

U.S. DEPARTMENT OF ENERGY
OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY
NEPA DETERMINATION



RECIPIENT: IACMI

STATE: TN

PROJECT TITLE : Clean Energy Manufacturing Innovation Institute for Composite Materials and Structures

Notice of Funding Opportunity Number
DE-FOA-0000977

Procurement Instrument Number
DE-EE0010659

NEPA Control Number
GFO-0010659-002

CID Number
GO10659

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Policy 451.1), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:

Description:

A9 Information gathering, analysis, and dissemination

Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), data analysis (including, but not limited to, computer modeling), document preparation (including, but not limited to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and information dissemination (including, but not limited to, document publication and distribution, and classroom training and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)

A11 Technical advice and assistance to organizations

Technical advice and planning assistance to international, national, state, and local organizations.

B1.31 Installation or relocation of machinery and equipment

Installation or relocation and operation of machinery and equipment (including, but not limited to, laboratory equipment, electronic hardware, manufacturing machinery, maintenance equipment, and health and safety equipment), provided that uses of the installed or relocated items are consistent with the general missions of the receiving structure. Covered actions include modifications to an existing building, within or contiguous to a previously disturbed or developed area, that are necessary for equipment installation and relocation. Such modifications would not appreciably increase the footprint or height of the existing building or have the potential to cause significant changes to the type and magnitude of environmental impacts.

B3.6 Small-scale research and development, laboratory operations, and pilot projects

Siting, construction, modification, operation, and decommissioning of facilities for smallscale research and development projects; conventional laboratory operations (such as preparation of chemical standards and sample analysis); and small-scale pilot projects (generally less than 2 years) frequently conducted to verify a concept before demonstration actions, provided that construction or modification would be within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible). Not included in this category are demonstration actions, meaning actions that are undertaken at a scale to show whether a technology would be viable on a larger scale and suitable for commercial deployment.

B3.15 Small-scale indoor research and development projects using nanoscale materials

Siting, construction, modification, operation, and decommissioning of facilities for indoor small-scale research and development projects and small-scale pilot projects using nanoscale materials in accordance with applicable requirements (such as engineering, worker safety, procedural, and administrative regulations) necessary to ensure the containment of any hazardous materials. Construction and modification activities would be within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible).

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide funding to the Institute for Advanced Composites Manufacturing Innovation (IACMI, or the Institute), a Manufacturing USA® Institute under the 2019 Manufacturing USA® Program, to help revitalize American manufacturing and support domestic manufacturing competitiveness. The Institute is planned as a consortium to be reestablished under a Cooperative Agreement with DOE with participation of subrecipients comprised of private companies, universities, and other educational institutions, as well as other state and federal government agencies and research organizations with complementary business and economic development interests, extensive existing infrastructure, and broad technical capabilities. The Institute and its subrecipients are committed to a partnership that would work in concert through Cooperative Agreements to leverage the federal funding with state government and private sector investments to deliver outcomes to advance manufacturing within the United States. DOE's overarching role would be to facilitate the reestablishment of the Institute and provide oversight and stewardship of federal funds. DOE would have substantial involvement in the Institute during its term of the DOE Cooperative Agreement. This project has five budget periods, but only project activities within Budget Period 1 (BP1) have been defined. This NEPA Determination is specific to BP1 only. Further

NEPA review would be required for the remaining budget periods once those activities have been defined and negotiated.

This project (award number DE-EE0010659) received a Conditional NEPA determination (GFO-0010659-001; CX A9, A11, B1.31 and B3.6) on August 21st, 2023. This NEPA Determination applied to all BP 1 activities within the of the statement of project objectives (SOPO). This ND also applies to additional tasks and work locations identified for BP 1. These include moving the scale-up research facility from Michigan State University's facility in the Corktown District of Detroit to the former Chrysler Mount Elliot Took and Die facility in Detroit, Michigan. New project tasks would also include research into automating wind blade finishing operations, and the advancement of composites for cryogenic hydrogen storage. Award efforts pertaining to proposed hydrogen storage activities would involve the use of nanoscale materials, which necessitate the application of an additional CX B3.15 to the award. All nanoscale materials would be evaluated for all applicable environmental, health and safety requirements and all appropriate safety protocols would be put into place prior to nanoscale material award efforts.

The Institute would provide open access to shared research, development, and demonstration (RD&D) facilities that leverage extensive existing capabilities to develop high-throughput technologies and lower-cost materials to enhance U.S. competitiveness. The Institute's overall technical objectives would also target increased production speed, decreased manufacturing cost, reduced embodied energy of products and enhanced recyclability. The Institute's technology development and demonstration programs would be driven by major industry participation with focus on reducing technical risk and addressing technical challenges for advanced composites in vehicles, wind energy, and hydrogen storage. Participating states would engage their economic development and education programs to encourage new business formation and develop a capable workforce to serve the growing composites industry. Lastly, encouragement and development of Small and Medium Enterprise (SME) industry participants and long-term sustainability would be key objectives of the Institute.

