



**ADVANCED ENERGY MANUFACTURING & RECYCLING GRANT PROGRAM
REQUEST FOR INFORMATION
(DE-FOA-0002810)**

ISSUE DATE: AUGUST 3, 2022
RESPONSES DUE: SEPTEMBER 16, 2022
SUBJECT: REQUEST FOR INFORMATION

Description

This is a Request for Information (RFI) issued by the U.S. Department of Energy's (DOE) Office of Manufacturing & Energy Supply Chains (MESC), in collaboration with DOE's Office of Energy Efficiency and Renewable Energy (EERE) Advanced Manufacturing Office (AMO). MESC, which reports to the Office of the Under Secretary for Infrastructure, manages a portfolio of annual appropriations and programs to build a secure, resilient, and diverse domestic energy sector industrial base. MESC engages with private-sector companies, other Federal agencies, and key stakeholders to collect, analyze, respond to, and share data about energy supply chains to inform future decision making and investment. This RFI seeks public input to help inform DOE's implementation of the Infrastructure Investment and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law (BIL).¹

The BIL is a once-in-a-generation public investment, designed to modernize and upgrade American infrastructure to enhance U.S. competitiveness, drive the creation of good-paying union jobs, tackle the climate crisis, and ensure stronger access to economic and environmental benefits for disadvantaged communities. BIL Section 40209² authorized appropriations of \$750 million over the five (5) year period encompassing fiscal years (FYs) 2022 through 2026 to establish the Advanced Energy Manufacturing & Recycling Grant Program (the "Program").

This Program will bolster domestic manufacturing and strengthen clean energy supply chains by enabling small- and medium-sized manufacturing firms to carry out projects to (a) produce or recycle clean energy property or (b) install equipment at existing facilities to reduce greenhouse gas emissions at those facilities substantially below current best practices.³ The Program will

¹ Public Law 117-58 (November 15, 2021).

² *Id.* at § 40209.

³ *Id.* at § 40209(a)(6), (b).

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broaden economic prosperity by requiring that projects be carried out in communities in which a coal mine closed after December 31, 1999, or a coal-fired power plant closed after December 31, 2009.⁴

To help inform DOE's implementation of BIL Section 40209, this RFI seeks input on:

- Clean Energy Property Projects
- Greenhouse Gas Emissions Reduction Projects
- Small- and Medium-Sized Manufacturing Firms
- Project Finance and Commercial Viability
- Community and Labor Engagement
- Investing in the American Workforce
- Equity, Environmental, and Energy Justice

Information collected from this RFI will be used by DOE for planning purposes, which could include developing future Funding Opportunity Announcements (FOAs) or other solicitations related to Section 40209. The information collected will not be published.

Background

The Bipartisan Infrastructure Law appropriates more than \$62 billion to DOE to ensure the clean energy future delivers true economic prosperity to the American people by:

- Investing in American manufacturing and workers, by creating good-paying jobs with the free and fair chance to join a union and supporting effective workforce development that ensures access to these jobs and enables workers to advance in their careers.
- Expanding access to energy efficiency and clean energy for families, communities, and businesses.
- Delivering reliable, clean, and affordable power to more Americans.
- Building the technologies of tomorrow through clean energy demonstrations.

Mining and power plant workers drove the industrial revolution and the economic growth that followed.⁵ The Advanced Energy Manufacturing & Recycling Grant Program is one part of the Biden Administration's overall efforts to invest in these communities and secure the benefits that have been earned by workers by generating sustained economic prosperity in coal communities.⁶ Even where plants and mines have closed, these communities contain valuable facilities, infrastructure, and skilled workers that can anchor clean energy industries.

⁴ *Id.* at § 40209(a)(2), (b).

⁵ E.O. 14008, Tackling the Climate Crisis at Home and Abroad (Jan. 27, 2021).

⁶ E.O. 14008, Tackling the Climate Crisis at Home and Abroad (Jan. 27, 2021).

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Investments in coal mining and power plant communities should, as described in President Biden’s Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad*, “include efforts to turn properties idled in these communities, such as brownfields, into new hubs for the growth of our economy.”⁷

Further, “[t]he United States needs resilient, diverse, and secure supply chains to ensure our economic prosperity and national security,” as well as to “revitalize and rebuild domestic manufacturing capacity, maintain America’s competitive edge in research and development, and create well-paying jobs.”⁸

In this RFI, DOE seeks information about how design and implementation of this Program can best support community development, catalyze economic revitalization, create good-paying jobs, and support investment in local infrastructure in communities where coal mines and coal power plants have closed. This RFI also seeks information regarding how this Program can best facilitate transition of existing assets, infrastructure, and workforce capabilities to provide the foundation for sustained future economic growth.

In February 2022, DOE published “[America’s Strategy to Secure the Supply Chain for a Robust Clean Energy Transition](#),” the first comprehensive U.S. government plan to build an Energy Sector Industrial Base. The report was produced in response to President Biden’s Executive Order 14017, *America’s Supply Chains*, and is supported by 13 deep-dive supply chain assessments across the energy sector—ranging from solar energy to semiconductors to cybersecurity. As the Federal government begins to implement the BIL, DOE’s report provides information regarding how the United States can capture the economic opportunity inherent in the energy sector transition and build a world-class American energy manufacturing base and workforce.

