

EERE 205: FOA Applicant Webinar Presentation

U.S. DEPARTMENT OF
ENERGY

Energy Efficiency &
Renewable Energy



Clean Energy Manufacturing Innovation Institute
for Reducing EMbodied-energy And Decreasing
Emissions (REMADE) in Materials Manufacturing

CEMII-REMADE@ee.doe.gov

FOA Webinar
DE-FOA-0001594
June 29, 2016

Anticipated Schedule:

FOA Issue Date:	6/20/2016
FOA Informational Webinar:	6/29/2016
Submission Deadline for Concept Papers:	7/28/2016
Submission Deadline for Full Applications:	9/28/2016
Expected Submission Deadline for Replies to Reviewer Comments:	10/25/2016
Expected Date for EERE Selection Notifications:	December 2016
Expected Timeframe for Award Negotiations:	180 days

Notice

- All applicants are strongly encouraged to carefully read the Funding Opportunity Announcement DE-FOA-0001594 (“**FOA**”) and adhere to the stated submission requirements.
- This presentation summarizes the contents of FOA. If there are any inconsistencies between the FOA and this presentation or statements from DOE personnel, the FOA is the controlling document and applicants should rely on the FOA language and seek clarification from EERE.
- If you believe there is an inconsistency, or have a question regarding the FOA, please email: CEMII-REMADE@ee.doe.gov.
- We will not be holding a live Q&A during this webinar

Agenda

- 1) FOA Description
- 2) Topic Areas/Technical Areas of Interest
- 3) Award Information
- 4) Statement of Substantial Involvement
- 5) Cost Sharing
- 6) Concept Papers
- 7) Full Applications
- 8) Merit Review
- 9) Pre-Selection Interviews
- 10) Selection Process
- 11) Registration Requirements

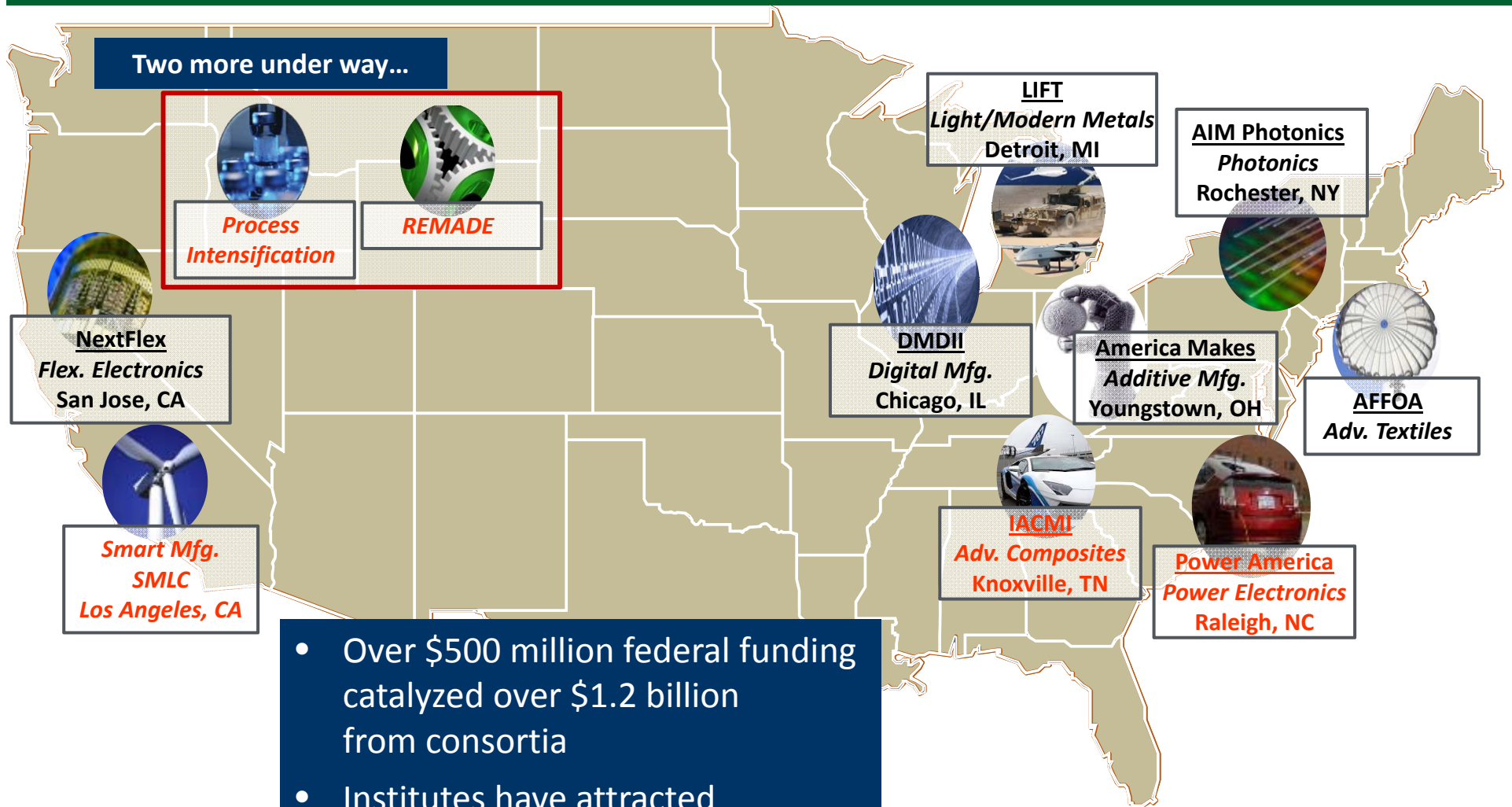
FOA Description – Section I.A

- EERE's AMO establishes Manufacturing Innovation Institutes in the National Network for Manufacturing Innovation (NNMI) as shared research, development, and demonstration facilities to overcome cross-cutting challenges related to the manufacturing of clean energy and energy efficiency products, in addition to challenges associated with improving the energy efficiency of the manufacturing sector across the board.
- This FOA supports the establishment of a Clean Energy Manufacturing Innovation Institute on *Reducing Embodied-energy And Decreasing Emissions (REMADE) in Materials Manufacturing*.

