FISCAL PLAN

CLIMATE LEADERSHIP PLAN

BUDGET 2017

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CLIMATE LEADERSHIP PLAN OVERVIEW

The Climate Leadership Plan (CLP) is a made-in-Alberta strategy to lower emissions, ensure Alberta's resources are developed responsibly and create new opportunities to diversify the economy into renewable energy.

Key aspects of the Climate Leadership Plan include:

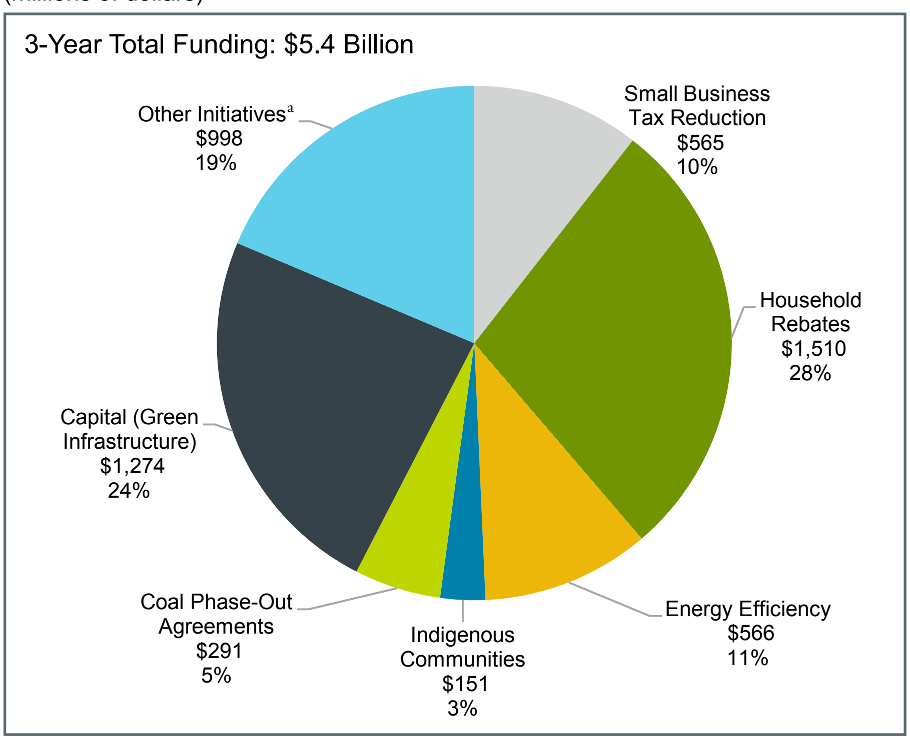
- Phasing out pollution from coal-generated electricity by 2030;
- Tripling renewable energy to supply 30% of generation by 2030;
- Reducing emissions from the oil and gas sector;
- Creating Energy Efficiency Alberta to deliver cost saving programs; and
- Implementing an economy-wide price on carbon.

CLIMATE LEADERSHIP FUNDING

Over the next three years, $5.4 billion in gross carbon pricing revenue will be fully reinvested in efforts to save energy, create opportunities to diversify Alberta's economy and to help households, businesses and communities adjust to the carbon price and reduce emissions. CLP budget details are provided on page 61.

All carbon pricing revenue is recycled to fund emissions reductions, economic diversification and adjustments to the carbon price.

Climate Leadership Funding
(millions of dollars)



[a] Revenue recycling into bioenergy, renewable energy, innovation and technology, coal community transition and other Climate Leadership Plan implementation initiatives.

HOUSEHOLD REBATES AND CARBON COSTS

Household rebates offset typical costs while maintaining incentives to reduce emissions.

The Alberta Climate Leadership Adjustment Rebate will provide $1.5 billion over three years to low and middle income households to offset typical carbon levy costs. The rebate is granted based on household income, not fuel consumption, so all households still have an incentive to reduce fuel use. The rebate is not taxable and does not affect benefits received from other income-tested provincial programs. An estimated 60% of Alberta households will get a full rebate, while additional households will receive a partial rebate. In January 2017, $138 million in rebates were provided to over 1.1 million households. The next quarterly payment to eligible households will be provided in April 2017.

Net household carbon levy costs will depend on income and consumption. For example, a couple with two children, annual income of $80,000 and monthly consumption of 265 litres of gasoline and 10 gigajoules of natural gas would face total estimated direct and indirect costs of $340 in 2017 and $510 in 2018. This family would qualify for rebates of $360 for 2017 and $540 for 2018, more than offsetting these costs. Albertans can estimate their household carbon levy costs, rebate eligibility and timing of the rebate payments through the Government of Alberta's online calculator: www.alberta.ca/calculate-carbon-levy-rebate-and-costs.aspx.