In order to harness the nation’s untapped potential to support greater domestic production for clean energy use and export, President Biden has also issued determinations permitting the use of Defense Production Act Title III⁹ authorities to strengthen the U.S. industrial base for large-capacity batteries and increase domestic mining and processing of critical materials for the large-capacity battery supply chain,¹⁰ as well as to accelerate domestic production of five additional energy technologies: (1) solar; (2) transformers and electric grid components;

⁷ E.O. 14008, *Tackling the Climate Crisis at Home and Abroad* (Jan. 27, 2021).

⁸ E.O. 14017, *America’s Supply Chains* (Feb. 24, 2021).

⁹ 50 U.S.C. § 4533.

¹⁰ See [Memorandum on Presidential Determination Pursuant to Section 303 of the Defense Production Act of 1950, as amended](#) (Mar. 31, 2022).

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(3) heat pumps; (4) insulation; and (5) electrolyzers, fuel cells, and platinum group metals.¹¹ These actions, which are part of the Biden Administration’s plan to lower energy costs for families, strengthen national security, and achieve lasting American energy independence that reduces demand for fossil fuels and bolsters our clean energy economy, also inform DOE’s implementation of the BIL.

Finally, the BIL’s Build America, Buy America Act,¹² which strengthens Made in America Laws,¹³ will bolster America’s industrial base, protect national security, and support high-paying jobs. The Act affirms, consistent with Executive Order 14005, *Ensuring the Future Is Made in All of America by All of America’s Workers*, the Biden Administration’s priority to “use terms and conditions of Federal financial assistance awards to maximize the use of goods, products, and materials produced in, and services offered in, the United States,”¹⁴ and authorizes the Made in America Office in the Office of Management and Budget to maximize compliance with Made in America Laws. The Made in America Office has provided guidance to Federal agencies on applying a “Buy America” preference to Federal financial assistance programs for infrastructure as well as on implementation of a transparent process to waive such a preference when necessary.¹⁵ As the Made in America Office aims to increase domestic manufacturing and reliance on domestic supply chains, this waiver process offers transparent information regarding supply chain gaps and needs.

¹¹ See [Memorandum on Presidential Determination Pursuant to Section 303 of the Defense Production Act of 1950, as amended, on Solar Photovoltaic Modules and Module Components](#) (June 6, 2022); [Memorandum on Presidential Determination Pursuant to Section 303 of the Defense Production Act of 1950, as amended, on Transformers and Electric Power Grid Components](#) (June 6, 2022); [Memorandum on Presidential Determination Pursuant to Section 303 of the Defense Production Act of 1950, as amended, on Electric Heat Pumps](#) (June 6, 2022); [Memorandum on Presidential Determination Pursuant to Section 303 of the Defense Production Act of 1950, as amended, on Insulation](#) (June 6, 2022); [Memorandum on Presidential Determination Pursuant to Section 303 of the Defense Production Act of 1950, as amended, on Electrolyzers, Fuel Cells, and Platinum Group Metals](#) (June 6, 2022).

¹² BIL §§ 70901-52.

¹³ “Made in America Laws” means all statutes, regulations, rules, and Executive Orders relating to Federal financial assistance awards or Federal procurement, including those that refer to “Buy America” or “Buy American,” that require, or provide a preference for, the purchase or acquisition of goods, products, or materials produced in the United States, including iron, steel, and manufactured products offered in the United States.

¹⁴ E.O. 14005, *Ensuring the Future Is Made in All of America by All of America’s Workers* (Jan. 25, 2021).

¹⁵ For more information regarding the implementation of Build America, Buy America see [M-22-11, Initial Implementation Guidance on Application of Buy America Preference in Federal Financial Assistance Programs for Infrastructure](#), as well as information from the Made in America Office available here: [Financial Assistance Waivers | Made in America](#).

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Building out domestic supply chains for emerging clean energy industries further supports the Biden Administration’s goal of achieving a carbon-free electric grid by 2035 and a net zero emissions economy by 2050.¹⁶

Respondents to this RFI are strongly encouraged to provide information about how design and implementation of this Program can most effectively accelerate deployment of secure, resilient clean energy supply chains.

In keeping with the Administration’s goals, and as an agency whose mission is to help strengthen our country’s energy prosperity, the Department of Energy strongly supports investments that expand quality jobs with the free and fair chance to join a union, improve job quality through the adoption of strong labor standards, increase job access, strengthen local economies, and develop a diverse workforce for the work of building and maintaining the country’s energy infrastructure and growing domestic manufacturing.

