MASSACHUSETTS CLEAN HEAT STANDARD

VIRTUAL COMMUNITY MEETING

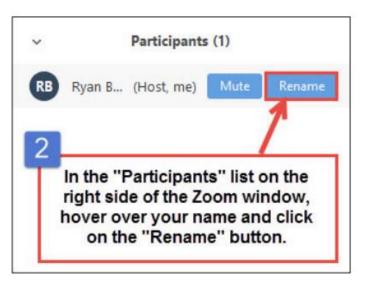
AUGUST 15, 2023



ZOOM MEETING LOGISTICS

- This meeting is being recorded
- To minimize background noise, attendees are on mute
- Please enter your full name, and affiliation if relevant, in the Participants panel





HOW TO PARTICIPATE VIRTUALLY

- There will be opportunities for clarifying questions throughout the presentation and the latter half of the meeting will be dedicated to receiving substantive questions and comments
- To ask a question or provide a comment, raise your hand
- When it is your turn, we will:
 - Notify you by chat
 - Announce your name
 - Unmute you and lower your raised hand



AGENDA

- Meeting logistics and updates (10 min.)
- Review Clean Heat Standard Technical Sessions (20 min.)
 - Review of Technical Session topics and content
 - Summary of written comments received on Technical Session topics
 - Overview of comments received during the Technical Sessions
- Questions and comments (30 min.)

STAKEHOLDER INPUT PROCESS

- Regular Virtual Community Meetings
 - With evening sessions, every 4-6 weeks
 - Content for general audience, with time for questions and comments
- Technical sessions on program design comments:
 - July 24, July 25, and July 26
 - Agendas included background, review of comments received, Q&A, and comment period
- Send us an email with questions, suggestions, or comments any time at climate.strategies@mass.gov

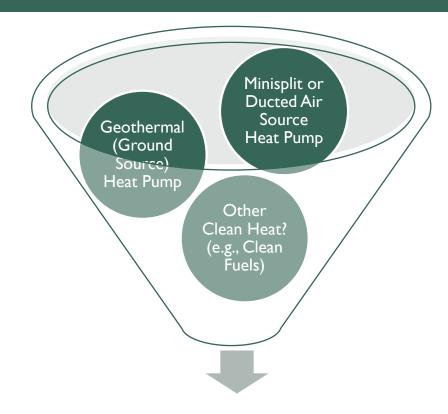






WHAT IS A CLEAN HEAT STANDARD?

- A Clean Heat Standard is a regulatory program that requires heating energy suppliers to reduce their GHG emissions over time by acquiring clean heat credits
- Regulated companies (suppliers) would include suppliers of heating oil, propane, natural gas, and possibly electricity
- Suppliers would demonstrate emissions reductions through clean heat credits
- Suppliers could implement clean heat themselves or purchase credits from third parties, such as heat pump installers
- Clean heat credits would be generated by implementing clean heat, such as electric heat pumps



Clean heat credits

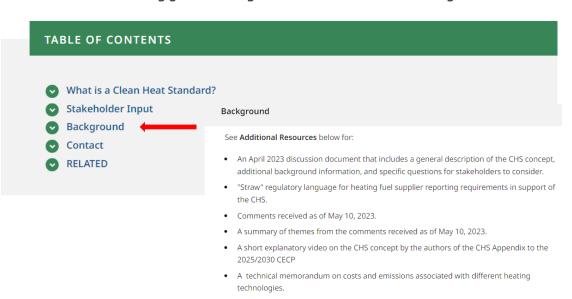
RESOURCES FOR STAKEHOLDERS

- Clean Heat Standard webpage includes
 - Links to descriptions of the Clean Heat Standard concept (including 2-page summary)
 - Translations of the 2-page summary into 5 languages*
 - White papers on 1) costs and emissions associated with different heating technologies; 2) existing crediting schemes for consumer-level actions, such as rooftop solar; and 3) which entities are obligated to comply
 - Comments received and a brief summary of themes from those comments
 - Slides and videos from June and July meetings*

(* = new material since previous meeting)

Massachusetts Clean Heat Standard

Learn about and participate in the MassDEP initiative to develop a regulatory standard for reducing greenhouse gas emissions from fossil heating fuels.



· A technical memorandum on existing crediting schemes for consumer-level actions.

A technical memorandum on which entities are obligated to comply with a CHS.

POTENTIAL NEXT STEPS IN 2023

- Second round of initial comments by September 1 (focus on Technical Sessions and equity mechanisms presented in July)
- Propose fuel supplier emissions reporting regulations
- Develop an "Early Action" crediting concept for electrification projects that could earn Clean Heat
 Credits
- Open a comment period on "straw" program design framework

REVIEW OF CLEAN HEAT STANDARD TECHNICAL SESSIONS

CLEAN HEAT STANDARD TECHNICAL SESSIONS

Monday, July 24

- Compliance flexibility/banking
- Alternative
 Compliance
 Payment level

Tuesday, July 25

- Calculation of credits by technology
- Hybrid heat system credits

Wednesday, July 26

- Mass Save coordination
- Measure verification

COMPLIANCE FLEXIBILITY/BANKING AND ALTERNATIVE COMPLIANCE PAYMENT LEVEL

Compliance flexibility mechanisms offer ways to "limit compliance costs and address weather variability." Options for compliance flexibility include:



From MassDEP Stakeholder Discussion Document

If the CHS includes an ACP, it must set an "appropriate ACP price to ensure creation of credits is preferable, while also ensuring the cost-burden of ACPs does not unduly burden businesses and ratepayers."

