk Management Framework in the policy assurance stage will assist in selecting appropriate Assurance Tools and in consistently applying Assurance Tools to activities of similar risk. For example, activities where the risk is understood and managed could be regulated by codes of practice or other similar types of authorizations with a greater emphasis on operational compliance, rather than issuing detailed prescriptive authorizations for a large number of identical activities in similar settings.

#### 9.4.3 In situ Oil Sands Example

An example of where Risk Management may enable more effective and efficient Assurance tool selection is the regulation of *in situ* oil sands projects.

It was noted in the REP system-level review that the regulatory process used for *in situ* oil sands projects is similar to mineable oil sands projects, yet the activity has greater similarity with conventional oil and gas projects. An option identified by the REP is to consider modifying the regulatory process for *in situ* oil sands to make it more similar to conventional oil and gas, and to address any unique issues through codes of practice, standards, or other assurance tools.

The opportunities from the system-level review conducted under this project align with the near-term enhancements identified in *Enhancing Assurance – The First 90 Days*. Regulators have gained considerable experience from reviewing more than 30 Environmental Impact Assessment reports that have been conducted for *in situ* oil sands project applications. These provide regulators with a thorough understanding of the types of potential impacts of *in situ* oil sands projects and the associated mitigation.

#### 9.5 SUMMARY AND CONSIDERATIONS

Currently risk and risk management is not understood and applied in a consistent way across the SREM departments. The current system could be enhanced through the adoption and application of a common Risk Management Framework that is built upon the established ISO 31000 Standard. This common *risk—management approach* would result in better management of the risks associated with enhancing the current system. It would provide support for the development of integrated GoA natural resource policy, and would assist in improved selection of Assurance Tools.

Enhancements for Risk Management, along with all other enhancements, can be found in Chapter 11.

#### 10 PERFORMANCE MEASURES

#### **10.1 INTRODUCTION**

Performance Measurement is a critical component of an Enhanced System. Performance measures will support competitiveness by providing a framework for accountability within the upstream oil and gas sector. They will enhance accountability and transparency by measuring the effectiveness of the *policy development* and *policy assurance* stages, and will direct attention to opportunities for continuous improvement.

There are two components to performance measures for the system:

- 1. **Performance measures for Policy Development**. These will be the highest level of performance measures, used to track the performance of strategic policies. The Government of Alberta department having accountability for a particular policy will be responsible for its performance measures, in consultation with SREM ministries.
- Performance measures for Policy Assurance. These performance measures will be based on *policy assurance* functions and administrative processes. The entity responsible for delivery of assurance functions will be accountable for these performance measures.

#### 10.1.1 Challenge

How can performance measures be used to enhance accountability, transparency, and assist with continuous improvement for the Policy Development and Policy Assurance System?

#### 10.2 Examining The Issues

Currently, performance measures are not formally defined or monitored in a way that measures effectiveness of the system as a whole. The addition of a transparent Performance Measurement Framework would demonstrate accountability and measure system performance.

#### 10.3 POTENTIAL SYSTEM ENHANCEMENTS

#### 10.3.1 Creation of a Performance Measurement Framework

A formally defined Performance Measurement Framework is necessary for the Enhanced System. This framework will promote a common understanding of performance measurement; provide a basis for comparison of system performance results; define methods for monitoring and continuous improvement of the system; and outline reporting requirements.

#### **Common Understanding of Performance Measures**

A common understanding of the need for performance measures, what they are, and what they are expected to accomplish, is necessary. Development of appropriate measures will promote a common understanding of performance drivers and the methods to quantify and evaluate success.

Performance measures are used to evaluate and improve the efficiency and effectiveness of business processes. Performance measures tend to be unit-based and reported on a consistent, periodic basis, depending on critical business needs. Performance measures can satisfy multiple objectives such as:

- Setting goals and standards;
- Determining and monitoring progress;
- · Assisting with decision-making and business management;
- · Assigning accountability to staff;
- Monitoring the performance of an organization, department, or function;
- Reporting according to a pre-determined schedule rather than ad-hoc.

Considerations for the creation of performance measures, including Government of Alberta specific requirements, can be found in Appendix 10A.

#### **Basis for Comparison (Benchmarks)**

Benchmarks are standards or references against which similar things can be measured or judged. Performance measures can provide the necessary data for the Enhanced System in order to compare actual performance results.

Performance measure targets can be established with reference to the current state or to a desired target. Two types of benchmarks have been identified to help with comparison:

- 1. **System Benchmarks** can be initially created by policy developers and regulators to evaluate system performance at a later date.
- 2. **Jurisdictional Benchmarks** are based on credible and regularly-collected performance results of comparable jurisdictions.

Additional detail on the selection of jurisdictional benchmarks can be found in Appendix 10B.

#### **Monitoring and Continuous Improvement**

An effective performance measurement system requires accountability for monitoring performance and developing and implementing strategies to improve system performance. This requirement also applies to the measurement system itself, so that that it remains relevant to current priorities and objectives.

Monitoring is necessary to measure results against established benchmarks. Once the targets and baselines have been established, measurement can take place and results can be used to identify areas that require improvement. Strategies can then be devised to initiate improvement.

#### Reporting

The purpose of performance measures reporting is to communicate the effectiveness of the system at achieving its objectives, and to influence positive change. Clear and consistent reporting is required to share results and maintain accountability. Two concepts for reporting are proposed:

- System Reporting can be conducted internally and externally, and will draw attention to system successes and areas for improvement. Specific functions for system reporting include:
  - Review system performance data and report on achievement of defined objectives;
  - Publish findings in a report made available internally to the Government of Alberta and externally to the public;

- Provide an initial report of system implementation in order to provide baseline data for subsequent reviews.
- 2. **An External Review Body** can be created to conduct an independent review of system performance. Externals review will provide Albertans with the assurance that the *Enhanced System* is delivering on integrated policy outcomes. The external body will perform independent reviews, and will not replace formal Government of Alberta internal reporting and auditing functions.

#### 10.4 ASSESSMENT

A Performance Measurement Framework will assist in integrating performance measurement in an Enhanced System. There are several factors that can affect the success of performance measurement:

- 1. **Accurate focus** Performance measures must be focused on the key activities or drivers that characterize success of the system.
- 2. **Relevant comparison across jurisdictions** Comparison against other jurisdictions can provide a valuable measure of success, but there must be acknowledgement of significant differences in the different systems.
- 3. **Reliability of results** Results are as good as the quality of the supporting data and sufficient data measurement capabilities.
- 4. "Active life" of a performance measure Measures and benchmarks can be replaced or modified to align with current business needs.
- 5. **Creating accountability** Performance measurement of the system must link to a higher level of reporting, rather than becoming a standalone measurement. "
- 6. **Quantity of performance measures** There must be enough measures to appropriately evaluate system performance but not so many that measurement and evaluation becomes overly burdensome and resource-consuming

#### 10.5 SUMMARY AND CONSIDERATIONS

Performance measurement constitutes an important component of the Enhanced System. It would link the *policy development* and *policy assurance* components to established performance criteria to ensure accountability and transparency of the system. It would also support the goal of improving Alberta's investment competitiveness in upstream oil and gas.

A Performance Measurement Framework should provide for performance measures and the development of benchmarks, as well as public reporting that meets Government of Alberta standards for accountability.

Enhancements for Performance Measures, along with all other enhancements, can be found in Chapter 11.

## SECTION 3: THE ENHANCED POLICY DEVELOPMENT AND POLICY ASSURANCE SYSTEM

In Section 3, the descriptions, analysis, and conclusions drawn from Section 2 are used to determine the composition of an enhanced Policy Development and Policy Assurance System. Preferred system enhancements selected from alternatives outlined in Section 2A are incorporated with the supporting enhancements outlined in Section 2B.

**Chapter 11 – The Enhanced System** – Provides a detailed overview of how each component of the system can be enhanced; how the issues identified in Section 1 can be mitigated by the Enhanced System; and a series of focused opportunities for improvement.

**Chapter 12 – Implementation Framework** – Presents considerations for how the Enhanced System can be implemented, including a portfolio of potential enhancement projects; an overview of how the Government of Alberta can transition to the Enhanced System; and a proposed governance structure for the implementation process.

#### 11 THE ENHANCED SYSTEM

#### 11.1 Introduction

The Enhanced System was developed based on an assessment of the potential enhancements outlined in Section 2. The development of the Enhanced System also considered several overarching factors, including:

**REP Principles**: The REP Principles of effectiveness, efficiency, adaptable, predictable, fair, and transparent guided the development of the Enhanced System.

**Scope**: Enhancements considered the need to balance and achieve Alberta's desired social, economic and environmental outcomes.

**Stakeholder and First Nations Input**: Through the REP engagement process, a significant amount of feedback was gathered relating to issues and challenges in the current system and potential system enhancements. This feedback was a primary input for developing an Enhanced System.

**SREM Focus**: The Enhanced System focuses on the activities of the three SREM departments that relate to upstream oil and gas. Other government ministries may be referenced, but were not initially included or affected.

**Land-use Framework and Regional Plans**: The Enhanced System is closely linked and dependant on regional planning efforts under the *Land-use Framework*. Implementation of the Enhanced System will depend to a large degree on regional plans to provide policy outcomes.

#### 11.2 OVERVIEW OF THE ENHANCED SYSTEM

The foundations of the Enhanced System are the *policy development* component, the *policy assurance* component, and the interface between them. These components rely on one another for the sharing of information and direction, common approaches, and integrated processes. REP System Design also identified an arm's length review that could further enhance the overall system. These components together comprise the enhanced Policy Development and Policy Assurance System. The following diagram (Figure 11.1) provides an overview of the *Enhanced System*.

