



Clean Heat Standard

Measures and Credits Discussion

May 28, 2026

Maryland
Department of
the Environment

Agenda

- Clean Heat Measures and Credits Review
- Measure Pathways
- Measure Registration
- Earning Credits
- Credit Ownership

What is a Clean Heat Standard (CHS)?



A **clean heat standard**
is a market-based program to bring more clean heating solutions to Marylanders through a credit-based system.

Clean Heat Measures & Credits Review

Clean Heat Measures



Installed Measures



Delivered Measures

Eligible Installed Clean Heat Measures (part 1 of 2)

- Building weatherization (i.e., insulation, air sealing, and other thermal efficiency improvements)
- Electric heat pumps (i.e., air-source, water-source, geothermal), heat pump water heaters, heat pump clothes dryers, and heat pump washer/dryers)
- Non-combustion or alternative-fuel-based district heating systems and components



Eligible Installed Clean Heat Measures (part 2 of 2)



- Advanced wood heating systems
- Solar space heating and water heating systems
- Complete manufactured home replacement

Photo: Biodiesel Magazine, Alliance for Clean Heat (Maryland)

Eligible Delivered Alternative Fuels



- Liquid biofuels
- Renewable methane gas
- Green hydrogen created through electrolysis with renewable electricity

Switching from one fossil fuel to another fossil fuel is not creditable.

Photo: Maryland Soybean Board

Clean Heat Credits

A **clean heat credit** represents one metric ton of avoided climate pollution.

The three types of clean heat credits:

- A **low-income credit** – a residential building where at least 51% of households are low-income;
- A **moderate-income credit** – a residential building where at least 51% of households are low- and moderate-income; and
- A **regular credit** – for all other buildings, including commercial, industrial, and other residential buildings.

Earning Clean Heat Credits

To earn clean heat credits, measures must be:

- Installed or delivered after publication of the final rule, and
- Registered in the Tracking System.



Credits will be awarded regardless of whether the measure was required or funded by other federal, state, or local policies and programs.

Clean Heat Measure Crediting Process

1a Identify an Existing Clean Heat Measure Pathway

1b Request a new Measure Pathway in the Tracking System

2 Register Measures under Pathway

3 Verify Measures

4 Earn Credits

Clean Heat Measure Pathways

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Clean Heat Measure Pathways

A **measure pathway** is a verified methodology to calculate the climate pollution impact of a specific installed or delivered measure.

Identified Measure Pathway Sources:

EmPOWER Maryland Technical Reference Manual

GREET Lifecycle Assessment Model



Clean Heat Measure Pathways

An installed or delivered measure **must** have an approved measure pathway to receive clean heat credits.

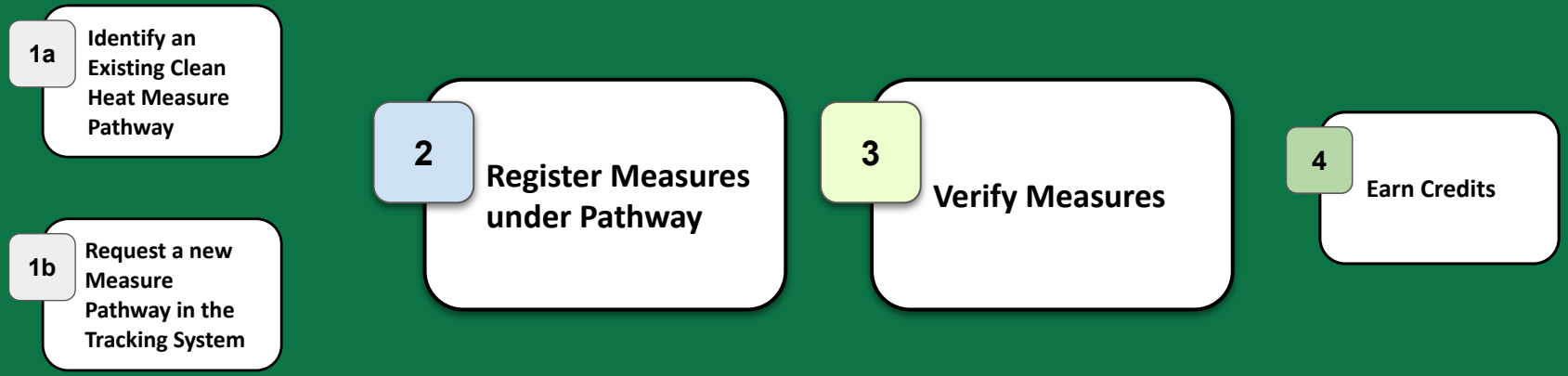
A clean heat provider can request a new measure pathway by submitting a request form to the Department.



