

AGRI Bioenergy/Biochemical Pilot Project Grant

2019 Request for Proposals

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Grant Summary

Application and Award Details

Grant funds are available for projects that would advance a bioenergy or biochemical production technology beyond the bench scale/proof-of-concept scale toward commercial scale, through construction and operation of a pilot plant. The Minnesota Department of Agriculture (MDA) anticipates awarding up to \$150,000 in this round using a competitive review process. No more than \$150,000, which would represent 50% or less of the entire project cost, will be awarded per proposal. Eligibility and award restrictions are detailed in this request for proposals.

Your application must be received through our [online application system](#) by 4:00 p.m. CDT on April 26, 2019, to be included in this grant cycle. We will send you an email confirmation when we receive your complete application.

Contact Information

Direct questions about the grant program, completing the application, or additional accommodations in writing to:

Kevin Hennessy
Kevin.Hennessy@state.mn.us
Minnesota Department of Agriculture
625 Robert St N
St. Paul, MN 55155-2538

Answers to questions will be posted on the MDA website.

AGRI Background and Program Goals

The Agricultural Growth, Research, and Innovation Program (AGRI) was established to advance Minnesota's agricultural and renewable energy industries ([Minn. Stat. 41A.12](#)). This program focuses on areas of greatest opportunity and potential economic impact to create agricultural jobs and profitable businesses.

Part of AGRI is the Bioincentive Program, which is designed to encourage commercial-scale production of advanced biofuels, renewable chemicals, and biomass thermal energy through production incentive payments. We also hope to encourage other technologies that would use Minnesota's biomass resources as feedstock for renewable energy or chemical production.

The purpose of this grant is to advance new products and production methods from proof-of-concept to pilot-plant scale in order to create a "pipeline" of potential claimants for the Bioincentive Program, or as may be used as replacements for other non-renewable fuels or chemicals.

Glossary

Bench scale. Testing of bioenergy or biochemical production methods or processes on a small scale, such as on a laboratory worktable, in order to demonstrate proof of concept. Also referred to as “laboratory scale”.

Commercial scale. The size of a bioenergy or biochemical production system necessary to produce a product for sale. Also referred to as “industrial scale”.

Pilot plant. A bioenergy or biochemical production system constructed and operated to determine practicality of commercial-scale production and identify production problems or hazards before commencing commercial-scale production.

Pilot-plant scale. A size of bioenergy or biochemical production larger than bench scale, but smaller than commercial scale, using sufficient volumes of materials to determine practicality of commercial-scale production and identify production problems or hazards.

Proof-of-concept. A demonstration, the purpose of which is to verify that bioenergy or biochemical production methods or processes have the potential for real-world application. Proof of concept usually involves construction and operation of a prototype at a bench scale.

Scale-up. The expansion of a bioenergy or biochemical production method or process, such as from lab scale to pilot-plant scale, or from pilot-plant scale to commercial scale.

Eligibility

Eligible Applicants

Applicants must:

- Be a Minnesota-based company, learning institution, local unit of government, Native American Tribal community, or individual, including for-profit businesses and colleges or universities.
- Be in good standing with the State of Minnesota (no back taxes). Project partners must also be in good standing.
- Not be an MDA employee or spouse of an employee.

Eligible Projects and Expenses

Eligible grant projects will be for the development of innovative bioenergy or biochemical production technology ideas that have advanced beyond proof of concept (documentation of proof of concept is required; see “Project Description” in the Project Proposal section on page 17), and are at the stage of development of scaling up to pilot-plant level. Up to 50% of the total project cost may be reimbursed with grant funds, with a minimum grant award of \$2,500 and a maximum grant award of \$150,000.

Expenses may not be incurred until after a grant contract has been fully executed. Successful applicants should anticipate having contracts available to them around June 10, 2019. All expenses must be incurred and paid for during the effective date of the grant contract. Applicants should anticipate that grant contracts will have an end date of June 30, 2021.

Funding must be used for:

- Equipment needed to achieve the goals of the project implementation. All equipment must be
 - Installed in Minnesota; and
 - Be essential for the execution of project tasks as listed in the project work plan.
- Wages, software, and anything else specific to the pilot plant project grant expenses necessary to perform the tasks of the grant project’s work plan.

Projects must continue to operate, including submission of required periodic reporting, until the expiration of the grant contract.