Strengthening prosperity – by expanding good-paying union jobs and by supporting job growth through investments in domestic manufacturing – is a key goal set by President Biden and is discussed in depth in his Executive Orders on *Ensuring the Future Is Made in All of America by All of America's Workers*,¹⁷ *Tackling the Climate Crisis at Home and Abroad*,¹⁸ *Worker Organizing and Empowerment*,¹⁹ *Promoting Competition in the American Economy*,²⁰ and *Implementing the Infrastructure Investment and Jobs Act*.²¹

Respondents to this RFI are strongly encouraged to provide information about how design and implementation of this Program can best support the creation of good-paying jobs with the free and fair chance to join a union, the incorporation of strong labor standards, and high-road

¹⁶ FACT SHEET: President Biden sets 2030 Greenhouse Gas Pollution Reduction Target Aimed at Creating Good-paying Union Jobs and Securing U.S. Leadership on Clean Energy Technologies, <https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/22/fact-sheet-president-biden-sets-2030-greenhouse-gas-pollution-reduction-target-aimed-at-creating-good-paying-union-jobs-and-securing-u-s-leadership-on-clean-energy-technologies/>

¹⁷ E.O. 14005, *Ensuring the Future Is Made in All of America by All of America's Workers* (Jan. 25, 2021).

¹⁸ EO 14008, *Tackling the Climate Crisis at Home and Abroad* (Jan. 27, 2021).

¹⁹ EO 14025, *Worker Organizing and Empowerment* (Apr. 26, 2021).

²⁰ E.O. 14036, *Promoting Competition in the American Economy* (July 9, 2021).

²¹ E.O. 14052, *Implementing the Infrastructure Investment and Jobs Act* (EO 14052) (Nov. 15, 2021).

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workforce development, especially through registered apprenticeship²² and quality pre-apprenticeship²³ programs.

Principles of equity and justice will guide BIL implementation, consistent with the Biden Administration’s commitments to ensure that underserved and disadvantaged communities, along with those communities that have been disproportionately impacted by major economic shifts – including coal mining, coal-fired power plant, and manufacturing communities that have suffered as a result of economic shifts – have access to federal resources.²⁴ Implementation

²² Registered Apprenticeship Program (RAPs) are a proven model of job preparation, registered by DOL or a DOL-recognized State Apprenticeship Agency (SAA), which employ workers and combine paid On-the-Job Learning (OJL) (also referred to as On-the-Job Training (OJT)) with Related Instruction (RI) to progressively increase workers’ skill levels and wages. RAPs are also a business-driven model that provide an effective way for employers to recruit, train, and retain highly skilled workers. RAPs allow workforce partners, educators, and employers to develop and apply industry standards to training programs, thereby increasing the quality of the workforce and workforce productivity. RAPs offer job seekers immediate employment opportunities that pay sustainable wages and offer advancement along a career path as they complete their training. Registered Apprentice completers receive industry-recognized certificates of completion leading to long-term career opportunities. For more information on RAPs, please visit www.apprenticeship.gov.

²³ The US Department of Labor has developed a framework for Quality Pre-Apprenticeship Programs:

- Training and curriculum based on industry standards, approved by the Registered Apprenticeship sponsor with whom the pre-apprenticeship program is partnering. Strategies that increase Registered Apprenticeship opportunities for disadvantaged and under-represented individuals that will allow the participant to meet the entry requirements for a Registered Apprenticeship program upon completion. These involve:
 - » Strong recruitment efforts for populations under-represented in Registered Apprenticeship programs
 - » Educational and pre-vocational services that prepare participants to meet the minimum qualifications for entry into a Registered Apprenticeship program
 - » Activities introducing participants to Registered Apprenticeship programs and assistance in applying for those programs
- Access to support services that help participants remain in the program (such as childcare, transportation, counseling and ongoing career services).
- Collaboration with Registered Apprenticeship sponsors to promote apprenticeship to other employers as a quality approach to attain and retain a skilled workforce.
- Hands-on experience that simulates the work performed in the Registered Apprenticeship, while observing proper supervision and safety protocols.
- Formal agreements, wherever possible, with Registered Apprenticeship sponsors for entry into Registered Apprenticeship programs upon successful completion of the pre-apprenticeship program.

For additional information on pre-apprenticeship, please review [USDOL’s Training and Employment Notice 13-12](#).

²⁴ The Justice40 initiative, created by E.O. 14008, *Tackling the Climate Crisis at Home and Abroad*, (Jan. 27, 2021), establishes a goal that 40% of the overall benefits of certain federal investments—including investments in climate change; clean energy and energy efficiency; clean transit; affordable and sustainable housing; training and

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efforts shall be in furtherance of the Justice40 Initiative (“Justice40”), which establishes a goal that 40% of the overall benefits of clean energy and energy efficiency investments flow to disadvantaged communities.²⁵ In addition, implementation efforts shall not exacerbate existing inequalities, including disproportionate exposure to environmental hazards and harms. In all cases, the BIL implementation process should advance equity²⁶ for all, including people of color and others who have been historically underserved, marginalized, and adversely affected by persistent poverty and inequality.

