

Environment and Natural Resources Trust Fund

2026 Request for Proposal

General Information

Proposal ID: 2026-103

Proposal Title: Reducing Refrigerant Emissions at Small Food Processors and Producers

Project Manager Information

Name: Jennifer Theodore

Organization: Minnesota Pollution Control Agency

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Project Basic Information

Project Summary: Grants will be awarded to small food processors and producers to replace existing refrigeration systems to use lower global warming potential (GWP) refrigerants, lowering their climate change impact.

ENRTF Funds Requested: \$670,000

Proposed Project Completion: March 31, 2029

LCCMR Funding Category: Energy (E)

Project Location

What is the best scale for describing where your work will take place?

Statewide

What is the best scale to describe the area impacted by your work?

Statewide

When will the work impact occur?

In the Future

Narrative

Describe the opportunity or problem your proposal seeks to address. Include any relevant background information.

Hydrofluorocarbon (HFC) refrigerants are highly potent greenhouse gases that trap thousands of times more heat in the atmosphere than carbon dioxide. For example, R-404A, a refrigerant often used for storing food, has a GWP 3,922 times greater than CO2. HFCs are common in older equipment. Newer refrigerants with significantly lower GWP are available.

When existing equipment leaks, it is more cost effective for small businesses to repair the leak and refill the system with high GWP refrigerants. Refrigeration systems can last for 20-40 years and are a costly investment. The best option for GHG-emission reductions and energy efficiency is to upgrade to a new refrigeration unit that uses a significantly lower GWP refrigerant. This proposal is designed to offset the cost of equipment replacement so small businesses and non-profits can choose to upgrade.

Switching to lower GWP refrigerants is one of the top 10 solutions for reducing greenhouse gases (Source: Project Drawdown). The purpose of this proposal is to upgrade systems to switch to lower GWP refrigerants, which has significant environmental benefits. This differs from utility rebates that cover other refrigeration components to improve energy efficiency.

What is your proposed solution to the problem or opportunity discussed above? Introduce us to the work you are seeking funding to do. You will be asked to expand on this proposed solution in Activities & Milestones.

Using lower GWP refrigerants lowers the environmental impact of refrigeration during the equipment's lifetime and from catastrophic leaks that are likelier to happen at end of life.

An example project is replacing a remote condensing unit to switch from R-404A (GWP= 3,922) to R-454A (GWP=237). Assuming the unit has a full charge of 22 pounds, 2 to 7 metric tons CO2 equivalent emissions would be avoided annually (assuming a 5-20% annual leak rate).

We are proposing to offer grants to small food producers and processors (for and non-profit) to replace refrigeration equipment to use lower GWP refrigerants. Recipients may include creameries, fruit and vegetable growers, meat processors, and meat markets. Grants address the cost burden of purchasing new equipment with the aim of helping owners make the switch to lower GWP refrigerants sooner.

Industry interest exists. Currently, the MDA offers grants for refrigeration equipment at food producers and processors through two grant programs. Applicants compete against proposals for a wide variety of processing, storage, and distribution equipment. Application and award data show triple the demand that can be met with current funding. Between the two programs in FY24, the MDA received 104 proposals and funded 32.

What are the specific project outcomes as they relate to the public purpose of protection, conservation, preservation, and enhancement of the state's natural resources?

The state's Priority Climate Action Plan includes "upgrade equipment to use low-global warming potential refrigerants in commercial and industrial settings". This project helps support the state's goals to reduce greenhouse gas emissions and fills a gap in the state's federal Climate Smart Food Systems grant for small food processors and producers. Reduced energy use is often a co-benefit of replacing refrigeration equipment. Additionally, grants support Minnesota food producers and processors, whose existence allows consumers choices for purchasing locally, strengthens local economies, and provides opportunities for the public to develop stronger connections to our food systems.

Activities and Milestones

Activity 1: Grant funds to upgrade refrigeration equipment

Activity Budget: \$625,555

Activity Description:

The MPCA will provide approximately \$625,000 in grants to small food producers and processors to replace existing, operational refrigeration systems to use lower GWP-refrigerants. Grantees will provide a cash match to their project, a minimum 25%-50% match is likely. We estimate completing 25 refrigeration projects with a maximum award amount of \$25,000.

