



New Jersey Economic Development Authority

REQUEST FOR INFORMATION

2022-RFI-OET-152

for

Clean Energy Manufacturing in New Jersey – Early Adopters Pilot

1. INTENT/SUMMARY OF SCOPE

The New Jersey Economic Development Authority (“Authority” or “NJEDA”), an independent authority of the State of New Jersey, is seeking information and ideas from qualified entities (“Respondents”) regarding the expansion of innovative clean energy technology manufacturing in the State.

This Request for Information (RFI) is issued by the NJEDA to seek information from individuals and/or entities with perspectives on manufacturing innovative clean energy technologies (supply) and/or accelerating their adoption (demand).

The Authority is interested in receiving information (including but not limited to comments, questions, recommendations, white papers, tools, case studies, information, ideas, references, and general responses, e.g., willingness to participate in a focus group or demonstration project) that will help it to shape new programs and initiatives to grow and strengthen New Jersey’s clean technology manufacturing sector and accelerate the adoption of innovative clean energy technologies, in accordance with the Fiscal Year 2023 (FY2023) Appropriations Act.¹ More specifically, this RFI aims to help the Authority better understand:

1. If the creation of a confirmed pipeline of customers is sufficient to attract innovative clean technology manufacturers to New Jersey that may be considering opening new development, assembly, or manufacturing facilities;
2. If reducing the cost of purchasing a technology would enable New Jersey businesses to become early adopters of new, NJ-produced clean energy technologies that may still have a higher market cost; and
3. If the program (proposed on page 2) would be beneficial to clean technology manufacturers and purchasers in the State.

¹ [Office of the Governor | Governor Murphy Signs Fiscal Year 2023 Appropriations Act into Law \(nj.gov\)](#)

Please note, the scope of this RFI is limited to clean energy technologies that have already been or are ready to be commercially deployed (i.e. at a minimum, previously demonstrated in a pilot production line), and that have not consequentially been manufactured or deployed in New Jersey to date.

2. **BACKGROUND**

The Authority serves as the State’s principal agency for driving economic growth. The Authority is committed to making New Jersey a national model for inclusive and sustainable economic development by focusing on strategies that help build strong and dynamic communities, create good jobs for New Jersey residents, and provide pathways to a stronger and fairer economy. Through partnerships with a diverse range of stakeholders, the Authority creates and implements initiatives to enhance the economic vitality and quality of life in the State and strengthen New Jersey’s long-term economic competitiveness.

The NJEDA is considering establishing a pilot program to attract clean energy manufacturers to New Jersey. The program would provide a grant or forgivable loan either to New Jersey companies or institutions seeking to purchase and adopt a clean energy technology, or to the technology manufacturer directly, if the purchase results in the manufacturer of the technology establishing a presence in the State. Awards are contemplated to cover a meaningful percentage of the direct technology product costs, up to a cap (e.g., 25% of the cost, or up to \$5,000,000, whichever is lesser), and would be provided to the New Jersey purchaser(s) or to the manufacturer, to defray the cost of the purchase. The goal of this program would be to build a pipeline of projects for manufacturers, and to make these NJ manufacturers relatively more competitive due to the provision of this grant/loan – while minimizing the costs of adoption of clean technologies for early adopters in the State.

Manufacturing in New Jersey

The State’s manufacturing output grew at a 5.8% annualized pace between the fourth quarter of 2017 and the fourth quarter of 2021, which exceeded the national growth rate of 2.6% during that period.² In June of 2022, Governor Murphy signed the Fiscal Year 2023 (FY2023) Appropriations Act into law, which includes funding for a Manufacturing Industry Initiative to support “programs to spur capital investment, increase the adoption of new technology, attract new suppliers to the state, and expand workforce development and training opportunities.”³

To help build on this momentum, the NJEDA is planning to pilot manufacturing support programs that will take advantage of New Jersey’s strength in technology development, help address supply chain fragility exposed by the COVID-19 pandemic, and respond to identified needs in the industry.