Input Requested for Measures and Measure Pathways

- Are there installed or delivered measures that are already part of your business that the Department should consider for this program?
- Are there additional measure pathway sources that you recommend the Department consider as verified methodologies to calculate the climate pollution impact of installed or delivered measures?

Clean Heat Measure Registration



What's Required to Register an Installed Measure?

To register an installed measure the clean heat provider must:

- Install the measure,
- Identify the installed measure pathway, and
- Demonstrate the necessary pre- and post-conditions for the installation.



What's Required to Register an Alternative Heating Fuel?



To register a delivered alternative heating fuel the clean heat provider must:

- Own and deliver the fuel,
- Identify the alternative fuel pathway,
- Own the renewable attributes associated with the fuel, and
- Demonstrate a continuous contractual pathway for delivery.

Clean Heat Measure Verification

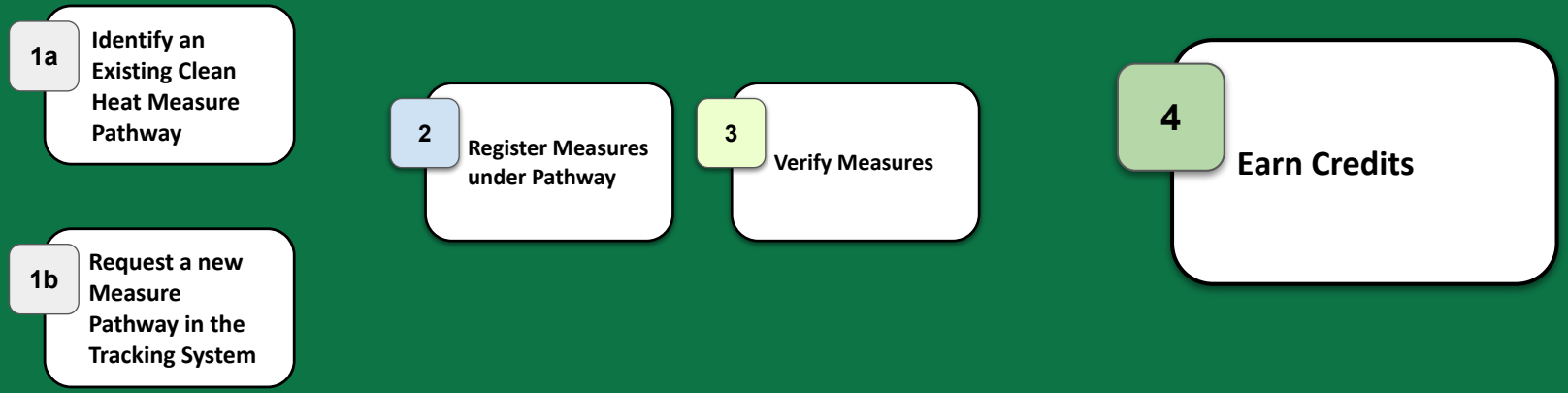
Verification of measures is critical to ensure that credits are accurately awarded for the climate pollution reductions of installed or delivered measures.



Input Requested for Measure Registration

- Do you have any feedback on the registration process from a program participant standpoint?
- How should third-party verification be incorporated for installed and/or delivered measures? Please provide examples that you believe work well from other programs.