#### **Policy Development**

- Considers Common Interest Matters.
- Enhanced Public Engagement to gather input for policy development.
- Integration of Policy Development and Setting.

# **\* \* \* \* \* \***

#### Interface

- SREM Policy Management Office.
- Facilitates policy integration, policy guidance and communication between policy development and policy assurance stages.
- Ensures a common risk-management approach is used throughout the system.
- Supports and facilitates a coordinated approach to public engagement.

#### Performance Review

Provides a review of the performance of the *Enhanced System* and industry.

#### **Policy Assurance**

- Single Regulator as a New Organization.
- Selects Policy Assurance Tools.
- · Considers Private Interest.
- Reduced Consideration for Common Interest.
- Specified Participation Rights for Private Interest.
- · Includes decision making functions.

Figure 11.1 – Conceptual Enhanced System

#### 11.2.1 An Enhanced Policy Development Component

**Policy Development** 

The *policy development* component is responsible for establishing policy outcomes at a variety of scales, from provincial to sub-regional and issue-specific.

The SREM departments will remain responsible for developing policies and policy outcomes regarding natural resources, and these will be more thoroughly integrated from their inception. This integrated approach to policy development will improve the ability of all natural resource policies to balance social, economic and environmental considerations.

The majority of common interest matters will be considered at the policy development stage.

Public engagement processes will be enhanced at the policy development stage to enable common interests to inform the development of policies. An Enhanced System will focus the consideration of common interest matters at the *policy development* stage. This focus will require enhanced public engagement in the development of policies and policy outcomes. It is critical that public engagement processes at the *policy development* stage be enhanced and coordinated for stakeholders to accept it as credible, meaningful, and effective.

One an enhanced public engagement process is in place at the *policy development* stage, public engagement processes at the *policy assurance* stage can be more coordinated and focused.

This enhancement serves to mitigate stakeholder concerns that the process for public interest is inefficient. The public will have enhanced opportunities to provide input into the development of policy.

While input on common interest matters is intended to be largely gathered at the *policy development* stage, the *Enhanced System* does not preclude a consideration of common interest matters at the *policy assurance* stage. For example, the Government of Alberta may ask for an inquiry on certain common interest issues in order to better inform the policy development exercise.

#### 11.2.2 An Enhanced Interface

#### Interface

The Interface between the *policy development* and *policy* assurance components contains certain common elements and linkages that overlap, connect, and enhance the function of both

components. Potential enhancements are focused on ensuring that policy development and integration is clearly understood, consistently applied, adaptable, and can reduce the emergence of unresolved policy conflicts or gaps with the *policy assurance* component.

Create a SREM Policy Management Office to ensure integration at the policy level.

To facilitate the integration of natural resource policies, the Enhanced System would include the creation of a SREM Policy Management Office (SREM-PMO).

The SREM-PMO will be responsible for ensuring policies are integrated at the *policy* development stage from inception through delivery. The SREM-PMO will ensure Alberta government departments approach policy development as a collaborative effort with shared responsibility for assuring policy outcomes are achieved.

The SREM Policy Management Office (SREM-PMO) would report to SREM Deputy Ministers and would have five key roles:

- Policy Integration The Office would work with all SREM departments to integrate
  natural resource policies and align them at the provincial and regional levels. It would
  also coordinate with other ministries and agencies having authority for decisions that
  impact upstream oil and gas activities.
- Stewardship and Oversight The Office would provide an interface between the policy development and policy assurance components of the system, enabling two-way communication and the provision of clear policy guidance to regulators.

- Stakeholder Engagement The Office would support an enhanced and coordinated approach to public engagement activities in SREM departments, to enable public input to inform policy development.
- Monitoring and Reporting The Office would develop performance measures and report on performance of the Enhanced System. It would also support periodic arm'slength reviews of the system and reporting to government, regulated entities and the public.
- Interface for Federal and Interprovincial Policy Issues The Office would provide a
  coordinated interface for SREM on policy development and policy assurance issues in
  relation to the federal government and other provincial governments.

The initial focus of the PMO will be for SREM. This focus may be expanded at a later time for other Government of Alberta ministries. This authority would work with other entities coordinating strategic policy initiatives, such as the Land-Use Secretariat.

In addition, the SREM PMO will use a *risk-management approach* as one of the ways to determine if new policy is needed, and to help prioritize policy development from a SREM perspective. It will provide guidance to cross-ministry policy development teams to appropriately manage risks to the GoA's social, economic, and environmental outcomes.

#### Adopt a common GoA Risk-Management Approach.

The Interface would oversee the adoption and use of a common *risk management approach* throughout the Enhanced System. The common *risk management approach* will support integration at different levels of activity, from strategic policy development to operational delivery. As well, the approach will improve system effectiveness, efficiency and adaptability.

The proposed Risk Management Framework is based on an internationally accepted standard (ISO 31000<sup>6</sup>). It would be used to help prioritize and integrate policy development, and help inform the selection of Assurance Tools and determine levels of regulatory oversight.

Participants in the REP engagement process identified the appropriate consideration of risk as an opportunity for system improvement.

The Risk Management Framework will be systematic and transparent. Risk management information gathered at one stage of the system will inform the other.

At the *policy development* stage, the Risk Management Framework would be used to evaluate new and existing natural resource policies as they are developed and integrated. It would help assess risks to Alberta's social, economic and environmental outcomes and assist in determining the policy approaches needed to manage those risks.

At the *policy assurance* stage, the Risk Management Framework would be used to rigorously identify and assess risks associated with specific upstream oil and gas development activities. The Risk Management Framework would help inform decision makers in the selection of appropriate policy tools to manage those risks, monitor industry compliance and support the achievement of Alberta's desired outcomes.

<sup>&</sup>lt;sup>6</sup> ISO 31000 is intended to be a family of standards relating to risk management codified by the International Organization for Standardization.

#### 11.2.3 An Enhanced Policy Assurance Component

**Policy Assurance** 

The *policy assurance* component will undergo a number of significant enhancements.

Consolidate all upstream oil and gas regulatory functions and accountability into a Single Regulator.

The *single regulator* would be established as a new organization, building on the existing foundation of the Energy Resources Conservation Board (ERCB). It would assume all *policy assurance* functions currently undertaken by Alberta Environment, SRD and the ERCB, related to upstream oil and gas.

It will include both the initial decision and a review process. The *Single Regulator* would make all decisions and perform all *policy assurance* functions after the acquisition of tenure through closure. These decisions would include right of entry, issuance of dispositions on public lands, licensing of water, and decision to proceed. It would also include all post decision requirements including monitoring and compliance including enforcement, and closure.

Stakeholders generally agreed that a less complex *policy assurance* delivery structure would be easier to navigate, especially if a single point of contact was used to simplify *policy assurance* processes.

A *Single Regulator* structure is intended to focus and streamline the operational deliver of Policy Assurance within the accountability of the existing SREM department mandates. To a large degree, accountability will be improved through the simplification of decision-making in a single agency and through the SREM Policy Management Office.

An important aspect of a *Single Regulator* structure is the effectiveness and efficiency gains realized as a result of reduced duplication; more coordinated processes; and clearer accountability and decision-making for all *policy assurance* functions throughout the project lifecycle. This will likely reduce the time required for application approval.

Other benefits of a *Single Regulator* include:

- A single point of contact for industry and other stakeholders:
- Greater efficiency and effectiveness than One Window and One Submission alternatives because policy assurance functions are combined within a single agency;
- Greater transparency and timeliness of decision-making because there is a single decision, rather than multiple decision points;
- Greater clarity of roles for *policy development* (the SREM departments) and *policy assurance* (the Single Regulator);

A key factor supporting the selection of the Single Regulator enhancement is the lower dependence on integration of operational functions (i.e., a single regulatory process as opposed to integrated, multiple processes). A single process strongly supports the efficiencies and simplicity highlighted by stakeholders as an essential requirement of an Enhanced System.

The Single Regulator structure strongly supports the implementation of the policy direction provided by regional plans under *Land-use Framework* and the emerging Cumulative Effects

Management System. The Single Regulator structure eliminates the redundancy, overlap, and potential misalignment of implementing these policy directions through multiple agencies

A key piece of future work required to establish a Single Regulator is to determine the responsibility for the decision review function, the scope of the review function, and the role of the Court system in the review function. The Single Regulator will also be required to establish review standards, including approval timelines, to provide more predictability to industry proponents.

The costs associated with implementing a Single Regulator are considered to be substantive, but are only likely to be incrementally higher than the cost of implementing a One Window approach. Feedback from industry stakeholders indicated stronger support for the Single Regulator approach, which would also increase the likelihood of industry support for implementing the Single Regulator enhancement.

#### Specify consideration of private interests by the Single Regulator.

With the move to a Single Regulator, a consistent process would be established to enable private interests, specified in legislation, to inform decisions made by the regulator. The separation of common and private interests may not be possible in all project reviews, so the regulator will need some flexibility to deal with specific public interest matters from time to time.

A more focused process enables the Single Regulator to clearly understand whose input is required for decisions. This enhancement also improves certainty for proponents and stakeholders that need to navigate *policy assurance* processes.

#### Increase the range of Assurance Tools utilized.

The suite of Assurance tools available to the Single Regulator will be broadened to allow maximum flexibility in the achievement of integrated policy outcomes.