Rebate Income Parameters

Rebate Amounts and Income Thresholds by Family Type and Year

	2017	2018
Rebate Amounts (annual)		
First adult	$200	$300
Spouse/Equivalent to spouse[a]	$100	$150
Each child (maximum 4)	$30	$45
Maximum Income to Receive Full Rebate (Family Net Income)		
Single	$47,500	$47,500
Couple or Family	$95,000	$95,000
Phase-Out Rates (% Reduction Per Additional $ Income)		
Single	2.67%	2.67%
Couple	4.00%	4.00%

[a] Equivalent to spouse includes common-law partner as reported on income tax forms, or first child in single-parent households.

SMALL BUSINESS TAX RATE REDUCTION

As of January 1, 2017, the small business tax rate was reduced from 3% to 2% to help small businesses adjust to the carbon levy. With this change, Alberta is aligned with Saskatchewan and British Columbia for the second lowest provincial small business rate. This tax reduction will be worth an estimated $565 million to small business owners over three years.

GREEN INFRASTRUCTURE

Budget 2017 provides $1.3 billion over three years through a combination of grants and capital investments for green infrastructure projects; such as transit projects, municipal infrastructure and upgrades to schools and hospitals. This funding will reduce emissions and future energy costs.

ENERGY EFFICIENCY

Budget 2017 allocates $566 million over three years to support energy efficiency and small scale renewable energy projects. Programs are in place for farms, schools, municipalities and Indigenous communities. Energy Efficiency Alberta was created in 2016 as a Crown agency tasked with investing in lowering the energy use and energy bills of Albertans, as well as developing on-site renewable energy. Starting in 2017-18, the agency will deliver programs including the Residential No-Charge Energy Savings Program; the Residential Retail Products Program; the Business, Non-Profit and Institutional Energy Savings Program; and the Residential and Commercial Solar Rebate Program.

PHASING OUT COAL POLLUTION

In support of Alberta's transition to a stable, reliable and cleaner electricity system, the CLP commits to phasing out all coal-fired electricity pollution by 2030. This will be achieved, in part, by increasing electricity generated from renewable sources to 30% by 2030, while also allowing existing coal units to convert to natural gas where viable and creating a market for private investment in new lower emission generation, such as cogeneration and clean-burning natural gas.

Alberta has elected to provide transition payments, funded by carbon pricing revenues, to the owners of the six coal units which were originally slated to operate beyond 2030. The payments promote investor confidence and encourage these companies to continue to participate in Alberta's transition to lower carbon emitting sources of electricity. At less than $10 per tonne, the payments achieve low-cost emissions reductions. In 2016-17, an expense and liability of $1.1 billion was recorded for the agreements (present value of $97 million per year for 14 years). From 2017-18 onwards, a portion of the annual $97 million payment reduces the liability balance and the remainder is a current year expense.

Coal Transition

Coal Transition Payment Liability

(millions of dollars)	2016-17 Forecast	2017-18 Estimate	2018-19 Target	2019-20 Target	3-Year Total
Opening Balance	-	1,132	1,067	1,000	
Liability Recognized	1,132	-	-	-	-
Pay Down of Liability	-	(65)	(67)	(69)	(201)
Current Year Expense	-	(32)	(30)	(28)	(90)
Subtotal Current Year Funding	**-**	**(97)**	**(97)**	**(97)**	**(291)**
Closing Liability Balance	**1,132**	**1,067**	**1,000**	**931**	

OTHER CLIMATE LEADERSHIP INITIATIVES

Budget 2017 provides $1 billion over three years for other CLP initiatives, including support for renewables; innovation and technology; and adjustment funding for coal communities and Alberta's most trade-exposed businesses.

The first phase of the Renewable Electricity Program, a competitive auction for 400 megawatts of renewable capacity, will begin in March 2017, with projects to be in service by 2019. The program is anticipated to add 5,000 megawatts of renewable capacity to help meet the legislated target of 30% renewable electricity generation by 2030.

The Bioenergy Producer Program provides interim producer support of $40 million in 2016-17 and $20 million for 2017-18 while a long-term plan for a self-supporting bioenergy industry is developed.

The Climate Change Innovation Task Team report will help guide investment in initiatives under the Innovation and Technology Framework. Further investments via Emissions Reduction Alberta will ensure innovation supports continued reductions in industrial emissions.

