

Government of Alberta ■

BUDGET 2010

Striking the Right Balance

Environment
BUSINESS PLAN 2010–13

Alberta ■

Environment

BUSINESS PLAN 2010-13

ACCOUNTABILITY STATEMENT

The business plan for the three years commencing April 1, 2010 was prepared under my direction in accordance with the *Government Accountability Act* and the government's accounting policies. All of the government's policy decisions as of January 20, 2010 with material economic or fiscal implications of which I am aware have been considered in preparing the business plan.

The ministry's priorities outlined in the business plan were developed in the context of the government's business and fiscal plans. I am committed to achieving the planned results laid out in this business plan.

Original signed by

Rob Renner, *Minister of Environment*
January 22, 2010

THE MINISTRY

The Ministry of Environment consists of the Department of Environment and the Climate Change and Emissions Management Fund as the entities for government reporting purposes as well as the Environmental Appeals Board, which is a quasi-judicial board reporting to the minister. In addition, three Delegated Administrative Organizations report to the minister and operate with separate board governance and financial management. They are the Alberta Recycling Management Authority, the Beverage Container Management Board and the Alberta Used Oil Management Association.

The ministry's authority to carry out its mandate is based on the *Environmental Protection and Enhancement Act*, the *Water Act* and the *Climate Change and Emissions Management Act*.

VISION

Alberta's healthy environment sustains a high quality of life.

MISSION

Alberta Environment leads environmental cumulative effects management.

LINK TO THE GOVERNMENT OF ALBERTA STRATEGIC BUSINESS PLAN

The Ministry of Environment is committed to making Alberta an innovative and prosperous province where Albertans enjoy a high quality of life built on vibrant communities and a healthy environment, as outlined in the *Government of Alberta Strategic Business Plan*. The key linkage between the Ministry of Environment's 2010-13 Business Plan and the *Government of Alberta Strategic Business Plan* is:

Government of Alberta Goal 3: The high quality of Alberta's environment will be sustained.

The Ministry of Environment contributes to this goal by providing the leadership to assure environmental outcomes benefit our economy and quality of life for present and future generations. Leadership is provided to transition to and implement an outcomes focused environmental cumulative effects management system, develop all Alberta's energy resources, including the oil sands, in an environmentally sustainable way, implement the provincial *Climate Change Strategy*, implement the renewed *Water for Life* strategy, and to work with other ministries to develop and implement the integrated and accessible environmental information systems critical to achieving Alberta's goals for the environment.

VALUED BEHAVIOURS

The ministry's values are reflected in our corporate and individual behaviors. They define how we treat our stakeholders, clients, partners, the public, and each other.

Respect – We foster an environment in which each individual is valued and heard.

Accountability – We are responsible for our actions and for contributing to the effectiveness of the public service.

Integrity – We behave ethically and are open, honest and fair.

Excellence – We use innovation and continuous improvement to achieve excellence.

SIGNIFICANT OPPORTUNITIES AND CHALLENGES

The ministry is working collaboratively across government and with stakeholders to respond to increasingly complex environmental challenges and risks, such as:

Environmental policy and strategy coordination

In response to the global fiscal crisis and recession that began in October 2008, the ministry took steps to ensure the integrity of fundamental environmental priorities and the wise use of available public resources in the environment portfolio. As the recession turns to global economic expansion once more, perhaps as soon as 2010, some familiar pressures for environmental management will re-emerge and new ones will certainly arise creating opportunities and challenges. For example, the continued divergence of the price of oil and that of natural gas means we may face the challenges of a reinvigorated oil sands sector at a time of decreased government revenues. A coordinated approach to policy and strategy implementation is needed to address these challenges, an approach that works across sectors and ministries and engages key players who drive change as well as those who may be affected by it.

Cumulative Effects Management

The *Land-use Framework* and a cumulative effects management approach will be the management system that Alberta will use to implement key environmental strategies and to respond to emerging environmental pressures.

