OFEP Comprehensive Application Guide

This document provides detailed information on each section of the OFEP application form to support applicants in creating a complete and accurate application. If you are interested in a specific section, place your cursor on the title in the Table of Contents and Ctrl + Click to go directly to that section.

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General Considerations

- Please read through the application in its entirety and follow the instructions carefully.
- Every item applied for **MUST** have a quote with a detailed breakdown of every component and its associated cost. Costs provided **MUST NOT** include GST or labour.
- The applicant name provided **MUST** be the same name on the invoices and proof of payment for approved expenses.
- The email and phone number you provide **MUST** be ones you have regular access to, as you will be contacted through these to confirm application information and approval.
- Ensure all numbers entered in tables are in the **CORRECT UNITS** stated in the column title.
- If mandatory sections of the application are not complete, your application will be returned, and you will not be added to the queue until a complete application is received.



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 All applicants MUST have an approved Environmental Farm Plan (EFP) before payment will be issued (you may apply without an EFP but you must submit one with your final report in order to be paid). Register to start an EFP at: <u>https://webbook.albertaefp.com/register/</u>

Part 1: Applicant Information

- Fill in all sections for name, address, phone numbers and email. If the application is being submitted under an individual name, you can enter **ONE NAME ONLY**.
- The email and phone number you provide **MUST** be ones you have regular access to, as you will be contacted through these to confirm application information and approval.
- Check the box confirming you are a Primary Producer as defined in the Program Terms and Conditions. The full Terms and Conditions are available on the OFEP website <u>www.alberta.ca/on-farm-efficiency-program</u>.
- Check if you are submitting a copy of your EFP Approval or if you will obtain one to submit with your final report. Note that an EFP must have been completed within 10 years of the application date or it is not considered valid.
- Enter your Proposed Project End Date. This is the date by which you expect to have completed all project purchases, i.e. the date on your proof of payment (processed cheque, bank or credit card statement) would fall before this date.

Part 2: Project(s) Overview

The objective of this section is to get an understanding of how the Eligible Item will be used and how it will improve efficiencies in your farm operation.

- **Current Technology/Systems Being Used:** describe your current operational setup (i.e., before your OFEP project) in relation to the equipment being applied for.
- **Proposed Technology/Systems Being Adopted:** include a description of the improvement in efficiency the new equipment will make (i.e., after your OFEP project). Be sure to describe the "smart" technology feature of the equipment if applicable. It is helpful to include the Eligible Item number (from the Funding List) in this response.
 - "Smart" features include elements such as digital sensors, data collection, connectivity, automated data analysis, or efficiency improvements. For more detail on smart features, refer to the Funding List.
 - Following the activity summary table, review the note regarding select Eligible Items that will require additional information. Review the list and check off any items that match what you are applying for – you will need to reference these to fill in the additional information in Part 4.



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Part 3: Estimated Project Budget for On-Farm Efficiency Program

Enter the required information into each column of the tables as appropriate. There are different tables for the Streams. Please ensure you enter your information into the applicable table for the item being applied for. For each table, you must enter:

- Item No: Each Eligible Item funded under OFEP is assigned an Item No. in the Funding List. Use the drop-down menu to select the correct Item number for your expense, as identified in the Funding List.
- **Technology/System Component:** Enter a brief description of the item, you can use wording from the Funding List if it is applicable.
- **Make & Model:** Enter the make and model for the equipment being applied for. If this information isn't listed on the quote, ask your retailer for the information.
- **Quantity or Area (sqft):** Enter the number of items being purchased or the total area if the item sells by the sqft (e.g., insulation).
- **Cost per Unit or Sqft:** Enter the cost of each item or the cost per sqft. GST and labour should not be included in this amount.
- **Total Cost:** Enter the total cost of the entire item being purchased. GST and labour should not be included in the total amount.
- Note that each table shows the maximum funding amount for the applicable Stream at the bottom of the table, highlighted in yellow.

Part 4: Greenhouse Gas Emissions Reductions for On-Farm Efficiency Program

This section is applicable to the following list of items only. If the items you are applying for are not in the list below, you can skip Part 4.

- Smart Farm Technology Stream
 - o Item No. 7 <u>Variable Rate Technology</u>
 - o Item No. 12 <u>Smart Calf/Livestock Feeders</u>
- Energy Efficiency Stream
 - o Item No. 19 Heating
 - o Item No. 19.1 <u>Combined Heat and Power</u>
 - o Item No. 20 Insulation
 - o Item No. 21 Heat Pumps
- Efficient Grain Handling Stream
 - o ALL <u>Item No. 30-45</u>

For each of the items listed above, there is a corresponding table that requires completion. A screenshot of each table and explanation of the information required is below.