Equity requires the consideration of existing barriers that underserved and underrepresented individuals and communities face when accessing Federal resources. Environmental and energy justice principles²⁷ include procedural justice, distributive justice, recognition justice, and restorative justice. For the purposes of BIL implementation, DOE has identified the following non-exhaustive list of policy priorities as examples to guide DOE’s implementation of Justice40 in disadvantaged communities: (1) decrease energy burden; (2) decrease environmental exposure and burdens; (3) increase access to low-cost capital; (4) increase the clean energy job pipeline and job training for individuals; (5) increase clean energy enterprise creation (e.g., minority-owned or disadvantaged business enterprises); (6) increase energy democracy, including community ownership and other economic benefits associated with the energy

workforce development; the remediation and reduction of legacy pollution; and the development of critical clean water infrastructure—flow to disadvantaged communities. The Justice40 Interim Guidance provides a broad definition of DACs (Page 2): <https://www.whitehouse.gov/wp-content/uploads/2021/07/M-21-28.pdf>. The Department of Energy has identified disadvantaged communities by census tract. See <https://www.energy.gov/diversity/justice40-initiative>. The DOE, OMB, and/or the Federal Council for Environmental Quality (CEQ) may issue additional and subsequent guidance regarding the designation of DACs and recognized benefits under the Justice40 Initiative.

²⁵ The Justice40 initiative, established by E.O. 14008, establishes a goal that 40% of the overall benefits of certain federal investments should flow to disadvantaged communities. DOE’s definition of disadvantaged communities, which should be used to determine benefits calculations, is available at <https://www.energy.gov/diversity/office-economic-impact-and-diversity>.

²⁶ Equity includes ensuring that traditionally underserved populations, including Black, Latino, Indigenous and Native American people, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural or remote areas; persons otherwise adversely affected by persistent poverty or inequality; and Historically Black Colleges and Universities (HBCUs), MSIs, and Tribal Colleges and Universities (TCUs), have access to Departmental programs and opportunities.

²⁷ Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. This goal will be achieved when everyone enjoys: (1) the same degree of protection from environmental and health hazards, and (2) equal access to the decision-making process to have a healthy environment in which to live, learn, and work. Energy justice refers to the goal of achieving equity in both the social and economic participation in the energy system, while also remediating social, economic, and health burdens on those disproportionately harmed by the energy system.

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transition; (7) increase parity in clean energy technology access and adoption; and (8) increase energy resilience.

Respondents to this RFI are strongly encouraged to provide information about how design and implementation of this Program can most impactfully support equity, environmental, and energy justice principles and priorities.

DOE intends to consider applicability of the Build America, Buy America Act of the BIL²⁸ and the Davis-Bacon Act²⁹ when evaluating applications under this and other BIL provisions.

Program Requirements & Priorities

BIL Section 40209 authorizes DOE to establish a \$750 million Advanced Manufacturing & Recycling Grant Program to award grants to small- and medium-sized manufacturing firms. Consistent with BIL Section 40209, to qualify as an eligible entity, a manufacturing firm must have:

1. Gross annual sales of less than \$100,000,000;
2. Fewer than 500 employees at the plant site of the manufacturing firm; and
3. Annual energy bills that total more than \$100,000 but less than \$2,500,000.³⁰

It is anticipated that priority will be given to minority-owned firms, meaning an eligible firm “not less than 51% of which is owned by one or more individuals who are (A) citizens of the United States; and (B) Asian American, Native Hawaiian, Pacific Islander, African American, Hispanic, Puerto Rican, Native American, or Alaska Native.”³¹

The Program will enable eligible firms to carry out two types of qualifying projects:

Clean Energy Property Projects

The Program will support projects to re-equip or expand existing manufacturing or recycling facilities, or establish new facilities, to produce or recycle clean energy property.³² These projects are referred to in this RFI as “Clean Energy Property

²⁸ For more information regarding the implementation of Build America, Buy America, see [M-22-11, Initial Implementation Guidance on Application of Buy America Preference in Federal Financial Assistance Programs for Infrastructure](#).

²⁹ The BIL includes wage requirements and directs that all laborers and mechanics employed by contractors or subcontractors in the performance of construction, alteration, or repair work on a project assisted in whole or in part by funding made available through the BIL shall be paid wages at rates not less than those prevailing on similar projects in the locality.

³⁰ BIL § 40209 (a)(3).

³¹ “The term ‘minority-owned,’ with respect to an eligible entity, means an eligible entity BIL § 40209 (a)(4), (c)(2).

³² BIL § 40209(a)(6)(A)(i).

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Projects.” Under BIL Section 40209, the following are the types of property that may be produced or recycled through a Clean Energy Property Project:

- Property designed to be used to produce energy from the sun, water, wind, geothermal or hydrothermal resources, enhanced geothermal systems, or other renewable resources;
- Fuel cells, microturbines, or energy storage systems and components;
- Electric grid modernization equipment or components;
- Property designed for use in carbon capture, transport, removal, use, or sequestration / storage;
- Equipment designed to refine, electrolyze, or blend any fuel, chemical, or product that is renewable or low-carbon and low-emission;
- Property designed to produce energy conservation technologies (including for residential, commercial, and industrial applications);
- Light-, medium-, or heavy-duty electric or fuel cell vehicles, electric or fuel cell locomotives, electric or fuel cell maritime vessels, or electric or fuel cell planes; technologies, components, and materials of those vehicles, locomotives, maritime vessels, or planes; and charging or refueling infrastructure associated with those vehicles, locomotives, maritime vessels, or planes;
- Hybrid vehicles with a gross vehicle weight rating of not less than 14,000 pounds; and technologies, components, and materials for those vehicles; and
- Other property designed to reduce greenhouse gas emissions.³³

Greenhouse Gas Emission Reduction Projects

The Program will also support projects to re-equip existing industrial or manufacturing facilities with equipment designed to reduce greenhouse gas emissions.³⁴ These projects are referred to in this RFI as “Greenhouse Gas Emission Reduction Projects.” Pursuant to BIL Section 40209, a Greenhouse Gas Emission Reduction Project must reduce the emissions of a facility substantially below greenhouse gas emissions under current best practices.³⁵ The installed equipment may be:

- Low- or zero-carbon heat systems;
- Carbon capture, transport, removal, utilization, and sequestration/storage;
- Energy efficiency and industrial waste reduction technologies; or
- Other industrial technology that reduces greenhouse gas emissions substantially below current best practices.³⁶

³³ BIL § 40209(a)(1).

