

Environment and Natural Resources Trust Fund

2026 Request for Proposal

General Information

Proposal ID: 2026-387

Proposal Title: Innovative Solution to Renewable Energy from Food Waste

Project Manager Information

Name: Melissa Finnegan Organization: Ramsey/Washington Recycling & Energy Board Office Telephone: (651) 259-1842

Email: mfinnegan@recyclingandenergy.org

Project Basic Information

Project Summary: A partnership supporting Minnesota's climate and renewable energy goals by diverting organic materials from landfills and producing renewable natural gas (RNG) through anaerobic digestion and sequestering carbon into biochar.

ENRTF Funds Requested: \$10,000,000

Proposed Project Completion: April 30, 2029

LCCMR Funding Category: Energy (E)

Project Location

What is the best scale for describing where your work will take place? Region(s): Metro

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

When will the work impact occur?

During the Project and In the Future

Narrative

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

This project offers a powerful opportunity to make investments that will reduce our reliance on fossil fuels and decrease methane and CO2 emissions. According to the US EPA, food waste results in 170 million metric tons of carbon dioxide equivalent (CO2e) annually. Production, transportation and handling of food generates significant CO2e emissions, and when the food ends up in a landfill, it generates methane. This project leverages innovative food waste recovery processes, an established public private partnership (PPP) with a 20-year feedstock supply agreement, and private funding, all for the long-term benefit of Minnesota residents. Featured in this project are partnerships with CenterPoint and Xcel Energy which will be purchasing the recycled products (RNG and attributes of the biochar) to help meet their sustainability goals and state renewable energy goals.

The proposed anaerobic digester will cost approximately \$100M to design and construct and requires state and federal grant funding to be economically viable. The \$10M requested will leverage state dollars against federal and and private funding, maximizing benefits to Minnesota. State funding is especially critical now as federal funding has become less reliable in 2025.

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.

We are proposing a unique PPP with Dem-Con HZI Bioenergy, LLC (DC/HZI), in collaboration with the Shakopee Mdewakanton Sioux Community (SMSC) as well as CenterPoint and Xcel Energy. This partnership will provide renewable energy, reduce GHG emissions and produce a valuable biochar soil amendment while helping Minnesota meet climate change, recycling, renewable energy and circular economy goals.

This innovative approach produces RNG through anaerobic digestion of food waste/organics and creates a biochar product, which sequesters carbon and is used for remediation projects, water filtration, and as a soil amendment. The biochar process also effectively eliminates PFAS.

The project's anaerobic digester will process 75k tons of organic waste annually, increasing organics processing by more than 60% from the 114k tons of source-separated organics collected state-wide in 2022. The project will also create 170k MMBtu of RNG, generating 10,000 tons of biochar and reduce CO2e by 30k tons per year, or 900k tons of CO2e over the life of the project.

An end-markets feasibility study was completed, demonstrating ample demand for RNG and biochar. CenterPoint and Xcel Energy have prioritized this project in their Innovation Plans developed as part of the Natural Gas Innovation Act.

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?

This project offers a rare opportunity to shift from landfilling toward circularity. The project will reduce GHG emissions and provide renewable energy to help Minnesota meet its 75% recycling by 2030 Goal, 100% Clean Energy by 2040 Goal and the 2050 net zero emissions target. Reducing food waste in the region will mitigate climate change, which in turn will help protect our natural resources, conserve energy and enhance ecosystem services throughout Minnesota. Importantly, this project demonstrates and verifies a process that can be right-sized and replicated throughout the state for organics recovery and local production of renewable energy.

Activities and Milestones

Activity 1: Reimbursement of Recycling Organics Processing Fee

Activity Budget: \$10,000,000

Activity Description:

The proposed DC/HZI anaerobic digestion and biochar system will process organic materials, producing RNG and biochar, while preventing GHG emissions. MPCA permitting is completed for operation as a recycling facility making recycled products. It is NOT a waste disposal facility. R&E will provide organic materials, collected from Ramsey and Washington county residents, as feedstock for the digestor, to be located in Scott County.