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Variable Rate Technology

Emissions Reduction Information – Variable Rate Technology - fertilizer ONLY (not applicable for variable rate seed and/or irrigation): Technology/System Component Item Baseline/Current Number of Acres Estimation of New Estimated Number No. Average Fertilizer under Baseline/ Average of Acres under Application Rate Current Rate Application Rate New Rate (Ibs of N/per acre) (lbs of N/per acre) 58 535 Eg. 7 Rate mapping services and soil sampling - Acme Solutions 57 535

- **Item No:** Item No. 7 in the Funding List fertilizer ONLY. Fill out table if applying for mapping services, sectional control, and/or rate control.
- Technology/System Component: you can copy the description you entered in Part 3
- **Baseline/Current Average Fertilizer Application Rate:** Enter the average application rate of lbs of nitrogen/acre used across all crops on your operation.
- Number of Acres under Baseline/Current Rate: enter total cropland acres currently managed.
- **Estimation of New Average Application Rate:** Enter the new estimated average application rate of lbs of nitrogen/acre used across all crops on your operation.
- Estimated Number of Acres under New Rate: enter number of acres that will be worked with new equipment. This number may be the same or les than the amount entered for the number of acres under baseline/current rate.
- Note: to see an example of how to calculate the average rate of lbs of N/acre see the example in Appendix A: Fertilizer Calculation Rate Example

Smart Calf/Livestock Feeders

Emis	Emissions Reduction Information – Smart Calf/Livestock Feeders:								
Item	m Technology/System Component Number of Head Describe the effects of the equipment/technology on								
No.		Affected	efficiency and estimate your savings.						
Eg. 12	Smart Calf Feeding Robot- Acme Solutions	80	Each calf will be administered the correct amount of milk to ensure they are getting the nutrients they need for optimal growth and waste will be reduced. Productivity and profitability will increase, 5% feed savings are estimated.						

- Item No: Item No. 12 in the Funding List
- Technology/System Component: you can copy the description you entered in Part 3
- Number of Head Affected: enter total number of livestock that will feed from the feeders.
- Describe the effects of the equipment/technology on farm efficiency and estimate your savings: estimate efficiency gains and savings. If item may be used across different livestock types or maturity levels, enter the average estimate.



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Heating and/or Insulation

Emiss	Emissions Reduction Information – Heating and/or Insulation:									
Item	Technology/System Component	Install Location	Avg.	Efficiency	HEAT	HEAT	HEAT	HEAT		
No.			Building Temp. (°C)	AFUE % (heating) OR R-Value (insulation)	ONLY: Rated Life (hrs)	ONLY: Max. Input (BTU/hr)	ONLY: Est. Usage (days/yr)	ONLY: Est. Usage (hrs/day)		
Eg. 19	Natural Gas Radiant Tube Heater	Calving Barn	12	95	50000	80000	212	8.5		
Eg. 20	Wall Insulation – Acme pro blow-in	Layer Barn	25	36						

- Item No: Item No. 19 (Heating) and 20 (Insulation) in the Funding List
- Technology/System Component: you can copy the description you entered in Part 3
- Install Location: name of the building
- Avg. Building Temp: enter the average temperature the building will be maintained at in degrees Celsius.
- **Efficiency:** enter AFUE % (Annual Fuel Utilization Efficiency) for heating items and R-Value for insulation. This information should be available in the product specifications or from your retailer.
- Heat Only:
 - **Rated Life (hrs):** this information should be available in the product specifications or from your retailer.
 - **Max Input (BTU/hr):** this information should be available in the product specifications or from your retailer.
 - **Est. Usage (days/yr):** use will fluctuate over the year, enter the average days you expect the item to run in a calendar year.
 - **Est. Usage (hrs/day):** use will fluctuate over the year, enter the average hours you expect the item to run in a day when it is in use.

Combined Heat and Power

Emissions Reduction Information – Combined Heat and Power:									
ltem No.	Technology/System Component	Install Location	Size of CHP (kW)	Electrical Efficiency (%)	Heating Efficiency (%)				
Eg. 19.1	Acme M375 CHP unit	Central Barn	360	39.2	51.3				

- Item No: Item No. 19.1 in the Funding List
- Technology/System Component: you can copy the description you entered in Part 3
- Install Location: name of the building
- Size of CHP (kW): this information should be available in the product specifications or from your retailer.
- Electrical Efficiency (%): this information should be available in the product specifications or from your retailer.
- Heating Efficiency (%): this information should be available in the product specifications or from your retailer.



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 Note: Power and heat utilization will need to be provided for the 12-month period BEFORE install (i.e., copies of energy bills for the 12-month period). If this information cannot be provided, you will not be eligible for this item.