FOA Description – Section I.B

- Section I.B. provides the following Background Information:
 - Overview of the Manufacturing Innovation Institutes
 - Purpose, TRL/MRL focus, etc.
 - Overview of REMADE
 - Description, background, benefits
 - Teaming Partner List
 - How to participate

FOA Description – Section I.B



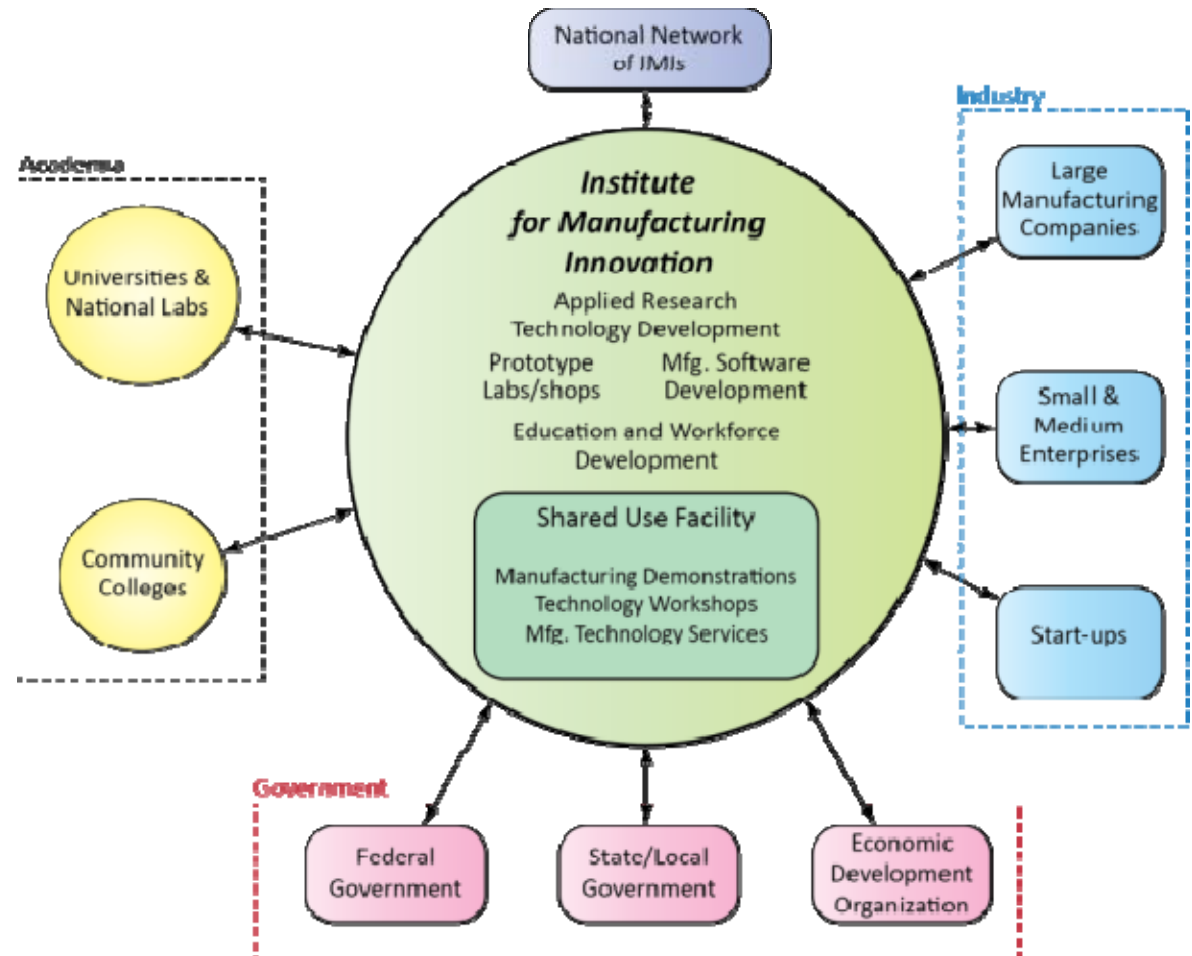
- Over \$500 million federal funding catalyzed over \$1.2 billion from consortia
- Institutes have attracted hundreds of companies and universities as active partners from across the country

FOA Description – Section I.B

Industry-Academia-Government Partnership

Each institute has:

- 1) Clear, unique institute focus
- 2) Clear industry value proposition
- 3) Strong Partnerships
- 4) Ability to address critical challenges
- 5) A balanced portfolio of projects



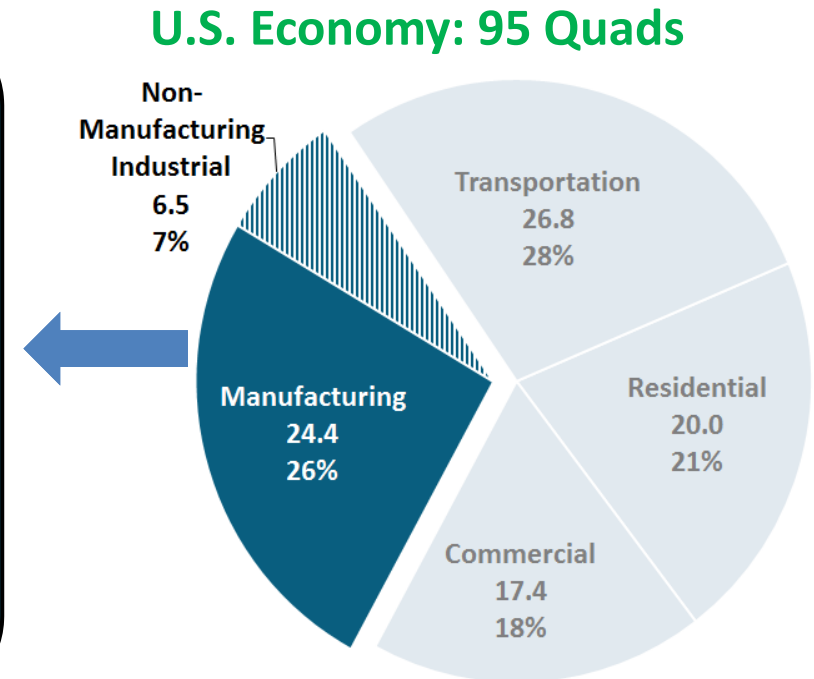
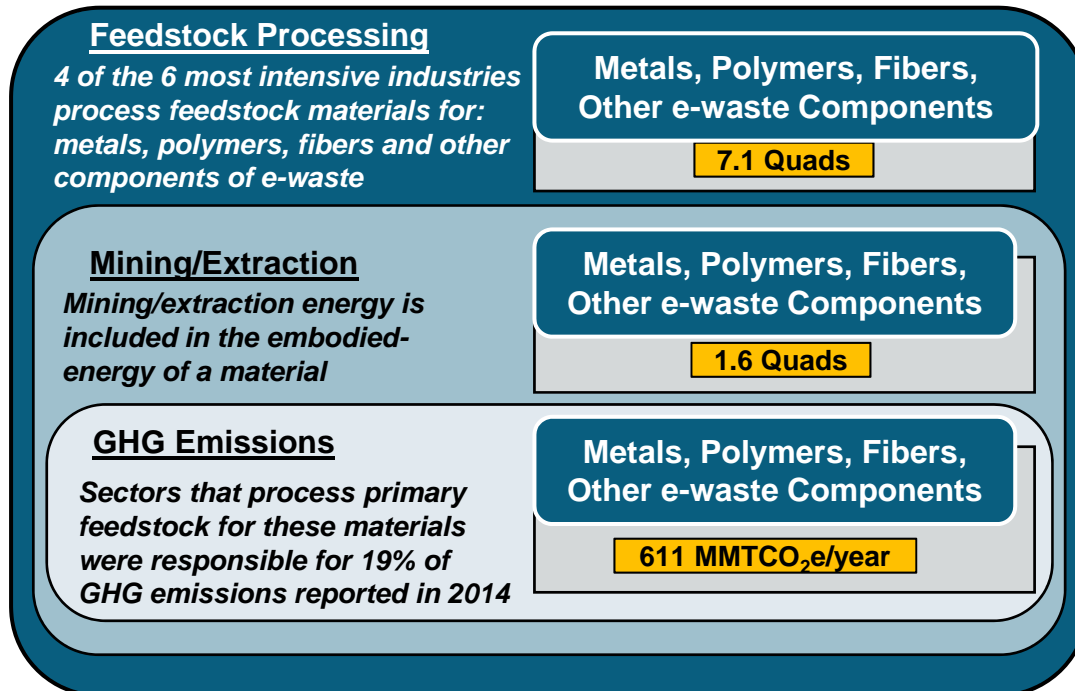
Consortia are open—new members able to join