From MA Commission on Clean Heat Final Report

COMPLIANCE FLEXIBILITY/BANKING AND ALTERNATIVE COMPLIANCE PAYMENT LEVEL

Summary of written comments received on the Stakeholder Discussion Document:

Commenters that discussed compliance flexibility mechanisms supported:

General compliance flexibility (many)

Credit banking (many)

Compliance via many different technologies (many)

Multi-year compliance periods (several)

Credit transfers (few)

Credit borrowing (few)

COMPLIANCE FLEXIBILITY/BANKING AND ALTERNATIVE COMPLIANCE PAYMENT LEVEL

Comments received during the Technical Session included:

- Discussion of using Mass Save methodology or the Social Cost of Carbon as starting points to set the ACP level
- Questions regarding compliance by small fuel suppliers
- Discussion of whether emissions from electricity generation should be considered when calculating credit values or ACP level
- Requests for MassDEP to release draft details once they are available

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CALCULATION OF CREDITS BY TECHNOLOGY AND HYBRID HEAT SYSTEM CREDITS

- MassDEP needs to assign "the credit value to various creditable actions."
- There are many possible approaches, including:
 - The California Low Carbon Fuel Standard approach: "assign every emission reduction 'pathway' a specific credit value, denominated in GHG emission reductions."
 - The "yardstick" approach: set "one credit equal to the average amount of emission reductions achieved through full electrification of one single family home."
- MassDEP also needs to assign credit values to hybrid heat systems,
 or "partial electrification" of systems "where a fossil-fueled backup system is retained."

CALCULATION OF CREDITS BY TECHNOLOGY AND HYBRID HEAT SYSTEM CREDITS

Summary of written comments received on the Stakeholder Discussion Document:

- "Many commenters suggested DEP should base credit calculations on preestablished methodologies such as the Mass Save programs, the federal GREET [GHG, Regulated Emissions, and Energy Use in Transportation] model, or a similar lifecycle analysis approach."
- Many commenters discussed "whether emissions from electricity generation should be included in calculations and if so, how those emissions should be quantified."

From Clean Heat Standard 2023 Initial Stakeholder Comments Summary

CALCULATION OF CREDITS BY TECHNOLOGY AND HYBRID HEAT SYSTEM CREDITS

Comments received during the Technical Session included:

- Questions regarding the implementation of different crediting approaches
- Discussion of methods to assess electrification-related emissions from the electricity sector
- Discussion of the advantages and disadvantages of using the GREET model
- Suggestions for how MassDEP could credit hybrid heat systems depending on fuel used
- Suggestions for analytical and data resources that MassDEP could use to evaluate grid and hybrid heating system performance

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MASS SAVE COORDINATION AND MEASURE VERIFICATION

Mass Save is a "collaborative of Massachusetts' electric and natural gas utilities and energy efficiency service providers" that "empower[s] residents, businesses, and communities to make energy efficient upgrades."

From Mass Save, "About Us"

 "Currently, Mass Save provides most of the funding for state programs related to building decarbonization through ratepayer funding."

From MA Commission on Clean Heat Final Report

Annual reporting and verification measures, such as third-party verifiers, "help ensure
accuracy, and could remove administrative burdens if verifiers bring sufficient expertise."

From MassDEP Stakeholder Discussion Document

MASS SAVE COORDINATION AND MEASURE VERIFICATION

Summary of written comments received on the Stakeholder Discussion Document:

- Many commenters suggested applying Mass Save's methodology for evaluating energy savings and benefits to the CHS and identified the need learn from equity pitfalls identified in Mass Save
- Commenters generally supported measure verification and raised the following topics:
 - Use of utility data
 - Third party verifiers
 - Aggregators
 - Fraud prevention

- Consumer privacy
- Periodic verification
- Administrative burden of verification
- Emissions calculations methods

MASS SAVE COORDINATION AND MEASURE VERIFICATION

Comments received during the Technical Session included:

- Questions regarding credit ownership for residential customers and installations completed through Mass Save
- Questions regarding coordination between the CHS, Mass Save, and APS
- Suggestions to require aggregations in the CHS to streamline marketing and reporting
- Discussion of how web-enabled monitoring tools could improve measure verification

ANY QUESTIONS OR COMMENTS ON THE CLEAN HEAT STANDARD TECHNICAL SESSIONS?

GENERAL QUESTIONS AND COMMENTS



MassDEP CHS web page



Submit comments and questions to climate.strategies@mass.gov



Sign up for the CHS email list