



Funding Opportunity Announcement (FOA) Fiscal Year 2025 Mechanical Insulation Grant Program

Definition:

The FY25 Mechanical Insulation Grant Program ("Program") provides subsidies to eligible entities that install mechanical insulation on a commercial or industrial property within Maryland. Eligible recipients may use Program grants to defray the expenses associated with implementing mechanical insulation as defined in a scope of work submitted with a grant application. Supporting documentation that describes the scope's energy-saving potential is required.

Mechanical insulation is defined in statute¹ as "insulation materials, facings, and accessory products used for thermal requirements for mechanical piping and equipment, hot and cold applications, and heating, ventilation, and air—conditioning applications." Mechanical insulation may satisfy one or more of these facility-owner objectives: energy conservation, operating cost reductions, process control, noise abatement, environmental impact minimization, and workplace comfort and safety.

Program Description:

The FY25 Mechanical Insulation Grant Program ("Program") provides subsidies to entities that install mechanical insulation in Maryland-based buildings and industrial processes. Eligible recipients may use Mechanical Insulation grants to defray the expenses associated with implementing mechanical insulation accompanied by a defined scope of work and a documented estimate of energy-saving potential provided by that scope.

Type of Grant Program:

Grants are issued on a first-come, first-served basis to eligible applicants that submit a scope of work that conforms with Program guidelines. Grant proceeds are issued in arrears to awardees that submit invoices demonstrating successful project completion.

Application Deadline:

Until funding is exhausted, or 3:00 p.m. on Wednesday, March 26,

¹ §9–2013 of the Maryland State Government article.

2025 at 3:00 p.m. Interested parties are encouraged to apply as soon as possible to have the best chance for funding.

Funding:

A total of \$400,000 is anticipated to be available for disbursement by the FY25 Mechanical Insulation program. The total amount awarded under the program may be more or less, depending on the quantity and quality of applications received.

Eligible Applicants:

Individuals, non-profit organizations, Maryland business entities Maryland non-profit organizations, state agencies, local governments, public and private schools, and community colleges. Non-governmental applicants must be in Good Standing with the Maryland State Department of Assessments and Taxation (SDAT).

Qualifying Scopes of Work: The FY25 Mechanical Insulation Program awards will be issued to qualified applicants that propose a scope of work for the installation of mechanical insulation only, to the exclusion of all other hardware that would be installed concurrently. Parties interested in grant funding to support a scope of work that includes other hardware in addition to mechanical insulation are encouraged to consider the FY25 Commercial, Industrial, and Agricultural Grant program.

> Each grant awarded under the FY25 Mechanical Insulation Program will accrue to a single building or process ("Project"). An eligible Project encompasses the design (site-specific specification) acquisition, installation, and commissioning of mechanical insulation applied to a thermal (heating and/or cooling) system, which may include:

- prime movers such as boilers, chillers, engines, or furnaces;
- the network of pipes, ducts, or other means for distributing thermal resources from a prime mover to points of use; and
- point-of-use thermal exchangers that transfer resources as needed to achieve space conditioning or material processing needs.

Note that scopes of work are eligible for grant reimbursement only if the applicant clearly demonstrates that the resulting performance measures will exceed ASHRAE Technical Committee (TC) 8.1 performance criteria. Eligible insulation selections for hot or cold applications include:

- jackets for boilers, heat pumps, chillers, heat exchangers, tanks, valves, and other distribution-related hardware
- sleeves or other configurations intended to enclose pipes or ducts.

Furthermore:

- The scope of an eligible Project is limited to the portion of a single-site heating or cooling system owned by the applicant. If the Project pertains to thermal resources transferred from a merchant-provider to the applicant's facility, only the assets "inside the meter" through which merchant-provided thermal commodities are delivered are deemed part of the eligible scope. Any equipment "upstream" of the merchant's delivery meter is ineligible for inclusion in the Project.
- If a single site or facility hosts two or more thermal systems, each of which is characterized by a distinct and separate system of prime movers, distribution networks, thermal exchangers, and thermal media, then the Program will recognize each system as a separate Project for grant funding purposes.
- A thermal distribution network that (whole or in part) serves multiple prime movers and/or shares common distribution assets will be considered one Project for the purposes of this program.

Demonstration of Energy Performance Improvement:

No FY25 Mechanical Insulation Program grant application will be considered for award unless its proposed scope of work is accompanied by documentation of the Project's estimated energy performance. Such documentation should be prepared by a competent engineering professional and clearly quantify:

- the annual energy consumption of the subject thermal system in its entirety both before and after the insulation improvement;
- the performance of the proposed insulation materials according to the current ASHRAE minimum performance standard for each distinct type of insulation material to be installed:
- the type, cost, and volume of all fuel and electricity consumed annually either by (1) the subject thermal system, or (2) the entire facility, as depicted on gas/electric utility bills or invoices for fossil fuel delivered.