Cumulative effects management recognizes that our watersheds, airsheds, landscapes and biodiversity have a finite carrying capacity. Our future well-being will depend on how well we manage our activities so they do not exceed the carrying capacity of our environment. During the past decade, Alberta Environment has considered how to shift from a project by project regulatory approach to a cumulative effects management approach. Cumulative management recognizes that it is the combined impacts of individually-regulated projects, in conjunction with activities that are not directly regulated, that need to be considered to understand their effects upon the environment. A project by project approach made sense when Alberta had fewer people and less activity but with increased pressure today, and anticipated for the future, we - government, industry and community - need to understand the whole picture and work together to make decisions today that will ensure sustainability.

Transforming to a cumulative effects management system is both a tremendous opportunity and challenge. It is challenging because it will require implementation of a knowledge-based system that spans traditional departmental boundaries and will require collaboration and integration of cross-ministry work. It also represents an opportunity to build a relevant approach that will address the challenges of the future.

Water decisions

There is a limited supply of water. Increasing demands from economic and population growth and the real possibility that historic supply volumes could be at risk during dry periods are water pressures that require improved water decision-making. The key challenge is to move from managing through government regulation by a few decision makers to shared governance, where many stakeholders help set the direction. The Government of Alberta and its partners are taking steps to share responsibility for water management decisions more broadly, without placing the assurance of key outcomes at risk. Alberta needs a water management system with improved water decision-making to serve Albertans in periods of adequate water supply and to position Alberta to manage a relative scarcity not experienced for generations.

Greening energy development in Alberta

Alberta's energy development sector has demonstrated, over at least five decades, their ability to operate responsibly as a good steward of the environment. Now, further action is needed by industry and government to ensure Alberta's energy development is aligned with the global economy and the expectations of international energy consumers. What has changed is the critical nature of climate change risks on a global scale and the growing recognition that dramatic action is required to reduce the carbon content of our fuels and further reduce pollution from the combustion of hydrocarbons in vehicles, in buildings and in industry. Action is needed to demonstrate to consumers and regulators in other jurisdictions where Alberta energy products are marketed, that Alberta is doing its share and in fact is leading us toward a less carbon-intense energy future.

Evolving climate change policy

Climate science and policy to respond to the risks of climate change are evolving rapidly. The changing climate is expected to affect Albertans, communities and ecosystems. It may also create new opportunities. Alberta has been leading on the climate change file among Canadian jurisdictions, but cannot afford to stand still on this issue. Alberta must continue to keep up to date on the latest science and knowledge about climate change and adaptation. Climate policy, even though only a year or two old, may have to change to respond to new information and pressures. The Government of Alberta is attempting to influence international policy forums and to seek alignment with others on the key issues.

Key shift in public values – environment and economy as one issue

Growing certainty that the interests of the environment and the economy are intertwined among economic and environmental experts is now also supported by public opinion. The economy and environment are a single issue, linked to the future prosperity of Alberta. This clarity and shared understanding among a wide variety of stakeholders is important and a positive development, an opportunity. It can make policy development and working with stakeholders more productive in coming years, and better serve the needs of Alberta over the long term.

STRATEGIC PRIORITIES

Through the ministry's review of environmental factors, the strategic priorities described below have been identified. These are in addition to the important ongoing core activities of the ministry.

- 1. Cumulative effects management**

Linkage:

Goals 1, 2, 3, 4 and 5

The ministry will lead Alberta's transition to and implementation of an outcomes focused environmental cumulative effects management system that is implemented within Alberta's *Land-use Framework* and addresses the impacts of development on land, air, water and biodiversity, at a regional level. Included under cumulative effects management is the implementation of the Clean Air Strategy and the *Too Good To Waste* strategy.
- 2. Sustainable development of energy resources**

Linkage:

Goals 1, 2, 3, 4 and 5

The ministry will work with other Government of Alberta ministries to ensure all Alberta's energy resources, including the oil sands, are developed in an environmentally sustainable way.
- 3. Climate Change Strategy**

Linkage:

Goals 1, 2, 3, 4 and 5

The ministry will implement the provincial *Climate Change Strategy*, including regulatory, conservation, and adaptation initiatives.
- 4. Water for Life**

Linkage:

Goals 1, 2, 3, 4 and 5

The ministry will implement the renewed *Water for Life* strategy to assure the province has the quality and quantity of water needed now and into the future to support the environmental, economic and social needs of Albertans.
- 5. Environmental information and knowledge**

Linkage:

Goals 1, 2, 3, 4 and 5

The ministry will work with other ministries to develop and implement the integrated and accessible environmental information systems critical to achieving Alberta's goals for the environment. Effective and useful information systems and education and outreach programs are foundation pieces for all of the ministry's strategic priorities.

