Technologist in Residence Pilot Overview





Energy Efficiency &

CLEAN ENERGY MANUFACTURING INITIATIVE **U.S. DEPARTMENT OF ENERGY**

Content

- 1. Background: Clean Energy Manufacturing Initiative
- 2. Pilot Summary
- 3. Programmatic Details
- 4. Cost Share Information
- 5. Lab Call for Proposals
- 6. Questions







Background: Clean Energy Manufacturing Initiative

1. Increase U.S. competitiveness in the production of clean energy products



2. Increase U.S. manufacturing competitiveness across the board by increasing energy productivity and leveraging low-cost fuels and feedstocks



3

Clean Energy Manufacturing Initiative: Portfolio



DOE Resources

- 1. Manufacturing R&D
- 2. National Network for Manufacturing Innovation & Manufacturing Demonstration Facilities
- 3. Energy Productivity

Analysis & Outreach

- 1. Clean Energy Manufacturing Analysis
- 2. Regional & National Summits
- 3. Dialogues & Round Tables

Key Take-Aways

- 1. Collaborative Innovation
- 2. Applications of Advanced Manufacturing Technologies
- 3. Leverage National Laboratories
- 4. Scaling Innovation to Manufacturing
- 5. State-led Strategies



Background: DOE National Laboratories a key Competitiveness Driver



Technologist in Residence Pilot Summary: Overview

TIR Vision: Catalyze strong Lab-Industry relationships that result in significant growth in high-impact collaborative research and development

Pilot Goals:

- Increase collaborative research and development between national laboratories and private sector companies
- Develop a streamlined method for companies to establish long term relationships with laboratories that result in collaborative research and development



Secondary Benefits:

- Enhance transparency into the national laboratory innovation infrastructure for the private sector;
- Enhance awareness of high-impact industrially relevant technology challenges within the national laboratory system; and
- Broaden and strengthen networks of Technologists in national laboratories and in industry to more effectively support industry needs and leverage the national laboratory enterprise.

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Technologist in Residence Pilot Summary: Model

Senior Technologists are identified within a National Lab and a manufacturing company. The Technologists work together... ...to identify new areas of collaborative research between the company and the Lab, and formulate an agreement and specific scopes of work



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Technologist in Residence Pilot Summary: Progression



8 MANUFACTURING INITIATIVE U.S. DEPARTMENT OF ENERGY



Metrics and Milestones

Milestones for technologist pairs include:

- Development of a framework partnership agreement that can be modified with statements of work as they are identified
- Creation of Statements of Work to be added to the agreement by the end of the pairs' participation in the Pilot

Technologist pairs may propose additional intermediary milestones.

Metrics to be reported by technologist pairs include:

- Number of National Labs visited to build relationships, explore ideas, and evaluate resources
- Time spent by the Lab technologist embedded in industry
- Time spent by the Industry technologist embedded in Laboratories
- Number of ideas and resources identified at the Lab Technologist's facility
- Number of ideas and resources identified at additional National Labs
- Meetings with leadership and staff from either Labs or industry to brief and consult about proposed potential ideas for R&D
- Number of scopes of work for R&D collaborations
- An assessment of how much a change (from Lab-push to commercial-needs pull) the partnership effected in the proposed R&D collaborations
- Scopes of work for proposed collaboration that have moved to contract negotiation or execution

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The proposal must detail the private sector partner's commitment to contribute—match—an amount equal to or greater than the anticipated Federal share (e.g., \$400,000) to be used for the salary and travel of the Lab Technologist. In addition to this cost match to support for the salary and travel of the Lab Technologist, it is anticipated that the Industry partner will cover 100% of the Industry Technologist's salary and expenses during the TIR pilot. The proposal must specify the amount and source of funding to be contributed to the project to match DOE's Federal share in the budget template provided. In addition, the proposal shall include a cost share commitment letter signed by the industry partner.

EERE has a budget of \$2.3 million for this pilot, from the Advanced Manufacturing Office. It is envisioned that about 5 Technologist in Residence pairs will be funded through this pilot.





Department of Energy National Laboratories are eligible to apply as the primary applicant. The proposal must also include an industry partner that is committed to participating

To be eligible, the lab proposal must identify both the senior representative of the clean energy manufacturing industry partner and the senior representative of the DOE National Laboratory that would participate.

For this lab call, "clean energy manufacturing industry partner" is defined as a company involved in the production of clean energy technologies or a company implementing energy productivity measures.

Proposals submitted after the full proposal deadline of **5:00 p.m. (ET) on June 21, 2015** will be declined without review.

Proposals may include an appendix of team members' resumes (no other information or materials). Proposals must not exceed 10 pages single spaced, 12 point font with standard margins. The budget document, the proposed Technologists' resumes, and the industry partner's cost match commitment letter can be additional pages beyond the 10 page limit.



How to Apply:

- Pairs will consist of a Lab Technologists and Industry Technologists --Pairs will apply to the pilot together
- Industry technologists can represent single companies or multiple companies through any sort of consortium or other organization
- Laboratories will lead the pair formulation process, DOE will not be involved in matching companies with laboratories
- Lab Points of Contact are posted on TIR webpage: <u>http://energy.gov/eere/cemi/technologist-residence-pilot</u>
- DOE will provide a centralized location to post and communicate pair formulation activities carried out by laboratories



How to Apply

Participant Selection

- DOE issued a call for proposals to the laboratories, posted on EERE Exchange.
- Applications will describe:
 - The broad area of technical focus to be explored by the Technologists in Residence and how the technical focus relates to CEMI objectives
 - The approach and activities the pair proposes to carry out to meet the pilot's and the pair's objectives
 - The specific workplan including a budget, metrics, and milestones
 - The background and capabilities of the individual Technologists and any additional support or resources provided by the participating companies and labs



Questions and Answers



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