Examples of ineligible expenses:

- Donated or volunteer (in-kind) services. While the project can receive unpaid services, the value of these services is not reimbursable either as a direct or indirect cost, nor can it be counted as a match
- Indirect costs, such as a percentage of grant costs that would count for general administration costs

- Donations or in-kind contributions made by the applicant, including property and services, regardless of the recipient
- Fines, penalties, or other settlement expenses resulting from violations (or alleged violations) of, or failure of the applicant to comply with, Federal, State, local, or Indian tribal laws and regulations
- Investment management costs, including costs of investment counsel and staff, and similar expenses incurred to enhance income from investments
- Bad debts, late payment fees, finance charges, or contingency funds
- Taxes, except sales tax on goods and services
- Entertainment, amusement, diversion, social activities, gifts, or any costs directly associated with such purchases (such as tickets to shows or sports events, meals, lodging, rentals, transportation, alcohol, and gratuities)
- Fundraising expenditures (financial campaigns, solicitation of gifts or bequests, etc.) to raise capital or obtain contributions, regardless of the purpose for which the funds will be used
- Lobbying, including costs of membership in organizations substantially engaged in lobbying
- Political activities

Application Instructions and Review

Instructions

Grant applicants are required to submit proposals through our [online application system](#). Questions that you will answer in the online application system are shown beginning on page 16.

All applications must be received by 4:00 p.m. CDT, on April 26, 2019. Late applications will not be considered. The MDA is not responsible for any technical or logistical problems resulting in the MDA not receiving the application on time. It is the responsibility of the applicant to ensure that submission is received by the MDA before the deadline.

Application Guidelines

- Write for reviewers who are generally knowledgeable but may not have a thorough or deep understanding of your proposed bioenergy or biochemical production area. Use plain, easily understood language.
- Answer all questions completely within the character limits specified in the grant application. Use 12 point font, single spacing for uploaded documents.
- The Project Evaluation Profile included in this document will be used to compare and score the grant applications.

Preferred Projects

Preference will be given to projects that:

- Provide economic benefit to communities of color, economically disadvantaged or Native American communities
- Are minority- or veteran-owned

Application Review Process and Timeline

A review committee, composed of MDA staff and external reviewers, evaluates all eligible applications. Reviewers may recommend whole or partial funding of a project. The Commissioner of Agriculture reviews the committee recommendations and is responsible for award decisions. The review committee and Commissioner may use rural/urban and geographic diversity when making their recommendations and decisions. We will notify applicants, both successful and unsuccessful, in writing by six weeks after the proposal deadline.

Request for Proposals (RFP) posted on the MDA website.....March 15, 2019

Questions due no later than 4:00 p.m. CDT.....April 19, 2019

Applications due no later than 4:00 p.m. CDT.....April 26, 2019

Committee begins review of applications.....April 29, 2019
Committee recommendations submitted to Commissioner for review.....May 13, 2019
Applicants notified of decisions; grant agreement negotiations begin.....May 28, 2019

Privacy Notice and Data Classification

The information provided by an applicant will be used to assess the applicant's eligibility to receive a grant under the Agricultural Growth, Research, and Innovation Program. The decision to apply for this grant is voluntary, and applicants are not legally required to provide any of the requested information. Applicants may decline to complete this application without any legal consequence. However, only completed applications will be considered for a grant; incomplete applications will not be considered.

Some of the data provided in this application is classified by the Minnesota Data Practices Act as private or non public. Access to private or non public data is limited by law to MDA staff and contractors with a valid work assignment to access the data, parties authorized by the applicant or by a valid court order, the state auditor, and the legislative auditor. If necessary, MDA may also share the data with law enforcement.

Per [Minn. Stat. 13.599](#):

- Names and addresses of grant applicants and the amounts requested will be public data once application responses are opened.
- All remaining data in application responses (except trade secret information, see below) becomes public data after the evaluation process is completed (for the purposes of this grant, when all grant agreements have been fully executed).
- All data created or maintained by the MDA as part of the evaluation process (except trade secret information, see below) will be public data after the evaluation process is completed.
- Trade secret information (as defined in Minn. Stat. § 13.37) submitted by an applicant is classified as private or nonpublic. In order to protect data as trade secret information, the application must identify the specific formula, pattern, compilation, program, device, method, technique, or process that the applicant wishes to protect, and provide an explanation of the economic value of keeping the data from being generally known to other persons. Determining what constitutes trade secret information is ultimately the responsibility of the MDA, and the MDA cannot guarantee that data marked by an applicant as trade secret information will be classified as such.

Conflicts of Interest

The State will take steps to prevent individual and organizational conflicts of interest, both in reference to applicants and reviewers per [Minn. Stat.16B.98](#) and [Conflict of Interest Policy for State Grant-Making \(PDF\)](#).