A broader range of Assurance tools will encourage innovation and support the development of technology, and enable effective use of the Risk Management Framework. In addition, new Assurance Tools will better support the implementation of regional plans and the Cumulative Effects Management System.

#### 11.2.4 Performance Review

**Performance Review** 

A system for reviewing the performance of the Enhanced System will support competitiveness by supporting a framework for accountability. This will enhance accountability and

transparency by measuring the effectiveness of *policy development* and *policy assurance* and will direct attention to opportunities for continuous improvement.

#### Establishment of a formal Performance Measurement Framework

A formally defined Performance Measurement Framework will enhance system accountability for meeting timelines for authorizations and for ensuring social, economic, and environmental outcomes are achieved.

The framework will include the following attributes:

- Formally defined performance measures that align with the REP principles and consider the economy, society, and the environment.
- System benchmarks established internally and through comparison with other jurisdictions.
- A system for monitoring and reporting of performance measures and continuous improvement of the framework.

Reviewed performance will primarily be for the internal components of the system. Where appropriate, performance of industry stakeholders will also be made.

Establish an arm's length panel of regulatory experts to measure the performance of the Enhanced System.

As a unique option for supporting the Performance Measurement Framework, the performance of the system as a whole will be periodically reviewed by an arm's-length panel of regulatory experts. This would not replace ongoing performance measurement or serve as a formal audit. Rather, it would provide an independent review to assure Albertans that the system is effectively and efficiently delivering on integrated policy outcomes. The SREM-PMO would play a role in supporting this arm's length review and associated reporting.

#### 11.2.5 Supporting System Elements

The Enhanced System would include a number of other supporting elements:

#### Link and coordinate information and data management systems.

In parallel with the consolidation of *policy assurance* functions in a Single Regulator, all current information and data management systems will need to be linked and coordinated to ensure appropriate information is being collected and shared. Efficient information technology would support all affected Government of Alberta departments and provide stakeholders with a central point of contact for applications and information requests. A goal for coordination should be that data is GIS-driven, online, and real time.

A coordinated approach to information management is a main opportunity identified by stakeholders. This enhancement will improve the access to relevant and easy-to-interpret data about the Enhanced System.

The development of coordinated information and data management systems for the Government of Alberta is a considerable undertaking and will require significant oversight in order to implement.

Facilitate improvements to the system that encourage innovation in upstream oil and gas development.

Participants in the REP engagement process indicated that encouraging innovation should be a standard practice in the Enhanced System. Through a more consistent approach to *risk management*, the broadening of Assurance Tools, and efficiency gains realized through the use of the Single Regulator, more innovation in upstream oil and gas development is expected to occur.

In order to ensure innovation in the upstream oil and gas sector is translated into improvements in the Enhanced System, an advisory committee focused on innovations may be set up as a sub-committee of the SREM PMO. This sub-committee would be responsible for the following:

- Understanding and employing history and trends for technology development and deployment in upstream oil and gas;
- Establishing criteria for the evaluation of new technologies;
- Evaluating new technologies;
- Assisting in the establishment or modification of assurance processes and Assurance Tools to better accommodate commercialization of new technologies, where appropriate;
- Collaborating in *policy development* and *policy assurance* and other stakeholders where appropriate;
- Developing, monitoring, and reporting on performance measures specifically for innovation and technical advancement.

Existing groups or organizations that are focused on innovation can be approached to assist in this activity as appropriate.

For landowners, facilitate a more effective mechanism to resolve disputes and obtain redress when a company fails to perform related to agreements reached when landowner consent was obtained.

Landowners have indicated that there is no effective and efficient mechanism to obtain redress when a company has either failed to perform or performed poorly with respect to agreements reached with the landowner at the time consent to enter the property was obtained.

It is recommended the Surface Rights Board or another body be given jurisdiction to examine and resolve such disputes through mediation or arbitration. Following the resolution of the dispute, the Single Regulator would be authorized to enforce the agreement using its regulatory tools.

A body such as the Surface Rights Board has the skills and the experience to resolve these types of disputes and by permitting the regulator to enforce the resolutions, there should be "teeth" to ensure compliance with the agreements.

#### 12 IMPLEMENTATION FRAMEWORK

#### 12.1 Introduction

The Implementation Framework for the REP focuses on how changes to the design of the system will be made. The Implementation Framework is organized in two subsequent sections, Governance and Activities.

The system as defined in Chapter 11 provides the input for Chapter 12.

#### 12.2 IMPLEMENTATION FRAMEWORK

The diagram below (Figure 12.1) describes the components of the *Implementation Framework*. Each specific component is discussed in detail.

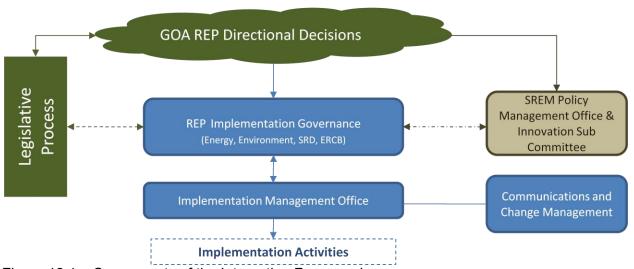


Figure 12.1 – Components of the Integration Framework

#### 12.2.1 Governance Process

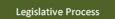
REP Implementation Governance (Energy, Environment, SRD, ERCB) Implementation requires exceptional leadership, sponsorship, timely and consistent decision-making, accountability and a common understanding among leaders.

There should be a single governance process encompassing the Implementation Framework. Its composition should include senior officials from the SREM departments, the ERCB and Alberta Justice and Attorney General. These will be the leaders who are accountable for the implementation and its consequences. The rationale for a single joint governance process is to have coherent oversight of the many interdependencies involved. These include:

- Alignment with policy or other changes already being managed collectively by the SREM departments, e.g. Land-use Framework and regional planning;
- Consistency of approach to upstream oil and gas regulation;
- Consistency of approach to other sectors and natural resources;
- Consistency of approach to information management and data management;
- Consistency of approach to website development and web governance processes;

- Agreement to a common timetable and transition states; and
- Ability to speak with one voice through change management strategies and communications to common stakeholder groups.

#### 12.2.2 Legislative Process



Implementation requires legislative change, which must be directed by decisions about policy and operational requirements. The legislative process cannot commence until decisions about policy

and operational requirements are made. Statutory changes must be made before implementation can be completed.

From the legislative process will flow the following key deliverables:

- Establishment of a Single Regulator;
- Transfer of identified functions and authorities to the Single Regulator.
- Provision of operational authority for the Single Regulator.

Linkages between the Governance Process will manage the Implementation Framework connectivity to the Legislative Process. The key elements of connectivity are:

- The policy intent and "business model" to be addressed;
- Consistency with implementation goals;
- Alignment of timing of the legislative change process with the REP implementation.

#### 12.2.3 Implementation Management Office

Implementation Management Office A formal structure must exist to perform oversight of all implementation activities, whether performed jointly or individually by the departments and Single Regulator. Governance requires a single source of accountability for progress, and a formal

mechanism to ensure that direction is translated into consistent actions.

The objective of establishing an Implementation Management Office (IMO) is to oversee, align, provide accountability and report on all Implementation Framework projects and activities. This ensures direct support of all projects and activities.

The IMO is the overall manager for REP implementation. It is accountable for creating and monitoring all of the implementation projects, including:

- Communication and Change Management Support;
- High Level Alignment;
- Financial Program;
- Connectivity with Legislative Process.

The IMO will provide directional scope and "blueprints" to support and enforce the terms of reference of programs and projects.

#### 12.2.4 Communications and Change Management Support

Communications and Change Management Support

The major shifts being implemented will impact industry, stakeholders and Government of Alberta staff. The desire or ability to accept and adopt change will vary among those impacted. The

Implementation Framework requires proactive change management, industry, stakeholder and staff engagement, and clear and consistent communications throughout.

Deliverables from this group will include:

- A communications program covering the entire implementation including web services;
- Change management support for all projects and activities;
- Selected stakeholder engagement.

Change management support will address the internal change management requirements within Government in addition to the external change management requirements with industry and stakeholders.

#### 12.2.5 SREM Policy Management Office

SREM Policy Management Office Policy integration is a Government priority and a critical success factor for implementation and long term system sustainability. A SREM Policy Management Office has been proposed, whose mandate will be to

address horizontal and vertical policy integration, and joint working between the *policy development* and *policy assurance* components of the Enhanced System. It should be leveraged to support the Implementation Framework.

The SREM-PMO will provide a responsive and authoritative process to address and resolve policy integration issues pertaining to the Implementation Framework.

#### 12.3 IMPLEMENTATION ACTIVITIES

The activities conducted through the Implementation Framework (Figure 12.2) will be organized as follows:

- High-Level Alignment
- Functional Transfer
- Organization
- Information Management
- Financial
- Quick Start

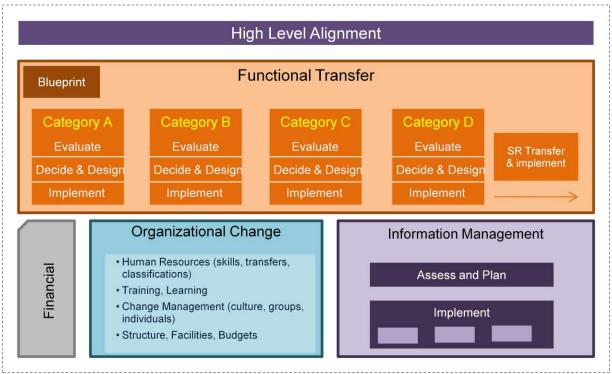


Figure 12.2 – Implementation Activities

#### 12.3.1 High-Level Alignment

High Level Alignment

The REP will not be implemented in isolation. Many other initiatives and changes that will affect the Implementation Framework are already planned and underway. Understanding

is required of how all the pieces fit together at the system level, support the development of the overall Implementation Framework roadmap, and ensure alignment among all of these moving parts over time.

