



October 28, 2022

2022 COMPREHENSIVE ENERGY STRATEGY

SECTION 16a-3d OF THE CONNECTICUT GENERAL STATUTES

NOTICE OF WRITTEN COMMENT OPPORTUNITY & SUMMARY OF WRITTEN
COMMENTS RECEIVED RELATED TO TECHNICAL SESSION 4

On September 29, 2022, the Department of Energy and Environmental Protection (DEEP) issued a public notice announcing cancellation of Comprehensive Energy Strategy (CES) Technical Session 4 and the intent to issue a summary of written comments received on the Technical Session 4 topic as well as a request for additional written comments.

With this notice, DEEP is providing a summary of written comments received on the Technical Session 4 topic and is soliciting additional written comments. Written comments in response to the provided summary, the questions posed below by DEEP, or any other subject related to the Technical Session 4 topic (Building thermal decarbonization – Economic potential and technology targets) are encouraged. To view the summary of written comments received on the Technical Session 4 topic, please visit the Energy Filings web page.

Written Comment Instructions: All written comments must be submitted electronically via the Energy Filings web page or submitted directly to DEEP at DEEP.EnergyBureau@ct.gov by the deadline noted. Please label comments as “related to Technical Session 4 - 2nd Comment Opportunity” and include question number(s) if appropriate.

Comment Deadline: Monday, November 21, 2022, at 5:00 pm ET

Respondents are invited to address the following specific questions in their comments.

1. Which building types or contexts are technically difficult to decarbonize via electrification in Connecticut? What proportion of Connecticut’s existing building stock do these hard-to-electrify building types represent?
2. What is the potential for geothermal systems, battery storage, and/or thermal storage to reduce Connecticut’s electric peak demand if most buildings were fully electrified? What scale of electric-system cost-savings could be achieved for Connecticut ratepayers?

3. Are policies in other states or countries successfully driving forward building decarbonization while remaining technology agnostic? If so, please describe the policies and their achieved outcomes.
4. What are the pros and cons of establishing state-level, technology-specific deployment targets for building thermal decarbonization? How have product manufacturers, installers, and buyers perceived and used such targets in other states?
5. How often should technology deployment targets be reevaluated? What factors should influence the frequency of reevaluation? Are there potential negative outcomes stemming from revising technology deployment targets?
6. What *generic* variables or parameters should DEEP consider in developing technology deployment targets? (The [Summary of Technical Session 4 Written Comments](#) provides a table of generic variables and parameters raised by other commenters)
7. What *technology-specific* variables or parameters should DEEP consider in developing technology deployment targets for the technologies included in the table shown in question 8 below? (The [Summary of Technical Session 4 Written Comments](#) provides a narrative summary of technology-specific variables and parameters raised by other commenters)
8. Please offer your perspective on the “deployment targets” suggested by previous comments that are outlined below by individual technology.

| Technology | Deployment Targets Information Provided in Written Comments |
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| Weatherization | Acadia Center recommends targeting deployment in the least-efficient homes, arguing that 25 percent of Connecticut’s housing stock is responsible for 54 percent of residential greenhouse gas emissions. No commenters quantify deployment targets for weatherization. The coalition recommends that residential buildings should be targeted for weatherization, but opportunities to weatherize commercial buildings should also be discussed. |
| Air Source Heat Pumps (ASHPs) | <p>A coalition of environmental advocates argues that deployment targets should be based on emissions reductions necessary to achieve the goals of Connecticut’s Global Warming Solutions Act (GWSA).</p> <p>Northeast Energy Efficiency Partnerships (NEEP) provides example deployment targets from the New England/New York heat pump market: 25% growth annually. Eversource calls for 50% ASHP adoption by 2030 and 90% by 2050 for residential</p> |

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| | space heating, and 50% ASHP adoption by 2030 and 70% by 2050 for commercial space heating. |
| ASHPs with Thermal Storage | None specified; no concrete guidance provided. |
| Ground-Source Heat Pumps (GSHPs) | Dandelion proposes a residential deployment target of 42,000 installations by 2030 and 400,000 by 2050. |
| Enhanced Geothermal | A coalition of environmental advocates implies enhance geothermal technology should be excluded from having deployment targets in Connecticut. |
| Solar Water Heating | None specified; no concrete guidance provided. |
| Solar Space Heating | None specified; no concrete guidance provided. |
| Biodiesel | <p>Acadia Center and a coalition of environmental advocates urge DEEP not to prioritize biodiesel use. Acadia recommends that it be reserved for hard-to-decarbonize end uses outside the building sector.</p> <p>Kolmar Americas, and American Greenfuels (Kolmar) urges widespread deployment and Clean Fuels Alliance America (CFAA) implicitly does so. Kolmar argues the existing biodiesel-blending statute provides “a floor upon which Connecticut should build” and suggests the “ultimate goal ... should be to maximize the percentage of ... renewable fuels in the heating sector, including up to B100 biodiesel.”</p> |
| Renewable Natural Gas (RNG) | <p>Acadia Center and a coalition of environmental advocates recommend that RNG be reserved for hard-to-decarbonize end uses outside the building sector.</p> <p>The RNG Coalition encourages Connecticut to establish an RNG-procurement target based on its population-weighted share of gas that can be reasonably transported to the state through the existing gas pipeline system in the long-term.</p> |
| Green Hydrogen | A coalition of environmental advocates and Acadia Center do not support the use of hydrogen as a decarbonization strategy for the building sector. |
| Compost Heat Recovery | None specified; no concrete guidance provided. |

- Please provide recommendations for technology-specific deployment targets and describe your bases for developing such targets.

The Connecticut Department of Energy and Environmental Protection is an Affirmative Action/Equal Opportunity Employer that is committed to complying with the requirements of the Americans with Disabilities Act. Please contact us at (860) 418-5910 or deep.accommodations@ct.gov if you: have a disability and need a communication aid or service; have limited proficiency in English and may need information in another language; or if you wish to file an ADA or Title VI discrimination complaint. Any person needing a hearing accommodation may call the State of Connecticut relay number - 711. Requests for accommodations must be made at least two weeks prior to any agency hearing, program, or event.