6. Organization and staff capability

Linkage:

Goals 1, 2, 3, 4 and 5

The ministry will undertake an organizational design process to develop the appropriate organization to operate in a cumulative effects management system. This deliberate approach will determine the leadership, strategy, capabilities, resources, relationships, people processes and infrastructure necessary to operate effectively in an environmental cumulative effects management system. Departmental staff will be involved in the design process to ensure that they are engaged, enabled and empowered as we implement the new design.

CORE BUSINESSES, GOALS, STRATEGIES & PERFORMANCE MEASURES

Core Business One: **Leading and enabling the achievement of environmental outcomes**

Environmental stewardship is a responsibility shared with the citizens, communities, governments and industries of Alberta. The ministry and its partners are leading Alberta's transition to an outcomes focused cumulative effects management system to address the impacts of development on land, air, water and biodiversity. Sharing timely and credible information to develop the desired environmental outcomes is the first step to making and implementing informed decisions for stewardship activities by all Albertans. Ministry programs that support this are Water for Life, resource management, conservation and education, environmental relationships, partnerships and strategies, and climate change and emissions management.

GOAL ONE **1 Environmental outcomes and objectives are established with Albertans, communities, government and industry**

What It Means Alberta's transition to an outcomes focused cumulative effects management system addresses the impacts of development and ongoing activities on land, air, water and biodiversity. Within the system, environmental outcomes are defined and become the focus for management actions. Objectives are measurable targets or thresholds set to achieve the outcomes.

- Strategies**
- 1.1 Implement the environmental cumulative effects management system within the ministry.
 - 1.2 Support development of regional plans within the *Land-use Framework* and development of sub-regional plans.
 - 1.3 Participate in interprovincial, national and international forums to inform and support Alberta's outcomes and objectives.

Performance Measure Under Development:

Place-based Environmental Management Objectives - Measures the percentage of the province (by area) that has established "place-based" environmental management objectives.

Albertans, communities, governments and industry are good stewards of the environment to achieve identified environmental outcomes

What It Means Shared responsibility in action is the key to achieving established environmental outcomes. Alberta Environment works in a wide variety of partnerships with other ministries, municipalities, public and private organizations, regulators and regulated parties and individuals to achieve outcomes. Success in developing a culture of stewardship rests on increasing the knowledge, motivation and capacity of stewards through collaboration, shared governance, voluntary action, clear rules, a level playing field and compliance.

- Strategies**
- 2.1 Involve key stakeholders (all Albertans, municipalities, First Nations, Métis, industries, regulators and regulated parties) in the implementation of cumulative effects management to achieve environmental outcomes.
 - 2.2 Ensure education and engagement programs support the development and implementation of cumulative effects management and environmental stewardship.
 - 2.3 Provide Albertans information and tools to become better stewards of the environment.

Performance Measures	Last Actual (year)	Target 2010-11	Target 2011-12	Target 2012-13
2.a Municipal Solid Waste to Landfills Measures Alberta's progress towards reducing the amount of municipal solid waste disposed in landfills as measured in kilograms of waste per capita	839 (2008)	800	765	725
2.b Personal Engagement Indicator Measures the percentage of Albertans that describe themselves as actively engaged in energy, waste or water conservation				
<ul style="list-style-type: none"> • Energy Conservation 	87% (2009)	88%	89%	90%
<ul style="list-style-type: none"> • Waste Conservation 	90% (2009)	90%	90%	90%
<ul style="list-style-type: none"> • Water Conservation 	84% (2009)	86%	88%	90%