FOA Description – Section I.B

Overview of REMADE

- As the consumption of materials grows, the embodied energy and greenhouse gas emissions footprint associated with the production of these materials is becoming increasingly important. Technologies to enable the recycling, reuse and remanufacturing of materials would recover the embodied energy of end-of-life (EOL) and waste materials and reduce greenhouse gas emissions.
- Opportunities exist for significant energy, cost and material resource savings through driving improvements in the efficiency of material re-use throughout the manufacturing process
- Materials-efficient processes and secondary/recycled feedstocks must be cost-competitive with current manufacturing approaches to enable private sector adoption– and should be targeted at multiple stages within the lifecycle of materials
- **Institutes focus on TRL/MRL 4-7 activities**

FOA Description – Section I.B



- Technologies to enable the recycling, reuse and remanufacturing of materials would recover the embodied energy of end-of-life (EOL) and waste materials and reduce greenhouse gas emissions.
- Increasing use of secondary feedstocks by 30% and decreasing energy intensity of secondary processing could result in more than 1.5 Quads of energy savings annually
- Few individual firms have the capability and/or capacity to research and develop new technologies which would enable non-incremental advances in the sustainable use of materials (and reduction of embodied energy) across product lifecycles and industry boundaries.

Technical Topic Area and FOA Goals – Section I.C

Introduction

- Three **Application Focus Areas** for REMADE are:
 - 1) Reduce energy and emissions through reduction of primary material use in energy intensive Industries
 - 2) Achieve secondary feedstock “better than cost and energy parity” for key materials, and
 - 3) Widespread application of new enabling platform technologies across multiple industries.
- DOE expects a REMADE Institute will have a balanced portfolio of technologies and workforce development, resulting in positive and direct benefit in all three of these impact areas.
- Applicants must address how they will engage with and have impact in all of these areas, as well as any other proposed and well justified areas of application

Technical Topic Area and FOA Goals – Section I.C

Technical Focus Areas:

The challenges to be addressed by an Institute are:

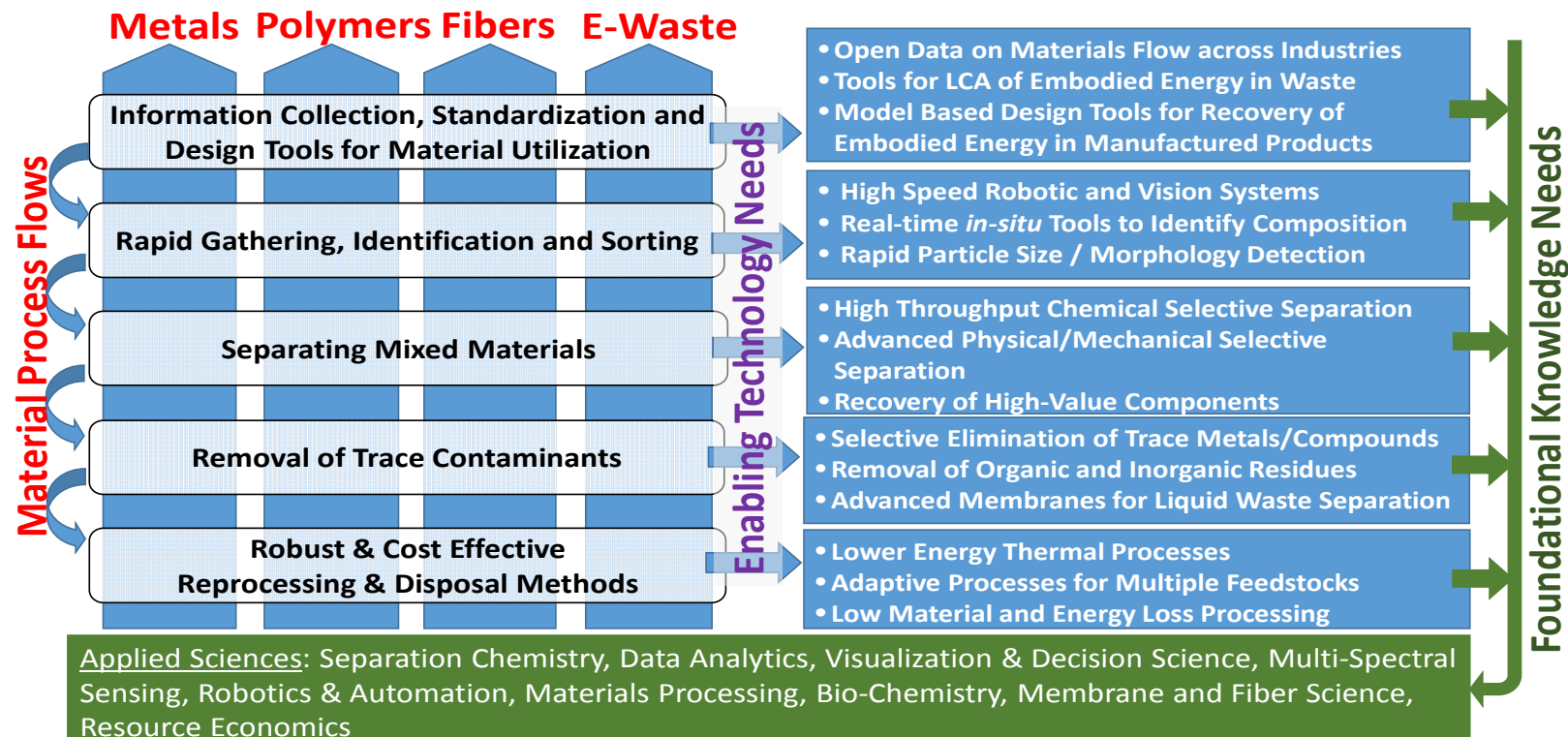
- (a) identifying and developing shared technology capabilities both within and across four of the most energy intensive materials classes (polymers, metals, fibers and e-waste)
- (b) demonstrating and deploying these technologies at different stages during the manufacturing process lifecycle.

