



# Growing Forward 2

A federal-provincial-territorial initiative

## Growing Forward 2 On-Farm Energy Management Program

### Program Funding List **effective October to December 2016**

This funding list contains a list of possible expenses that may be included in an application under the On-Farm Energy Management Program (the “Program”). Projects with equipment not listed here 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. To be considered for funding under the Program, Applicants must complete and submit a Program application form to Alberta Agriculture and Forestry. The Program is governed by the Program Terms and Conditions, and these should be reviewed prior to submitting an application.

**All purchases must meet the eligibility requirements in the Program Terms and Conditions. Please note that purchases made before April 1, 2013 are ineligible for reimbursement under the Program.**

1. The following expenses are cost shared at 70% grant and 30% Applicant:
  - a) Variable speed drives for pumps, fans, compressors, conveyers, and material handling equipment. Applications must include Expected Savings Calculations showing proper sizing.
  - b) Lighting that meets the minimum efficiency criteria in this Table:

<b>For Luminaires ≤ 30 Watts*</b>	
Efficacy (lm/W)	≥85
<b>For Luminaires ≥ 30 Watts*</b>	
Efficacy (lm/W)	≥100

\* Must be approved under the Canadian Electrical Code – e.g. CSA- or ULC-approved

- c) LED lighting that is designed for greenhouse use. Must be approved under the Canadian Electrical Code – e.g. CSA- or ULC-approved;
- d) Tankless (inline) natural gas or electric water heaters with Energy Factor of 0.93 or higher;
- e) Equipment for recovering compressor heat and using it to offset water-heating energy consumption;
- f) Energy-free outdoor livestock watering fountains;
- g) Curtains and membranes, actuators, controllers, sensors, and chimneys for natural ventilation systems (**Excluding Dairy Applications**);
- h) Greenhouse energy curtains;



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- i) Greenhouse heat storage systems;
- j) Greenhouse CO<sub>2</sub> recovery systems;
- k) Combined Heat and Power (CHP) units;
- l) High-volume, low-speed (HVLS) circulation fans;
- m) Remote tire pressure monitors for trucks with GVWR ≥9000kg ;
- n) Combustion Efficiency Analyzers;
- o) Independent third party Energy Assessment (up to a maximum of \$9,000.00 grant funding). Assessors must be pre-approved before applying; and

The following expenses are covered only for Retrofit projects; and are ineligible for New Construction projects:

- p) Natural gas boilers with AFUE of 95% or higher (or boiler systems – e.g. boiler + condensing economizer – with manufacturer test data or an engineering study showing efficiency over 95%);
  - q) Natural gas furnaces with AFUE of 95% or higher;
  - r) Natural gas radiant tube heaters – Approvals are case-by-case;
  - s) Timers, photo-sensors, motion sensors, and programmable logic controllers for energy saving (e.g. for controlling lighting, block heaters, ventilation, heating, etc.); and
  - t) Low-energy outdoor livestock watering fountains
2. Agricultural ventilation fans tested by BESS Labs, listed at <http://www.bess.uiuc.edu>, and which meet the minimum efficiency ratings in this Table:

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



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3. Liquid fuel meters, or submeters for electricity or natural gas, installed downstream of the main utility meter, that give increased detail about equipment's energy usage and performance. Submeters are cost-shared as follows:
  - a) 100% grant for the cost of up to 3 submeters or \$3,000, whichever is lower; and
  - b) 70% grant and 30% Applicant for any additional submeters.

For more information on submeters and their benefits, refer to the fact sheets on the Program website.

4. The following expenses are cost-shared at the levels indicated:
  - a) **Building Wall Insulation** in new construction projects: \$0.85 per square foot of wall area for building wall insulation R25 or greater, or \$1.05 per square foot of wall area for building wall insulation R35 or greater;
  - b) **Building Ceiling Insulation** in new construction projects: \$0.70 per square foot of ceiling area for ceiling insulation R50 or greater, or \$0.80 per square foot of ceiling area for ceiling insulation R60 or greater; and
  - c) **Building Under-Slab or Foundation Insulation:** \$0.09 per square foot per R-value, to maximum \$2.70 per square foot.
  - d) **Adding to existing insulation:** 70% grant and 30% Applicant on the cost of the additional insulation.
  - e) **Energy Efficient Windows:** \$15.00 per square foot of window area for windows with National Fenestration Rating Council (NFRC) total U-factor rating of 0.30 or lower.

***Please remember: the minimum allowable grant amount is \$500. Applications for grants less than this amount will be denied.***