Request for Proposals

Advancing Commercialization of Cellulosic Nanomaterials- Product Development Projects

The U.S. Endowment for Forestry and Communities (Endowment) and the USDA Forest Service's (USFS) public private partnership (P3Nano) has \$2,000,000 in funding available for collaborative research & development projects designed to advance the commercialization of cellulosic nanomaterials. Although there is no specific dollar limit for each proposal, P3Nano hopes to fund 4-8 proposals with anticipated budget of \$250,000 to \$500,000 each. Timeline to complete the project is 1 to 3 years. Proposals must be submitted by industry. Proposal Narratives are limited to six pages using the outline that follows this RFP. Budget, investigator bios, business analysis, and references are not included in the six-page limit and will be uploaded to the appropriate sections of the application on the Endowment's grantee portal.

Proposal selection will be made by the P3Nano steering committee with initial review and recommendation made by its science and technology advisory committee. P3Nano is requiring that a USFS scientist be listed as a co-PI on all submitted proposals, who will work with the team as needed. Please email Michael Goergen at michael@usendowment.org if you need assistance in identifying an appropriate USFS scientist for a given project. Budgets should not include funding for the USFS scientist. Intellectual Property will be negotiated on a case by case basis.

The proposal and all attachments should be submitted via our grantee portal by 02-February 2021. Awards will be made by March 2021.

This RFP is directed toward projects that will accelerate the emergence of commercial markets for cellulosic nanomaterials and the proposal should reflect this. P3Nano is asking for a stronger commitment from industry partners. Proposed projects that show the greatest potential for commercialization, have a compelling business analysis, a credible research and development approach, and a strong case for how P3Nano funding would address key technical and/or development challenges that once solved would result in commercialization will be considered

This RFP is open to a broad range of market segments; (e.g., adhesives, building/construction, cement/concrete, coatings, electronics, food, pharmaceuticals, medical, paper, packaging, personal care, etc.).

Proposal submissions must:

- Be submitted by industry
 - Include a letter summarizing the nature of the company, and that they are selling product within the given market area of the proposed project.
 - o Include at least 5% in cash cost share and 10% in-kind cost share from the company.
 - If a University partner is involved, then an additional in kind cost share of at least 10% provided by the University is required.
- Include a preliminary business analysis or techno-economic analysis (TEA)for realistic scenarios to assess the viability of the proposed product. Items that should be specifically noted are:
 - O What is the market opportunity within this product area?
 - O What are the hurdles that need to be overcome?
 - What are the things that can kill this project or major hurdle for commercialization? (e.g., EHS, regulatory or licensing issues, cost of cellulose nanomaterials, policy, etc.)
 - Are there other competitive products out there or are being developed that will be ready by the time your product is ready?

- Where will the cellulose nanomaterials come from or primary feedstocks for making cellulosic nanomaterials?
- O How much will it cost to do it and scale up?
- O What is the expected payback period, 5, 20, 15 yrs?
- Include a Proposal narrative
 - o 6-page proposal outlining a credible research & development approach.
 - o Provide a strong case for how P3Nano funding would address key technical and\or development challenges that once solved would result in commercialization

Proposal outline:

- 1. Proposal Narrative:
 - a. Title
 - b. Principal Investigator(s)
 - c. Collaborator(s)
 - d. Forest Service Collaborating Scientist(s)
 - e. Other Personnel
 - f. Project Abstract
 - g. Key Questions Being Addressed
 - h. Background
 - i. Research & Development Approach
 - j. Expected Deliverables (Summary)
 - k. Timeline & Milestones
 - I. References (not counted against the 6 page limit)
- 2. Workplan Activities and Budget (not counted against the 6 page limit; please build out workplan activities in the online application on the Workplan tab, these can evolve as the project goes along; please upload the budget to the appropriate section in the online application, there is a link to a budget template for your use in the Financial Information tab)
- 3. PI Bios (not counted against the 6 page limit, please upload to the appropriate section in the online application)
- 4. Letter of support from collaborator(s) (not counted against the 6 page limit, please upload to the appropriate section in the online application)
- 5. Business analysis for new product (not counted against the 6 page limit, please upload to the appropriate section in the online application)

The Review Committee reserves the right to ask additional questions.

Please follow the directions closely and fill out all mandatory fields and attachments in the portal.

For any portal/application issues please contact subawards@usendowment.org.
For proposal technical questions please contact Michael Goergen michael@usendowment.org.

To view or complete the application go to the Endowment's grantee portal: https://usendowment.force.com/grantee

If you already have an account on the portal from a previous Endowment project, please use those login credentials. If you are a new user, please click on "New User" and follow the instructions to create an account.

Note: Please **use Google Chrome or Firefox** as your web browser when completing the application.