Core Business Two: Assuring a healthy environment

There is an integral relationship between public health and the state of the environment. Through this core business, the ministry helps assure both public safety and a high quality environment that can sustain a high quality of life and a prosperous economy for present and future generations of Albertans. The ministry and key partners manage cumulative environmental effects by addressing human activities that affect the environment, managing air, water, and land resources, monitoring environmental conditions, evaluating and responding to environmental risks and opportunities, developing or updating policies, strategies and programs and by preparing for and responding to environmental emergencies. In conjunction with the Departments of Energy, Sustainable Resource Development, and Justice, Alberta Environment is working on two projects to improve the natural resource regulatory system. The Regulatory Alignment project is streamlining the existing system, while the Regulatory Re-engineering project is investigating a wide variety of options for assuring the delivery of outcomes developed through the *Land-use Framework* and other strategies. Key programs that contribute to this core business are monitoring, reporting and innovation, approvals, compliance and enforcement, emergency response, ministry support services, climate change, air and land policy, reclamation and emergency preparedness and oil sands innovation and policy.

GOAL THREE **3** The ministry has effective policies, regulatory and non-regulatory tools to manage cumulative effects on the environment

What It Means Diverse traditional and innovative management tools are required as Alberta Environment manages the cumulative effects of development over a variety of ecosystems with rapidly changing environmental challenges.

- Strategies**
- 3.1 Develop and implement the necessary legislative framework to allow implementation of a cumulative effects management approach.
 - 3.2 Develop an Energy Efficiency Act to enable new energy efficiency and conservation actions, in support of Alberta's *Climate Change Strategy*.
 - 3.3 Develop environmental policies and management frameworks in coordination with other ministries to support the following key Government of Alberta initiatives:
 - *Land-use Framework*;
 - *Provincial Energy Strategy*;
 - *Responsible Actions – A Plan for Alberta's Oil Sands*;
 - Regulatory Alignment project; and
 - Regulatory Re-engineering project.
 - 3.4 Implement the following key environmental strategies:
 - *Water for Life*;
 - *Climate Change Strategy*;
 - *Too Good to Waste* strategy; and
 - Clean Air Strategy.

- 3.5 Enhance, modernize and integrate departmental information, knowledge and technology systems with a focus on:
- Regulatory business support applications;
 - Cross-ministry information and knowledge sharing systems; and
 - Departmental business support systems.
- 3.6 Implement the environmental performance management system.
- 3.7 Implement the People and Learning Plan processes and tools to help employees transition to the outcomes focused cumulative effects management system and structure.
- 3.8 Streamline the current regulatory system for upstream oil and gas, including in-situ oil sands, through collaboration and coordination within the Government of Alberta and externally with stakeholders.
- 3.9 Work with other departments and stakeholders to develop and implement an efficient, integrated natural resource regulatory system that maintains environmental protection while providing excellent service to industry.

Performance Measures	Last Actual (year)	Target 2010-11	Target 2011-12	Target 2012-13
3.a River Water Quality Index Measures the water quality of six major Alberta rivers at key sites, based on monthly data on four groups of variables (metals, bacteria, nutrients and pesticides), which are averaged to provide an overall water quality rating	Five out of six river systems have good to excellent water quality (2007-08)	Six out of six river systems have good to excellent water quality	Six out of six river systems have good to excellent water quality	Six out of six river systems have good to excellent water quality
3.b Air Quality Index Measures the quality of Alberta's air based on five major pollutants: carbon monoxide, nitrogen dioxide, ozone, sulphur dioxide, and fine particulate matter – PM _{2.5}	Good air quality days 97% of the time (2008)	Good air quality days 97% of the time	Good air quality days 97% of the time	Good air quality days 97% of the time
3.c Total Greenhouse Gas Emissions Measures the success in meeting the greenhouse gas emissions growth targets measured in million tonnes of CO ₂ e, as outlined in <i>Alberta's 2008 Climate Change Strategy</i>	246 ¹ (2007)	241	246	250

Note:

- 1 The Last Actual results for 2007 reflect significantly higher year-over-year growth compared to previous periods. This is largely due to strong economic activity over that period. Results for 2008 are anticipated to reflect the slow down in economic activity thereby balancing out this short-term trend to align with the more modest year-over-year fluctuations which informed the development of the targets.

