### **Energy**

BUSINESS PLAN 2015-18:

#### **ACCOUNTABILITY STATEMENT**

This business plan was prepared under my direction, taking into consideration the government's policy decisions as of October 15, 2015.

original signed by

Margaret McCuaig-Boyd, Minister

#### THE MINISTRY

The ministry consists of the Department of Energy, the Alberta Energy Regulator (AER), the Alberta Utilities Commission (AUC), the Alberta Petroleum Marketing Commission (APMC) and the Post-Closure Stewardship Fund.

The ministry ensures sustained prosperity in the interests of Albertans through responsible resource development and the stewardship of energy and mineral resource systems.

- The Department of Energy enables sustainable and effective energy and mineral resource development that
  considers the social, economic and environmental outcomes Albertans want. The department oversees Alberta's
  royalty and tenure systems; collects revenues from energy resource development; develops strategic and integrated
  policies and plans for sustainable energy and mineral development; and ensures Alberta has adequate electricity
  generation, transmission and distribution.
- The AER regulates the safe, efficient, orderly and environmentally responsible development of Alberta's energy
  resources. This includes allocating and conserving water resources, protecting the environment and managing
  public lands, which benefit Alberta's economy and environment.
- The AUC regulates the utilities sector, natural gas and electricity markets to protect the social, economic and environmental interests of Alberta where competitive market forces do not.
- The APMC is a provincial agency that markets the Crown's crude oil royalty barrels. The APMC supports projects
  that economically benefit the province through improving market access or maximizing the value of Alberta's nonrenewable resources.
- The Post-Closure Stewardship Fund, financed by carbon-capture and storage operators in Alberta, is a liability fund
  that has been established to ensure that carbon-capture and storage sites are properly maintained in the long-term
  after carbon-capture operations cease.

A more detailed description of Energy and its programs and initiatives can be found at www.energy.alberta.ca.

#### LINK TO GOVERNMENT OF ALBERTA STRATEGIC DIRECTION

The desired outcomes and priority initiatives identified in this business plan are aligned with the strategic direction of the Government of Alberta.



#### STRATEGIC CONTEXT

The importance of energy development for Alberta cannot be overstated. The energy sector – currently focused mostly on the oil sands – provides both jobs and revenues for important government programs. Energy development also indirectly drives activity in a number of other industries, including construction and manufacturing.

Albertans know all too well that environmental issues are a global problem that every jurisdiction must tackle. The provincial government will live up to its responsibility to be a leader and a part of the solution on climate change. A review of Alberta's climate change policy will ensure the province is well-positioned to address energy issues on their economic and environmental merits, in a new atmosphere of greater trust as well as mutual economic interest. Addressing climate change will help elevate Alberta's environmental reputation within North America and globally and support efforts to diversify markets for Alberta's energy products.

The provincial government's royalty review will explore ways to optimize: the returns to Albertans as owners of the resource; industry investment; diversification opportunities, such as value-added processing and other innovation; and responsible development of Alberta's resources. The current price environment for both oil and natural gas creates challenges for Alberta, but it also provides an opportunity to assess what works and what should improve. Current low prices benefit potential resource value chain diversification opportunities for sectors within Alberta's economy such as the petrochemical industry, which uses oil and natural gas as feedstock.

The sharp drop in the price of oil in late 2014 has presented the energy industry with significant challenges, as oil producers have focused on cost containment and have reduced capital spending. However, Alberta's energy companies have seen these downturns before and have the experience and ability to cope with the volatility in the energy sector. Oil sands projects are capital-intensive and have long pay-back periods; as such, projects that are operating or are well under construction will proceed despite the low price environment. This will propel oil production up over the near term, but growth is expected to slow down by the end of the decade. Alberta's abundant oil and gas reserves will remain open to investment. Advancing new opportunities in Alberta's energy economy and pioneering advanced technologies will continue to require investment on a large scale.

If Alberta's and Canada's economies are to continue benefitting from the energy industry, markets must be solidified and diversified through strong partnerships. In July 2015, all of Canada's provincial and territorial governments agreed to a Canadian Energy Strategy – a framework for collaboration on shared priorities such as infrastructure development, technology and responsible development.

Closer to home, the provincial government will engage with Albertans, Indigenous peoples, and others to support public confidence on energy development. Albertans also want to feel confident that resources are developed in a responsible way, such as strengthening landowner's surface rights for fair compensation and due process.