Organizational conflicts of interest occur when:

- A grantee or applicant is unable or potentially unable to render impartial assistance or advice to the MDA due to competing duties or loyalties.

- A grantee's or applicant's objectivity in carrying out the grant is or might be otherwise impaired due to competing duties or loyalties.

In cases where a conflict of interest is suspected, disclosed, or discovered, the applicants or grantees will be notified and actions may be pursued, including but not limited to disqualification from eligibility for the grant award or termination of the grant agreement.

Questions

Questions may be submitted by email using Kevin.Hennessy@state.mn.us. Questions must be submitted by 4:00 p.m. CDT on April 19, 2019. Answers will be posted on the [Questions and Answers](#) portion of the AGRI Bioenergy/Biochemical Pilot Project Grant webpage.

Requirements for Projects Receiving Grant Funds

Pre-Award Financial Review

All Non-Governmental Organizations (NGOs) applying for grants from the State of Minnesota must undergo a financial review prior to a grant award made of \$25,000 and higher. The University of Minnesota is excluded from this requirement.

Documentation will be requested based on the following criteria:

- Grant applicants with annual income of under \$50,000, or who have not been in existence long enough to have a completed IRS Form 990 or audit, should submit their most recent board-reviewed financial statements.
- Grant applicants with total annual revenue of \$50,000 or more and less than \$750,000 should submit their most recent IRS Form 990.
- Grant applicants with total annual revenue of over \$750,000 should submit their most recent certified financial audit.

Applicant Fund (Cash Match) Requirement

Applicants must provide documentation for at least 50% of the total project cost as a cash match (no in-kind or indirect matches are allowed).

Sources of the applicant funds can include cash, loans, or other grants. Other funds from the State of Minnesota cannot be used as cash match. The sources will need to be stated in the budget section of the application. If the applicant has applied for Federal funding (grant or loan) for this or related projects, please specify the grantor, the funding amount, and the purpose of that grant or loan funding.

Grant Award Agreement and Payments

Upon approval of an application and prior to beginning work on the AGRI Bioenergy/Biochemical Pilot Plant Grant and receiving reimbursements of up to 50% of eligible grant expenditures, the applicant is required to do the following:

- Complete an IRS W-9 form or register as a vendor in SWIFT, the State's accounting system.
- For individuals, complete an Affidavit for Individuals responding to State of Minnesota Grant Request for Proposal form.
- Sign a Grant Award Agreement indicating their intention to complete the proposed tasks. The agreement also authorizes the MDA to monitor the progress of the project.

Grant Award Agreements must be signed by the applicant's Authorized Representative and returned to MDA within 30 days of receipt. Failure to submit the signed agreement may result in loss of the grant award.

Reporting Requirements

To receive grant payments, grantees must provide a progress report and proof that grant project work has been done by submitting details of each purchase on receipts or invoices, and proof that the vendors have been paid. Upon completion of the grant project, submission and approval of a final progress report will be required to receive the final payment.

The MDA reserves the right to modify reporting requirements during the course of the project. Information submitted in any report is a public record. If the grant recipient considers any information in the report to be trade-secret protected, the grant recipient may request that trade-secret information be kept confidential and must specifically label that information. The MDA shall notify the grant recipient if a public records request is made for the information claimed as protected by the grant recipient.

Site Visits and Evaluation

The grant agreement allows the MDA to monitor the progress of the project. The MDA will perform a monitoring visit for all grantees with awards of \$25,000 or more before a final payment is approved. Other grantees may receive monitoring visits at the discretion of the MDA.

Bidding Requirements

All funded applicants will be required to abide by the state's bidding requirements for larger purchases. See a detailed list of the state's [bidding requirements](#) for details.

Affirmative Action and Non-Discrimination Policy

The grantee agrees not to discriminate against any employee or applicant for employment because of race, color, creed, religion, national origin, sex, marital status, status in regard to public assistance, membership or activity in a local commission, disability, sexual orientation, or age in regard to any position for which the employee or applicant for employment is qualified. [Minn. Stat. 363A.02](#). The grantee agrees to take affirmative steps to employ, advance in employment, upgrade, train, and recruit minority persons, women, and persons with disabilities.

The grantee must not discriminate against any employee or applicant for employment because of physical or mental disability in regard to any position for which the employee or applicant for employment is qualified. The grantee agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified disabled persons without discrimination based upon their physical or mental disability in all employment practices such as the following: employment, upgrading, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. [Minnesota Rules, part 5000.3500](#).

