

2018-2020 Farm Energy and Agri-Processing Program Funding List for *Producers*

Grant funding \$250,000.00 Funding Maximum Per Applicant Per Year

The Farm Energy and Agri-Processing Program shares costs with the agriculture and agri-processing sector on energy efficiency investments. The Program is designed to encourage energy management which will result in cost savings, energy conservation, and ultimately, reduced greenhouse gas emissions. The Program offers financial support, subject to financial constraint, to Producer Applicants who incorporate high efficiency equipment that is identified in this Funding List in their construction and/or retrofitting projects. This program is open until **March 31, 2020**, or until program budget is fully allocated. The Funding List is subject to change, please see www.agriculture.alberta.ca/feap for updates. Changes to the Funding List from the previous edition are shown in red.

ENERGY AUDITS AND ASSESSMENTS – Activity Code 500	
Cost Share:	50% up to a maximum of \$9,000 grant funding
Assessors must be pre-approved before applying Please see the list of Energy Assessment Providers on the FEAP website	

ELECTRICITY, NATURAL GAS, AND LIQUID (FUEL OR WATER) SUBMETERS – Activity Code 600	
Cost Share:	100% up to the cost of 3 submeters or \$3,000, whichever is lower 50% for any additional submeters

NEW CONSTRUCTION INSULATION – Activity Code 700		
Description	Eligibility	Cost Share Level
Wall Insulation	≥ R25	\$0.40/ft ² wall area
	≥ R35	\$0.80/ft ² wall area
Ceiling Insulation	≥ R50	\$0.20/ft ² ceiling area
	≥ R60	\$0.40/ft ² ceiling area
Under-Slab or Foundation Insulation	Eligible	\$0.04/ft ² per R-value MAXIMUM \$1.20/ft ²
Windows and Doors	Ineligible	N/A
Adding to existing insulation	Ineligible under new construction – See Retrofit Insulation section below	N/A

LIGHTING – Activity Code 800		
All electrical equipment must be approved under the Canadian Electrical Code – e.g. CSA or ULC approved Lights must be on DLC's product list to be eligible. Search for lights at: https://www.designlights.org/search/		
Description	Eligibility	Cost Share Level
Lighting ≤ 30 Watts	Efficacy (lm/W) ≥105	50%
Lighting 31 – 60 Watts	Efficacy (lm/W) ≥120	50%
Lighting ≥ 61 Watts	Efficacy (lm/W) ≥140	50%
LED lighting designed for greenhouse growing	RETROFIT ONLY – do not need to be on DLC's product list	50%
Non-integrated lighting fixtures	Ineligible	N/A
Lighting on vehicles	Ineligible	N/A
Portable lighting	Ineligible	N/A
Induction lighting	Ineligible	N/A

HEATING– Activity Code 900		
Description	Eligibility	Cost Share Level
Combined Heat and Power Units (CHP)	Eligible 1.5 kW to 500 kW for on-farm energy use only	50%
Natural Gas Boilers	RETROFIT ONLY – AFUE of $\geq 95\%$. Ineligible in new construction.	50%
Hydronic Heating Pipe Insulation	RETROFIT ONLY	50%
Natural Gas Furnaces	RETROFIT ONLY – AFUE of $\geq 95\%$. Ineligible in new construction.	50%
Natural Gas Radiant Tube Heaters	RETROFIT ONLY OF EXISTING RADIANT TUBE HEATERS Ineligible in new construction.	50%
Tankless (in-line) Natural Gas or Electric Water Heaters	RETROFIT ONLY – Energy Factor ≥ 0.93	50%
Heat Recovery Ventilation Systems (or air recovery units)	Eligible on a case by case basis	50%

VENTILATION – Activity Code 1000		
** All electrical equipment must be approved under the Canadian Electrical Code – e.g. CSA or ULC approved **		
Description	Eligible	Cost Share Level
General Circulation Fans	Ineligible	N/A
Agricultural Ventilation Fans	FANS MUST MEET THE MINIMUM EFFICIENCY RATINGS OUTLINED IN THE TABLE BELOW Check the fan ratings at: http://bess.illinois.edu/	50%
Minimum Efficiency Ratings		
	Fan Blade Diameter	cfm/W at 0.1"
	<16"	8.7
	16 to 21"	11.2
	22 to 35"	14.6
	36 to 47"	17.2
	48 to 56"	20.4
	>56"	21.5

RETROFIT INSULATION – Activity Code 1100

Description	Eligibility	Cost Share Level
Adding to existing insulation	Eligible	50%
Windows and Doors	Ineligible	N/A

