

Climate Leadership Plan

GHG emissions avoided

Efficiency Programs making their mark

Program Results

Agriculture and Forestry (AF) programs funded by the Climate Leadership Program (CLP) are currently open and applicants are completing projects.

For completed projects, avoided Greenhouse Gas (GHG) emissions are calculated based on energy savings and emission factors associated with electricity and natural gas. Nearly all projects in the programs involve electricity or natural gas.

Projects involving other fuel types occur, but their savings are translated into equivalents of electricity or natural gas.

Lifetime emissions represent the cumulative GHGs over all the years in a project's lifetime. The calculation of avoided GHGs is ongoing as projects are completed. All data is available now for the 2016-17 year. Estimates are available for the 2017-18 and 2018-19 years.

Avoided Emissions Chart

Annual avoided GHG emissions, by Program, in tonnes per year	2016-17		2017-18 (Estimate)		2018-19 (Estimate)	
	Nat Gas	Electricity	Nat Gas	Electricity	Nat Gas	Electricity
On-Farm Energy Management	1,220	1,492	752	920	4,404	5,382
On-Farm Solar	167	205	85	104	1,561	1,907
Irrigation Efficiency	650	715	451	551	862	1,053
Energy Savings for Agri-Processors, Small	183	224	325	398	4,261	5,208
Energy Savings for Agri-Processors, Large*	N/A		177,339		218,500	

For more information on government programs go to Alberta.ca

Future Data

Funded projects will continue to avoid emissions for 15 years. For the available emissions data, the lifetime avoided emissions rates are as follows:

Lifetime avoided GHG emissions, by Program, without predictions, in tonnes	2016 to 2033	
	Natural Gas	Electricity
On-Farm Energy Management	95,648	116,903
On-Farm Solar	27,196	33,239
Irrigation Efficiency	28,465	34,790
Energy Savings for Agri-Processors, Small	71,543	87,442
Total	222,852 tonnes	272,374 tonnes
Energy Savings for Agri-Processors, Large*	5,937,585	

Predicting into future program years (based on present budget allocations), ultimate reductions are as follows:

Lifetime avoided GHG emissions, by Program, with predictions, in tonnes	2016 to 2033	
	Natural Gas	Electricity
On-Farm Energy Management	157,289	192,243
On-Farm Solar	50,018	61,133
Irrigation Efficiency	39,185	47,893
Energy Savings for Agri-Processors, Small	134,584	164,492
Total	381,076 tonnes	465,761 tonnes
Energy Savings for Agri-Processors, Large*	13,906,085	

CLP has allocated funding on three occasions to AF programs that reduce GHG emissions: February 2016 (\$500,000), October 2016 (\$10,000,000) and December 2017 (\$88,000,000).

Funding was allocated to the following programs:

- On-Farm Energy Management
- On-Farm Solar PV
- Irrigation Efficiency
- Energy Savings for Agri-Processors, small
- Energy Savings for Agri-Processors, large

*Avoided methane

For more information on government programs go to Alberta.ca