4

The ministry has effective risk management processes, preparation and responses to events and emerging issues

What It Means The ministry and its partners need to be aware of and manage environmental risks and opportunities. To do this, the ministry advises other ministries across the Government of Alberta, municipalities and Albertans about emerging environmental issues and related threats to environmental and public health and safety. To respond to these issues, the ministry works with partners to update or develop new policies and programs. In addition, working with the Alberta Emergency Management Agency to prepare for and respond to environmental incidents and emergencies, the ministry helps plan hazard reduction and risk management with stakeholders. If required, the ministry takes part in, or directs, emergency response activities that could have an impact on air, land and/or water.

- Strategies**
- 4.1 Expand integrated risk management to the operational level to manage risk and respond to emerging issues.
 - 4.2 Identify capital and operation maintenance risks for water management infrastructure and develop a system to identify priority areas for attention.

Performance Measure	Last Actual 2008-09	Target 2010-11	Target 2011-12	Target 2012-13
4.a Environmental Emergencies Response				
Indicator				
Measures the response by Alberta Environment to environmental emergencies within established timelines	85% responded to within 50 minutes	90% responded to within 50 minutes	90% responded to within 50 minutes	92% responded to within 50 minutes

Core Business Three: Leading and supporting the development and maintenance of environmental infrastructure

The ministry is committed to develop and maintain a variety of environmental infrastructure, on its own and through its partners. This environmental infrastructure supports Albertans for environmental and public health and safety in addition to having economic significance. The program that supports this is water operations.

5

Environmental infrastructure is developed and maintained to meet the Government of Alberta agreed upon outcomes

What It Means Albertans depend on a variety of environmental infrastructure to support their quality of life. Environmental infrastructure includes the facilities, equipment and associated monitoring and management systems required for the protection and wise use of water, land, air and ecosystems, the management of waste and environmental hazards management. Some environmental infrastructure systems, such as drinking water, are critical to public health and safety. Other systems such as water management infrastructure (i.e. dams, canals, weirs, diversions, drains) have important economic significance and are critical to the achievement of *Water for Life: Alberta's Strategy for Sustainability* objectives.

- Strategies**
- 5.1 Implement solutions resulting from an assessment of Alberta's water and wastewater facilities' ability to respond to present and future demands.
- 5.2 In cooperation with other ministries, upgrade and maintain Crown-owned water management infrastructure.

Performance Measures	Last Actual (year)	Target 2010-11	Target 2011-12	Target 2012-13
5.a Effective Water Management Infrastructure Measures the:				
• Utilization	99.5% (2008-09)	99%	99%	99%
• Functional Adequacy	94.5% (2008-09)	95%	95%	95%
• Physical Condition (PC) of provincially-owned water management infrastructure¹	Good 94.9% Fair: 4.8% Poor: 0.3% (2008-09)	Good: 93% Fair: 7% Poor: 0%	Good: 93% Fair: 7% Poor: 0%	Good: 93% Fair: 7% Poor: 0%
5.b Drinking Water Safety Indicator²				
• Facility Design Standards – Measures the percentage of facilities meeting the newest (1997 or 2006) standards, as applicable	87% ³ (2008-09)	92%	94%	96%
• Facility Operational Requirements – Measures the number of incidents that could lead to water quality incidents where regulatory requirements have not been met	26 (2008)	19	16	15
• Drinking Water Quality – Measures the number of water quality incidents	37 (2008)	34	32	30

Notes:

- 1 Good is defined as adequate for intended use and expected to provide continued service life with average maintenance. Fair means aging components are nearing the end of their life cycle and require additional expenditure for renewal or refurbishing. Poor means upgrading is required to comply with minimum codes or standards and deterioration has reached the point where major repairs or replacement are necessary.
- 2 Evaluates performance of facilities delivering safe drinking water in the way facilities are operated, and reporting on analytical results.
- 3 The remainder of facilities meet older (pre 1997) standards.