High-Level Alignment will be required to allow for proper alignment of the Implementation Framework and other pertinent initiatives and changes.

#### 12.3.2 Functional Transfer

**Functional Transfer** 

The Implementation Framework will encompass numerous projects and activities required to transfer regulatory functions, change processes, shift resources and provide information

management support on a coordinated basis, organized and managed by a single point of authority. These projects and activities will be distributed across multiple organizations, and many aspects will be jointly resourced.

The objective of the Functional Transfer is to ensure that all required projects and activities are defined and implemented on schedule. This will create consistency in approach, and obtain synergies among projects, in addition to forming the ability to identify and escalate key issues to governance for resolution.

The key areas of responsibility for the Functional Transfer are as follows:

- Identify projects and provide charters and work plans. Some of these have already been identified as part of the REP functional review.
- Facilitate project management and issue resolution.
- Apply a standard approach for each functional transfer, including evaluation; decisions, priorities and designs; and implementation of the transfer.
- Identify training needs and resources.

Table 12.1 – Outline of the potential functions for transfer to the Single Regulator.

Category	Examples
Surface Acquisition	<ul> <li>Geophysical (Seismic) authorization</li> <li>Public land disposition authorization</li> <li>Right of Entry Order</li> <li>Issuance of water licenses</li> <li>Issuance of air or conservation and reclamation approvals</li> <li>Consultation and Notification Requirements</li> </ul>
Wells and Facilities Licensing	<ul> <li>Well License authorization</li> <li>Oil sands authorizations (both mining and in situ)</li> <li>Pipeline authorization (gathering systems – non AUC)</li> <li>Facility authorization</li> </ul>
Monitoring, Compliance, and Closure	<ul> <li>Monitoring, Inspection, Compliance, Enforcement</li> <li>Closure including abandonment, remediation and reclamation certification</li> <li>Well or activity Suspension</li> </ul>

#### 12.3.3 Information & Data Management

Information & Data Management

Policy assurance delivery relies heavily on data needs, data management, information management and systems. Improvements to data management,

information management and systems will be required. Most, if not all, of the regulatory functions being transferred to the Single Regulator for upstream oil and gas will continue to be delivered by ministries to other sectors. Information and data management needs to be considered in this context. Regardless of longer term considerations, solutions must be in place by the time the transferred functions become operational.

The goals of Information & Data Management are to determine how to best use, modify or share existing data management, information management and information systems corresponding with Implementation Framework timelines.

Key responsibilities for Information & Data Management will be to provide the following:

- Readiness assessment to support Functional Transfer.
- Data-needs assessment.
- Information management and systems roadmap to support functional transfers, and a program of technical projects to implement this roadmap.
- Longer-term direction for information management and systems strategy

#### 12.3.4 Organizational Change

Organizational Change

The Implementation Framework will impact organizations, facilities, human resource planning and most of all, individual staff. Regardless of the

process and technology change associated with functional transfer and information systems each participating organization will need to change.

These changes will resolve requirements for facilities and human resource planning on a timely basis to enable implementation. This will ensure the successful communication and change management at the organizational level (including cultural change) as well as support staff as individuals through the transitions.

Stemming from Organization Change will be individual organizational change management developed in part with Corporate Human Resources. This may include:

- Human Resources (including skills, transfers, classifications, etc.);
- Facilities:
- Transition and Change Management;
- Financial Implications.

#### 12.3.5 Financial

**Financial** 

The expedited REP timeline has not allowed the development of detailed costing for its implementation. The information required for this exercise will not be available until the programs described in this

portfolio are underway. The Implementation Framework requires an overall system-level program to determine the full implementation costs, budget impacts, and funding model opportunities, and provide this to governance for resolution.

The Financial Program will determine the costs and cost options for full implementation (including initial funding to commence implementation). This team will provide the initial implementation budget in addition to estimated costs for sustaining the Enhanced System.

The ability to resource REP implementation is a critical success factor. Key resource enablers are budgets and people.

Elements of the Financial Program to be addressed include:

- Funding for one-time implementation costs either directly through REP implementation or coordinated through Government of Alberta ministries and the Single Regulator;
- Development of a sustainability model and its translation into the budgets of Ministries and the Single Regulator;
- Adjustments to the Single Regulator external funding model.

#### 12.4 NEAR-TERM ENHANCEMENTS

There are a number of near-term enhancements to the system that are currently underway. REP implementation will build upon these near-term enhancements. These initiatives are described below.

#### **Call centre coordination**

To provide increased coordination and a single point for Albertans, the call centers for upstream oil and gas will be integrated through a "one-window" approach. By calling a single number, Albertans will be connected with the appropriate point to obtain answers to questions or to access information.

#### **Coordinated compliance inspections**

A program of coordinated compliance inspections, along with a cross-training program for inspectors, will enhance coordination among multiple regulators in the current system. It will enable joint inspections to be conducted at jointly regulated facilities.

As the process is implemented in 2011, joint ERCB, SRD, and AENV inspections of sour gas plants and in situ oil sands operations will be further integrated and coordinated. This will result in fewer inspection-related workplace interruptions for companies, increased efficiencies and consistency among regulators, as well as a more effective use of provincial regulatory resources. This is an important functional step in the direction towards a Single Regulator.

#### Remediation, Abandonment, Reclamation and Reclamation Certification

To continue building a shared understanding of the number of wells advancing through the various life cycle stages of progress towards abandonment and reclamation certification, CAPP and SEPAC will request data from its members to augment the data already provided.

Additional abandonment, remediation and reclamation enhancements will continue to be developed and implemented by winter 2011-12.

#### Clear, consolidated guidance for industry

A new *Upstream Oil and Gas Authorizations and Consultation Guide* has been developed to provide a central reference tool for industry. The Guide consolidates information in a single document, enabling investors to better understand the current authorization and consultation processes for upstream oil and gas development activities in Alberta.

This web-based Guide is now live. It includes conventional and unconventional oil and gas development and activities, as well as in situ oil sands, but not mineable oil sands projects. The Guide clarifies the regulatory processes by identifying common authorizations such as approvals, licenses, dispositions, permits and registrations that are required from Alberta Energy, Alberta Environment, SRD and the ERCB. While the Guide focuses on a range of key authorizations, it does not include all activities. The Guide is available at <a href="http://authorizationsquide.ercb.ca/">http://authorizationsquide.ercb.ca/</a>.

As the system is enhanced, the Guide will be kept up-to-date. It will play an important role in providing ongoing clarity to industry and stakeholders during transition phases.

#### **ERCB Well Spacing and Control Well Testing**

A province-wide framework for well spacing for conventional and unconventional oil and gas reservoirs has been developed and is ready for consultation with stakeholders. The framework:

- a. Removes well density controls for CBM and shale gas reservoirs throughout the province and for all gas zones to the base of the Colorado Group in southeast Alberta.
- b. Increases baseline well densities from one well per pool per standard DSU to two wells per pool per standard DSU province-wide for conventional gas reservoirs.
- c. Standardizes province-wide bottom-hole target areas.

Interim relief from annual pressure testing requirements for CBM control wells has been extended for 2011. The ERCB continues to review testing requirements for CBM control wells.

#### **Deployment of New Innovative Technology**

In order to facilitate the timely deployment of new innovative technology in the upstream oil and gas industry, the ERCB will pursue the following:

- a. Establish appropriate partnerships with other government agencies and/or nonprofit organizations to assess the technical validity and potential commercial viability of new technologies and enable the focus on any regulatory risks that may be encountered.
- b. Identify areas where technology may play an important role in addressing opportunities, issues, and risks or impacts that industry or government researchers should be focusing on.
- c. Establish a point of contact for external parties to initiate dialogue and assist proponents of new technology through regulatory review.

#### **In Situ Application Processes**

The Government of Alberta has considerable knowledge about *in situ* oil sands development from the review, approval, and oversight of more than 30 projects. Based on this experience, the Government of Alberta recognizes that *in situ* resembles conventional oil development more so than it does mineable oil sands projects. Therefore, the Government of Alberta will streamline the environmental assessment process for *in situ* projects, which will shorten approval times. Streamlining will involve the use of a broader set of Assurance Tools and will be informed by the outcomes of regional plans.

To create efficiency while maintaining Alberta's high standards for environmental management, public safety and resource conservation, the current *in situ* oil sands authorization function will be optimized by:

- a. Better reflecting the information requirements of legislation and regulatory decision-making through applying a focused Terms of Reference, including the Human Health Risk Assessment (HHRA), for the Environment Impact Assessment (EIA) Report for in situ projects. This will improve the quality of the regulatory submissions.
- b. Modifying, updating and strengthening the *Environmental Protection and Enhancement Act* (EPEA) approval template.
- c. Releasing the new ERCB Directive which describes the regulatory process for proposed modifications to commercial in situ oil sands projects. The intent is to increase the efficiency and effectiveness of the regulatory process.
- d. Ongoing implementation of the changes to Alberta Environment's Pre-disturbance Assessment administration process.
- e. Continuing to strengthen the in situ oil sands regulatory delivery system.