OTHER – Activity Code 1200

Description	Eligibility	Cost Share Level
All retrofit projects in Activity Code 1200 must provide the specifications and operating conditions of the equipment to be replaced in order to allow program staff to calculate potential energy savings.		
All electrical equipment must be approved under the Canadian Electrical Code – e.g. CSA or ULC approved		
Energy-free and low-energy outdoor livestock water fountains and insulated large-diameter ground risers for water fountains (aka “heat tubes” for energy-free waterers)	Eligible if installed in a confined feeding location (ie. in a yard or a pen, not in a pasture) Eligible under Retrofit and New Construction Must have maximum heating element size of 8W per dairy cow capacity rating (4W per beef cattle capacity rating), be thermostatically controlled, and have minimum 2” HD foam insulation. Insulated large diameter ground risers (“heat tubes”) are eligible in all new and retrofit installations.	50%
Refrigeration and Cooling Equipment using scroll compressors	RETROFIT ONLY	50%
Natural Ventilation – Curtains and membranes	Eligible under New Construction excluding Dairy operations Eligible under Retrofit for all operations	50%
Natural Ventilation – actuators, winches, sensors and inlets	Ineligible	N/A
Power Ventilation – Curtains, membranes, actuators, winches, control panels, sensors and inlets	Ineligible	N/A
Greenhouse energy curtains	Eligible	50%
Greenhouse heat storage systems	Eligible	50%
Greenhouse CO ₂ recovery systems in conjunction with heat storage	Eligible	50%
Variable speed drives	Eligible	50%
NEMA Premium electric motors	RETROFIT ONLY	50%
Timers	IN EXISTING BUILDINGS ONLY	50%
Photo-sensors	IN EXISTING BUILDINGS ONLY	50%

OTHER – Activity Code 1200		
Description	Eligibility	Cost Share Level
<p>All retrofit projects in Activity Code 1200 must provide the specifications and operating conditions of the equipment to be replaced in order to allow program staff to calculate potential energy savings.</p> <p>**All electrical equipment must be approved under the Canadian Electrical Code – e.g. CSA or ULC approved**</p>		
Programmable logic controllers	<i>IN EXISTING BUILDINGS ONLY</i>	50%
Combustion Efficiency Analyzers	Eligible	50%
Irrigation – retrofit new fixed speed pump with smaller hp motor	<i>RETROFIT ONLY</i>	50%
VFDs for irrigation motors	Eligible for retrofit or new construction. Must be installed on a system with an end of line pressure sensor.	50%
Irrigation - End of line pressure sensor	<i>ON EXISTING PIVOTS ONLY, must be installed with a VFD (invoice required)</i>	50%
Retrofit Grain Dryer Components – Hopper Covers, Automated Controllers, New Burners, Heat Exchangers, VSD, PTO to Electric Motor Conversion may be eligible in Retrofits.	Eligible in retrofits on case-by-case basis. Applications must include specifications or calculations demonstrating energy savings of the proposed upgrades	50%
New Grain Dryer Components – upgrade options on new dryers that demonstrate clear energy savings over the standard dryer configuration	Eligible on new dryers on case-by-case basis. Upgrade options such as heat exchangers, VSD, automated controllers installed as factory options only. Considered if they are an optional upgrade from the standard new dryer configuration and an accompanying specification or calculation demonstrates energy savings. Only cost of the options is eligible, not the cost of the standard dryer.	50%
GPS	Ineligible	N/A
Circulation pumps	Eligible if pumps have intrinsic controller capability and are installed with boiler in retrofit only.	50%
Grid-tied Batteries – Includes batteries, required functional accessories, and third-party design work.	Eligible on a case-by-case basis. Must be connected to the electrical grid, and warrantied for 3 years minimum. May be used as grid backup, or to optimize Micro-Generators' time-of-day production with usage, to reduce grid import. Other uses considered. Additional criteria may be required.	50%
Tire pressure control systems	Eligible on a case-by-case basis. System must be able to deflate or inflate tires to optimum pressure for driving conditions. Additional criteria may be required.	50%
On-board vehicle load scales	Eligible on a case-by-case basis. System allows operator to avoid overloading the vehicle. Additional criteria may be required.	50%
<p>All retrofit projects in Activity Code 1200 must provide the specifications and operating conditions of the equipment to be replaced in order to allow program staff to calculate potential energy savings.</p> <p>***Projects with equipment not listed in the above list may still be considered for funding under the program depending on their energy savings potential, and shall be reviewed on a case-by-case basis.***</p>		