Each task/subtask in BP1 would be completed by either the prime recipient or one of the project partners (subrecipients). For the project partners listed in question 2b of the completed Environmental Questionnaire (EQ1), the scope of work for proposed activities in BP1 are generally laboratory scale operations, data analysis and modeling, workforce development, or educational, managerial, and reporting activities. The location of the facilities and description of proposed activities for the prime recipient and each sub-recipient is detailed within question 2b of the completed EQ1 for the project. Once identified, new projects would be added to the list of participants in the award as additional entries in question 2b and would be incorporated as new partners into the Institute. As these specific sites are identified with these new participants and as long as these additional entries conform to the rationale and CX categories applied in this NEPA Determination then no additional NEPA would be required. Any new partners that do not fit the above would be required to submit separate EQ1s for further review. None of the activities occurring at any of the listed facilities or activities anticipated to occur as part of projects would require any new permits, licenses or authorizations for BP1 activities. No new waste streams or effluents would be produced as a result of the proposed activities in BP1. All facilities would conduct activities consistent with current operations and would not be expanded or modified in BP1. Equipment acquisition, maintenance, upgrades, and calibration are planned in BP1, but no facilities or operational modifications are anticipated as a result.

DOE has considered the scale, duration, and nature of proposed activities to determine potential impacts on resources, including those of an ecological, historical, cultural, and socioeconomic nature. DOE does not anticipate impacts on these resources which would be considered significant or require DOE to consult with other agencies or stakeholders.

Any work proposed to be conducted at a federal facility may be subject to additional NEPA review by the cognizant federal official and must meet the applicable health and safety requirements of the facility.

EERE is aware of the November 12, 2024, decision of *Marin Audubon Society v. FAA*, No. 23-1067 (D.C. Cir. Nov. 12, 2024). To the extent that a court may conclude that the Council on Environmental Quality (CEQ) regulations implementing NEPA are not judicially enforceable or binding on this agency action, EERE has nonetheless elected to follow those regulations at 40 C.F.R. Parts 1500-1508, in addition to DOE's procedures/regulations implementing NEPA at 10 C.F.R. Part 1021, to meet the agency's obligations under NEPA, 42 U.S.C. §§ 4321 et seq.

NEPA PROVISION

DOE has made a conditional NEPA determination.

The NEPA Determination applies to the following Topic Areas, Budget Periods, and/or tasks:

BP1 activities only (Task 1, Task 2 and Task 8). You are restricted from taking any action using federal funds, which would have an adverse effect on the environment or limit the choice of reasonable alternatives prior to DOE providing either a NEPA clearance or a final NEPA decision regarding the project.

The NEPA Determination does not apply to the following Topic Area, Budget Periods, and/or tasks:

Budget Period 2 through Budget Period 5

Include the following condition in the financial assistance agreement:

The Recipient is required to consult with the DOE Project Officer and NEPA Specialist regarding any project, beyond what is proposed in this NEPA determination, that would result in:

- changes in function, use, or operation of existing facilities, and/or
- modifications to existing facilities, and/or
- ground disturbing or new construction activities prior to initiating any of these activities in order to determine whether additional NEPA review is required.

Notes:

Industrial Efficiency and Decarbonization Office

This NEPA Determination requires legal review of the tailored NEPA provision.

NEPA review completed by Chris Akios, 1/17/2024

FOR CATEGORICAL EXCLUSION DETERMINATIONS

The proposed action (or the part of the proposal defined in the Rationale above) fits within a class of actions that is listed in Appendix A or B to 10 CFR Part 1021, Subpart D. To fit within the classes of actions listed in 10 CFR Part 1021, Subpart D, Appendix B, a proposal must be one that would not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions or facilities; (3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources, including, but not limited to, those listed in paragraph B(4) of 10 CFR Part 1021, Subpart D, Appendix B; (5) involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those listed in paragraph B(5) of 10 CFR Part 1021, Subpart D, Appendix B.

There are no extraordinary circumstances related to the proposed action that may affect the significance of the environmental effects of the proposal.

The proposed action has not been segmented to meet the definition of a categorical exclusion. This proposal is not connected to other actions with potentially significant impacts (40 CFR 1508.25(a)(1)), is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1508.27(b)(7)), and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211 concerning limitations on actions during preparation of an environmental impact statement.

A portion of the proposed action is categorically excluded from further NEPA review. The NEPA Provision identifies Topic Areas, Budget Periods, tasks, and/or subtasks that are subject to additional NEPA review.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:



Signed By: Andrew Montano

NEPA Compliance Officer

Date:

1/17/2025

FIELD OFFICE MANAGER DETERMINATION

- ☒ Field Office Manager review not required
☐ Field Office Manager review required

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____
Field Office Manager

Date: _____