#### **Better Information Sharing for First Nations Consultation**

Alberta Sustainable Resource Development and the ERCB have established procedures to increase coordination of regulatory processes to now share information more effectively regarding First Nations consultation. The process applies to applications related to gas processing plants, wells and other oil and gas facilities. It is triggered when a concern or objection has been filed with the ERCB by a First Nation relating to the adequacy of consultation. Proponents will provide copies of SRD approvals for the project along with any documents confirming adequacy of consultation. These changes will support the ERCB in making timely decisions on whether First Nations may be directly and adversely affected by applications made to the ERCB.



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## REGULATORY ENHANCEMENT PROJECT

## **Technical Report - Appendices**

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## APPENDIX A - GLOSSARY OF TERMS

Term	Definition
Activity-based Regulation	Regulation based on the type of activity being undertaken.
Agency	Any organization (or part of an organization) that provides regulatory delivery. This includes those portions of Environment and SRD that do delivery, as well as ERCB, and others.
Alberta Utilities Commission (AUC)	The Alberta Utilities Commission regulates the utilities sector, natural gas and electricity markets to protect social, economic and environmental interests of Alberta where competitive market forces do not.
Assurance Tools	The set of processes and concept that may be used to help with assurance. See Chapter 8.
Bowtie	The "Bowtie" is a widely accepted practical approach that adds rigor to qualitative risk analysis. It forces a comprehensive and structured approach to risk assessment, ensures that appropriate management strategies are in place and can help communicate complex risk issues to non-specialists. It has been widely adopted by industries, governments and regulators.
Canadian Association of Petroleum Producers (CAPP)	The Canadian Association of Petroleum Producers (CAPP) represents companies large and small that explore for, develop and produce natural gas and crude oil throughout Canada. CAPP's member companies produce about 90 percent of Canada's natural gas and crude oil. CAPP's associate members provide a wide range of services that support the upstream crude oil and natural gas industry.
Code of Practice	A set of rules that are to be followed by companies, trade, occupation, organization etc. or for certain specified activities;
Consequences	The potential effects of a given risk situation.
Cumulative Effects	An approach which enables a wide range of non-regulatory and policy
Management System	tools, including economic incentives, education and voluntary action to
(CEMS)	help achieve environmental objectives. It is outcomes-based, place-based, performance management-based, collaborative and will be implemented by SREM departments.
Design Team	A group within the REP Project Team that dealt with the design of the enhanced system.
Energizing Investment	A Government of Alberta report released in March 2010. Precursor to the REP.
Energy Resources	The ERCB is an independent, quasi-judicial agency of the Government of
Conservation Board	Alberta. It regulates the safe, responsible and efficient development of
(ERCB)	Alberta's energy resources: oil, natural gas, oil sands, coal and pipelines.
Enhancing Assurance – The First 90 Days	A report released 90 days after energizing investment that details the initiatives for enhancing assurance that were started right away.
Environmental Appeals Board (EAB)	The EAB is an independent administrative agency with legislative authority to hear appeals from decisions made under the <i>Environmental Protection</i> and <i>Enhancement Act</i> , the <i>Water Act</i> , the <i>Climate Change and Emissions Management Act</i> , and Schedule 5, section 6 of the <i>Government Organization Act</i> .
GeoDiscover	A Government of Alberta initiative that links to existing natural resource and other related geo-spatial information in Alberta.
Implementation Management Office (IMO)	An entity design to oversee the implementation of all projects related to the REP.
Information Technology (IT)	The study, design, development, implementation, support or management of computer-based information systems, particularly software applications and computer hardware
in situ	In the original or natural place or site

Term	Definition
Integrated Risk	The proposed approach for conducting risk management.
Management (IRM)	The proposed approach for conducting fisk management.
ISO 31000	ISO 31000 is intended to be a family of standards relating to risk
130 31000	management codified by the International Organization for
	Standardization. The purpose of ISO 31000:2009 is to provide principles
Landlia Francisco (IIIF)	and generic guidelines on risk management.
Land Use Framework (LUF)	The Land-use Framework consists of seven strategies to improve land-use
	decision-making in Alberta
Land Use Secretariat (LUS)	The entity that manages the LUF.
Likelihood	Used as a qualitative description of probability or frequency of a risk
	occurring.
Mineral Surface Lease	The lease that must be obtained to gain access to the surface of public
(MSL)	land in Alberta for the purpose of mineral development.
National Energy Board	The National Energy Board (NEB or Board) is an independent federal
(NEB)	agency established in 1959 by the Parliament of Canada to regulate
	international and interprovincial aspects of the oil, gas and electric utility
	industries.
Non-renewable resources	A non-renewable resource is a natural resource which cannot be
	produced, re-grown, regenerated, or reused on a scale which can sustain
	its consumption rate.
Non-Routine	An activity that does not follow a previously accepted formula or template.
Oil sands	Oil sands, also known extra heavy oil, are a type of bitumen deposit. The
Oli Sarius	sands are naturally occurring mixtures of sand or clay, water and an
	extremely dense and viscous form of petroleum called bitumen.
Outcomes-based	An approach that is based on the achievement of pre-determined results or
Outcomes-based	
	outcomes. This approach emphasizes the setting clear standards for
Doutisia stica Dialete	observable, measurable outcomes.
Participation Rights	The rights afforded to members of the public and applicants to participate
	in a hearing or other decision making process.
Performance measures	Ways to objectively measure the degree of success a program has had in
	achieving its stated objectives, goals, and planned program activities.
Performance-based	An approach in which industries/companies/activities are regulated
	differently based on real or perceived risk, compliance history and/or other
	factors. For example, companies may be subject to higher inspection
	frequencies based on their compliance history or different industries may
	be subject stricter regulation or more onerous approval
	requirements based on the risk, both real and perceived, of their activities.
Place-based	Regulation based on the location or geographical region that an activity will
	occur.
Policy assurance	The function of overseeing the achievement of policy and policy outcomes.
	i.e. Government of Alberta policy assurance system.
Policy integration	Integration aims at producing joint policy, especially policies with cross-
and the second s	cutting objectives, such as sustainable development. It requires a high
	level of collaboration, formal interaction and mutual inter-dependence.
	Policy integration is complex.
Policy development	That part of government which determines policy and policy outcomes,
l siley development	and provides these to the policy assurance system.
	Policy system contains all of the vertical and horizontal activities
	among ministries for setting policy, as well as the authority to make
	laws, regulations and set standards.
	Policy system includes the creation of strategic policies and
	frameworks, and the development and approval of Regional Plans and
	other directives.
Dook Approved	
Post-Approval	This refers to a process or processes through which a regulator

Term	Definition			
	conducts functions which are pertinent to monitoring, compliance and enforcement, and others following the approval of a project.			
Public Engagement	The act of gathering input from the public.			
Reclamation	The act of reclaiming or the state of being reclaimed			
Regional Plans	See Land Use Framework.			
Regulator	The entity that carries out policy assurance.			
Regulatory Alignment	A government initiative that looked at specific enhancements to the current			
Project (RAP)	regulatory system pertaining to the oil and gas sector.			
Regulatory system	See Policy Assurance System			
Renewable resources	Any natural resource (as wood or solar energy) that can be replenished			
	naturally with the passage of time			
Resource Policy	Formal policies or plans relating to natural resources			
Risk	The uncertainty that surrounds future events and outcomes; an expression of the likelihood and consequences of an event			
Risk management	The policies, procedures, and practices involved in identification, analysis,			
	assessment, control, and avoidance, minimization, or elimination of risks.			
Stakeholder engagement	The process used to gather input from previously identified stakeholders.			
Subsurface rights	Ownership of mineral rights (more properly "mineral interest") is an estate			
_	in real property. It is the right of the owner to exploit, mine, and/or produce			
	any or all of the minerals lying below the surface of the property			
Surface rights	The rights to use the surface of the land, including the right to drill or mine			
	through the surface when subsurface rights are involved.			
Surface Rights Board (SRB)	The SRB is responsible for providing accessible processes and delivering			
	timely and fair decisions for Right of Entry orders and related			
	compensation.			
Sustainable Development	Capable of being maintained at a steady level without exhausting the			
Custoinable Descures and	natural resources or causing long-term effect on the environment.			
Sustainable Resource and	Under "Alberta's Commitment to Sustainable Resource and Environmental			
Environmental Management (SREM)	Management" policy, the Ministries of Energy, Environment, and Sustainable Resource Development work collaboratively to guide and			
(SKEWI)	sustain our resource-based economy and environment for the benefit of			
	Albertans.			
Task Force	The group of GOA Members of the Legislative Assembly responsible for			
Tuok Toroo	providing recommendations to the Minister of Energy based on REP			
	findings.			
Task Force Report	A summary of the Recommendations of the Regulatory Enhancement			
	Task Force.			
Tenure	See Subsurface rights.			
Unconventional Gas Project	A project relating to unconventional gas.			
(UGP)	-			
Unconventional oil and gas	Unconventional oil and gas is produced or extracted using techniques			
	other than the traditional methods.			
Upstream oil and gas	Those activities which occur for the exploration, extraction, transportation,			
	and processing of oil and natural gas from the initial acquisition of			
	petroleum and natural gas leases and licenses, through to the sales outlet			
	at oil and natural gas facilities.			