It is a given that refrigeration systems will leak at some point in their lifetime and at end of life. By switching to lower GWP refrigerants, we reduce the environmental impact of leaks. Additionally, users typically see energy efficiency gains when installing newer equipment.

We measure environmental benefits of a project by documenting the carbon dioxide equivalent (CO2e) of the existing system (a product of the amount of refrigerant the system holds and the refrigerant's GWP) and comparing it to the new system's CO2e to see how CO2e decreases.

The grant process includes creating a Request For Proposals (RFP) (including scoring criteria), promoting the RFP, reviewing applications through a review team, selecting recipients, writing contracts to award funds, and monitoring project compliance with state policy and program goals. All grants will meet the capital expenditure requirements of the appropriation.

Activity Milestones:

Description	Approximate Completion Date
1st round RFP: Develop and publish RFP, evaluate applications, execute contracts	July 31, 2027
1st round refrigerant projects completed	January 31, 2029
Document project outcomes, complete site visits, close out grants	March 31, 2029

Activity 2: Hire .25 FTE grant administrator (Position length = 1 year)

Activity Budget: \$43,750

Activity Description:

Our goal is to scale-up emissions reductions by completing more projects. More staff time is needed to support additional grant programs.

Activity Milestones:

Description	Approximate Completion Date
Post position, interview, make offer, position start	November 30, 2026
Position end	November 30, 2027

Activity 3: Site Visits (potential)

Activity Budget: \$695

Activity Description:

Site visits at the grantee's location are not required for expected award amounts. May do a visit if issues arise or to document and share successful project outcomes. Assumes 1 lunch per trip (\$13/lunch) and 180 miles/trip at .70 cents/mile IRS reimbursement rate. Visits will be conducted by the grant administrator or MPCA grant project manager.

Activity Milestones:

Description	Approximate Completion Date
Site visits complete	March 31, 2029

Long-Term Implementation and Funding

Describe how the results will be implemented and how any ongoing effort will be funded. If not already addressed as part of the project, how will findings, results, and products developed be implemented after project completion? If additional work is needed, how will this work be funded?

Not applicable- projects will be complete at end of ENRTF funding period.

Project Manager and Organization Qualifications

Project Manager Name: Jennifer Theodore

Job Title: Environmental Specialist

Provide description of the project manager's qualifications to manage the proposed project.

Jennifer is an Environmental Specialist 3 in the Small Business Environmental Assistance Program at the MPCA. She's developed RFPs for projects that reduce refrigerant emissions at food retailers and food assistance programs and has been involved in all aspects of grant management, from evaluating applications to acting as grant project manager. To date, the MPCA has made 17 awards to upgrade equipment to use to lower GWP refrigerants, reducing the carbon dioxide equivalent of the systems by 2,138 metric tons. Jennifer was recently the team lead for developing the refrigerant emission reduction section of the MPCA's application for federal Climate Pollution Reduction Grant Funds. As a result, the MPCA was awarded \$10 million dollars to reduce refrigerant emissions at food retailers and food assistance programs (status is uncertain with current federal funding freeze).

Jennifer has made connections with organizations such as the MN Technical Assistance Program, Minneapolis College, the North American Sustainable Refrigeration Council, trade associations, and refrigeration contractors, to develop financial and technical assistance resources for refrigeration owners and technicians.

Organization: Minnesota Pollution Control Agency

Organization Description:

The Small Business Environmental Assistance Program at the MPCA offers free, confidential assistance to businesses that are independently owned and operated, have fewer than 100 employees, and are not major sources of waste or emissions. We help businesses comply with environmental rules and reduce waste and regulatory obligations. We offer grants for projects that reduce air pollutants and greenhouse gases. We offer zero percent interest loans to small businesses for capital equipment purchases that meet or exceed environmental regulations and cover costs associated with the investigation and clean-up of contaminated sites.

Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineli gible	% Bene fits	# FTE	Class ified Staff?	\$ Amount
Personnel								
Environmental Specialist 3		Grant development and administration			34%	0.25		\$43,750
							Sub Total	\$43,750
Contracts and Services								
Businesses and non- profits	Service Contract	Grants to approximately 25 small businesses and non-profit organizations to upgrade refrigeration equipment to use lower GWP refrigerants. Grantees will be responsible for cash match.				0		\$625,555
							Sub Total	\$625,555
Equipment, Tools, and Supplies								
							Sub Total	-
Capital Expenditures								
							Sub Total	-
Acquisitions and Stewardship								
							Sub Total	-
Travel In Minnesota								
	Miles/ Meals/ Lodging	5 site visits	Site visits are not required for expected award amounts. May do a visit if issues arise or to document and share successful project outcomes. Assumes 1 lunch per trip (\$13/lunch) and 180 miles/trip at .70 cents/mile IRS reimbursement rate.					\$695

				Sub Total	\$695
Travel				Total	
Outside Minnesota					
Willinesota				Sub	-
				Total	
Printing and					
Publication					
				Sub	
				Total	
Other					
Expenses					
			_	Sub	-
				Total	
				Grand	\$670,000
				Total	

Classified Staff or Generally Ineligible Expenses

Category/Name Subcategory or		Description	Justification Ineligible Expense or Classified Staff Request
	Туре		

Non ENRTF Funds

Category	Specific Source	Use	Status	Amount
State				
In-Kind	2800 Fund	Classified MPCA staff time (.10 FTE) to act as project manager while grantees complete projects (approximately 15 months duration).	Potential	\$21,875
In-Kind	2800 Fund	100 hours of classified MPCA contract staff time (Management Analyst 4) to develop RFP, respond to questions, evaluate applications, and execute 25 grant agreements.	Potential	\$4,231
			State Sub Total	\$26,106
Non-State				
Cash	Grantee cash match	Grantees will be responsible for a cash match. Assuming an average project cost of about \$36,000 and max award of \$25,000.	Pending	\$275,000
			Non State Sub Total	\$275,000
			Funds Total	\$301,106

Total Project Cost: \$971,106

This amount accurately reflects total project cost?

Yes

Attachments

Required Attachments

Visual Component

File: a7769ca3-860.docx

Alternate Text for Visual Component Graphic is not included in application....

Administrative Use

Does your project include restoration or acquisition of land rights?

No

Do you understand that travel expenses are only approved if they follow the "Commissioner's Plan" promulgated by the Commissioner of Management of Budget or, for University of Minnesota projects, the University of Minnesota plan?

Yes, I understand the Commissioner's Plan applies.

Does your project have potential for royalties, copyrights, patents, sale of products and assets, or revenue generation?

No

Do you understand and acknowledge IP and revenue-return and sharing requirements in 116P.10?

N/A

Do you wish to request reinvestment of any revenues into your project instead of returning revenue to the ENRTF?

N/A

Does your project include original, hypothesis-driven research?

No

Does the organization have a fiscal agent for this project?

No

Does your project include the pre-design, design, construction, or renovation of a building, trail, campground, or other fixed capital asset costing \$10,000 or more or large-scale stream or wetland restoration?

No

Do you propose using an appropriation from the Environment and Natural Resources Trust Fund to conduct a project that provides children's services (as defined in Minnesota Statutes section 299C.61 Subd.7 as "the provision of care, treatment, education, training, instruction, or recreation to children")?

No

Provide the name(s) and organization(s) of additional individuals assisting in the completion of this proposal:

The MN Department of Agriculture provided FY24 data on number of proposals and awards for two grant programs.

Do you understand that a named service contract does not constitute a funder-designated subrecipient or approval of a sole-source contract? In other words, a service contract entity is only approved if it has been selected according to

the contracting rules identified in state law and policy for organizations that receive ENRTF funds through direct appropriations, or in the DNR's reimbursement manual for non-state organizations. These rules may include competitive bidding and prevailing wage requirements

Yes, I understand