Earning Credits



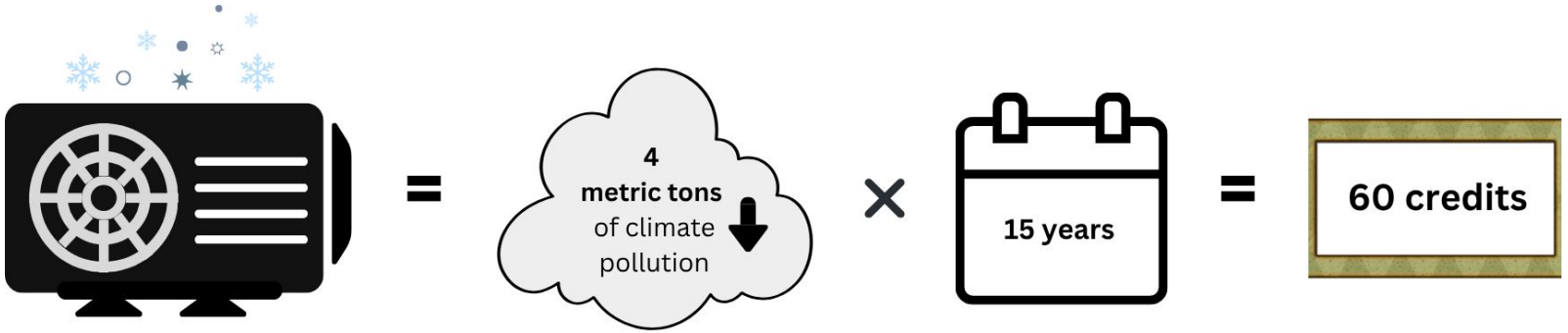
Earning Credits: Installed Measures

Installed measures will earn credits for the climate pollution prevented each year by the installed building upgrade:

- Following installation, all credits will be earned up front.
- Once earned, all credits can be traded between users.
- An annual allotment of credits representing the expected emissions reduction that year will become retirement eligible each year.
- As a result, only credits for the current or previous years can be retired.

Earning Credits for Installed Measures

A cold-climate heat pump is installed in a single-family home that used to be heated with a natural gas furnace. This heat pump will reduce climate pollution by 4 tons per year during its expected 15-year lifespan. 60 credits are earned for this project.

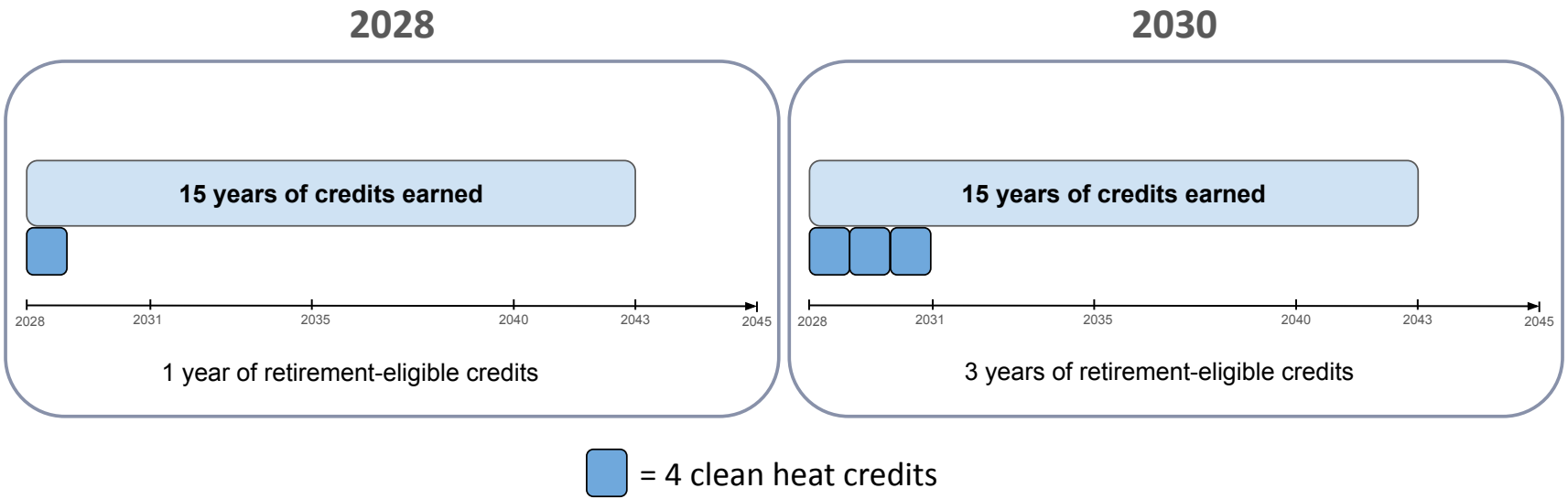


Based on GREET lifecycle emissions framework developed for Maryland in the Alternative Fuels and Technologies Working Group.