³⁴ BIL § 40209 (a)(6)(A)(ii), (b).

³⁵ *Id.*

³⁶ *Id.*

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All projects, whether Clean Energy Property Projects or Greenhouse Gas Emission Reduction Projects, must be carried out in census tracts (a) where a coal mine closed after December 31, 1999, (b) where a coal-fired power plant was retired after December 31, 2009, or (c) immediately adjacent to (a) or (b).³⁷ Consistent with the BIL Section 40209, a census tract is not an eligible location for a funded project under this Program until after a coal mine or coal-fired power plant project in the census tract has closed.

In addition to prioritizing projects proposed by minority-owned firms and requiring that projects take place in communities that have experienced coal mine or coal-fired power plant closures, the Program will, consistent with BIL Section 40209, offer priority to projects that:

- i. Result in higher direct and indirect domestic job creation during the lifetime of the project;³⁸
- ii. Result in a higher level of job creation in the vicinity of the project, particularly with respect to low-income communities and dislocated workers previously employed in manufacturing, coal power plants, or coal mining;³⁹
- iii. Provide higher net impact in avoiding or reducing greenhouse gas emissions;⁴⁰
- iv. Have higher potential for technological innovation;⁴¹
- v. Have higher potential for commercial deployment;⁴² and
- vi. Have a lower levelized cost of (i) generated or stored energy or (ii) measured reduction in energy consumption or greenhouse gas emission.⁴³

Projects funded under this Program must demonstrate a reasonable expectation of commercial viability. Selected projects must be completed within three years of receipt of grant funds,⁴⁴ and projects with shorter project times will be prioritized.⁴⁵

DOE's Draft Strategy for Implementation

This section provides a high-level draft plan for DOE's current vision to meet the BIL requirements by conducting a competitive solicitation to select projects under the Program. As

³⁷ BIL § 40209 (a)(6)(C), (c)(1)

³⁸ BIL § 40209 (c)(2)(A)(ii).

³⁹ BIL § 40209 (c)(2)(A)(iii).

⁴⁰ BIL § 40209 (c)(2)(A)(i).

⁴¹ BIL § 40209 (c)(2)(A)(iv).

⁴² BIL § 40209 (c)(2)(A)(iv).

⁴³ BIL § 40209 (c)(2)(A)(v).

⁴⁴ BIL § 40209 (d)(1).

⁴⁵ BIL § 40209 (c)(2)(A)(vi).

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this is a preliminary plan, it will likely change as DOE gathers feedback through the RFI and other stakeholder engagement.

DOE envisions that the projects authorized under this BIL provision will be selected through a competitive solicitation in which projects will be evaluated according to criteria that reflect the BIL and Program priorities identified above. However, the precise criteria and the plans for how the projects will be structured have yet to be determined. This draft strategy outlines how information is being gathered to understand key challenges and opportunities presented with respect to the Program.

DOE is working with partners at the national laboratories to gather relevant data sets and conduct relevant analyses of challenges and opportunities. DOE is also working with intra-agency partners, including the Advanced Manufacturing Office and the Clean Energy Smart Manufacturing Innovation Institute, and interagency partners including but not limited to the Interagency Working Group on Coal and Power Plant Communities and Economic Revitalization, the Department of Labor, and the Department of Commerce, including the Minority Business Development Agency,⁴⁶ the Economic Development Administration, the Manufacturing Extension Partnership, and the Manufacturing USA network, and to maximize the effectiveness of this spending and align with related efforts to promote economic and workforce development in coal and power plant communities and build a secure, resilient, and diverse domestic energy sector industrial base.

DOE is planning a series of stakeholder workshops in 2022 that will collect perspectives on the challenges and opportunities that this Program presents for manufacturing and recycling in coal and power plant communities. The workshops will be open to the public and representatives from key stakeholder groups will be invited to participate in these workshops. DOE envisions that stakeholder groups participating will include, but not be limited to, the clean energy industry and its investors, the manufacturing industry and small and medium-sized manufacturing firms, federal and state regulatory agencies, state and local governments, labor unions, environmental justice organizations, economic development organizations, Tribal officials, disadvantaged communities, community-based organizations, conservation and environmental groups, and academic and other research institutions.

Based on information gathered in this RFI and in other stakeholder engagement, DOE expects to produce public resources, such as technical reports, best practices, regulatory analyses, data sets, and maps. These resources will help potential applicants or host sites prepare for DOE-funded clean energy projects while also providing resources that can be used for projects outside of this program. In addition, DOE worked with the National Renewable Energy Laboratory to establish an initial program to provide technical assistance to small- and medium-

⁴⁶ BIL § 100003(a).