## **APPENDIX 1A - ORGANIZATIONS FOR STAKEHOLDER ENGAGEMENT**

The following organizations were invited to one or more Stakeholder Engagement sessions:

#### **Government of Alberta**

- Alberta Aboriginal Relations
- Alberta Advanced Education & Technology
- Alberta Agriculture and Rural Development
- Alberta Energy
- Alberta Environment
- Alberta Finance and Enterprise
- Alberta Justice and Attorney General
- Alberta Municipal Affairs
- Alberta Sustainable Resource Development
- · Alberta Tourism, Parks and Recreation
- Alberta Transportation
- Alberta Culture and Community Spirit
- ERCB
- Executive Council
- Alberta Health and Wellness
- International and Intergovernmental Relations
- Alberta Municipal Affairs
- Alberta Treasury Board
- Alberta Justice and Attorney General
- Alberta Transportation

#### Industry

The Upstream Oil and Gas Industry was represented by the Canadian Association of Petroleum Producers. The following organizations were part of this group:

- The Alberta Chamber of Resources
- Canadian Energy Pipeline Association
- Canadian Association of Geophysical Contractors
- Canadian Association of Oilwell Drilling Contractors
- Canadian Society for Unconventional Gas
- In Situ Oil Sands Alliance
- The Small Explorers and Producers Association of Canada
- Petroleum Services Association of Canada
- The Oil Sands Developers Group

#### **Environmental and Non-Government Organizations:**

- Agriculture and Food Council of Alberta
- Agri-Environmental Partnership of Alberta (AEPA)

- Alberta Airsheds Council (AAC)
- Alberta WaterSMART
- Clean Air Strategic Alliance (CASA)
- Environmental Law Society
- The Land Stewardship Resource Centre of Canada
- The Pembina Institute
- Toxics Watch Society of Alberta
- Trout Unlimited Canada (TUC)
- Water Matters Society of Alberta
- Alberta Conservation Association (ACA)
- Alberta Fish and Game Association
- Alberta Wilderness Association
- Alberta's Industrial Heartland Association (AIHA)
- Canada West Foundation
- Canadian Parks and Wilderness Society (CPAWS) Northern Alberta Chapter
- Clean Air Strategic Alliance (CASA)
- Ducks Unlimited Canada Alberta
- Hunting for Tomorrow
- Integrated Landscape Management (University of Alberta)
- Miistakis Institute
- Nature Conservancy Canada Alberta and The North
- Water Planning and Advisory Councils (WPAC)

#### **First Nations**

All 47 First Nations and the three Treaty Organizations in Alberta were invited, the following list represents those that attended a session.

- Blood Tribe
- Chipewyan Prairie First Nation
- Louis Bull Tribe
- Mikisew Cree First Nation
- O'Chiese First Nation
- Peerless Trout First Nation
- Sucker Creek First Nation
- Tallcree First Nation
- Tsuu T'ina Nation

#### **Landowners and Landowner Associations**

In addition to these groups, some individual landowners were invited to participate in the REP engagement process.

- Agri-Environmental Partnership of Alberta (AEPA)
- Alberta Land Trust Alliance (ALTA)

- Alberta Parks
- Alberta Surface Rights Group
- Davey Lake Surface Rights Association
- Freehold Owners Association (FHOA)
- Land Advisors Association
- My Landman Group Inc
- Pine Lake Surface Rights Association
- Southern Alberta Land Trust Society (SALTS)
- Springdale Surface Rights Association
- Synergy Alberta

#### **Municipalities and Municipal Associations**

- Alberta Association of Municipal Districts and Counties (AAMDC)
- Alberta Urban Municipalities Association (AUMA)
- · City of Brooks
- City of Calgary
- · County of Grande Prairie no. 1
- Drayton Valley
- Grande Prairie No. 1
- Lacombe County
- Northern Sunrise County
- Parkland County
- Regional Municipality of Wood Buffalo
- Strathcona County
- Town of Fort MacLeod
- Town of Peace River
- Yellowhead County

# APPENDIX 4A – GOVERNMENT OF ALBERTA STRATEGIC NATURAL RESOURCE POLICIES

The Government of Alberta delivers a diverse and complex suite of natural resource policies through several government departments (e.g., Alberta Energy, Alberta Environment, Alberta Sustainable Resource Development, etc.). In order to understand and describe the linkages between these policies, existing natural resource policies were "mapped" based on their relationship to one another.

The outcomes from nine existing Government of Alberta strategic policies were grouped into six Policy Directions (Figure 1).

- <u>Economic Prosperity</u>: focus on economic growth, competitiveness, prosperity or sustainability.
- <u>Clean Energy</u>: focus on technology and innovation specific to energy production and associated effects.
- Wise Use: primarily focus on conservation, stewardship, and improved use of all resources.
- <u>Adaptation</u>: focus on improving economic and society's capacity to adapt to changing conditions.
- Healthy Communities and Quality of Life: focus on individuals and communities.
- <u>Environmental Health</u>: directly focus on the environment required to enable societal and economic outcomes.

This assessment was used to understand the state of integration and support the development and analysis of enhancements to the system.

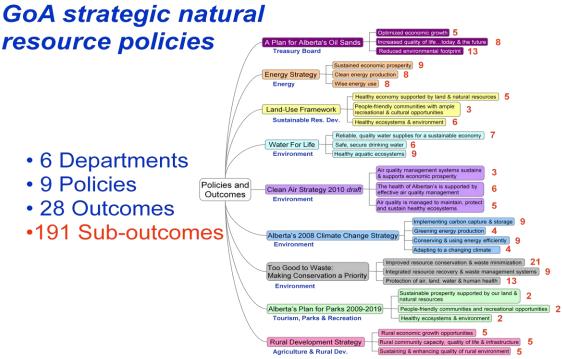


Figure 4A1 GoA Strategic Natural Resource policies.

## **APPENDIX 8A - POLICY ASSURANCE TOOLS**

The Assurance Tools used to assure policy outcomes generally reflect a historical approach to regulation adopted by a jurisdiction or agency. The tools occur along a regulatory continuum from "strict prescriptive' to "less prescriptive' approaches and are often used in combination (i.e., self-regulation tools may be paired with education or information tools).

For the purposes of REP, Assurance tools are divided into four broad categories:

- a. Command and control tools;
- b. Economic tools;
- c. Self-regulation; and
- d. Common tools.

These categories of regulatory tools are not the only forms of regulation, but they represent some of the most common approaches to regulation. These tools can be combined in a wide variety of different ways to achieve desired outcomes.

#### **COMMAND AND CONTROL TOOLS**

Command and Control tools are typically more stringent that other regulatory tools, as they require compliance with specific legal requirements (Table 8A.1). This category of tools includes prescriptive regulations, performance-based regulations or standards, and process-based standards.

As their name implies, *prescriptive regulations* prescribe the methods to be used and the results to be achieved in carrying out a regulated task. There is no option to use alternate approaches.

A *performance-based standard* provides more flexibility by specifying the desired regulatory outcome and leaving the specific measures to achieve that outcome up to the discretion of the regulated entity. In other words, a regulatory agency sets a regulatory goal and lets each regulated entity decide how to meet it.

A *process-based standard* requires regulated entities to engage in certain management practices that are designed to achieve or avoid a particular regulatory outcome. For this reason, this grouping of tools is also called "management-based regulation". In contrast to other Command and Control tools where the achievement or avoidance of the outcome is mandatory, process-based standards make the establishment of particular management practices or internal procedures mandatory.

Table 8A.1 – Types and characteristics of Command and Control Assurance Tools

Types of Assurance Tools	Setting Requirements	Assuring Compliance	Opportunities and Challenges
Prescriptive Regulations	One or more regulatory agency	Regulator ensures regulated entities are in conformance with all prescribed requirements (e.g. through inspections, audits, compliance	Requirements are consistent     Requirements are consistent     Greater ability by regulator to control and assess compliance     Outcomes are predictable as requirements clear and discretionary powers are more limited     Challenges     Prescriptive regulations may not have the same degree of flexibility as other tools to be able to adjust to changing market conditions     May be less cost-effective than alternative tools which rely on competition in the market place to reduce costs     Developing, amending or rescinding existing regulations

Types of Assurance Tools	Setting Requirements	Assuring Compliance	Opportunities and Challenges
		assessment)	result in significant time lags for development
Performance-Based Regulations or Standards	Government agency sets outcome; regulated entity/industry determines the measures to achieve outcomes	Regulated entity does self-assessment; government audits	Opportunities  Greater emphasis on performance as opposed to meeting "requirements" or following required processes and procedures  Industry has greater flexibility to explore and employ cost effective methods or technology to meet prescribed outcomes  Promotes innovation and competition as industry is able to apply more sophisticated technology at lower market costs  Encourages industry to put in place more specific systems and processes to manage each risk; filling gaps that may occur in prescriptive regulations.  Creates a more equitable and fair, competitive environment by not prescribing a favored method, approach, or technology to meet a particular outcome.  More effective and efficient at adapting to changing technological and market conditions (i.e. if not using established design standards)  Challenges  Places greater onus on industry/regulated companies  May lack clear benchmarks to measure performance, gauge the level of progress, enforce compliance, and justify and legally defend enforcement actions  Poorly defined or operationalized performance measures may lead to legal implications if using the force of law to enforce compliance  Measuring performance a challenge if based on predictions or estimates rather than actual events  If performance based standards defined too narrowly may offer little discretion to the regulator and little flexibility to the regulated entity  May impose excessive transaction costs on businesses especially small firms if must search for ways to meet standards
Process-Based Standards	Government agency establishes standards or overall requirements and reviews industry-set management systems or process requirements	Industry sets and assesses against standards and process requirements, conducts internal audit and government conducts external audit	<ul> <li>Opportunities</li> <li>Decision-making delegated to those most informed of relevant operational risks and appropriate control measures</li> <li>May result in the application more cost-effective measures</li> <li>Tools designed with a high degree of industry involvement may promote greater compliance among that industry's players</li> <li>Enables the use of third party, private certifiers; thereby, lessening pressure on governmental enforcement resources</li> <li>Businesses have greater flexibility to apply more innovative regulatory solutions</li> <li>Challenges</li> <li>Dependence on industry with minimal government oversight for professional accountability and control mechanisms</li> <li>Regulatory compliance is may not be assured in accordance to a stated regulatory objective or endpoint, compliance assurance is based on the components of a plan or internal control system</li> <li>Implementation of control mechanisms dependent upon private sector depending on level of prescription</li> <li>Small and Medium Enterprises may lack the expertise or financial resources to properly design and implement management plans</li> <li>Regulatory actions may be limited to correcting system defects rather than focusing on regulatory outcomes</li> </ul>

## **ECONOMIC TOOLS**

Economic Assurance tools, also referred to as Market-based Instruments (MBI) include instruments or regulations that encourage behaviour through market signals rather than through other Assurance tools, such as explicit directives. Generally, the three types of economic Assurance tools are charges or taxes, subsidies, and tradable permits (Table 8A.2).