Budget 2017 provides $151 million over three years to help Indigenous communities reduce energy costs, lower emissions and create job opportunities in renewable energy. The government is also committed to working with communities and workers to support the transition towards the phase-out of coal power emissions.

ECONOMIC ANALYSIS

The CLP will provide a number of economic and social benefits, including low-cost emissions reductions, better health outcomes, improved cost and regulatory certainty for industry, greater market access and the development of new technologies.

The CLP played a key role in the federal approval of two new energy infrastructure projects – The Trans Mountain Expansion (TMX) and Enbridge Line 3 pipelines. TMX provides access to tidewater, allowing Alberta's oil sands industry to receive higher returns, while Line 3 adds critical capacity to current markets. These projects are estimated to lift Alberta's real GDP by about 1.5% by 2022 relative to a scenario without additional pipelines (see Economic Outlook page 75). The benefits of improved pipeline access and CLP funding are expected to more than offset the economic costs of carbon pricing over this period, for a net positive impact on real GDP of about 1% by 2022.

Even without additional market access, the CLP would have provided a net economic benefit over the alternative, which is a federally imposed carbon price. Without the CLP, a federal carbon price would come into effect in 2018, and is unlikely to provide the same protection to trade-exposed sectors.

EMISSIONS IMPACTS

Prior to the CLP, Alberta's emissions were forecast to grow for decades to come. Emissions are now expected to peak in the early 2020s. The CLP is designed to achieve measurable, cost-effective emissions reductions across the provincial economy. The CLP ensures the province is on track, at minimum, to achieve estimated emissions reductions laid out by Alberta's Climate Change Advisory panel – that is, 20 million tonnes (Mt) by 2020 and 50 Mt by 2030. Many of the actions and targets under the Plan are stronger than what was outlined in the Panel's recommendations. This includes significant investment in improving energy efficiency throughout the province, reducing methane emissions in the oil and gas sector to 45% below 2014 levels by 2025 and capping oil sands emissions. The cumulative actions of Alberta's carbon pricing scheme, coupled with transitioning to a cleaner electricity system and long-term investment of carbon pricing revenue, will generate additional emissions reductions.

CARBON PRICING

An economy-wide price on carbon is widely agreed to be the most efficient and cost-effective way to reduce greenhouse gas emissions, encouraging people and organizations to find the best options for both reducing emissions and costs. A national carbon price is being developed by the federal government, recognizing provincial pricing programs already in place. Alberta designed and implemented a pricing plan tailored to our unique economy that balances broad emissions coverage with measures to protect vulnerable people and trade-exposed sectors.

Alberta's unique carbon pricing approach drives low-cost emissions reductions.

The carbon pricing system has two components:

- A carbon levy on heating and transport fuels, starting at $20 per tonne of carbon dioxide equivalent (CO_2e) in 2017, rising to $30 in 2018; and
- The Specified Gas Emitters Regulation for large trade-exposed industry, with compliance options that include offsets and payments into the Climate Change and Emissions Management Fund at a $30 carbon price.

CARBON LEVY

Alberta's carbon levy, implemented through the *Climate Leadership Act* (CLA) took effect January 1, 2017. The levy will generate $3.9 billion in gross revenue over the next three years, more than half of which will be recycled through the small business tax cut and household rebates. The remainder will be invested in programs that reduce emissions and diversify the economy.

The levy is paid by consumers of fuel in Alberta, with the rates determined by the emissions released when each fuel is combusted. Some specific fuels and uses are exempt from the carbon levy, as outlined in the CLA. Consumers do not pay the levy on electricity.

Carbon Levy Revenue

Carbon Levy Revenue and Adjustment Funding

(millions of dollars)	2016-17 Forecast	2017-18 Estimate	2018-19 Target	2019-20 Target	3-Year Total
Gross Levy Revenue	230	1,038	1,396	1,416	3,850
Small Business Tax Reduction	(40)	(175)	(190)	(200)	(565)
Household Rebates	(90)	(410)	(550)	(550)	(1,510)
Levy Revenue Subtotal	**100**	**453**	**656**	**666**	**1,775**

Carbon Levy Rates

Major Fuels by Year

Type of Fuel	Carbon Levy Rate for 2017	Carbon Levy Rate for 2018
Diesel	5.35 ¢/L	8.03 ¢/L
Gasoline	4.49 ¢/L	6.73 ¢/L
Natural Gas	$1.011 /GJ	$1.517/GJ
Propane	3.08 ¢/L	4.62 ¢/L

LARGE INDUSTRIAL EMITTERS

Alberta's regulation encourages industry to reduce emissions without scaling back activity.