Applicants are expected to develop their plan of work to address the progress they can make in these technical focus areas as a portfolio of activities within the Institute. Other well justified technical focus areas may be proposed, provided they are justified as being relevant to enabling REMADE in Materials Manufacturing.

Technical Topic Area and FOA Goals – Section I.C

Technical Focus Areas enabling REMADE – cont.

Five enabling technology process platforms and underlying scientific capabilities for the sustainable use of four materials classes (metals, plastics, fibers, e-waste) of importance to energy applications.

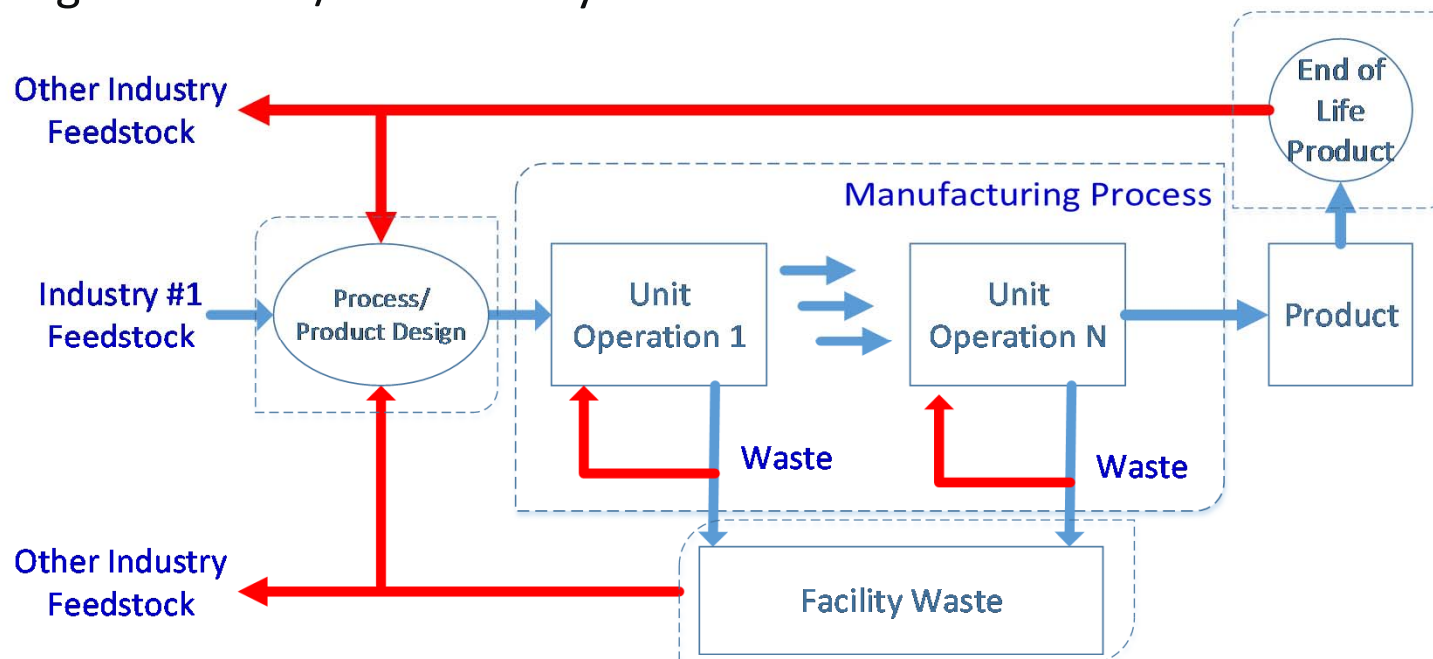


Technical Topic Area and FOA Goals – Section I.C

Technical Focus Areas enabling REMADE – cont.

An Institute will be expected to apply these enabling technologies as appropriate at four distinct stages of the material lifecycle:

- Efficient material use during manufacturing processes;
- End-of-Life material reuse;
- Separation and reutilization of waste streams; and
- Design for reuse/disassembly



Technical Topic Area and FOA Goals – Section I.C

FOA Goals

- The NNMI program has defined overall objectives for each Institute:
 - to research, develop and demonstrate high-impact new advanced manufacturing technologies that are adopted into the market at scale for energy efficient manufacturing and clean energy and energy efficient product manufacturing;
 - to be financially self-sustaining after 5 years;
 - to train an advanced manufacturing workforce;
 - to enrich the innovation ecosystem;
 - strengthen US manufacturing competitiveness; and
 - to establish an industrial consortium as a public-private partnership (including small and medium sized manufacturers).

Technical Topic Area and FOA Goals – Section I.C

FOA Goals – Cont.

In addition to meeting the overall objectives for the NNMI program, Applicants for the REMADE Institute must address elements and goals specific to this funding opportunity.

Example Goals and Elements include:

- Lead a national effort to research, develop, test, and demonstrate innovative material reuse, recycling, remanufacturing and reprocessing technologies and solutions that reduce the embodied-energy and greenhouse gas emissions and strengthen U.S. manufacturing competitiveness for energy intensive/dependent, clean energy, and energy efficient product and/or material manufacturing;
- Develop technologies that enable at a minimum cost parity of key secondary feedstocks with existing primary feedstocks;
- Establish cost-effective pathways for improved recycling and reuse rates of energy intensive materials;
- Lead RD&D efforts that significantly improve the efficiency of material use and reduce material waste in major manufacturing processes;
- Drive cross-industry reuse of secondary feedstocks and end-of-life materials;
- Develop cost-effective approaches to reducing energy required to reprocess key secondary feedstocks;

See Section C. for the complete list of FOA Goals.

Technical Topic Area and FOA Goals – Section I.C

Technical Performance Metrics of the R&D work of the Institute are:

1. Demonstrate through innovative material reuse, recycling, remanufacturing and reprocessing technologies , a 25 percent (25%) improvement in embodied-energy efficiency (% change in BTU/kg product) through first-of-their-kind demonstrations at manufacturing plants or major processes within five years of Institute operation, supporting a goal of at least fifty percent (50%) improvement in embodied-energy efficiency within ten years following initial Federal support for the Institute.
2. Demonstrate Potential for Cost Parity Secondary Feedstocks: Develop tools and technologies to quantitatively increase energy productivity by reducing the cost of key secondary feedstocks in existing processes to at or below cost parity of primary feedstocks (modeled costs based on technologies being demonstrated) relative to the existing state-of-the-art within five years, and be on a pathway to achieve, at minimum, installed and operating cost parity for the secondary feedstocks at full scale.

Technical Topic Area and FOA Goals – Section I.C

Technical Performance Metrics – cont.