Heat Pump

Emissions Reduction Information – Heat Pump: *Refer to instruction sheet for "Heating Load per year of Install Location"								
Heating Load per year of Install Location (GJ)								
455								

- Item No: Item No. 21 in the Funding List
- Technology/System Component: you can copy the description you entered in Part 3
- Install Location: name of the building
- Heating Load per year of Install Location (GJ): this information can be collected from your previous heating bills add up total GJ consumed from the previous year.

Efficient Grain Handling

Emissions Reduction Information – Efficient Grain Handling:										
Item No.	Technology/System Component	Old Burner Efficiency (%)	Burner Input Size (BTU/hr)	Maximum BTU (BTU/hr)	Annual Dryer Run Time (hrs/yr)	VFD Only: Motor Size (hp)	VFD Only: Motor Nameplate Efficiency (%)			
Eg. 33	Variable Frequency Drive – Acme SQDATV61HD	70	3100000	5750000	350	20	<u>91.7</u>			

- Item No: Item No. 30-45 in the Funding List. Check Funding List for applicable Item No.
- Technology/System Component: you can copy the description you entered in Part 3
- **Old Burner Efficiency:** this is referring to the burner efficiency prior to any upgrades from OFEP funding or your baseline system.
- **Burner Input Size (BTU/hr):** Refers to your baseline grain drying system. This value can also be referred to as the "minimum burner input rate" and can be found on most grain dryer specification sheets or obtained from your retailer.
- **Maximum BTU (BTU/hr):** Refers to your baseline grain drying system. This value can also be referred to as the "maximum burner input rate" and can be found on most grain dryer specification sheets or obtained from your retailer.
- Annual Dryer Run Time (hrs/yr): Provide an estimate to the best of your ability based on how much you use your grain dryer.
- VFD Only: Motor Size (hp): this information should be available in the product specifications or from your retailer.
- VFD Only: Motor Nameplate Efficiency (%): this information should be available in the product specifications.

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Part 5: Grant Funding Request Summary

- Check Yes or No for whether you received funding from the Efficient Grain Handling Program or Farm Technology Program in 2023/24. If you select Yes, then enter the total amount you received from the program(s).
 - Note that any funding received in 2023/24 is not counted towards the funding maximum of \$150,000 for applicants under OFEP.
- Optional ASB Survey: this question is not required, so applicants may choose whether to answer or not. Responses will be used to support delivery of the Agricultural Service Board Grant Program.

Part 6: Applicant Declaration

- PRINT THIS PAGE. (Reminder: please DO NOT print the rest of the application)
- Carefully read through the Statement of Certification.
- Print your name at the top and bottom of the section, along with the date.
- For the signature line, a **handwritten signature** is required and no forms of digital signatures will be accepted.
- Once signed, please scan the signature page to submit alongside a copy of your digitally filled in PDF application.
- Submission details are shown below the signature line for emailed and mailed applications. Please note that email submissions are STRONGLY preferred.

Application Submission

Application ready for Submission = Application Form (2 documents) + ALL relevant quotes or invoices

- **TWO** separate documents make up a complete application form:
 - 1. The completed **Application Form in active fillable PDF format** (i.e., you can click on text boxes and still makes changes)
 - 2. The **Signature page** with a **handwritten signature** (scan and attach separately from the rest of the application)
- Attach scanned quotes for every Eligible Item being applied for (do not mail in the original quotes or invoices)

Ensure the Application Form is in the fillable PDF format when submitted. This format allows for your application to be uploaded directly to our system, reducing application processing time.

If your application has been successfully submitted, you will receive a confirmation email to the provided email address, or the email address used to submit the application.



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Application PDF Troubleshooting

Common Issues

- **Issue**: Internet browser (e.g., Chrome, Safari, Edge, Firefox) displays an error message when you try to open the Application Form.
 - Solution: Ensure you download the form to your computer before filling it out. Right-click the link and select "Save As" to save the PDF file to your desktop or to a folder you know the location of. Then, open the downloaded file using a PDF reader like Adobe Acrobat. To do this, launch Adobe Acrobat, click "Open" and navigate to the location where you saved the Application form.
- Issue: Software will not open PDF application form outside of browser.
 - Solution: Use Adobe Acrobat Reader for the best compatibility and functionality with our forms. If you encounter issues with other PDF software, switch to Adobe Acrobat Reader, which you can download for free from the <u>Adobe website</u>. If you are already using Adobe Acrobat Reader, make sure it is updated to the latest version in your Settings.

Tips by Device Type

Windows/PC: Different PDF readers or outdated versions on your Windows PC might render forms differently, causing issues with form functionality or appearance.