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manufacturing firms and expects to continue to provide technical assistance to facilitate meaningful engagement between eligible entities and communities where coal mines and coal power plants have closed; to identify opportunities to transition existing workforce, manufacturing, and infrastructure assets into hubs for future economic growth; and to increase the likelihood of successful selection and completion of projects.

Purpose

The purpose of this RFI is to solicit feedback on issues related to design and implementation of the Advanced Energy Manufacturing & Recycling Grant Program from small- and medium-sized manufacturers; minority-owned businesses; individuals and organizations involved in clean energy business planning, siting, operations, and management; academic experts; research laboratories; Tribes⁴⁷; government agencies; State and local officials; labor unions; economic development organizations; community-based organizations (CBOs); and other stakeholders. This is solely a request for information and not a funding opportunity. DOE is not currently accepting applications for funding.

You may answer as few or as many of the questions below as you would like. Please use the bolded Category letters and sub-numbers as headings in your response to the greatest extent possible and refer to the questions (e.g., A1., A2., A3., . . .) in the body of your responses. This helps save time both for the responder and the reviewers.

Request for Information Categories and Questions

DOE is requesting input on the following categories and questions:

Category A: Clean Energy Property Projects

- A1. What supply chain-related data and resources should DOE consider in designing and implementing the Program?
- A2. What clean energy properties should DOE focus on or prioritize in designing this Program and selecting Clean Energy Property Projects? Why?
- A3. Please describe factors that manufacturing firms consider when selecting a site to produce or recycle clean energy property. (Please be as specific as possible regarding, for example, economic considerations, policy considerations, labor-management partnerships, environmental and energy justice considerations, geography and geology, workforce availability and skills, existing industrial and other relevant infrastructure and storage available to be repurposed/reused, industry partners, available waste streams, proximity to downstream customers and

⁴⁷ Including Tribal governments, American Indian and Alaska Native communities, Tribal enterprises, Alaska Native Regional and village corporations.

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- transportation infrastructure, cost of land, governmental incentives, regional specific resources, security of supply, climate and weather risks, etc.)
- A4. Please provide comments comparing the re-equipping or expanding of an existing facility to produce or recycle clean energy property versus the establishing of a greenfield facility. (Please be as specific as possible regarding, for example, costs, barriers, advantages, job creation impacts, greenhouse gas emission impacts, community benefits, environmental justice and equity considerations, technological innovation potential.)
 - A5. What kinds of technical assistance should DOE provide to facilitate the re-equipping of existing facilities for Clean Energy Property Projects? The establishing of new facilities?
 - A6. What environmental reviews and permitting challenges might Clean Energy Property Projects face? How should DOE incorporate consideration of those challenges into project selection? What approaches (such as “dig once” and/or the strategic use of existing facilities or infrastructure) can reduce impact and improve efficiencies?
 - A7. How should DOE evaluate the net impact of Clean Energy Property Projects in avoiding or reducing greenhouse gas emissions?

Category B: Greenhouse Gas Emission Reduction Projects

- B8. What greenhouse gas emission avoidance and reduction technologies offer the greatest potential for greenhouse gas emission reduction at small- and medium-sized industrial and manufacturing facilities?
- B9. How should DOE consider the potential for innovation and/or the potential for scaled commercial deployment of various greenhouse gas emission avoidance and reduction technologies in designing and implementing this program?
- B10. How should DOE evaluate whether a proposed project will reduce the greenhouse gas emissions of a facility “substantially below the greenhouse gas emissions under current best practices”?

Category C: Small- and Medium-Sized Manufacturing Firms

- C10. How can DOE most effectively engage with small- and medium-sized manufacturing firms – and, in particular, minority-owned firms – regarding design and implementation of the Program?
- C11. What types of cross-cutting support (e.g., technical assistance) from DOE/national laboratories, other federal agencies, and/or from state, regional, or local entities would be helpful to firms in developing applications and executing projects? What other entities could DOE fund to provide technical assistance for eligible entities?
- C12. How can DOE facilitate connectivity among small- and medium-sized manufacturing firms (by common technology, region, supply chain, etc.) and with downstream clean energy suppliers, distributors, and installers through this Program?

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- C13. What questions or challenges may arise as DOE determines whether a manufacturing firm qualifies as an eligible entity under the Program? What information should DOE use to determine eligibility?
 - C14. What questions or challenges may arise as DOE determines whether a firm qualifies for priority as a minority-owned firm under the Program? What information should DOE use to determine eligibility?
 - C15. What challenges may arise as eligible entities seek to complete projects within three years of receiving BIL funding?