3. Demonstrate Material Recycling/Reuse Improvement: Research, develop and demonstrate improved recycling and reuse in materials manufacturing to enable a 30% absolute increase in recycling rates of specific energy-intensive materials as a prioritized portfolio of technologies.
4. Demonstrate Improved Material Efficiency and Decreased GHG Emissions: Research, develop and demonstrate at representative pilot scale, at least one cost effective energy intensive / dependent process that achieves a 10x reduction in primary material feedstock (kg/kg product), with improved energy efficiency (% relative to baseline), and 20% lower GHG emissions (ton CO₂ eq./kg) relative to commercial state-of-the art at the relevant production rate (kg per day).

Technical Topic Area and FOA Goals – Section I.C

Technical Performance Metrics – cont.

5. Demonstrate Approaches to Cost-Effective Cross-Industry Use of Secondary Feedstocks: Develop and demonstrate at minimum pilot scale at least one process with relevant and quantified operating times that enables reuse of recycled and recovered materials to serve as cost effective material feedstocks for one or more different industries.
6. Demonstrate Reduced Energy Demands for Secondary Feedstocks: Develop tools and technologies to reduce the total energy required to process secondary materials by thirty percent (30%) relative to the existing state-of-the-art within five years, and be on a pathway to achieve at 50% reduction for the secondary materials processing at full scale within 10 years.

See Section I.C. for complete list of metrics

Technical Topic Area and FOA Goals – Section I.C

Organization and Ecosystem Metrics

7. Establish an industrial consortium as a public-private partnership with an applied research and development program for enabling technologies with the potential to reach at minimum cost-parity (including material, processing and energy costs) in recycled, recovered, remanufactured or re-used materials relative to existing feedstock with quantitative goals.
 - 7.1 Establish an Industrial Roadmap
 - 7.2 Establish an Annual Planning Process
 - 7.3 Build Pathway to Self-Sustainment: Establish a portfolio of external support generating activities for technology RD&D and workforce development that directly replaces the initial Federal funding (i.e., \$14 million per year, starting in the sixth year of operation).

See Section I.C. for the complete list of metrics

Technical Topic Area and FOA Goals – Section I.C

Organization and Ecosystem Metrics - cont.

8. Build Industrial Partnerships and Ecosystem: Demonstrate potential for significant industry adoption of REMADE technology, growth of the domestic supply chain and increased diversity of firms and individuals in the ecosystem.

8.1. Support an Emerging Supply Chain: Document the existence and growth of a domestic supply chain that is the focus of secondary materials manufacturing, document the Institute capabilities supporting the elements of the domestic supply chain, and assess the health of the domestic supply chain annually.

8.2. Support Increased Diversity of Firms and Individuals in the Ecosystem: Demonstrate the participation of underrepresented groups including but not limited to small and medium enterprises, minority-owned businesses, and women-owned businesses in technology development, workforce development, and Institute governance.

Technical Topic Area and FOA Goals – Section I.C

Workforce Development Metrics

9. Establish a technical education and workforce development program.
 - 9.1 Train the Trainers: Train at least fifty education/training professionals per year in REMADE technologies by year three.
 - 9.2. Educate Students: Train at least 500 students per year in REMADE technologies, including recycling, reuse and remanufacturing processes by year three.

See Section I.C. for the complete list of metrics

Technical Topic Area and FOA Goals – Section I.C

Institute Best Practices

- DOE has identified several best practices for management and operations that the proposed Institute applicants are expected to align with and plans to address these points are to be included in the project narrative. Deviations from these best practices shall be adequately justified by the applicant with a strong alternative plan.
 - Institute Management time commitment expectation
 - Institute organizational structure
 - DOE participation in decision making
 - Intellectual Property guidance and work for others or fee for service arrangements
 - Publication of results and data sharing
- See Section I.C. for more information on these best practices.

Non-Responsive Applications

The following types of applications will be deemed nonresponsive and will not be reviewed or considered for an award:

1. Applications that fall outside the technical parameters specified in Section I.C of the FOA, including but not limited to technology development and demonstration that is primarily not focused on energy efficient or lifecycle energy manufacturing or is solely focused on technology development with no relevant application to energy intensive or energy related industries or clean energy/energy efficient product manufacturing.
2. Applications that focus primarily on demonstrations at industrial facilities without the research, development and demonstration of technology or sharing of pre-competitive knowledge as a resource in a public-private partnership.
3. Applications for proposed technologies that are not based on sound scientific principles (e.g., violates the laws of thermodynamics).
4. Applications that do not propose the establishment of a pre-competitive public-private consortium with partners from industry (including small and medium-sized firms).

Teaming Partner List

- To facilitate the formation of new project teams for this FOA, a Teaming Partner List is available at <https://eere-Exchange.energy.gov> under FOA, DE-FOA-0001594.
- Any organization that would like to be included on this list should submit the following information to CEMII-REMADE@ee.doe.gov:
 - Organization Name, Contact Name, Contact Address, Contact Email, Contact Phone, Organization Type, Area of Technical Expertise, and Brief Description of Capabilities
- By submitting this information, you consent to the publication of the above-referenced information
- By facilitating this Teaming Partner List, EERE does not endorse or otherwise evaluate the qualifications of the entities that self-identify themselves for placement on the Teaming Partner List

Award Information

Total Amount to be Awarded	\$70,000,000*
Average Award Amount	EERE anticipates making awards that range from \$35,000,000 to \$70,000,000
Types of Funding Agreements	Cooperative Agreements and Work Authorizations
Period of Performance	60 months
Cost Share Requirement	50% of Total Project Costs

*Subject to the availability of appropriated funds

Statement of Substantial Involvement

EERE has substantial involvement in work performed under Awards made as a result of this FOA. EERE does not limit its involvement to the administrative requirements of the Award. Instead, EERE has substantial involvement in the direction and redirection of the technical aspects of the project as a whole. Substantial involvement includes, but is not limited to, the following:

1. EERE shares responsibility with the Recipient for the management, control, direction, and performance of the Project.
2. EERE may intervene in the conduct or performance of work under this Award for programmatic reasons. Intervention includes the interruption or modification of the conduct or performance of project activities.
3. EERE may redirect or discontinue funding the Project based on the outcome of EERE's evaluation of the Project at a Go/No-Go decision point.
4. EERE may redirect or discontinue funding for individual Institute Activities based on the outcome of EERE's evaluation of those activities at the Go/No-Go decision points.
5. EERE participates in major project decision-making processes.
6. EERE participates in any governance or management boards that may be established and may invite other U.S. Government officials for participation in advisory capacity.
7. To adequately monitor project progress and provide direction to the Institute, the Prime Recipient must provide EERE with an adequate level of insight into various Institute activities. The Prime Recipient must notify EERE of meetings, reviews, and tests in sufficient time to permit EERE participation and provide all appropriate documentation for EERE review. (More details in the FOA)
8. EERE may choose to engage a private, independent engineering (IE) firm to assist in assessing the progress of the project and provide timely and accurate reports to EERE. (More details in the FOA)

Cost Sharing Requirements

Applicants must contribute a minimum of **50%** of the total project costs for the Institute.