Alberta facilities that emit more than 100,000 tonnes of CO_2e per year, including electricity producers, are subject to the Specified Gas Emitters Regulation (SGER) rather than the carbon levy. These facilities account for about half of Alberta's emissions, and include Alberta's largest trade-exposed facilities, such as oil and gas and industrial manufacturing facilities. The SGER requires emissions reductions per unit output, relative to each facility's historic performance. Facilities that do not meet their emissions targets directly can comply by submitting carbon credits or paying into the Climate Change and Emissions Management Fund (CCEMF). The CCEMF price increased from $15 per tonne to $20 in 2016 and $30 in 2017. Funds accumulated in the CCEMF will be fully recycled over time into emissions reductions and climate change adaptation initiatives in Alberta.

Starting in 2018, facility-specific SGER targets will be replaced by an output based allocation approach using product level standards. This approach is intended to be advantageous for top performing facilities, such as the most efficient gas-fired electricity generation. The shift will encourage the deployment of best-in-class technology in each sector, support investment, drive emissions reductions and maintain industry competitiveness. Consultation on this transition is ongoing.

Large Emitters Revenue

Climate Change and Emissions Management Fund

(millions of dollars)	2016-17 Forecast	2017-18 Estimate	2018-19 Target	2019-20 Target	3-Year Total
Opening Balance	369	422	403	317	
Revenue	203[a]	196	597	519	1,312
CLP Funding	(150)	(215)	(683)	(521)	(1,419)
Balance at Year End	**422**	**403**	**317**	**315**	

[a] Includes $3 million of investment revenue.

Climate Leadership Plan Budget Details

Carbon Pricing Revenue and Recycling					
(millions of dollars)	2016-17 Forecast	2017-18 Estimate	2018-19 Target	2019-20 Target	3-Year Total
Sources of Funding					
CCEMF - Facility Compliance Payments	200	196	597	519	1,312
CCEMF - Investment Income	3	-	-	-	-
Carbon Levy	230	1,038	1,396	1,416	3,850
Total Sources of Funding	**433**	**1,234**	**1,993**	**1,935**	**5,162**
Allocations of Funding					
Small Business Tax Reduction	40	175	190	200	565
Household Rebates	90	410	550	550	1,510
Energy Efficiency	10	187	237	142	566
Indigenous Communities	5	41	55	55	151
Coal Phase-Out Agreements[a]	-	97	97	97	291
Other Initiatives (includes Renewables/ Bioenergy, Innovation and Technology, and Plan Implementation)	144	198	522	278	998
Capital Grants and Investment (Green Infrastructure)	4	214	445	615	1,274
Subtotal	**293**	**1,323**	**2,097**	**1,937**	**5,357**
Retained by / (Withdrawn from) the Carbon Levy Account	88	(70)	(18)	-	(88)
Retained by / (Withdrawn from) the CCEMF	53	(19)	(86)	(2)	(107)
Total Allocation of Funding	**433**	**1,234**	**1,993**	**1,935**	**5,162**

a See Coal Transition table on page 57.

Climate Change and Emissions Management Fund (CCEMF)[b]				
Opening Balance	369	422	403	317
Retained by / (Withdrawn from) the CCEMF	53	(19)	(86)	(2)
Closing Balance	**422**	**403**	**317**	**315**

b The CCEMF is a separate restricted purpose fund. Fund balances are an asset.

Carbon Levy Account[c] (excluding liabilities related to Coal Phase-Out Agreements)				
Opening Balance	-	88	18	-
Retained by / (Withdrawn from) the Carbon Levy Account	88	(70)	(18)	-
Closing Balance	**88**	**18**	**-**	**-**

c An account internal to the Government of Alberta was established for the carbon levy to track and demonstrate compliance that revenue is being used for the purposes approved under legislation over multiple fiscal years. Annual surpluses and deficits factor into the calculation of the overall government's annual surplus/(deficit).

Liabilities Related to Coal Phase-Out Agreements				
Opening Balance	-	1,132	1,067	1,000
Coal Phase-Out Agreements - Liability Recognized	1,132	-	-	-
Coal Phase-Out Agreements - Pay Down of Liability	-	(65)	(67)	(69)
Closing Balance[d]	**1,132**	**1,067**	**1,000**	**931**

d Expense and liability of $1.1 billion were reported in the *2016-17 Third Quarter Fiscal Update and Economic Statement*.