

# ALBERTA'S CLIMATE CHANGE PROGRAM



## Target and Policy Context

In 2007, the Government of Alberta introduced the province's Climate Change Strategy and committed to reduce its GHG emissions intensity by 50 million tonnes from "business as usual" by 2020 and by 200 million tonnes by 2050. To help achieve this target, Alberta introduced the first fully operational regulatory GHG emission reduction and trading program in North America. The Climate Change and Emissions Management Act (the "Act") provides a framework for the implementation of this program. Two key regulations were implemented under the Act:



## Specified Gas Reporting Regulation (SGRR):

- Requires all facilities emitting more than 50,000 tonnes CO<sub>2</sub>e annually to report their emissions to Alberta Environment and Sustainable Resources Development (AESRD)



## Alberta's Specified Gas Emitters Regulation (SGER):

- Facilities emitting more than 100,000 tonnes CO<sub>2</sub>e annually are regulated by AESRD and are required to reduce GHG emissions intensity by 12% per production unit from an established government approved baseline;
- The resulting intensity based system is different than cap and trade approach which sets a hard cap on emissions at a facility;
- Allows GHG emissions at a facility to grow in line with development or expansion as long as the emission intensity per unit decreases by 12%;
- 8 compliance periods since the SGER came into force since 2007;
- 106 regulated facilities in 2013;
- The SGER expires June 30, 2015 and is expected to be amended and renewed prior to that date.



## Compliance options under SGER:

1. Physically reduce emissions intensity at the facility by 12%; OR
2. Purchase verified Alberta offsets or use/purchase emission performance credits (EPCs) generated at facility in previous years or from other regulated facilities; OR
3. Purchase Technology Fund (Tech Fund) credits (currently \$15/tonne) for each tonne emitted over their target; OR
4. Any combination of the above options.

There is no limit on utilizing any one of the aforementioned options to achieve compliance targets.



## Program Results

- As of the end of 2013, approximately **51 million tonnes** CO<sub>2</sub>e have been reduced from business-as-usual (BAU) levels<sup>1</sup> through operational changes at facilities and purchases of verified offsets produced by non-regulated source CO<sub>2</sub>e reductions.
- Equivalent to taking more than 10 million cars off the road for one year.
- Data for the 2014 compliance year is not yet available, but is estimated to bring the total GHG emission reductions from BAU levels to at least **57 million tonnes** CO<sub>2</sub>e based on previous years.

<sup>1</sup> Alberta Environment and Sustainable Resource Development, <http://esrd.alberta.ca/focus/alberta-and-climate-change/regulating-greenhouse-gas-emissions/greenhouse-gas-reduction-program/default.aspx>.

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Compliance Cycle	Emissions Reductions at Facility (Mt CO <sub>2</sub> e)	Offset Credits Submitted (Mt CO <sub>2</sub> e)	Recognition of Cogeneration (Mt CO <sub>2</sub> e)	Total Reductions (Mt CO <sub>2</sub> e)	Fund Payment (\$Million)
2007 (1/2 year)	1.55	0.91	1.28	3.74	44.1
2008	1.25	2.91	2.57	6.73	85.4
2009	1.07	3.79	2.66	7.52	63.5
2010	1.20	3.86	2.56	7.62	69.3
2011	3.15	5.40	2.51	11.06	54.9
2012	1.50	3.00	3.41	7.91	86.7
2013	0.12	2.04	3.91	6.07	99.3
<b>Total</b>	<b>9.84</b>	<b>21.91</b>	<b>18.90</b>	<b>50.65</b>	<b>503.4</b>

Mt = Million Tonnes

Table Updated October 23, 2014<sup>2</sup> Note that figures are subject to change as a result of auditing and are rounded for presentation purposes.

## Alberta Technology Fund



The Climate Change and Emissions Management Fund (CCEMF) was created by the Government of Alberta to establish or participate in funding for initiatives that reduce emissions of greenhouse gases or improve Alberta's ability to adapt to climate change. The Climate Change and Emissions Management Corporation (CCEMC) is an independent organization that manages the CCEMF and grants funding to organizations to support and build on the strategic direction established by the province. The CCEMC mission is to accelerate the achievement of actual and sustainable reductions in greenhouse gas emissions and support climate change adaptation through partnerships and collaboration in the discovery, development and deployment of technology for application in Alberta.<sup>3</sup> Through the \$15/tonne contributions to the CCEMF, as of 2013, \$503 million has been collected by CCEMF and \$249 million has been invested into 100 innovative and clean energy projects<sup>4</sup> CCEMC estimates its investments are leveraged almost 6:1 yielding projects valued at \$1.7 billion, providing estimated cumulative emission reductions of 10.7 Mt CO<sub>2</sub>e by 2020.<sup>5</sup> Data for the 2014 compliance year is not yet available, but is estimated to bring the total contributions to the CCEMF to over \$600 million, based on previous year contributions.

<sup>2</sup> Alberta Environment and Sustainable Resource Development, <http://esrd.alberta.ca/focus/alberta-and-climate-change/regulating-greenhouse-gas-emissions/greenhouse-gas-reduction-program/default.aspx>.

<sup>3</sup> For more information about CCEMC, see: <http://ccec.ca/about>

<sup>4</sup> Alberta Environment and Sustainable Resource Development, <http://esrd.alberta.ca/focus/alberta-and-climate-change/climate-change-and-emissions-management-fund.aspx>

<sup>5</sup> Climate Change and Emissions Management Corporation, <http://ccec.ca/about/performance/>