As Alberta's economy recovers and its population grows, demand for electricity is expected to increase. This requires significant investments in transmission expansion and generation by electricity companies. At the same time, decreasing costs for renewable technology are making local or "distributed" generation more feasible. Expanding use of alternative energy sources including wind, solar and industrial co-generation will improve both the environment and the health of all Albertans. Amidst these developments, the provincial government will take steps to ensure more stable electricity prices and protect the public interest.



# DESIRED OUTCOMES, PRIORITY INITIATIVES, PERFORMANCE MEASURES, PERFORMANCE MEASURES UNDER DEVELOPMENT AND PERFORMANCE INDICATORS

## Desired Outcome One: Albertans benefit from responsible energy and mineral development and access to global markets

For the benefit of Albertans, the ministry accurately calculates and fully collects revenues from energy royalties and sales bonuses. The ministry also reviews and maintains a competitive and effective royalty regime that attracts industry investment, which provides jobs, business opportunities, tax revenue and numerous other benefits to the provincial economy. The ministry continues to seek opportunities to increase access to global markets to strengthen both provincial and national economies.

#### **Priority Initiatives:**

- 1.1 Support the Royalty Review Panel to optimize returns to Albertans as owners of the resource; industry investment; diversification opportunities, such as value-added processing and other innovations; and responsible development of Alberta's resources.
- 1.2 Build and deepen energy-related relationships nationally and globally to diversify markets for Alberta's energy resources and products.
- 1.3 Develop policies and conditions that support the diversification of resource value chains.

Performance Measures		Last Actual (Year)	Target 2015-16	Target 2016-17	Target 2017-18
1.a	Revenues from oil, oil sands, gas, land sales and bonuses are fully collected:  • Percentage of amounts collected compared to amounts owed	100% (2012)	100%	100%	100%
1.b	Alberta's oil sands supply share of global oil consumption	2.3% (2013)	2.5%	2.6%	2.7%
Perf	ormance Indicators	Actual 2010	Actual 2011	Actual 2012	Actual 2013
1.a	Alberta's total crude bitumen production (thousands of barrels per day)	1,613.4	1,744.6	1,921.7	2,085.4
1.b	Conventional crude oil and equivalent annual production (thousands of barrels per day)	581.9	609.4	672.0	709.0
1.c	Total marketable natural gas annual production (billion cubic feet per day) <sup>1</sup>	10.85	10.38	9.80	9.69
1.d	<ul> <li>Upstream oil and gas industry investment in Alberta:<sup>2</sup></li> <li>Total conventional and non-conventional oil and gas extraction investment (\$ billions)</li> </ul>	35.6	44.6	51.9	n/a
1.e	Total percentage of crude oil leaving Alberta	80%	83%	84%	85%
1.f	Total percentage of natural gas leaving Alberta	71%	69%	66%	66%

#### Notes:

- The Alberta Energy Regulator modified the methodology and format of the ST-3 Gas Report (effective January 2013), affecting 2013 actuals for performance indicators 1.c and 1.f.
- The upstream oil and gas sector consists of the conventional oil and gas industry and the oil sands industry. Upstream refers to the production of oil, gas and oil sands, including entities engaged in operating oil and gas field properties and activities such as exploring for crude petroleum and natural gas, among others.



### Desired Outcome Two: Effective stewardship and regulation of Alberta's energy and mineral resources

The ministry regulates Alberta's energy industry to ensure the efficient, safe, orderly and environmentally responsible development and sustainable management of energy and mineral resources. An integrated, big-picture approach to responsible resource development in the province enables strategic and integrated policies and plans that consider the overall environmental, economic and social outcomes of sustainable energy and mineral development for the benefit of Albertans. The ministry further supports the interests of Albertans by ensuring that the delivery and regulation of Alberta's utility service are fair and responsible.

#### **Priority Initiatives:**

- 2.1 Promote sustainable and responsible resource development and environmental stewardship as part of a strategic and integrated system of policies and plans to achieve the balance of social, economic and environmental outcomes that Albertans expect. Collaborate with other ministries to continue to develop and implement:
  - Alberta's Climate Change Strategy to establish Alberta as an environmentally responsible energy producer and collaborative partner in overall Canadian efforts to reduce emissions;
  - enhanced regulation and oversight of the province's resources to ensure responsible development; and
  - policies to manage the cumulative effects of resource development.
- 2.2 Develop an integrated *Alberta's Energy Sustainability Strategy* that contributes to economic growth and prosperity and embodies a high standard of environmental and social responsibility for Albertans.