Category D: Project Finance and Commercial Viability

- D16. Under EPAct 2005, Section 988,⁴⁸ DOE must, absent an exception, require a cost share for demonstration or commercial application projects of at least 50% cash or in-kind, with the recipient's cost-share deriving from non-Federal resources. (For example, a \$25mm award would require \$12.5mm in matching non-Federal cost share to the \$12.5mm Federal share.) However, the Secretary may reduce the non-Federal share if the Secretary determines the reduction to be necessary and appropriate, taking into consideration any technological risk relating to the activity.⁴⁹ Is it feasible for eligible firms to meet a cost share requirement of 50% or more? If so, what are the most effective ways for eligible firms to meet this requirement? If 50% is too much of a burden, what are the considerations or challenges that make this requirement infeasible?
- D17. What specific challenges or opportunities might minority-owned eligible firms encounter in meeting a 50% cost share requirement?
- D18. How can other public or private funding (including funding under other BIL provisions), financing, or incentives be leveraged to maximize the impact of this Program?
- D19. What strategies and approaches should DOE utilize to facilitate collaboration between eligible entities and potential financing partners?
- D20. What is the minimum award needed to carry out a Clean Energy Property Project? A Greenhouse Gas Emissions Reduction Project? Please be as specific as possible regarding costs and the nature of the project (e.g. greenfield or existing facility, clean energy property produced or recycled, whether any remediation costs are included, greenhouse gas emissions reduction technology deployed, etc.).
- D21. What data or information (e.g. supply chain market analysis, information regarding transportation and other foundational infrastructure, workforce data) should DOE consider when assessing the commercial viability of proposed Clean Energy Property Projects? Greenhouse Gas Emissions Projects?

⁴⁸ 42 U.S.C. § 16352.

⁴⁹ *Id.*

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- D22. What actions can DOE take to help applicants de-risk proposed projects and achieve commercial viability post-BIL funding?

Category E: Community and Labor Engagement

- E23. What external non-project partners/stakeholders (e.g., CBOs, disadvantaged communities, Tribes, state and local governments, labor unions, economic development organizations) will be critical to the success of the Program?
- E24. How can DOE ensure community-based stakeholders/organizations, labor unions, and worker representatives are equitably and meaningfully engaged and included in the planning, decision-making, and implementation processes, in both program development and individual projects? What barriers exist to meaningful engagement?
- E25. What activities and engagement (e.g., with MSIs, community-based organizations, registered apprenticeship programs, joint labor-management partnerships, women and minority-owned contractor capacity building, and community-based quality pre-apprenticeship programs) would make the Program successful and sustainable in terms of workforce development; worker recruitment; improved diversity, equity, inclusion, and accessibility across the workforce; and the creation of good-paying union jobs?
- E26. What information and/or technical assistance do communities, local, State, and Tribal governments, and other stakeholders need to effectively engage with DOE and eligible entities regarding this Program?
- E27. What support do Tribes need to be successful in securing economic and community benefits from the implementation of the Program?
- E28. A [Community Benefits Agreement](#) is an agreement signed by community benefit groups and a developer, identifying the community benefits a developer agrees to deliver, in return for community support of the project.
- a. What role can community benefit agreements play in ensuring that lasting community benefits flow from these federal grant funds?
 - b. What steps can DOE take to assist potential applicants and communities to reach community benefit agreements as part of the application process?
 - c. Please provide examples of how community consultation, consent-based siting, and community benefits agreements or good neighbor agreements can successfully be included in the environmental and permitting review process.
- E29. What other actions can DOE take to further ensure that projects funded through the Program support community development, catalyze economic revitalization, create good-paying jobs, and support investment in local infrastructure in communities where coal mines or coal-fired power plants have closed?

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Category F: Quality Jobs

- F30. How can DOE best support the direct and indirect creation of high quality, good-paying union jobs, especially in disadvantaged communities and for dislocated workers, through this Program?
- F31. In what ways, if any, do you anticipate the Program could impact the workforce? For example:
 - a. To what extent do you anticipate job creation, loss, or changes in job quality?
 - b. To what extent do you anticipate the creation of construction jobs? Ongoing operations and maintenance jobs? Other jobs across the supply chain?
 - c. To what extent do you anticipate that the Program will incentivize reskilling or transition of existing workforces, including displaced coal workers, to meet new demand?
- F32. What existing workforce education and training efforts (e.g., specific registered apprenticeship programs, labor management training programs, community college or technical school programs, etc.) are preparing displaced workers for clean energy manufacturing and recycling jobs? How can those efforts be best supported or augmented to ensure success of the Program? What training pathways are needed, or already exist, to address these needs?
- F33. If you are a potential funding applicant or recipient, would you consider committing to workers having the free and fair chance to join a union by signing a card-check labor neutrality agreement, collective bargaining agreement, and/or establishing a labor-management partnership? Why or why not?
- F34. How should the quality of and access to jobs, both in the construction phase and the operations and maintenance phase, be measured and evaluated?

Category G: Equity, Environmental, and Energy Justice

- G35. What equity, energy and environmental justice concerns or priorities are most relevant for the Program? How have/can these concerns or priorities been/be addressed?
- G36. What program requirements or review criteria should DOE consider to ensure that regional economic growth flowing from funded projects will be shared with disadvantaged communities?
- G37. How are adverse impacts of manufacturing and recycling facilities currently measured or monitored? Which materials, processes, and/or components result in the largest environmental impacts? What opportunities exist to minimize such impacts?
- G38. How could the Program further energy democracy (e.g., community ownership models, community governance models, community benefits agreements, etc.)?
- G39. What are key equity-aligned review criteria that DOE should use to evaluate and select projects in the Program?