For the purpose of quantifying energy performance, applicants are **strongly encouraged** to use the $3E \text{ Plus}^{\mathbb{R}}$ online calculator. This is a free, unbiased resource developed by the insulation manufacturing industry in cooperation with the U.S. Department of Energy to meet <u>ASTM C-680</u> industry standards. 3E Plus calculates a variety of performance measures as selected by the user, including energy and

cost savings, emissions reductions, and economically optimal thickness of insulation.

ABOUT <u>3E Plus</u>®

- 3E Plus is not designed to evaluate models of distribution systems in their entirety. Rather, it will reference either (1) 12-inch horizontal, vertical or diagonal sections of pipe or duct runs; or (2) one square foot of surface space on the top or side of a tank or vessel.
- To achieve a total-project performance evaluation with 3EPlus, the applicant must generate performance reports for a 12-inch or one square-foot segment of unique surface area, then scale up those results to reflect the total linear feet or square feet involved.
- Access to 3E Plus is free of charge, requiring only that the user establish a log-in account. Once this is accomplished, multiple calculations can be generated, saved, and documented in PDF format reports.
- Youtube instructional videos for 3E Plus users include:

o Part 1 (1min 30sec): Sign-up

o Part 2 (3min 46sec): Setting up Projects and Scenarios

Part 3 (4min 59sec): Navigating Calculations

o Part 4 (14min 52sec): Calculation Types

o Part 5 (7min 45sec): Materials

Part 6 (6min 02sec): Data and Reporting

Qualified Expenses:

Mechanical insulation Projects eligible for funding per this FOA must be (1) applied to facilities located in the State of Maryland; (2) represented by a total project cost net of the value of any incentives additional to this grant, such as utility rebates; (3) cost-effective in that the anticipated simple payback of total Project expense is no more than 15 years; (4) not included in a scope for which a purchase order, or contract was issued prior to the filing of this application; and (5) not subject to concurrent funding from other MEA loan or grant sources.

FY25 Mechanical Insulation Program grant funds may be used to defray the costs documented by invoices for Project design, feasibility analysis, material acquisition, installation, and post-installation commissioning. Non-eligible costs include administrative costs related to procurement management, and any remediation and repair costs for hardware to which mechanical insulation is to be applied.

Minimum Evaluation Criteria:

A complete application will include:

1. Proof that the applicant is eligible for funding

- a. Documentation demonstrating that the applicant is one of the following: an individual, non-profit organization, Maryland business entity, Maryland non-profit organization, state agency, local government, public or private school, or a community college;
- b. <u>IRS Form W-9</u> for the Applicant organization. The applicant name on the application and the name on the W-9 form must match: and
- c. (if applicable) for non-governmental applicants, documentation demonstrating that the applicant is in Good Standing with the Maryland State Department of Assessments and Taxation (SDAT)
- 2. include a scope of work for the Project indicating:
 - a. a description of the Project, including address/location and the facility name; a description of the facility's purpose; a description of the subject thermal system that includes a schematic illustration, a basic component itemization, and the system's operating parameters (normal operating temperatures of media conveyed by the components to be insulated);
 - a description of mechanical insulation components proposed for installation, itemized by type of material, configuration, and quantity to be installed; and
 - an indication of the annual volume of energy consumed by the thermal system at present compared to estimated post-installation consumption, along with annual savings of energy and energy expenses (reports generated from 3EPlus are encouraged);
- 3. be signed by an individual with the authority to enter into a grant agreement with MEA to execute an insulation improvement project. this signature indicates the recipient's intent to use the grant award in compliance with all program requirements, as outlined in this FOA:
- 4. provide a summary of anticipated funding sources to be secured for the proposed project in addition to this grant (e.g., bond funding, utility incentives, energy performance contracting); and
- 5. if applicable, provide completed copies of utility rebate or incentive applications, and documentation that the rebates or incentives have been applied for;
- 6. demonstrate the applicant's capital investment commitment to the proposed project for all total Project costs remaining after accounting for rebates, incentives, and FY25 Mechanical Insulation program funding.

Application Review Process & Award Amounts:

Review Process

Applications will be evaluated by a review panel to determine whether minimum qualifications are met. Qualified projects will be awarded in the order received.

If an incomplete application is received while Mechanical Insulation program funding remains available, MEA will give the applicant an opportunity to update the application for completeness. The application will then be reviewed based on the date that MEA receives the complete application, not the date that the incomplete application was submitted.

Award Calculation

An individual grant award may not exceed the lesser of: (1) 30% of the total amount of qualified Project expenses paid or incurred by the applicant, or (2) \$20,000. MEA will consider only applications indicating a total project cost valued at no less than \$10,000. Multiple applications, each representing a distinct Project, can be submitted by a single entity, but the total value of Program award disbursements per entity are capped at \$50,000.

Partial awards

Partial awards may be awarded under this program, depending on the number of complete proposals received and associated total grant funds requested. Grant awards will be issued for the amounts requested by eligible applicants for eligible projects on a first-come, first-served basis until grant funds are exhausted. If program funding is depleted by awards so that remaining funds are insufficient to fully fund a grant request, the last applicant prior to exhaustion of funds may be offered a partial award. If the applicant declines, MEA will offer partial grant funding under this same structure to the next qualified applicant until all funding has been expended or all remaining projects have rejected the offer.

