

Expression of Interest

Alternative Fuels & Feedstock Initiative to Add Value to Seed Oil Crops through Improved Preprocessing, Scalability, and Valorization of Product Streams

NAICS 115114 — Postharvest Crop Activities

1. INTRODUCTION

Battelle Energy Alliance, LLC (BEA), Management & Operating Contractor of the U.S. Department of Energy (DOE) owned Idaho National Laboratory (INL), is seeking an Expression of Interest (EOI) from prospective offerors to complement existing seed oil crop research efforts at the Biomass Feedstock National User Facility (BFNUF) through U.S. Department of Energy (DOE) funded work. Appropriate topics of research will develop a greater understanding of harvesting, storage, separations, and scalability that increase the value of seed oil crops by reducing processing costs, increasing yields, and/or generating material streams that can be valorized. Topics that are not of interest to this EOI include operations upstream of harvesting (e.g., agronomy, crop engineering, genetic engineering), and downstream of processing (e.g., new conversion technologies). This effort expects to fund a maximum of two projects through DOE's Alternative Fuels & Feedstock Office (AFFO). Projects can be led by industry or a U.S. university, with INL collaboration.

2. BACKGROUND

AFFO and Idaho National Laboratory (INL) seek research that improves post-harvest preprocessing, storage, separations, and scalable fractionation of seed oil crops to reduce costs, increase yields, and create valuable non-oil product streams. Work must focus on post-harvest operations and demonstrate scalability. Awardees will collaborate with INL's BFNUF and generate data supporting an INL-led technoeconomic assessment (TEA)

3. SCOPE OF WORK

BEA is seeking qualified company or U.S. University to support the BFNUF and AFFO mission through novel research that increases the value of seed oil crops through more effective harvesting, storage, fractionation, and/or valorization for seed components.

If the proposed work is bench-scale, a case must be made for why it is scalable to field applications. Proposed research may focus on commodity or niche seed oil crops. More niche seed feedstocks will be considered if the research team can demonstrate the extent to which the proposed methods are broadly applicable. EOIs should focus on the

non-oil components of the seed, although outcomes affecting the oil extraction process can be considered in the overall potential impact of the proposed work.

The winning project team will collaborate with INL and help design INL scope that uses BFNUF capabilities, which may be reviewed at Biomass Feedstock National User Facility - Idaho National Laboratory.

Qualifications for successful applicants include:

- **Technical Expertise and Leadership:** Strong technical credentials and experience, demonstrated by impactful research publications. There will be a preference for teams with experience collaborating with industrial partners or in performing industrially relevant research.
- **Collaboration and Networking:** Demonstrated ability to work with and lead teams from different organizations.
- **Industry and Workforce Development Connections:** Extensive ties with agricultural companies, equipment manufacturers, and/or energy sectors.

Interested applicants will propose scope to address the research challenge posed. It is anticipated that the project duration will be between 12 and 24 months and will support approximately 0.25 FTEs for project PI and 1.0 – 3.0 FTEs for technicians/post docs/students. In addition to labor, the project may include laboratory consumables commensurate with the proposed scope. Any non-consumable equipment purchases, or planned travel must be specified in the proposed scope and is subject to approval by INL.

Project resources required to fund BEA and BFNUF activities are separate from the awarded amount, which will be managed through a contract with BEA. As determined by BEA, responders to this EOI may receive a Request for Proposal (RFP) that may require detailed technical and price proposals for evaluation and ranking in a selection process.

4. PROCESS

This EOI is the first step in identifying interested and qualified vendors for future solicitation. Responses may be used to inform the development of a formal solicitation list. Selected vendors may be invited to participate in a Request for Proposal (RFP) process for award consideration.

5. SUBMITTAL REQUIREMENTS

Interested individuals are requested to email expressions of interest to BFNUF@inl.gov and chase.egbert@inl.gov by 6PM Mountain Standard Time on October 23, 2026.

Included must be sufficient written information confirming the responder's qualifications, including the following:

- For all core team members (no page limit):
 - Name
 - Institution
 - Contact Information
 - CV or Resume
- A brief statement (no more than three - five pages in length) including:
 - The objective of the planned proposed work
 - The approach to meeting the research objective
 - The scale and technology readiness level of the proposed work
 - Team members, resources, and roles for each team member
 - How the team will collaborate with the BFNUF and include an INL-led TEA

Expressions of interest may be submitted by 1) Contacting BFNUF@inl.gov to receive a link to securely transmit your application using Box, or 2) Emailed directly to BFNUF@inl.gov and chase.egbert@inl.gov. If you do the latter, please enable encryption features in your email platform to ensure secure transmission. Securely sending emails protects sensitive information from unauthorized access. Transmitting PII via non-secured methods carries inherent risks for which you are accountable.

Only potentially qualified offerors, as determined by BEA, will be contacted for further discussions or the release of a request for proposal for the project. Interested individuals are advised that the selection decision is anticipated in January 2027. If you have questions, need additional information, or need to speak with a BEA subject matter expert for clarification, please email BFNUF@inl.gov. For further questions regarding BFNUF capabilities, please reach out via email at BFNUF@inl.gov. Proposing teams should anticipate collecting information that will support a technoeconomic assessment completed by INL.

Deadline for submission: October 23, 2026

Submit to: Chase.Egbert@inl.gov and BFNUF@inl.gov

6. PROPRIETARY INFORMATION

Because information received in response to this EOI may be business sensitive or proprietary to the responding party, respondents must mark information in their responses accordingly.