Preliminary Results

Installed Measures: Credit Earning Scenario

A cold-climate heat pump is installed in 2028, which will generate 4 clean heat credits each year.



Earning Credits for Delivered Alternative Fuels

A heating fuel provider delivers 500 gallons of biofuel. Emissions savings for the delivery of biofuels are calculated using the GREET lifecycle emissions framework. This biofuel delivery reduces climate pollution by 4 metric tons. As a result, 4 credits are earned for this biofuel delivery.

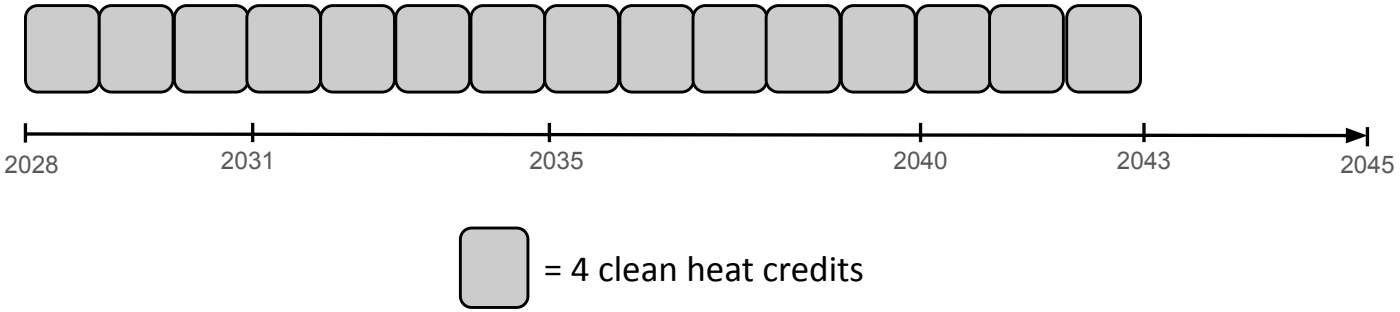


1. *Lifecycle emissions factors are based on the GREET framework.*
2. *GREET source: Biofuel energy density factor* - NREL, *Biodiesel Handling and Use Guide, Sixth Edition.*

Preliminary Results

Delivered Alternative Fuels: Credit Retirements

A heating fuel provider delivers 500 gallons of biofuels in 2028 – earning 4 credits. The provider will also earn 4 credits in each following year if they continue to deliver the same amount of biofuel.



Based on GREET lifecycle emissions framework developed for Maryland in the Alternative Fuels and Technologies Working Group.

Preliminary Results

Input Requested for Credit Earning

- What are the benefits and/or drawbacks of the credit earning schedule proposed by the Department?
- What are the benefits and/or drawbacks of awarding credits upfront?
- Should the Department consider any other methods for credit earning?

Credit Ownership

Who Owns the Clean Heat Credit?

The Department is considering that initial credit ownership will go to…

- The building owner for installed measures, and
- The clean heat provider for delivered alternative fuels.

Credits are transferable to other parties before their registration or through the Tracking System.

With clean heat credits, Marylanders can benefit from their own pollution reduction decisions.



Input Requested for Credit Ownership

- Who should be the “default” owner of credits awarded for measures installed in residential, commercial, or industrial buildings?
- Should the “default” owner vary for installed and delivered measures?
- How do you expect credit ownership will impact different types of building owners in Maryland? For example, a BEPS covered building owner versus a single family homeowner.

Clean Heat Measure Crediting Process Review

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Clarifying Questions?

Use the Q&A feature

Feedback on the input questions?

Please respond via the Google Form by July 31st

Join us in our upcoming clean heat topic sessions:

- **Credit Retirement Support** TBA
- **Credit Retirement** TBA



Thank you for your joining!

Please provide additional feedback via the Google Form



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