Required Application Documents:

To be considered complete, an application to the Mechanical Insulation Program must include the following documents. Failure to submit any of the required documents may result in the application being considered incomplete. Applications deemed incomplete by MEA will not be considered for award until any necessary missing documentation is provided by the applicant.

REQUIRED DOCUMENTS Complete and accurate FY25 Mechanical Insulation Program Application Form. This application, along with any potential award, must be signed by an individual holding signatory authority for the applicant organization. This signature indicates the recipient's intent to use the grant award in compliance with all program requirements, as outlined in this FOA.

	Ш	Documentation of Project Location and Scope. Include information that
		clearly describes the name and address of the facility receiving the
		proposed Project's scope of work, as described below. Provide a brief
		description of the thermal system to which the insulation is being
		applied, including a simple schematic of prime movers, distribution
Į		networks, and thermal exchangers.
		Scope of Work: Description of mechanical insulation components
		proposed for installation, itemized by type of material, configuration,
		and quantity to be installed. MEA, at its discretion, may review and
Į		request additional information to verify.
		<u>Documentation of Total-Project Energy Performance Improvement.</u>
		Document the calculations used to determine the annual energy
		consumption of the subject thermal system in its entirety both before
		and after the insulation improvement. Describe the performance of
		the proposed project's insulation materials according to the current
		ASHRAE minimum performance standard for each distinct type of
		insulation material to be installed. Summarize the type, cost, and
		volume of all fuel and electricity consumed annually either by (1) the
		subject thermal system, or (2) the entire facility, as depicted on
		gas/electric utility bills or invoices for fossil fuels delivered. For the
		purpose of quantifying energy performance, applicants are strongly
Į		encouraged to use the <u>3E Plus</u> [®] online calculator.
		Example Products . Attach to the grant application the insulation
		manufacturer's cut (or "sell") sheets or similar product descriptions
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following: an individual, non-profit organization, Maryland business
entity, Maryland non-profit organization, state agency, local
government, public or private school, or a community college

Grant Program General Provisions: MEA grant programs are covered by general requirements ("General Provisions") that will be made part of the grant agreement between MEA and a grantee. The General Provisions are available for review on MEA's website². These General Provisions, Version 3.0, will be incorporated into all MEA FY25 grant agreements. In addition, the following provisions apply to the FY25 Mechanical Insulation Program:

Other Program Provisions:

- <u>Limitations on multiple funding sources.</u> Funding from other MEA grant programs cannot be combined with funding from this program for the same energy measures. Applicants may pursue funding from MEA's Lawton Loan program to help finance the balance of the project proposed for Mechanical Insulation grant funding (see below).
- <u>Prior Expenses Restriction</u>: Funds awarded by this Program cannot be used to
 offset costs that were incurred prior to the issuance of an award by MEA, or
 a purchase order that predates the FY25 Mechanical Insulation application.
- MEA may, at its discretion, obligate all or none of the FY25 Mechanical Insulation program budget, based on the eligibility of applications submitted to MEA.
- In the case of an incomplete application, as determined by MEA, MEA may ask an applicant to provide additional information. An applicant will be allowed up to 7 business days to provide the requested information. If MEA does not receive the requested information within 7 business days, the applicant may be requested to reapply and will lose its position in the queue.

Submission Instructions: Applications are due by Wednesday, March 26, 2025 at 3:00 p.m.

MEA recommends that Applicants submit files electronically in PDF format; all electronic files should be submitted to insulation.mea@maryland.gov. MEA encourages the use of electronic communication, including applications, to streamline processing and reduce environmental impacts. If an applicant chooses to "opt out" of electronic communications for this

² https://energy.maryland.gov/SiteAssets/Pages/all-incentives/General%20Provisions%20v3%202.11.22.pdf

program, please contact MEA no later than five (5) days prior to the application deadline to claim a place in the sequence of application received and to establish an alternative method to apply. All applications, regardless of submission method, must be received no later than **Wednesday**, **March 26**, **2025** at **3:00** p.m. However, the program may close early if funding is fully committed.

Questions can be directed to Christopher Russell, the Mechanical Insulation program manager, at insulation.mea@maryland.gov or (443) 908-1767.

Related MEA Programs:

Jane E. Lawton Conservation Loan Program.

Applicants eligible for a Mechanical Insulation Program award are encouraged to apply simultaneously for a Jane E. Lawton Conservation Loan to help finance any remaining eligible Project costs not covered by a Mechanical Insulation grant. Lawton loans are currently offered at an interest rate of 1% and may be able to help eligible applicants finance any remaining costs associated with the Project, if the proposed Project meets the requirements of the Lawton program and loan funds remain available.

Commercial Industrial & Agricultural Grant Program.

A wide variety of energy efficiency improvements to existing buildings - including lighting, HVAC, water heating, building automation controls, and building shell insulation or air-sealing measures - are eligible for grants provided by the CI&A program. NOTE that building shell insulation, as opposed to mechanical system insulation, is eligible for CI&A grant finance.