² [GDP figures show manufacturing in N.J. has made strong strides | ROI-NJ](#)

³ [Office of the Governor | Governor Murphy Signs Fiscal Year 2023 Appropriations Act into Law \(nj.gov\)](#)

Clean Energy Manufacturing

Clean energy manufacturing is a key component of the burgeoning multi-billion-dollar global clean energy industry.⁴ The COVID-19 pandemic exposed supply chain weaknesses, including material shortages, volatile pricing, and lack of staff, forcing companies to rethink their supply chains and fueling a resurgence in domestic manufacturing. The recent passage of the Inflation Reduction Act of 2022 will spur historic investments in domestic clean energy manufacturing, including over \$60,000,000,000 allocated to on-shoring manufacturing firms across the full supply chain of clean energy and transportation technologies.⁵

The State of New Jersey Energy Master Plan sets clear targets for the State, including meeting the 50% Renewable Portfolio Standard by 2030, and transitioning to 100% clean energy by 2050.⁶ Innovative clean energy technologies are defined in this RFI as technologies or equipment that can demonstrate their integral nature to the development of Class I renewable energy, and that are not yet widely manufactured or adopted in New Jersey. These technologies are key to meeting New Jersey residents' energy needs in an environmentally sound manner, in accordance with the Energy Master Plan, the State's implementation of the Regional Greenhouse Gas Initiative (RGGI), P.L. 2007, c.340, and the "Global Warming Response Act", P.L. 2007, c.112, ("GWRA"), which commits New Jersey to reducing its greenhouse gas emissions by 80% below 2006 levels by 2050, and as updated within Murphy E.O. 274, to 50% below 2006 levels by 2030.

The Energy Master Plan includes some of the ways in which the expansion of clean technology manufacturing will benefit New Jerseyans and support the accelerated transition to clean energy, such as:

- The creation of new high-quality manufacturing jobs in the clean energy sector;
- The potential for the State to take a leadership position in creating dynamic new clean energy industry clusters in sub-sectors of the broader clean energy economy, which will in turn bring an influx of investment and jobs that will support other sectors in New Jersey's economy;
- The development of a local population of trained energy professionals, which presents an opportunity to support workers in stagnating industries by transitioning them to ones with greater future growth potential, and will in turn attract industry investment and make the State a hub for clean energy manufacturing and innovation; and
- The possibility of exporting innovative clean technology products as other states and regions pursue their own clean energy aspirations.

This intersects with Governor Murphy's economic plan, "The State of Innovation: Building a Stronger and Fairer Economy in New Jersey"⁷, which the Authority's Office of Economic Transformation embraces by ensuring the State is making strategic investments to support the

⁴ Clean Energy Manufacturing Analysis Center, "Benchmarks of Global Clean Energy Manufacturing": <https://www.manufacturingcleanenergy.org/research-highlights.html>

⁵ The Inflation Reduction Act can be accessed here: <https://www.democrats.senate.gov/inflation-reduction-act-of-2022>

⁶ The Energy Master Plan (EMP) can be accessed here: <https://nj.gov/emp/>

⁷ The economic plan can be accessed here: <https://www.njeda.com/economicplan/>

growth of New Jersey's competitiveness in high-wage, high-growth sectors, including clean energy and advanced manufacturing.

Expanding clean technology manufacturing in the State also aligns with the New Jersey Council on the Green Economy's roadmap, "Green Jobs for a Sustainable Future", which serves as a blueprint for expanding the green economy and building a diverse workforce to support Governor Murphy's Administration's clean energy and climate goals.⁸

3. ELIGIBILITY CRITERIA

The RFI is seeking responses from all interested stakeholders in innovative clean energy technologies, clean technology manufacturing, and/or businesses interested in or that might benefit from the adoption of new clean energy technologies that may still have a higher market cost.

In addition, this RFI welcomes input from:

- Entities representing the interests of clean energy/clean technology manufacturing supply chain businesses and workers, including but not limited to industry associations, chambers of commerce, and unions;
- Subject matter experts on new, innovative, or emerging clean energy technologies, including those pertaining Class I renewable energy, such as photovoltaic, solar, wind energy, renewably fueled fuel cells, wave, tidal, sustainable harvested biomass, and methane gas from landfills, as well as other technologies or equipment that are integral to the development or recycling of Class I renewable energy technologies, including "balance of system" technologies that produce or support the production or recycling of renewable or clean electricity generation or storage, e.g., batteries;
- Environmental and other public policy-focused organizations;
- Organizations representing Environmental Justice communities (together with individual representatives of these communities);
- Jurisdictional and regulatory representatives (from NJ, all other states and territories, and international sources); and
- Entities with expertise in innovative clean technology matters, such as research institutions.

Qualified entities do not need to be located within the State of New Jersey to provide a response.

