

# 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.

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

ELECTRICITY, NATURAL GAS, AND LIQUID (FUEL OR WATER) SUBMETERS – Activity Code 600	
<b>Cost Share:</b>	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 <sup>2</sup> wall area
	≥ R35	\$0.80/ft <sup>2</sup> wall area
Ceiling Insulation	≥ R50	\$0.20/ft <sup>2</sup> ceiling area
	≥ R60	\$0.40/ft <sup>2</sup> ceiling area
Under-Slab or Foundation Insulation	Eligible	\$0.04/ft <sup>2</sup> per R-value MAXIMUM \$1.20/ft <sup>2</sup>
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		
<b>**All electrical equipment must be approved under the Canadian Electrical Code – e.g. CSA or ULC approved**</b>		
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	<b>RETROFIT ONLY</b>	50%
Lighting on vehicles	Ineligible	N/A
Portable lighting	Ineligible	N/A
Induction lighting	Ineligible	N/A

### HEATING AND REFRIGERATION – 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	<b>RETROFIT ONLY</b> – AFUE of ≥95%. Ineligible in new construction.	50%
Natural Gas Furnaces	<b>RETROFIT ONLY</b> – AFUE of ≥95%. Ineligible in new construction.	50%
Natural Gas Radiant Tube Heaters	<b>RETROFIT ONLY OF EXISTING RADIANT TUBE HEATERS</b>  Ineligible in new construction.	50%
Heat Recovery Ventilators (or air recovery units)	Ineligible	N/A
Refrigeration and Cooling Equipment using scroll compressors	<b>RETROFIT ONLY</b>	50%
Tankless (in-line) Natural Gas or Electric Water Heaters	<b>RETROFIT ONLY</b> – Energy Factor ≥0.93	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	<b>FANS MUST MEET THE MINIMUM EFFICIENCY RATINGS OUTLINED IN THE TABLE BELOW</b>	50%
<b>Minimum Efficiency Ratings</b>		
	<b>Fan Blade Diameter</b>	<b>cfm/W at 0.1"</b>
	<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
<b>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.</b>		
<b>**All electrical equipment must be approved under the Canadian Electrical Code – e.g. CSA or ULC approved**</b>		
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)	<p>Eligible if installed in a confined feeding location (ie. in a yard or a pen, not in a pasture)</p> <p>Eligible under Retrofit and New Construction</p> <p>If Retrofit, it must outperform the existing water fountain, 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.</p> <p>If New Construction, it must have maximum heating element size of 5W per dairy cow capacity rating (2.5W per beef cattle capacity rating), be thermostatically controlled, and have minimum 2” HD foam insulation.</p> <p>Insulated large diameter ground risers (“heat tubes”) are eligible in all new and retrofit installations.</p>	50%
Natural Ventilation – Curtains, membranes, actuators, sensors and inlets	<p>Eligible under New Construction excluding Dairy operations</p> <p>Eligible under Retrofit for all operations</p>	50%
Power Ventilation – Curtains, membranes, actuators, sensors and inlets	Ineligible	N/A
Greenhouse energy curtains	Eligible	50%
Greenhouse heat storage systems	Eligible	50%
Greenhouse CO <sub>2</sub> recovery systems in conjunction with heat storage	Eligible	50%
Variable speed drives	Eligible	50%

OTHER – Activity Code 1200		
Description	Eligibility	Cost Share Level
<b>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.</b>		
<b>**All electrical equipment must be approved under the Canadian Electrical Code – e.g. CSA or ULC approved**</b>		
NEMA Premium electric motors	<i>RETROFIT ONLY</i>	50%
Timers	<i>IN EXISTING BUILDINGS ONLY</i>	50%
Photo-sensors	<i>IN EXISTING BUILDINGS ONLY</i>	50%
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 a corner arm or end of line pressure sensor.	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
<b>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.</b>		
<b>***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.***</b>		