Some PDF readers may not support all form features, causing functionality or appearance issues. If you notice slow performance or if the document does not open correctly, consider updating your PDF reader or switching to Adobe Acrobat Reader for the best experience.

Mac: The default PDF reader on Mac, Preview, may not fully support all interactive PDF features.

It is recommended to download and use Adobe Acrobat Reader instead of Preview. Preview, the default PDF reader on Mac, often does not support interactive features like drop-down menus, checkboxes, and form validation scripts. Adobe Acrobat Reader fully supports these features and ensures your form is completed correctly. While filling out the form in Adobe Acrobat Reader, make sure to save your work frequently.

iPhone/iPad: We highly recommend using a computer to complete your OFEP application form.

Some interactive features like checkboxes, drop-down menus, and buttons might not work properly on an iPhone or iPad. Adding a scanned signature page to an existing PDF on these devices is also very challenging and not user-friendly.

Please ensure all mandatory information is completed for your application to be considered. If your application is missing mandatory information, it will be sent back, and your place will not be held in the review queue until the completed form is received.



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Program Resources

If after reviewing this guide you still have questions regarding your application, please reach out to the OFEP team:

Hours: 8:15 am to 4:30 pm (open Monday to Friday, closed statutory holidays)

Toll free: 310-FARM (3276) (in Alberta)

Phone: 403-742-7901 (outside Alberta)

Email: OFEP@gov.ab.ca

Appendix A: Fertilizer Rate Calculation Example

The example below will show how to calculate average nitrogen (N) application rates for the Emissions Reduction Table – Variable Rate Technology in Part 4 of the application form.

Step 1: Determine the lbs of N/lb of fertilizer product

Different fertilizer sources provide different amounts of nitrogen per pound of product. A list of some common fertilizer types with their lbs of N/lb of product are below:

N Fertilizer Source	lbs of N per lb of product
Urea (46-0-0)	0.46
Ammonium nitrate (34-0-0)	0.34
Anhydrous ammonia (82-0-0)	0.82
Ammonium sulphate (21-0-0-24S)	0.21

Step 2: Calculate average Baseline/Current N rate

For the calculation steps, we will be using Urea as our fertilizer source and assume the farming operation applying for funding grows wheat, peas and canola in their rotations.

Field	Total	Crop	Fertilizer Rate	Average Fertilizer Rate
#	Acres	Туре	(lbs of Urea*0.46 = lbs of N)	(lbs of N/ac)
1	150	Wheat	152 lbs urea/ac = 70 lbs of N/ac	70
2	155	Peas	22 lbs urea/ac = 10 lbs of N/ac	10
3	230	Canola	180 lbs urea/ac = 83 lbs of N/ac	83
Total	535			[(70*150) + (10*155) + (83*230)] / 535ac
				= <mark>58 lbs of N/ac</mark>



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Step 3: Calculate the New N rate

It is common for VRT systems to provide a read out of fertilizer rate per acre by crop type, similar to the below example. Use this data to calculate the new N rate:

Field	Total	Crop	Fertilizer Rate	Average Fertilizer Rate (lbs of N/ac)
#	Acres	Туре	(lbs of Urea*0.46 = lbs of N)	
1	150	Wheat	50ac: 165 lbs urea/ac= 76 lbs N/ac	[(50*76) + (72*70) + (28*55)] / 150 ac
			72ac: 152 lbs urea/ac= 70 lbs N/ac	= 69 lbs N/ac
			28ac: 120 lbs urea/ac= 55 lbs N/ac	
2	155	Peas	55ac: 30 lbs urea/ac= 14 lbs N/ac	[(55*14) + (65*10) + (45*7)] / 155 ac
			65ac: 22 lbs urea/ac= 10 lbs N/ac	= 22 lbs N/ac
			45ac: 15 lbs urea/ac= 7 lbs N/ac	
3	230	Canola	80ac: 190 lbs urea/ac= 87 lbs N/ac	[(80*87) + (100*83) + (50*67)] / 230ac
			100ac: 180 lbs urea/ac= 83 lbs N/ac	= 81 lbs N/ac
			50ac: 145 lbs urea/ac= 67 lbs N/ac	
Total	535			69 + 22 + 81 / 3 fields
				= <mark>57 lbs of N/ac</mark>

Note: we divide the total N rates by the number of fields, as the numbers/ac have already been averaged

Step 4: Fill in the Emissions Reduction Table – Variable Rate Technology

Using the numbers calculated above, we can fill in the Emissions Reduction Information table.

Baseline/Current Average Fertilizer Application Rate (lbs/per acre)	Number of Acres under Baseline/ Current Rate	Estimation of New Average Application Rate (lbs/per acre)	Estimated Number of Acres under New Rate
58	535	57	535



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