- Contributions must be:
 - Specified in the project budget
 - Verifiable from the Prime Recipient's records
 - Necessary and reasonable for proper and efficient accomplishment of the project
- Every cost share contribution must be reviewed and approved in advance by the Contracting Officer and incorporated into the project budget before the expenditures are incurred

Allowable Cost Share

- Cost Share must be allowable and must be verifiable upon submission of the Full Application
- Refer to the following applicable Federal cost principles:

Entity	Cost Principles
For-profit entities	FAR Part 31
All other non-federal entities	2 CFR Part 200 Subpart E - Cost Principles

Allowable Cost Share

- Cash Contributions
 - Cash can be cash contribution to the Institute
 - Cash can also be project expenses paid by Prime Recipient, Subrecipients, or a Third Party which can include, but are not limited to: personnel costs, indirect costs, facilities and administrative costs, equipment, service, or other resources
 - May be provided by the Prime Recipient, Subrecipients, or a Third Party
- In-Kind Contributions
 - Can include, but are not limited to donated: personnel time volunteered, indirect costs not incurred, facilities and administrative costs, rental value of buildings or equipment, and the value of a service, other resource, or third party in-kind contribution

Unallowable Cost Share

- The Prime Recipient may not use the following sources to meet its cost share obligations including, but not limited to:
 - Revenues or royalties from the prospective operation of an activity beyond the project period
 - Proceeds from the prospective sale of an asset of an activity
 - Federal funding or property
 - Expenditures reimbursed under a separate Federal Technology Office
 - Independent research and development (IR&D) funds
 - The same cash or in-kind contributions for more than one project or program

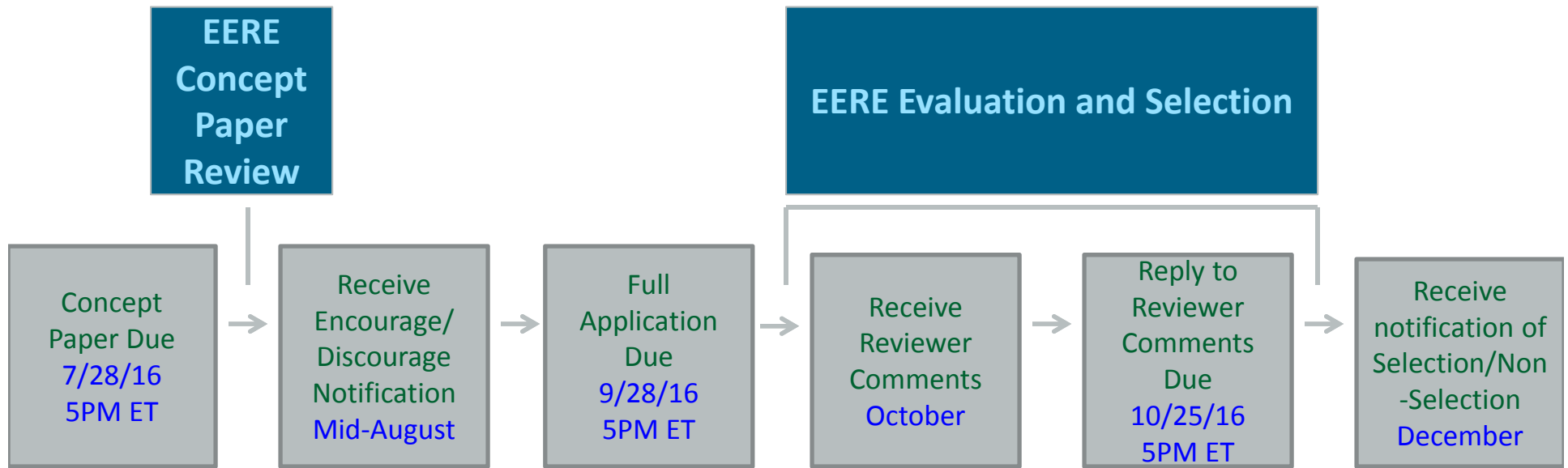
Cost Share Payment

- Recipients must provide documentation of the cost share contribution, incrementally over the life of the award
- The cumulative cost share percentage provided on each invoice must reflect, at a minimum, the cost sharing percentage negotiated
- In limited circumstances, and where it is in the government's interest, the EERE Contracting Officer may approve a request by the Prime Recipient to meet its cost share requirements on a less frequent basis, such as monthly or quarterly. See Section III.B.vi of the FOA.

Program Income

- Further, Applicants are encouraged to review the regulations regarding Program Income and be aware of the ways in which Program Income can be treated during the award. For awards made under this FOA, the default use of program income is Addition (see 2 CFR 200.307(e)(2)).
- Any other treatment of Program Income must be negotiated and approved by the Contracting Officer. Program Income should not be included as cost share in the Applicant's budget.

FOA Timeline



EERE anticipates making awards by **June 2017**

Concept Papers

- Applicants must submit a Concept Paper
 - Each Concept Paper must be limited to a single concept or technology
- The Concept Paper must include a technology description (See Section IV.C of the FOA)
 - The technology description is limited to 6 pages
 - The qualifications and resources description is limited to 2 pages
 - The operations and management approach description is limited to 2 pages
 - The Concept Paper can also include graphs, charts, or other data (limited to 4 pages)
- Concept Papers must be submitted by [July 28, 2016, 5PM ET](#), through EERE Exchange, and must comply with the content and form requirements in Section IV.C of the FOA
- EERE provides applicants with: (1) an “encouraged” or “discouraged” notification, and (2) the reviewer comments

Concept Paper Review

EERE evaluates the Concept Papers based on the following technical review criteria:

- **Criterion 1: Technical Description, Innovation and Impact (40%)**

This criterion involves consideration of the following factors:

- Quality of the proposed REMADE technical approach;
- The proposed technical focus areas are well-defined and have well-defined, aggressive quantitative technical objectives;
- The Applicant's understanding of the current state-of-the-art in the field, including key opportunities and challenges;
- Extent to which the Applicant has described how the proposed technical work will overcome the challenges identified;
- The estimated energy and competitiveness impact that the proposed Institute would have on clean energy and energy efficient manufacturing;
- Quality of the approach presented in the technical education and workforce development plan summary; and
- Quality of the approach to strengthen U.S. manufacturing competitiveness while engaging a broad range of stakeholders with both horizontal and vertical reach across and within supply chains.

Concept Paper Review

Concept Papers technical review criteria cont'd:

- **Criterion 2: Team and Resources (30%)**

This criterion involves consideration of the following factors:

- Extent to which the roles and responsibilities of the leadership team are well-defined;
- Whether the Principal Investigator (Institute Director/Executive) and Project Team have the skill, expertise and prior experience needed to successfully execute the Institute;
- Whether the Applicant has adequate access to equipment and facilities necessary to accomplish the effort and/or clearly explains how the proposed Institute intends to obtain access to the necessary equipment and facilities.