The grantee agrees to comply with the rules and relevant orders of the Minnesota Department of Human Rights issued pursuant to the [Minnesota Human Rights Act](#).

Audits of Project

Per [Minn. Stat. 16B.98, subdivision 8](#), the grantee's books, records, documents, and accounting procedures and practices of the grantee or other party that are relevant to the grant or transaction are subject to examination by the granting agency and either the legislative auditor or the state auditor, as appropriate. This requirement will last for a minimum of six years from the grant agreement end date, receipt, and approval of all final reports, or the required period of time to satisfy all state and program retention requirements, whichever is later.

Voter Registration Requirement

The grantee will comply with [Minn. Stat. 201.162](#) by providing voter registration services for its employees.

Project Evaluation Profile

Evaluation Criteria	Maximum Score
<p>Project contains desired qualities for this State funded grant:</p> <ul style="list-style-type: none"> • Clear benefit to the people of Minnesota (4 pts) • Project takes advantage of public-private partnerships, business to business partnerships, or other meaningful collaborations that will aid in assisting project outcomes (12 pts) • Application makes a convincing case, backed up by credible data and information, that: <ul style="list-style-type: none"> ○ The bioenergy/biochemical process will have demonstrated and has a good chance of becoming commercialized – proof-of-concept documentation has been submitted (6 pts) ○ Project scale is communicated in terms of its size with measurements that detail that the project would qualify as a pilot-project (6 pts) ○ Project makes use of previous MDA bioenergy/biochemical grant project results (2 pts) ○ Project will use Minnesota biomass feedstock as source material (4 pts) 	34
<p>Measurable objectives and outcomes</p> <ul style="list-style-type: none"> • Plan to measure outcomes is detailed and easy to accomplish (5 pts) • Measured outcomes are appropriate to evaluate progress and success (5 pts) • Plan clearly states how the project will assist in the movement of a bioenergy or biochemical project will move forward toward commercialization (5 pts) 	15
<p>Soundness and rigor of work plan for project</p> <ul style="list-style-type: none"> • Project work plan is appropriate to meet proposed objectives (3 pts) • Project plans are clear, descriptive, and address each objective (3 pts) • Project work plan makes clear why the project tasks matter in achieving a successful result (3 pts) • Project is achievable in the project’s timeline (3 pts) 	12
<p>Qualifications of project team</p> <ul style="list-style-type: none"> • Members of project team are identified and their roles are defined and necessary (3 pts) • Skills and experience of individuals/organizations match their proposed involvement (3 pts) • Project team is sufficient to accomplish the implementation, scale-up objectives, assessment of outcomes, and analysis of project results. (3 pts) 	9
<p>Budget detail and justification</p> <ul style="list-style-type: none"> • Budget narrative clearly details and justifies all project costs (4 pts) • Budget fully addresses the needs of each objective (4 pts) • Equipment and associated costs are well specified with all costs included and estimated – documentation of costs for project are clear and well defined (4 pts) • Matching funds for project are easily documentable and can be accounted for throughout the project (4 pts) • Budget contains necessary costs for project implementation and avoids extraneous costs that fall outside the grant project objectives (4 pts) 	20

Evaluation Criteria	Maximum Score
Preferred projects <ul style="list-style-type: none"> • Project will provide economic benefit to protected classes. Project serves communities of color or Native American Tribal Communities (5 pts) • The applicant is a minority/veteran owned business (5 pts) 	10
Total	100

Application Questions

These questions are provided for your convenience and planning. Use [the Online Application System](#) to record your answers.

Contact Information

Applicant Information

- Applicant Name
- Organization Name
- Mailing Address
- Telephone
- Email

Authorized Signatory

(Required if the authorized signatory for the contract is **not** the applicant)

- Name of Authorized Signatory
- Organization Name
- Mailing Address
- Telephone
- Email

Eligibility

Please confirm that the following statements apply to your organization. You must respond “Yes” to all of the statements to be eligible to apply for this grant.

- The organization applying is based in Minnesota.
- The organization applying is in good standing with the State of Minnesota (no back taxes).
- The applicant is not an MDA employee nor will an MDA employee benefit financially from the grant project.

Program Publicity

How did you hear about the AGRI Bioenergy/Biochemical Pilot Project Grant? (Mark all that apply.)