Charges or taxes are a fee imposed on a regulated entity for the right to use a public good. This group of economic tools is based on the 'Polluter Pays Principle (PPP); which requires that a polluter must bear the cost to maintain environmental quality. The types of charges or taxes can include: emission (or effluent) charges, product charges or levies (to cover the cost of their recovery or recycle), user charges, administrative charges, and betterment charges.

Subsidies are another type of economic tool. Subsidies are a payment or tax concession that assists firms achieve a desired outcome. In that sense a subsidy is the opposite of taxes. The subsidy could be offered per unit of change or be a flat rate.

Tradable permits involve an initial decision on an overall level of acceptable activity (e.g. a threshold environmental condition), after which tradable rights or quotas are allocating up to this pre-determined level. Firms that run out of allowances must buy them from other companies or face legal penalties. In either case, it is in the financial interest of the participating firms to reduce their activity below the acceptable level as much as they efficiently can. By containing the number of tradable permits or monitoring tradable rights, government is able to contain market activity in terms of: emissions, use of resources and the volume of industry activity in a particular area.

Table 8A.2 - Types and characteristics of economic Assurance tools

			onomic Assurance tools
Types of Assurance Tools	Setting Requirements	Assuring Compliance	Opportunities and Challenges
Charges/ Taxes	Government agency		<ul> <li>Opportunities:         <ul> <li>Provide incentives for technological innovation and diffusion</li> <li>Decreased externalities as decision-makers bear the cost of the decision</li> <li>Generation of government revenues</li> <li>Satisfaction of 'polluter pays principle'</li> <li>Creation of financial incentives to exceed standards (e.g. with permits; potentially sell extra "credits")</li> </ul> </li> <li>Challenges:         <ul> <li>Institutional constraints (e.g. underfunding, unclear jurisdiction) can limit effectiveness</li> </ul> </li> <li>Costs to regulator to establish substantive requirements and administration procedures may be high for administration,; also monitoring and enforcement costs may be high as well as administrative costs to industry</li> <li>Need to understand industry to ensure set appropriate levels for taxes, subsidies and permits for non-market environmental commodities</li> <li>May increase cost of goods and services and, therefore, consumer costs</li> </ul>
Subsidies	Government Agency		Opportunities: Cost Effective Provide incentives for technological innovation and diffusion Decreased externalities as decision-makers bear the cost of the decision Generation of government revenues Satisfaction of 'polluter pays principle' Creation of financial incentives to exceed standards (e.g. with permits; may sell extra) Challenges: Institutional constraints (e.g. underfunding, unclear jurisdiction) Costs to regulator for administration, monitoring and enforcement costs may be high as well as administrative costs to industry Need to understand industry to ensure set appropriate levels for taxes, subsidies and permits for non-market environmental commodities May increase cost of goods and services and, therefore, consumer costs

Types of Assurance	Setting	Assuring	Opportunities and Challenges
Tools	Requirements	Compliance	
Tradable Permits	The allowable levels or conditions are set by a government agency. Permits may be either allocated directly to companies generating the pollution or made available through market auction.	Industry responsible for reporting on goals met while government agency monitors results	Tradable licenses and permits allow effective use of resources and encourage least cost solutions across an industry sector     Able to embed performance expectations in permits.     May reduce administrative costs to government by relying on market place to make decisions     Improved practices which often result in reduced wastage and lower costs.     Improved overall industry performance and maintenance of minimum acceptable standards of performance.  Challenges     Can restrict market entry     Market failures can prevent the system from operating successfully and may lead to requirement for constant monitoring by government

#### **SELF-REGULATION TOOLS**

Self-Regulation is a category of Assurance Tools that refers to instances where compliance is assessed and assured by industry against standards developed within the industry (Table 8A.3). Standards are often developed or identified by an industry association or through a multistakeholder process, and then administered as industry standards, codes of conduct, or professional standards.

In the case of *industry standards* or *codes of conduct*, industry establishes codes of conduct, performance standards or management practice standards that are designed to improve performance or management practices in a particular industry or sector. These standards can be applied by the industry body (e.g., as a condition of membership) or be recognized in regulation. These standards can be recognized in regulation or interim regulatory requirements

For *professional standards*, quantified or other specified requirements of performance established by a professional body or standard-setting body that members are required to follow/adhere to as a condition of membership

Table 8A.3 Types and characteristics of Self Regulation Assurance Tools

Types of Assurance	Setting	Assuring	Regulation Assurance Tools Opportunities and Challenges
Tools	Requirements	Compliance	opposition and other states of the states of
Industry Standards / Codes of Conduct	Industry Association; can be in consultation with government or other industry stakeholders; some criteria or standards set through multi- stakeholder processes (e.g. sustainable forest management)	Industry provides assurance through requirements it establishes to be followed by its member companies, either as association- led verification or company audit or verification to the agreed system.  If the standard is recognized in regulation, government can audit the	<ul> <li>Opportunities</li> <li>Creates peer pressure and support across companies for performance improvement through voluntary agreement and membership approach</li> <li>Effective in encouraging better practices and discouraging poor company behaviours.</li> <li>Industry directly engaged in development leads to greater buy-in</li> <li>More informed, less costly.</li> <li>Can address consumer requirements or stakeholder expectations - quality, price, choice, environment, health and safety.</li> <li>Promotes best practice and continuous performance improvement</li> <li>Improves the public image of industry and promotes public confidence in regulation.</li> <li>Easy to update and revise.</li> <li>Ability to quantify performance outcomes.</li> <li>Industry understands standards and process controls.</li> <li>Convenient measures which can be monitored.</li> <li>Reputation or condition of membership in the association is an incentive for participation</li> </ul>

Types of Assurance Tools	Setting Requirements	Assuring Compliance	Opportunities and Challenges
		verification system application.	Challenges Poor design may cause additional cost, frustration, negative publicity and not achieve desired outcomes. If not transparent, will not achieve support. Depends on sector/industry willingness to raise the bar; the adoption of minimum industry standards may not encourage continuous improvement.
<del></del>	D ( ) 1	D ( : 1	Requires strong industry involvement and understanding
Professional Standards	Professional Association	Professional Association provides assurance in terms of its own membership	Opportunities Requires adherence by a full body of professional practitioners who work in companies (i.e. regulated entities) Challenges Risk of low adherence Closed to public scrutiny

#### **COMMON TOOLS**

Common tools refer to such tools as establishing regulatory tiers, education programs/information disclosure, rewarding good behavior and third party certification that can be applied within the other categories of Assurance Tools (Table 8A.4).

Regulatory tiering refers to a process whereby different industry segments are treated differently under regulations.

Education programs or information dissemination tools are used to raise the industry awareness of a particular problem or issue, or to upgrade the knowledge or skill levels within industry or amongst key stakeholder groups. Information disclosure covers publication or disclosure of industry regulatory compliance levels or performance at the company or aggregate industry/sector level. Information disclosure can be voluntary and led by industry (e.g., through an industry association) to demonstrate its performance, or it can be used in the regulatory system in conjunction with other tools to reveal both good and poor compliance to regulatory requirements.

In some cases, *rewarding good behaviour* can be used to encourage preferred business behaviour. It involves rewarding companies with good regulatory track records, or demonstrated beyond compliance performance, and penalizing those with poor records. Rewards for regulatory compliance can take the form of a reduction in the number of licenses required, faster approvals, a lowering of the frequency of random audits, use of taxes, subsidies/ financial rewards, allowing for self-regulation or by reducing other burdens.

Third party certification is a process by which an organization is authorized (accredited) to certify compliance with regulatory requirements or industry performance or management practice standards.