EXPENSE BY CORE BUSINESS

(thousands of dollars)

	Comparable			2010-11 Estimate	2011-12 Target	2012-13 Target
	2008-09 Actual	2009-10 Budget	2009-10 Forecast			
Leading and enabling the achievement of environmental outcomes	193,184	141,419	140,100	125,886	160,946	161,774
Assuring a healthy environment	103,280	168,316	147,440	145,259	127,283	121,605
Leading and supporting the development and maintenance of environmental infrastructure	36,305	37,942	37,942	36,788	36,788	37,039
MINISTRY EXPENSE	332,769	347,677	325,482	307,933	325,017	320,418

MINISTRY STATEMENT OF OPERATIONS

(thousands of dollars)

	Comparable			2010-11 Estimate	2011-12 Target	2012-13 Target
	2008-09 Actual	2009-10 Budget	2009-10 Forecast			
REVENUE						
Internal Government Transfers	2,108	3,175	3,175	2,774	2,774	2,774
Transfers from Government of Canada	-	51,967	32,410	45,644	43,201	34,644
Premiums, Fees and Licences	2,415	5,725	5,725	5,465	5,465	5,465
Other Revenue	88,681	98,248	98,248	81,248	115,248	115,248
MINISTRY REVENUE	93,204	159,115	139,558	135,131	166,688	158,131
EXPENSE						
Program						
Ministry Support Services	22,283	21,876	21,876	19,108	19,108	20,690
Environmental Assurance:						
Monitoring, Reporting and Innovation	15,918	12,881	12,881	12,095	12,095	12,294
Air and Land Policy	11,009	7,941	7,941	4,956	4,956	5,042
Climate Change	9,947	77,248	56,372	63,445	45,469	37,204
Oil Sands Innovation and Policy	7,228	4,594	4,594	4,018	4,018	4,088
Reclamation and Emergency Preparedness	1,608	2,675	2,675	2,274	2,274	2,274
Climate Change and Emissions Management	145,585	95,000	95,000	78,000	112,000	112,000
Environmental Stewardship:						
Environmental Relationships, Partnerships and Strategies	9,394	7,664	7,664	6,487	6,487	6,577
Conservation and Education	6,393	4,471	4,471	2,982	2,982	3,034
Water for Life	17,873	16,322	15,003	18,926	18,926	19,255
Environmental Management:						
Resource Management	13,939	17,962	17,962	19,491	20,551	20,908
Approvals	20,883	27,310	27,310	26,508	26,508	26,947
Compliance and Enforcement	11,447	12,245	12,245	11,448	11,448	11,636
Water Operations	16,403	15,581	15,581	14,427	14,427	14,678
Emergency Response	1,738	1,447	1,447	1,308	1,308	1,331
Amortization of Capital Assets	19,902	22,361	22,361	22,361	22,361	22,361
Valuation Adjustments and Other Provisions	1,219	99	99	99	99	99
MINISTRY EXPENSE	332,769	347,677	325,482	307,933	325,017	320,418
Gain (Loss) on Disposal of Capital Assets	4	-	-	-	-	-
NET OPERATING RESULT	(239,561)	(188,562)	(185,924)	(172,802)	(158,329)	(162,287)

CONSOLIDATED NET OPERATING RESULT

(thousands of dollars)

	Comparable		2009-10 Forecast	2010-11 Estimate	2011-12 Target	2012-13 Target
	2008-09 Actual	2009-10 Budget				
Ministry Revenue	93,204	159,115	139,558	135,131	166,688	158,131
<i>Inter-ministry consolidation adjustments</i>	(2,108)	(3,175)	(3,175)	(2,774)	(2,774)	(2,774)
Consolidated Revenue	91,096	155,940	136,383	132,357	163,914	155,357
Ministry Expense	332,769	347,677	325,482	307,933	325,017	320,418
<i>Inter-ministry consolidation adjustments</i>	-	-	-	-	-	-
Consolidated Expense	332,769	347,677	325,482	307,933	325,017	320,418
Gain (Loss) on Disposal of Capital Assets	4	-	-	-	-	-
CONSOLIDATED NET OPERATING RESULT	(241,669)	(191,737)	(189,099)	(175,576)	(161,103)	(165,061)