- **Criterion 3: Operations and Management Approach Description (30%)**

This criterion involves consideration of the following factors:

- The proposed management and operations structure and approach, including the role of the U.S. government in the management of the proposed Institute.

Full Applications

- The Full Application includes:
 - **Technical Volume:** The key technical submission - info relating to the technical content, project team members, etc.
 - **SF-424 Application for Federal Assistance:** The formal application signed by the authorized representative of the applicant.
 - **Statement of Project Objectives (SOPO)**
 - **SF-424A Budget & Budget Justification:** a detailed budget and spend plan for the project.
 - **Summary for Public Release**
 - **Summary Slide**
 - **Administrative Documents:** E.g., U.S. Manufacturing Plan, Draft IP Management Plan, FFRDC Authorization (if applicable), Disclosure of Lobbying Activities, etc

Full Applications: Technical Volume Content

Technical Volume: the key technical component of the Full Application (50 pages max)

Content of Technical Volume	Suggested % of Technical Volume
Cover Page	
Institute Overview	2 pages
Technical Description, Innovation and Impact	50 %
Qualifications and Resources	20%
Operations and Management Plan	30%

Full Application Eligibility Requirements

- Applicants must submit a Full Application by [September 28, 2016, 5PM ET](#)
- Full Applications are eligible for review if:
 - The Applicant is an eligible entity Section III.A of FOA;
 - The Applicant submitted an eligible Concept Paper;
 - The Cost Share requirement is satisfied Section III.B of FOA;
 - The Full Application is compliant, Section III.C of FOA; and
 - The proposed project is responsive to the FOA Section III.D of FOA
 - The Applicant submitted only one Full Application for consideration
 - The Full Application meets any other eligibility requirements listed in Section III of the FOA.

Who's Eligible to Apply?

Eligible applicants for this FOA include:

1. Individuals
2. Domestic Entities
3. Foreign Entities
4. Incorporated Consortia
5. Unincorporated Consortia

For more detail about each eligible applicant, please see Section III.A of the FOA for eligibility requirements

Nonprofit organizations described in Section 501(c)(4) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 1995, are not eligible to apply for funding.

Limitation on Number of Concept Papers and Full Applications Eligible for Review

An entity may only submit one Concept Paper and one Full Application for consideration under this FOA. For example, EERE will only consider one Concept Paper and one Full Application per university for this FOA (not one submission per each college or school under the university). This limitation does not prohibit an Applicant from collaborating on other applications (e.g., as a potential Subrecipient or partner) so long as the entity is only listed as the prime Applicant on one Concept Paper and Full Application submitted under this FOA.

Merit Review and Selection Process (Full Applications)

- The Merit Review process consists of multiple phases that each include an initial eligibility review and a thorough technical review
- Rigorous technical reviews are conducted by reviewers that are experts in the subject matter of the FOA
- Ultimately, the Selection Official considers the recommendations of the reviewers, along with other considerations such as program policy factors, to make the selection decisions

Technical Merit Review Criteria

Criterion 1: Technical Merit, Innovation, and Impact (40%)

Technical Merit and Innovation

- Quality of the integrated technical approach, including core competencies identified for the proposed Institute to research, develop and demonstrate REMADE technologies that meet the goals and the objectives of the Institute in Section I.C. and those proposed by the Applicant;
- Degree to which the Applicant has defined and justified the proposed Technical Focus Areas building upon those identified in Section I.C. of this FOA, and has clearly defined Institute objectives, goals, performance metrics including aggressive technical targets to achieve the goals of the FOA;
- Extent to which the Applicant demonstrates a strong understanding of the state-of-the-art;
- Quality of the technical education and workforce development plan to integrate and support technical education and career training into the Institute ecosystem, and leverage existing resources;

Technical Merit Review Criteria - Continued

Criterion 1: Technical Merit, Innovation, and Impact (40%) - Continued

Impact

- Extent to which the Applicant demonstrates a high and credible impact of the Institute for aggregate cumulative energy savings (TBTU) and reduction in GHG (tons of CO2 equivalent) over ten years relative to existing available technologies;
- Extent to which the Applicant demonstrates the likelihood of successful technology adoption by industry and supports precompetitive technology development and the quality of the Market Transformation plan for the initial proposed projects and technical work;
- Extent to which the Applicant demonstrates the potential impact of the Institute to support U.S manufacturing competitiveness for clean energy and energy efficient manufacturing and supply chains, such as increased domestic production capacity, growth of domestic supply chains, impact on domestic job creation, as well as regional economic development, etc. as a result of successful technology deployment and commercialization from Institute related activities over ten years;
- Degree of commitment to support U.S. manufacturing as demonstrated in the U.S. Manufacturing Plan; and
- Degree to which the Applicant illustrates how DOE funding will enable acceleration of RD&D.

Technical Merit Review Criteria - Continued

Criterion 2: Qualifications and Resources (30%)

- Quality of the Institute key technical personnel and their level of technical capabilities and relevance to achieving the goals and objectives of the Institute and the FOA;
- Qualifications, relevant expertise, experience and time commitment of the proposed Institute Director/Executive and key management staff, e.g., Deputy Director(s), Chief Technology Officer, Chief Operating Officer, in successfully managing a national effort to develop and deploy REMADE technologies;
- The sufficiency of the existing and proposed equipment, facilities and capabilities to support the work and horizontal and vertical supply chain activities;
- Adequacy of budget and spend plan for the proposed project to achieve the defined objectives;

Technical Merit Review Criteria - Continued

Criterion 2: Qualifications and Resources (30%) (continued)

- The degree that cost share demonstrates strong industry commitment and the clarity of the representation of cost share contributions (cash, in-kind) including the source of cost share;
- Adequacy of funding availability to encourage openness and new participants as the Institute goes forward, and to accommodate changes in strategic direction that may occur once the Institute is formalized and aligned with strategic roadmaps; and
- Degree to which Institute will appropriately leverage existing resources and that will result in more impactful outcomes including but not limited to DOE/NNSA FFRDCs, National Institute of Standards and Technology's Manufacturing Extension Partnership (MEP) Centers, National Science Foundation's Advanced Technological Education (ATE) Centers, national laboratories, and other government investments.

Technical Merit Review Criteria - Continued

Criterion 3: Operations and Management (30%)

Management and Governance Approach

- Effectiveness of management approach and governance structure to enable strategic and technical decision-making;
- Degree to which the Institute can operate as an independent, neutral, non-biased coordinating and convening body for a diverse set of stakeholders;
- Adequacy of the inclusion of Federal government (DOE and other Federal government participants identified by DOE) on decision making bodies (boards/committees) at both a strategic and technical level within the Institute;
- The adequacy and quality of the proposed participation structure (e.g., tiered membership structure, pay-for-use arrangements, etc.) including the benefits and restrictions for each level of participation (such as IP rights) to incentivize broad private sector participation (SMEs, minority-owned businesses, and women-owned businesses); and
- Adequacy of the planned business agreements, including how non-disclosure agreements will be used to support the Institute objectives.