- MDA website
- Word of mouth

- Previously applied
- Notification from organization other than the MDA
- Press release
- Email notification from the MDA
- Other (please list)

Project Proposal

Grant Request Summary

- Project Title
- Project Start Date
- Project End Date
- Total Project Costs
- Amount of Grant Request and Total Project Cost (request must be 50% or less than the total project cost, and no more than \$150,000)
- Applicant's Matching Funds – Matching funds will be the project costs that are not covered by the grant award. Explain the source of matching funds. If the proposed project has been submitted to or funded by another grant program, please specify the grantor, the funding amount, and the purpose of that grant funding. If you have not received the grant funding please provide contingency match funding source(s) in the event you do not obtain the grant. Your matching funds must amount to at least 50% of your total project costs. *(500 characters, including spaces)*

Project Description

(Limit: 500 characters, including spaces)

Summarize your project. Include a description of your production idea and necessary costs that would be incurred to implement the idea, a succinct account of the project's objectives, and the anticipated outcomes of the pilot plant project. Explain how your project fits into the stage of development of pilot or demonstration level, and is now well beyond the bench scale phase, and attach documentation of proof of concept. Include measurements that describe the scale of your pilot-plant project and tell why this size qualifies the project to be considered pilot-scale.

Rationale and Those Who Benefit

(Limit: 3,000 characters, including spaces)

Provide the background and need for the proposed project. Explain why the project is important and timely.

Do any previous MDA NextGen Energy Grant projects provide foundational support which this grant project can use? Which one(s), and in what way?

Explain who else in Minnesota stands to benefit, directly or indirectly, from your project. If applicable, describe how the project stands to address inequities and/or disparities experienced by minority and Native American Tribal Communities.

Business Readiness and Financial Sustainability

- **Need for the Grant Project** *(Limit: 2,800 characters, including spaces)*
 - Describe the need for this project and the production scale-up issue(s) it will address.
 - Summarize the expenses to be incurred for the project.
- **Project Work Plan Overview** *(Limit: 2,800 characters, including spaces)*
 - Give a general narrative of the work plan for your project, and how this fits into your short term objectives and long term goals for the bioenergy or biochemical technology idea you are pursuing.
 - Include estimated date when your pilot plant project will begin should you obtain funding.
 - Explain how your idea will benefit or be better off after completion of this project, and at what stage of development you hope to reach with this project.

Work Plan and Timeline

Complete the following table (one is provided with the online grant application). For Timeline, you might include target dates for tasks (describe in Description of Task) such as getting quotes on equipment, selecting an equipment vendor, ordering equipment and installation time, data you expect to collect, and conclusions you hope to determine with the data collected. Also include which members/organization of your project team who will have primary or secondary responsibilities for each task listed, and list what those responsibilities will be. Identify and mark confidential information and trade secrets contained in the table.

Expected Outcomes and Project Evaluation

(Limit: 2,800 characters, including spaces)

Address the following questions:

- How will you evaluate the success of the project? What will you measure? What information will you document? What will you expect your final report to convey?
- How will your project move your pilot plant implementation further toward commercialization? Name the potential users of your technology once it is commercial and who will benefit from your idea becoming a reality.
- Describe the biomass feedstock to be used in this project. How will your project benefit Minnesota biomass suppliers? Include an assessment of how variability in costs of your feedstock will effect project viability should the technology reach commercialization.

Qualifications of Applicant and Other Key Participants

(Limit: 3,400 characters, including spaces)

Provide the qualifications of all individuals and organizations who will participate in the project, including project lead person and any collaborators. Do not include extensive resumes or biographies, but rather a short description of their relevant abilities and qualifications.

- Participant Name
- Organization Affiliation
- Occupation
- Email Address
- Brief Summary: Relevant abilities and qualifications

Letters of Commitment and Support

We require letters of commitment from each key participant (except the applicant). Letters should indicate that each person listed understands her or his role and is willing to participate and commit adequate time to the project. Letters of support from organizations or individuals that are not directly involved in the project are not required, but they may be helpful in justifying the need for your project.

Budget Summary

Upload a budget summary chart that uses the following format (one is provided with the online grant application). Equipment purchased or rented that is paid for with either grant or matching funds should be justified as to why it is needed. Associated installation and other necessary costs should be included and listed separately. Only equipment, installation costs, labor/salary, software, and any other expenses necessary to perform the tasks of the grant project may be reimbursed and used as match for this grant. If matching funds includes a non-State of Minnesota grant please submit documentation as instructed earlier in this grant application.

Note: Award request must be equal to or less than 50% of the total expenses.

Budget Narrative

(Limit: 6,800 characters, including spaces)

Provide a budget narrative. The narrative should:

- Provide detail and justify each expenditure.
- Explain how the budget items connect to the projects expected outcomes.
- Explain how you arrived at the budget estimates.
- Identify the dollar value and source(s) of cash match.