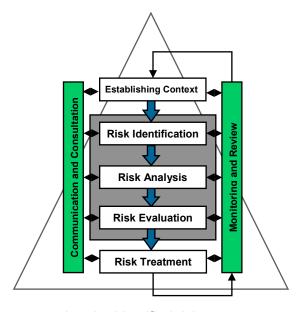
Table 8A.4 – Types and characteristics of Common Assurance tools

Types of Assurance	Setting	Assuring	Opportunities and Challenges
Tools	Requirements	Compliance	
Regulatory Tiering	Applied by government within regulations	Government	Opportunities Able to recognize different sector experiences and capacities. Cater for small business issues. Preserve flexibility and outcomes without disadvantaging some sectors. Able to reflect level of risk Efficiencies for lower risk activities Challenges

Types of Assurance Tools	Setting Requirements	Assuring Compliance	Opportunities and Challenges
Education Programs / Information Dissemination	May include government, private sector,	May include government, private sector,	Unforeseen impacts. Risk of being misunderstood if complex. Can create a threshold effect (deter business activity, employment, etc.). Can increase enforcement costs for Government.  Opportunities Increases compliance by raising awareness about specific issues.  May sadded recoverse execution implementing and enforcing.
	not-for-profit or member- based association	not-for-profit or member- based association	<ul> <li>May reduce resources spent on implementing and enforcing regulations.</li> <li>Can be an effective sanction.</li> <li>Informs users/consumers of products/services.</li> <li>Challenges</li> <li>May be less effective than other regulatory methods as it can rely on voluntary compliance.</li> <li>May have little impact on business and market prospects.</li> <li>May not impact on consumer behaviour.</li> </ul>
Rewarding Good Behaviour	Government or Industry	Government or Industry	Opportunities  Efficient and responds to industry efforts to improve performance and compliance levels  Encourage appropriate behaviour.  Market acceptance of rewards for outcomes.  Requires company or industry sector to demonstrate superior performance  Challenges  Requires monitoring and enforcement.  Financial incentives/disincentives may be inappropriate.  Poor outcomes if industry is not involved.
Third Party Certification	The accrediting organisation and standard setter may be an industry body (e.g. industry association), a standard setting body (e.g. ISO Canadian Standards Association) or another organisation formed with the specific purpose of developing and assuring standards are met in a specific industry or sector certifying organisations e.g. Forest Stewardship Council.	Accredited certification entities including individual experts, consulting/eng ineering firms and not-for-profit bodies.	<ul> <li>Opportunity:</li> <li>Industry involvement in certification and monitoring is more efficient and provides better industry understanding of regulatory requirements.</li> <li>Third party certification can be more efficient and less cumbersome than traditional arrangements.</li> <li>The third party certification organization can play an extended role in providing education, feedback on regulatory requirements and can be involved in monitoring and evaluation of the effectiveness of the regulation.</li> <li>The extension of certification from government to private sector certifiers provides greater access to a pool of skilled certifiers. The use of non-government certifiers improves efficiency for the client and streamlines the required approvals and inspection processes.</li> <li>Challenges:</li> <li>Successful implementation of this alternative results in a reduction in time and costs to business clients with streamlined approval and inspection processes.</li> </ul>

# APPENDIX 9A – SAMPLE INTEGRATED RISK MANAGEMENT FRAMEWORK

The approach presented here presents the risk management process as a series of discrete elements for descriptive purposes – in reality, the elements overlap and blend together.



#### Step 1 - Establishing the Context

This step is intended to outline the context in which the risk assessment will take place. It can include three levels of assessment: strategic, policy, and operational (project). The various levels of assessment will determine the internal and external stakeholders that are required for completing the next steps in the assessment process, as well as the duration or timeframes associated with the assessment.

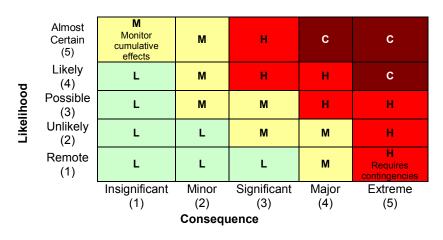
#### Step 2 - Risk Identification

Risk identification is done by reviewing various types of information including reports, audits and evaluations as well as by conducting interviews. This identification of risks should be validated to

ensure that the identified risks are supported by those involved and by applicable information. Risk identification includes the identification of risks to specific groups or agencies (e.g., department, division, branch), the source, condition, and consequences or a particular risk, and the current factors that might mitigate the identified risks.

#### Step 3 - Risk Analysis

The Risk Analysis step takes into account all the current risk controls and risk treatments, as well as the current resources applied to manage this risk, and then rates risks by their potential consequences and likelihood of occurrence. The combination of the consequence and likelihood ratings results in an overall risk ranking of critical (C), high (H), moderate (M) or low (L) that can be depicted in a matrix format:



#### Step 4 – Risk Evaluation

The Risk Evaluation step is where a determination is made about the acceptability of an identified risk and the requirement for a response or treatment.

#### **Step 5 – Risk Treatment (Risk Response)**

Risks can be treated or responded to by opting to *reduce*, *share*, or *accept* the risk. In this step, a plan should be developed that is consistent with the chosen treatment and most cost effectively reduces the risk ranking to tolerable levels. The exception is that acceptance of an intolerable risk may still require a contingency plan (e.g., a Business Continuity Plan).

#### **MONITORING AND REVIEW**

It is essential that decisions made in Steps 1 through 5 be recorded in a risk register. This creates a risk profile and facilitates identification of risk priorities and continuous monitoring. The management of risk must be reviewed and reported on at regular intervals to determine if the risk profile is changing (e.g., a change in risk ratings, identification of new risks, changes in control effectiveness, etc.) and if the overall risk management process continues to be effective.

#### COMMUNICATION AND CONSULTATION

Communication is an essential part of each step in risk assessment and management processes and includes both internal and external parties.

## **APPENDIX 10A - PERFORMANCE MEASURES CONSIDERATIONS**

Performance measures can be categorized as:

- 1. Measures of **Quality** (e.g. the level of accuracy that is achieved in a task, activity or element of the process)
- 2. Measures of **Time** (e.g. cycle time which is the length of time it takes to complete a task, activity or element of the process)
- 3. Measures of **Cost** (e.g. cost of an inefficient process or bottleneck)

Proposed performance measures must be analyzed and evaluated in order to establish feasibility, value, and practicality in terms of implementation. Performance measures should appropriately represent objectives of the policy system; align with system principles; ensure balance among social, economic, and environmental outcomes; and reflect the obligations of both government and industry.

Each measure should also adhere to "SMART" criteria:

- **Specific** measures should be specific to a particular activity or function and can be focused on outcome, output, efficiency or explanatory
- **Measurable** there must be a way to evaluate achievement of the measure in terms of complexity of both implementation and data collection
- **Attainable** the measure must be attainable, and the desired performance must be stated so that the measure can be evaluated appropriately (e.g. meets target, exceeds target, does not meet target)
- Relevant the measure must be relevant to system and higher-level objectives
- Timely the measure must have time boundaries associated with it

Monitoring and continuous improvement also requires that sufficient data and information systems be available to capture the required information for evaluation. When performance measures are selected, the following items should be considered to ensure data can be collected appropriately:

- **Data source** Where does the data come from and is it a reliable, consistent source?
- Method of data collection How will the data be collected?
- Method of calculation If calculations are necessary, how will they be performed? Will
  they change from year to year?
- **Data limitations** In what cases would the data be unavailable? What are the limits to the data?
- Calculation type Is the data cumulative or non-cumulative?

#### GOVERNMENT OF ALBERTA SPECIFIC REQUIREMENTS

Accountability and performance measures are inherently related. Reporting performance measures results in business plans and annual reports is central to the fulfillment of public accountability for the Government of Alberta. Performance measurement for the regulatory system must meet the Government of Alberta's standards for accountability.

## APPENDIX 10B - SELECTION OF JURISDICTIONAL BENCHMARKS

Benchmarks created from comparable jurisdictions constitute a form of benchmarking to compare Alberta's performance to other jurisdictions. In the selection of comparable jurisdictions, there should be demonstrated similarities in several performance-influencing categories to ensure the credibility of the benchmark comparison. In addition, the jurisdictions' data results should be credible, collected and reported for several years, and match the time frame as the results collected for the "home" jurisdiction. Benchmarks should have reasonable expectations and be achievable.

When selecting performance measures from other jurisdictions, the following guidance may be used:

- Jurisdictional comparisons will not be perfect. Each jurisdiction has its own context, strengths and weaknesses. It would not be prudent to make major decisions based strictly on benchmark comparison results.
- Select benchmark jurisdictions on the basis of the characteristics to be measured. The
  bases of selection should consider: the best fit for characteristic and jurisdiction; what
  the particular jurisdiction is experiencing and doing; and how this compares with Alberta.
  Compare "apples to apples".
- 3. Jurisdictions that show a range of results will provide a clear picture of Alberta's comparable performance. Avoid selecting only those jurisdictions that Alberta easily outperforms.
- 4. For some performance measures, it may be appropriate to set Alberta's targeted results at the top end of the benchmark range. However, an assessment needs to be made as to whether extremes in high/low results imply that Alberta's regulatory strategies are either too lax or too extreme. In these cases, mid-range targets may be more desirable.
- 5. Performance measures and benchmarks that might be used to establish whether a balance has been achieved in reaching outcomes should include performance measures for competitiveness, as well as performance measures for monitoring and enforcing environmental standards.
- 6. Consider incorporating jurisdictions that also have single regulators for regulatory administration benchmarks.

In addition, the Price Waterhouse Coopers' report, *Alberta's Royalty System—Jurisdictional Comparison* (June 2009), offers the following cautionary concerns regarding comparisons with other jurisdictions:

- Comparisons to Alberta, particularly at the international level, are difficult to make because of the unique nature of Alberta's resources and the specific environment in which private developers operate.
- There are challenges to data availability, completeness, accuracy and overall comparability with regards to comparisons using international jurisdictions.

It is imperative that the Government continually monitors other jurisdictions to ensure that the system is meeting the intended objectives. However, regulatory policy should consider the contexts that also influence the outcomes.