Technical Merit Review Criteria - Continued

Criterion 3: Operations and Management (30%) - Continued

Operations

- The adequacy and quality of the annual planning process, including the strategic planning and industry roadmap activities, periodic update of the industry roadmap (annual or bi-annual) and incorporation of the industry roadmap to Institute strategic planning;
- Strength of the technical management plan for selecting and prioritizing RD&D work, tracking performance, and planned periodic (annual) review of processes for Institute and project performance;
- Quality of the stakeholder engagement plan, and how it demonstrates openness to new participants, in particular with SMEs, minority-owned businesses, and women-owned businesses, and ability to engage stakeholders along the supply chain including end-users;
- Adequacy of the discussion of the economic and operational key risk areas involved in the operations and management plan, and the quality of the mitigation strategies to address them, specifically with respect to Intellectual Property management and strengthening U.S. manufacturing competitiveness;
- The adequacy of Institute's strategy to manage export control compliance and meet the goal of strengthening U.S. manufacturing competitiveness while engaging a wide range of stakeholders that may include foreign participants; and
- Adequacy of how metrics will be tracked to gauge success of the Institute and impact in the technology area.

Technical Merit Review Criteria - Continued

Criterion 3: Operations and Management (30%) - Continued

Project Management

- Adequacy, reasonableness, and soundness of the proposed project management plan for accomplishment of the Institute objectives; and
- Extent to which the Applicant demonstrates a strong level of integration across the Institute elements to provide value that is greater than the sum of the individual activities (i.e., how will the shared facilities support the technical education and workforce development plans and project activities).

Statement of Project Objectives

- Adequacy, appropriateness, and reasonableness of the proposed work, schedule and allocation among the team members to accomplish the stated objectives;
- Relative to a clearly defined baseline, the strength of the quantifiable metrics, milestones, Go/No-Go decision points, and mid-point deliverables defined in the application;
- Quality of the SOPO for the first two budget periods (Budget Period 1 and Budget Period 2) that describes the initial startup phase for the Institute and the initial technology development activities, as well as the overall plan for the full award period;

Technical Merit Review Criteria - Continued

Criterion 3: Operations and Management (30%) - Continued

Intellectual Property Management Plan

- Adequacy of the IP management plan for supporting the needs of the Institute and its participants, which addresses the precompetitive landscape and the broader U.S. manufacturing sector; and
- Quality of the IP Management plan and any other IP agreements (attached as an Appendix to the Narrative) demonstrating that the IP issues inherent with collaborations and/or multi-user facilities are addressed, including those outlined in Section VI.B.x of the FOA.

Transition Plan

- Likelihood that the Institute can achieve financial self-sufficiency from dedicated Federal funding within five years; and
- Reasonableness of the extended profit and loss estimates for an additional three years beyond the award period.

Replies to Reviewer Comments

- EERE provides applicants with reviewer comments
- Applicants are not required to submit a Reply - it is optional
- To be considered by EERE, a Reply must be submitted by October 25, 2016 at 5:00PM ET and submitted through EERE Exchange (unless otherwise noted in Exchange)
- Content and form requirements:

Section	Page Limit	Description
Text	5 pages max	Applicants may respond to one or more reviewer comments or supplement their Full Application.
Optional	1 page max	Applicants may use this page however they wish; text, graphs, charts, or other data to respond to reviewer comments or supplement their Full Application are acceptable.

Pre-Selection Interviews

- EERE may invite one or more applicants to participate in Pre-Selection Interviews
- All interviews will be conducted in the same format
- EERE will not reimburse applicants for travel and other expenses relating to the Pre-Selection Interviews, nor will these costs be eligible for reimbursement as pre-award costs
- Participation in Pre-Selection Interviews with EERE does not signify that applicants have been selected for award negotiations

Selection Factors

The Selection Official may consider the merit review recommendation, program policy factors, and the amount of funds available in arriving at selections for this FOA

Program Policy Factors

The Selection Official may consider the following program policy factors in determining which Full Applications to select for award negotiations:

- The degree to which the proposed project optimizes the use of available EERE funding to achieve programmatic objectives;
- The level of industry involvement and demonstrated ability to accelerate commercialization and overcome key market barriers; and
- The degree to which the proposed project will accelerate transformational technological advances in areas that industry, by itself, is not likely to undertake because of technical and financial uncertainty.

Note: Cost sharing above the minimum required will not be considered in the evaluation.

Registration Requirements

- To apply to this FOA, Applicants must register with and submit application materials through EERE Exchange: <https://eere-Exchange.energy.gov>
- Obtain a “control number” at least 24 hours before the first submission deadline eere-Exchange.energy.gov
Although not required to submit an Application, the following registrations must be complete to received an award under this FOA:

Registration Requirement	Website
DUNS Number	http://fedgov.dnb.com/webform
SAM	https://www.sam.gov
FedConnect	https://www.fedconnect.net
Grants.gov	http://www.grants.gov

Means of Submission

- Concept Papers, Full Applications, and Replies to Reviewer Comments must be submitted through EERE Exchange at <https://eere-Exchange.energy.gov>
 - EERE will not review or consider applications submitted through other means
- The Users' Guide for Applying to the Department of Energy EERE Funding Opportunity Announcements can be found at <https://eere-Exchange.energy.gov/Manuals.aspx>

Key Submission Points

- Check entries in EERE Exchange
 - Submissions could be deemed ineligible due to an incorrect entry
- EERE strongly encourages Applicants to submit 1-2 days prior to the deadline to allow for full upload of application documents and to avoid any potential technical glitches with EERE Exchange
- Make sure you hit the submit button
 - Any changes made after you hit submit will un-submit your application and you will need to hit the submit button again
- For your records, print out the EERE Exchange Confirmation page at each step, which contains the application's Control Number

Applicant Points-of-Contact

- Applicants must designate primary and backup points-of-contact in EERE Exchange with whom EERE will communicate to conduct award negotiations
- It is imperative that the Applicant/Selectee be responsive during award negotiations and meet negotiation deadlines
 - Failure to do so may result in cancellation of further award negotiations and rescission of the Selection

Questions

- Questions about this FOA? Email CEMII-REMADE@ee.doe.gov
 - All Q&As related to this FOA will be posted on EERE Exchange
 - You must select this specific FOA Number in order to view the Q&As
 - EERE will attempt to respond to a question within 3 business days, unless a similar Q&A has already been posted on the website
- Problems logging into EERE Exchange or uploading and submitting application documents with EERE Exchange? Email EERE-ExchangeSupport@hq.doe.gov.
 - Include FOA name and number in subject line