Per	formance Measures	Last Actual (Year)	Target 2015-16	Target 2016-17	Target 2017-18
2.a	Regulatory compliance (AER):     Percentage of inspections that are in compliance with regulatory requirements <sup>1</sup>	99% (2014)	97%	98%	98%
2.b	<ul> <li>Timelines of the needs and facility applications (AUC):</li> <li>Percentage of needs and facility applications determined within 180 days of the application being deemed complete</li> </ul>	96.3% (2013)	100%	100%	100%

#### Note:



<sup>&</sup>lt;sup>1</sup> The percentage for 2014 is based on the data available since July 2014 when the AER began transitioning to a new compliance assurance framework.

## Desired Outcome Three: Albertans benefit from safe and reliable energy-related infrastructure and innovative energy technologies

Reliable, efficient and resilient energy systems are vital to the social and economic foundation of Alberta. To meet the increasing demand for electricity and to access new markets, energy-related infrastructure is needed. In the interest of Albertans, the ministry develops effective innovation policies and programs and works with other ministries and stakeholders to support energy infrastructure development, innovative technologies and energy and mineral resources processing improvements.

#### **Priority Initiatives:**

- 3.1 Develop, review and implement policies and regulations to ensure a safe, reliable, efficient, affordable and environmentally responsible electricity system for Albertans by:
  - supporting the electricity and natural gas needs of Albertans; and
  - enabling the increased development and use of alternative and renewable energy in Alberta.

Perl	formance Measures	Last Actual 2013	Target 2015-16	Target 2016-17	Target 2017-18
3.a	Transmission losses	2.9%	3.0%	3.0%	3.0%
3.b	Power generation: • Margin (megawatt) between firm generating capacity and peak demand <sup>1</sup>	18%	Maintain a mi	nimum 7% margin over peak demand	

#### Note:

For electric system reliability purposes, Alberta is required to constantly maintain a minimum seven per cent real-time operating reserve. This requirement is stipulated by the Western Electricity Coordinating Council, the regional entity responsible for coordinating electric system reliability in several member jurisdictions in Canada, United States and Mexico.

Per	formance Indicator	Actual 2010	Actual 2011	Actual 2012	Actual 2013
3.a	Alternative and renewable generation capacity in Alberta				
	(megawatts)	5,678	5,805	6,461	6,573
	• Wind	805	895	1,113	1,113
	Hydro	900	900	900	900
	Biomass	340	359	414	417
	Gas cogeneration	3,633	3,651	4,034	4,143



### STATEMENT OF OPERATIONS

Consolidated Financial Statements Basis

(thousands of dollars)	Comparable			
	2014-15	2015-16	2016-17	2017-18
	Actual	Estimate	Target	Targe
REVENUE				
Freehold Mineral Rights Tax	171,831	87,000	101,000	109,000
Natural Gas and By-Products Royalty	989,160	343,000	455,000	423,000
Crude Oil Royalty	2,244,745	536,000	790,000	722,000
Bitumen Royalty	5,049,393	1,547,000	1,803,000	2,813,000
Coal Royalty	15,755	15,000	16,000	16,000
Bonuses and Sales of Crown Leases	476,331	181,000	227,000	279,000
Rentals and Fees	172,489	145,000	121,000	112,000
Energy Regulation Industry Levies and Licences	258,278	270,093	270,093	270,093
Utility Regulation Industry Levies and Licences	33,782	35,740	35,740	35,740
Investment Income	1,894	1,600	1,600	1,600
Other Revenue	26,595	63,559	7,689	7,689
Net Income from Commercial Operations	13,759	20,000	29,000	19,000
Inter-Ministry Consolidation Adjustment	(12)	-	-	-
Total	9,454,000	3,244,992	3,857,122	4,808,122
EXPENSE				
Ministry Support Services	7,887	7,391	7,391	7,391
Resource Development and Management	101,942	94,019	94,019	94,019
Biofuel Initiatives	70,275	92,000	-	-
Cost of Selling Oil	176,426	184,616	189,616	189,616
Energy Regulation	256,612	253,252	250,252	250,252
Settlements Related to Energy Lease Cancellation	4,123	-	-	-
Utilities Regulation	33,810	36,940	36,940	36,940
Carbon Capture and Storage	53,914	291,700	159,650	61,690
Orphan Well Abandonment	15,760	30,500	30,500	30,500
Total	720,749	990,418	768,368	670,408
Net Operating Result	8,733,251	2,254,574	3,088,754	4,137,714
CAPITAL INVESTMENT				
Ministry Support Services	127	-	-	-
Resource Development and Management	3,847	5,999	5,399	5,399
Energy Regulation	20,854	9,000	9,000	9,000
Utilities Regulation	1,042	1,000	1,000	1,000
Total	25,870	15,999	15,399	15,399