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Category H: Other

- H40. Please provide any additional information or input not specifically requested in the questions above that you believe would be valuable to help DOE develop the Program FOA and implement BIL Section 40209.

Disclaimer and Important Notes

This RFI is not a Funding Opportunity Announcement (FOA); therefore, DOE is not accepting funding applications at this time. There is no guarantee that a FOA will be issued as a result of this RFI. Responding to this RFI does not provide any advantage or disadvantage to potential applicants if DOE chooses to issue a FOA regarding the subject matter. Final details, including the anticipated award size, quantity, and timing of DOE-funded awards, will be subject to Congressional appropriations and direction.

Any information obtained as a result of this RFI is intended to be used by the Government on a non-attribution basis for planning and strategy development; this RFI does not constitute a formal solicitation for proposals or abstracts. Your response to this notice will be treated as information only. DOE will review and consider all responses in its formulation of program strategies for the identified materials of interest that are the subject of this request. DOE will not provide reimbursement for costs incurred in responding to this RFI. Respondents are advised that DOE is under no obligation to acknowledge receipt of the information received or provide feedback to respondents with respect to any information submitted under this RFI. Responses to this RFI do not bind DOE to any further actions related to this topic.

Freedom of Information Act

Responses received under this RFI are subject to public disclosure under the Freedom of Information Act. Because information received in response to this RFI may be used to structure future programs and funding opportunity announcements and/or otherwise be made available to the public, **respondents are strongly advised to NOT include any information in their responses that might be considered business sensitive (e.g., commercial or financial information that is privileged or confidential), trade secrets, proprietary, or otherwise confidential.**

If an RFI response includes business sensitive, trade secrets, proprietary, or otherwise confidential information, it is furnished to the Federal Government (Government) in confidence with the understanding that the information shall be withheld from public disclosure to the extent permitted by law, including the Freedom of Information Act. Without assuming any liability for inadvertent disclosure, DOE will seek to limit disclosure of such information to its employees and contractors or as otherwise authorized by law. This restriction does not limit the Government's right to use the information if it is obtained from another source.

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If a respondent chooses to submit business sensitive, trade secrets, proprietary, or otherwise confidential information, the respondent must provide **two copies** of the response. The first copy should be marked, “non-confidential” with the information believed to be confidential deleted. The second copy should be marked “confidential” and must clearly and conspicuously identify the business sensitive, trade secrets, proprietary, or otherwise confidential information. Failure to comply with these marking requirements may result in the disclosure of the unmarked information under the Freedom of Information Act or otherwise. The Government is not liable for the disclosure or use of unmarked information and may use or disclose such information for any purpose.

If your response contains business sensitive, trade secrets, proprietary, or otherwise confidential information, you must include a cover sheet marked as follows identifying the specific pages containing business sensitive, trade secrets, proprietary, or otherwise confidential information:

Notice of Restriction on Disclosure and Use of Data: Pages [List Applicable Pages] of this response may contain business sensitive, trade secrets, proprietary, or otherwise confidential information that is exempt from public disclosure. Such information shall be used or disclosed only for the purposes described in this RFI DE-FOA-0002810. The Government may use or disclose any information that is not appropriately marked or otherwise restricted, regardless of source.

In addition, (1) the header and footer of every page that contains business sensitive, trade secrets, proprietary, or otherwise confidential information must be marked as follows: “Contains Business Sensitive, Trade Secrets, Proprietary, or Otherwise Confidential Information Exempt from Public Disclosure” and (2) every line and paragraph containing such information must be clearly marked with double brackets or highlighting. DOE will make its own determination about the confidential status of the information and treat it according to its determination.

Evaluation and Administration by Federal and Non-Federal Personnel

Federal employees are subject to the non-disclosure requirements of a criminal statute, the Trade Secrets Act, 18 USC 1905. The Government may seek the advice of qualified non-Federal personnel. The Government may also use non-Federal personnel to conduct routine, nondiscretionary administrative activities. The respondents, by submitting their response, consent to DOE providing their response to non-Federal parties. Non-Federal parties given access to responses must be subject to an appropriate obligation of confidentiality prior to being given the access. Submissions may be reviewed by support contractors and private consultants.

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Request for Information Response Guidelines

Responses to this RFI must be submitted electronically to 40209Program@hq.doe.gov no later than 5:00pm (ET) on September 16, 2022. Responses must be provided as attachments to an email. It is recommended that attachments with file sizes exceeding 25MB be compressed (i.e., zipped) to ensure message delivery. Responses must be provided as a Microsoft Word (.docx) or PDF attachment to the email, and no more than 15 pages in length, 12-point font, 1-inch margins. Only electronic responses will be accepted.

For ease of replying and to aid categorization of your responses, **please copy and paste the RFI questions, including the question numbering, and use them as a template for your response.**

Respondents may answer as many or as few questions as they wish.

DOE will not respond to individual submissions or publish publicly a compendium of responses. A response to this RFI will not be viewed as a binding commitment to develop or pursue the project or ideas discussed.

Respondents are requested to provide the following information at the start of their response to this RFI:

- Organization / institution / individual name
- Organization / institution contact
- Individual or contact's address, phone number, and e-mail address.

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