⁸ The New Jersey Council on the Green Economy's "Green Jobs for a Sustainable Future" can be accessed here: <https://www.nj.gov/governor/climateaction/council/greenreport/>

4. RFI QUESTIONS

In submitting responses to this RFI, respondents are encouraged to answer any questions they consider relevant and to the best of their ability. Respondents do not need to answer all questions for their response to be considered. Answers are understood to be preliminary and non-binding. Respondents are free to go beyond the scope of the questions and/or structure responses as necessary to increase clarity and efficiency of responses. Respondents should also feel free to submit additional or alternate information as deemed necessary and appropriate.

As outlined above, the NJEDA is considering establishing a pilot program to attract clean energy manufacturing businesses to New Jersey. The program would provide a grant or forgivable loan to New Jersey companies or institutions seeking to purchase and implement a clean energy technology, or to the manufacturer directly, if the purchase results in the manufacturer of the technology establishing a presence in the State. Awards are contemplated to cover a meaningful percentage of the direct technology product costs up to a cap (e.g., 25% of the cost, or up to \$5,000,000, whichever is lesser), and would be provided to the New Jersey purchaser(s) or to the manufacturer to defray the cost of the purchase. The questions within this RFI are intended to garner feedback on this pilot idea.

For ease, questions have been broken into the following categories:

- A. Background
- B. General questions
- C. Questions specific to prospective adopters/purchasers of new clean energy technologies
- D. Questions specific to clean technology manufacturers

A. Background

1. Please provide information on your entity (name, size, business type), and your involvement or interest in adopting or manufacturing innovative clean energy technologies.

B. General questions

2. Would a program like the one described be an effective way to attract clean energy manufacturers to NJ and incentivize NJ businesses to adopt these technologies?
3. What are the major financial barriers (e.g., upfront capital costs, installation costs, use case studies or consultation costs, access to loans, etc.) and non-financial barriers (e.g., regulatory barriers, lack of comfort with new clean energy technologies, operational risks, timelines to procurement, etc.) to the adoption of clean energy technologies in NJ?
4. Which clean energy technologies (e.g., solar, EVs, hydrogen, building efficiencies, etc.) are most viable for adoption by NJ businesses and for manufacture in NJ in the immediate term (1-2 years) and medium term (2-5 years)?

C. Questions for prospective NJ purchasers of clean energy technologies:

5. How do you see your entity adopting innovative clean energy technologies over the next 5 – 10 years? Would this program accelerate or increase the likelihood of adoption?
6. What subsidy amount (in dollar amount or percentage of the total cost) to defray the cost of adopting a new clean energy technology would make it feasible for you to adopt a new technology that you might not otherwise have considered for financial reasons?
 - a. Would you prefer to receive the subsidy directly, or for it to be awarded to the manufacturer? (Note: The subsidy's impact would remain unchanged in reducing the cost of purchasing the technology.)
7. What level of market penetration (e.g. 0-20%, 20-40%, over 40%, etc.) would an innovative technology need before you would consider purchasing it, and why?
 - a. What other considerations would you take into account before purchasing an innovative technology?
8. Does your entity have diversity/equity/inclusion goals when it comes to your manufacturers or suppliers, and/or any programs in place to increase the diversity of your suppliers?

D. Questions for clean technology manufacturers:

9. If you develop or manufacture new or innovative technologies, please describe the process from the pilot or pre-commercialization stage to scale. To what extent is your product tested, demonstrated, or piloted before your first customers purchase it?
10. Would a program that lowered the technology cost for purchasers, like the one described above, lead your manufacturing firm to consider relocating to or opening a new facility in New Jersey?
 - a. If yes, what subsidy amount (in dollar amount or percentage of the total cost) do you believe would be necessary?
 - b. Would you prefer to receive the subsidy directly, or for the purchaser to receive it? (Note: The subsidy's impact would remain unchanged in reducing the cost of purchasing the technology.)
 - c. If no, what would make the program more beneficial to manufacturers and/or businesses purchasing clean technologies? What alternatives should we consider?
11. Please describe factors that your firm considers when selecting a site for a new development, assembly, or manufacturing facility. (Please be as specific as possible regarding, for example, policy, partnerships, regulations, geography, workforce skills and counts, existing infrastructure, proximity to customers, proximity to transportation infrastructure, cost of land, governmental incentives, regional specific resources, etc.)