The \$10,000,000 request leverages state dollars against federal and private funding to maximize benefits to Minnesota. Without grants, the residents of Ramsey and Washington counties would bear the cost to develop this renewable energy process, placing an unjust burden on residents to develop this new technology for Minnesota. Without mitigation from federal and state funding being sought, residents would need to pay \$200 per ton to create renewable energy, which is unaffordable. However, with the LCCMR grant, and other grants, the processing fee would be approximately \$125 per ton in Year 1, which is more economically competitive with landfilling. This approach leverages LCCMR funds for the maximum benefit of citizens throughout the state.

Activity Milestones:

Description	Approximate Completion Date
Anaerobic digestion facility operational	June 30, 2027
Reimbursement of Recycling Organics Processing Fee	April 30, 2029

Project Partners and Collaborators

Name	Organization	Role	Receiving
			runus
Bill Keegan,	Dem-Con	President, Dem-Con Companies	Yes
P.E.	Companies		

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?

The 20-year organic materials feedstock agreement already completed by R&E and DC/HZI provides long-term project stability and financial certainty to support the ENRTF investment with a pioneering new materials management strategy for Minnesota. Approximately 65% of funds needed to complete the project are secured through private financing backed by the agreement, enabling LCCMR to leverage investment for the state. This project demonstrates and verifies processes replicable throughout the state to reduce reliance on fossil fuels and end food waste to landfills, while improving the quality of human health and our natural resources through GHG reduction and carbon sequestration.

Project Manager and Organization Qualifications

Project Manager Name: Melissa Finnegan

Job Title: Strategic Partnerships Manager

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

Melissa Finnegan, Ramsey/Washington Recycling & Energy Board's Strategic Partnerships Manager, will be responsible for

overseeing the administration and reporting on LCCMR grant funds, should they be awarded for this project. Melissa joined R&E in November 2024 and was previously employed by Ramsey County and the Minnesota Department of Health. At Ramsey County and MDH, she gained

substantial experience managing legislative reporting and funding-related projects. Melissa is currently managing and reporting for a \$5 million grant from the Minnesota Department of Commerce, as well a \$150,000 grant from the Minnesota Pollution Control Agency. She is well-versed in the intricacies of this project and how funds will be used.

Melissa will be supported by Matthew Phillips, Ramsey/Washington Recycling & Energy Board's Accounting Manager. Matthew joined R&E in September 2023 and was previously employed by Ramsey County. At Ramsey County, he oversaw ARPA (American Rescue Plan, \$107 million) funding, which included requirements from the US Treasury such as quarterly and annual reporting for all funds spent, broken down by subrecipient, direct pay or contractor. He additionally oversaw \$16 million from the Treasury for Emergency Rental Assistance (ERA Grant 1 & 2) funding to Ramsey County. In addition to reporting, Matthew's team oversaw all subrecipient monitoring and desk audits for annual monitoring. He has over nine years' experience in governmental accounting.

Organization: Ramsey/Washington Recycling & Energy Board

Organization Description:

Ramsey and Washington counties have worked together to manage waste responsibly since the 1980s. Today, the counties work jointly through Ramsey/Washington Recycling & Energy (R&E). Through R&E, the counties strive to protect health and the environment and meet the state's 75% recycling goal by 2030. R&E serves over 800,000 residents and 70,000 businesses.

Ramsey/Washington Recycling & Energy is governed by the joint powers Ramsey/Washington Recycling & Energy Board

(R&E Board), which is comprised of commissioners from the two counties, as well as two ex officio members from the City of Newport and the Minnesota Pollution Control Agency.

In 2015 the R&E Board purchased the Recycling & Energy Center (R&E Center), located in Newport, Minnesota. All trash generated by individuals and businesses in the two counties is delivered here, where R&E works to recover value. The R&E Center manages about 450,000 tons of trash per year. At the facility, trash is processed to recover recyclable metals and make fuel for producing electricity. Through this system, R&E is maximizing the recovery of resources and diverting as much as possible from landfills.

Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineli gible	% Bene fits	# FTE	Class ified Staff?	\$ Amount
Personnel								
							Sub Total	-
Contracts and Services								
Ramsey/Washington Recycling & Energy Board	Internal services or fees (uncommon)	Funds will be used for reimbursement of recycling organic processing fee, reducing R&E's estimated \$200 per ton fee down to approximately \$125/ton (combined with other grant awards). This provides recycling of 50,000 tons of organic material annually for nearly 2.5 years (28 months) at \$85/ton.				0		\$10,000,000
							Sub Total	\$10,000,000
Equipment, Tools, and Supplies								
							Sub Total	-
Capital Expenditures								
							Sub Total	-
Acquisitions and Stewardship								
							Sub Total	-
Travel In Minnesota								
							Sub Total	-
Travel Outside Minnesota								
							Sub Total	-
Printing and Publication								
							Sub Total	-

Other Expenses					
				Sub	-
				Total	
				Grand	\$10,000,000
				Total	

Classified Staff or Generally Ineligible Expenses

Category/Name Subcategory or Type	Description	Justification Ineligible Expense or Classified Staff Request
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Non ENRTF Funds

Category	Specific Source	Use	Status	Amount
State				
Cash	Renewable Development Account, M.S. Section 116C.779	The 2024 Legislature Committed \$5M (minus state agency administration fees) of Renewable Development Account funding to support the development of the anaerobic digester project. (See Laws 2024, Ch. 127, Art. 41, Sec. 2, Subd. 5.)	Secured	\$4,830,000
			State Sub Total	\$4,830,000
Non-State				
In-Kind	R&E is contractually committed to the recycling organic material processing fee of approximately \$125/ton in year 1 for recycling 50,000 tons of organic material annually for nearly two and half years (28 months).	\$125/ton for 50,000 tons annually for 28 months. Though the grant period is 28 months, this project leverages a public-private partnership 20-year feedstock agreement which will be catalyzed by the LCCMR grant. The project will continue beyond the grant period to reduce GHG emissions, provide renewable energy, and sequester carbon to meet Minnesota's 75% recycling by 2030 Goal, 100% Clean Energy by 2040 Goal, and the 2050 net zero emissions target.	Secured	\$14,583,333
			Non State	\$14,583,333
			Sub Iotal	¢10,412,222
			Total	\$19,413,333

Total Project Cost: \$29,413,333

This amount accurately reflects total project cost?

Yes

Attachments

Required Attachments

Visual Component File: bbe0a674-2ab.pdf

Alternate Text for Visual Component

Innovative Solution to Renewable Energy from Food Waste: Ramsey/Washington Recycling & Energy and Dem-Con/HZI. Project components: food waste recycling, anaerobic digestion, renewable natural gas, and digestate-to-biochar process (soil amendment and carbon sequestration method)....

Financial Capacity

Title	File		
R&E 2022 Financial Report	<u>813e3617-9dd.pdf</u>		
Board Resolution or Letter			
Title	File		
Ramsey/Washington Recycling & Energy Board Resolution	<u>1506d1d7-5d2.pdf</u>		

Supplemental Attachments

Capital Project Questionnaire, Budget Supplements, Support Letter, Photos, Media, Other

Title	File
SMSC Letter of Support	<u>88f174cd-c5a.pdf</u>
Washington County Letter of Support	<u>1515b07f-a18.pdf</u>
Ramsey County Letter of Support	8abc7dab-243.pdf
Kanadevia Inova Letter of Support	<u>6fc41f8b-207.pdf</u>
PWE Letter of Support	d7d6aebc-754.pdf
Olmsted County Letter of Support	<u>2faf5b68-44b.pdf</u>
CenterPoint Letter of Support	<u>81a128a5-67b.pdf</u>
Dem-Con Letter of Support	<u>ddc5119a-f00.pdf</u>
MPCA Letter of Support	74dae9b2-101.pdf

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?

N/A

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:

Leigh Behrens, Ramsey/Washington Recycling & Energy; Sam Holl, Ramsey/Washington Recycling & Energy; Michael Reed, Ramsey County; Bill Keegan, Dem-Con; Eugenia Manwelyan, Gershman, Brickner & Bratton, Inc. (GBB); Nathan Klett, Foth Infrastructure & Environment, Llc.; Kevin Johnson, Husch Blackwell Llp.

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

N/A