

DoE- Office of Energy Efficiency and Renewable Energy (EERE)

<https://eere-exchange.energy.gov/#Foaldf0b06a03-0ac0-4c6d-a01b-bd09a4a62a0e>

WVU Internal Letter of Intent Due: Friday, January 13, 2017

Agency Concept Paper Due: January 31, 2017

Synopsis:

The U.S. Department of Energy (DOE) Office of Energy Efficiency and Renewable Energy (EERE) is an organization focused on achieving aggressive and well-defined mid-to-long term clean energy goals for the United States of America. In that context, EERE has established multi-year plans and roadmaps. To enhance the responsiveness of the roadmap approach, EERE is issuing Funding Opportunity Announcements (FOAs) within its existing Offices and programs to support innovative technologies and solutions that could help meet existing goals but are not represented in a significant way in the Offices' existing Multi-Year Program Plans (MYPPs) or current portfolios. EERE's Advanced Manufacturing Office (AMO) partners with industry, small business, universities, and other stakeholders to identify and invest in emerging technologies with the potential to create high-quality domestic manufacturing jobs, increase energy efficiency, productivity, and enhance the global competitiveness and energy independence and security of the United States and its manufacturing sector. The AMO goal is to reduce by 50% in 10 years, the life-cycle energy consumption of manufactured goods, by targeting the production and use of advanced manufacturing technologies.

Topical Areas of Interest for this FOA:

- 1) Advanced Materials
 - a. Innovative Advance Materials Manufacturing for Clean Energy
 - b. Novel Materials for Use in Harsh Service Conditions
 - c. Novel Materials for Direct Thermal Energy Conversion
 - d. Novel Materials for New Highly-Effective Chemical Catalysts
 - e. Atomically Precise Machining
- 2) Advanced Processes
 - a. Approaches to Cost-Effective Hydrogen Use in Manufacturing Processes
 - b. Innovative and Intensified Process Heating Methods to Minimize Emissions
 - c. Novel Approaches to Low Cost Waste Heat Recovery
 - d. High Value Roll to Roll Processes in Manufacturing
- 3) Modeling and Analysis Tools for Materials and Manufacturing
 - a. Machine Learning and Algorithms for Efficiency in Manufacturing
 - b. Open Source Tools for Energy Efficiency in Manufacturing

Estimated funding: \$ 250K to \$1M for Tier 1 (Concept Definition TRL 2-3)
\$750K to \$2.5M for Tier 2 (Proof of Concept TRL 3-5)

Internal LOI Guidelines: 1 page

- PIs and Co-PIs (Names and Departments)
- List any external collaborators or agencies
- Which of the three topical areas listed above to which you wish to apply
- 2-3 Sentences about your proposed project

WVU is restricted to 1 submission for each of the three topical areas above, if there are multiple internal applicants, the Energy Institute and RO will issue a rapid internal competition. Email your LOI to:

Deanna.Whorton@mail.wvu.edu with subject line: "DoE EERE AMO

Feel free to contact Brian.Anderson@mail.wvu.edu with questions.