12. What type(s) of support would be most useful in terms of building a pipeline of customers for new clean energy technologies?
13. To what extent is your business currently involved in projects or with suppliers in New Jersey (including strategic partnerships with vendors, etc.), and what is the nature of its involvement?
14. What is the minimum amount of time you require to open a new development, assembly, or manufacturing facility?
15. What economic benefit do you believe would be created in NJ by the opening of a development, assembly, or manufacturing facility by your entity? For example, number of FTEs at full production, typical facility start-up investment, local ESG commitments.

5. QUESTIONS AND ANSWERS (from Respondents to NJEDA)

All questions concerning this RFI must be submitted in writing no later than 1:00 PM ET, on Thursday, October 27, 2022 via e-mail to: earlyadopters@njeda.com.

The subject line of the e-mail should state: **Questions-2022-RFI-OET-152**.

Answers to questions submitted will be publicly posted on the Authority's website on or about Thursday, November 3, 2022 at: <https://www.njeda.com/Bidding-Opportunities-General/Economic-Transformation-RFIs> as Addendum.

IT IS THE RESPONDENT'S RESPONSIBILITY TO CHECK THIS URL REGULARLY FOR UPDATES.

6. RESPONSE DETAILS (Info Provided to Respondents Regarding Document Submission)

All RFI responses must be submitted in writing no later than 1:00 PM ET on Friday, November 11, 2022 via e-mail to: earlyadopters@njeda.com.

The subject line of the e-mail should state: **RFI Response-2022-RFI-OET-152 – Innovative Clean Energy Manufacturing – Early Adopters Pilot Program**.

7. FOLLOW-UP QUESTIONS (from NJEDA) / ADDITIONAL INFORMATION

Respondents may be invited to provide additional information to allow the Authority to better understand information provided.

8. PROPRIETARY AND/OR CONFIDENTIAL INFORMATION

The Authority reserves the right to copy any information provided by the Respondents. The Authority reserves the right to use ideas that are provided by Respondents, applicants, stakeholders, or vendors. By submitting a Response, the submitter represents that such copying or use of information will not violate any copyrights, licenses, or other agreements with respect to information submitted or product solutions demonstrated, if applicable. Responses must clearly be marked for any information the Respondent deems Proprietary and/or Confidential.

9. DISCLAIMER / NO OBLIGATION

The Authority is under no obligation to contact Respondents to this RFI. If necessary, it may contact respondents through telephone calls, written or electronic communications, presentation requests and/or interviews to seek clarification on submissions. Please note that, Respondents shall not be under any obligation to respond to any such request.

This RFI is completely voluntary and will not affect scoring or consideration of any applications that may in the future be submitted to the Authority under programs or projects intended to strengthen New Jersey's cleantech innovation ecosystem.

This RFI is issued solely as a means of gathering information. Interested parties responding to this RFI do so at their own expense. There will be no monetary compensation from the Authority for the time and effort spent in preparing the response to this RFI. All expenses incurred are the sole responsibility of the Respondent.

This RFI is not a request for qualification/proposal. It may or may not result in further action. Should the Authority to move forward and issue an RFQ/P or announce a program/product related to this RFI, Respondents need not have submitted a response to this RFI in order to be eligible to respond to the RFP. Should an RFQ/P be issued, responding to this RFI will not affect scoring or consideration for that process.

10. NEW JERSEY OPEN PUBLIC RECORDS ACT

Respondents should be aware that responses to this RFI are subject to the "New Jersey Open Public Records Act" (N.J.S.A. 47:1A-1 et seq.), as amended and including all applicable regulations and policies and applicable case law, including the New Jersey Right-to-Know law. All information submitted in response to the RFI is considered public information, notwithstanding any disclaimers to the contrary, except as may be exempted from public disclosure by OPRA and the common law.

Any proprietary and/or confidential information submitted in response to this RFI will be redacted by the Authority. A person or entity submitting a response to this RFI may designate specific information as not subject to disclosure pursuant to the exceptions to OPRA found at N.J.S.A. 47:1A-1.1, when such person or entity has a good faith legal and/or factual basis for such assertion (i.e. information that may be included in another ongoing public procurement or solicitation). The

Authority reserves the right to make the determination as to what is proprietary or confidential and will advise the person or entity accordingly. The Authority will not honor any attempt to designate the entirety of a submission as proprietary, confidential and/or to claim copyright protection for the entire proposal. In the event of any challenge to the Respondent's assertion of confidentiality with which the Authority does not concur, the Respondent shall be solely responsible for defending its designation.