



March 27, 2024

Mayor Elicker  
The City of New Haven  
165 Church Street  
New Haven, CT 06510

**Subject:** Funding Opportunity #EPA-R-OAR-CPRGI-23-07, Climate Pollution Reduction  
Grants Program: Implementation Grants General Competition

**To:** City of New Haven

Dear Mayor Elicker,

On behalf of the Connecticut Department of Energy and Environmental Protection (DEEP), I am writing this Letter of Commitment for the City of New Haven's application for funding from the U.S. Environmental Protection Agency's Climate Pollution Reduction Implementation Grants (CPRG) Program.

The City of New Haven's proposal represents a bold effort to decarbonize a critical transit hub that serves over 625,000 riders annually while providing clean geothermal energy to the energy-burdened community adjacent to it via a strategic deployment of shared energy infrastructure known as a Thermal Energy Network. Funding for this project would transform the gateway to New Haven, its busiest train station, and the housing development greeting new arrivals into a highly visible symbol of the environmental, health, and resilience benefits of thermal energy networks.

DEEP is charged with conserving, improving, and protecting the natural resources and the environment of the state as well as making cheaper, cleaner, and more reliable energy available for the people and businesses of the state. New Haven's proposal would support this mission.

The New Haven community has a critical need for reliable and equitable access to clean, renewable energy. To achieve its goal of reducing greenhouse gas emission by 55% of 1999 levels by 2030 and to become carbon-neutral by 2050, the City of New Haven must pursue aggressive, transformative energy projects like this one. This project would install a thermal energy network that would provide low-cost, pollution-free heating and cooling to both Union Station and the planned 1,000-unit, mixed-income housing development to be constructed across the street. The Union Station Area Thermal Energy Network (USATEN) would be designed to support additional buildings in the future and may expand or extend into other nearby neighborhoods. Serving as a model for municipally owned neighborhood-scale decarbonization, USATEN will utilize modern public-private partnerships, engineering design best practices, and highly refined project planning techniques emphasizing local participation and equity.



The State of Connecticut’s Priority Climate Action Plan (PCAP) includes “support deployment of networked geothermal systems” as a greenhouse gas reduction measure. This measure was selected as a priority in the State PCAP because “networked geothermal systems, also known as district geothermal systems or district thermal networks, combine ground-source heat pumps with district energy to create highly efficient, neighborhood-scale heating and cooling systems [and] this technology represents an all-electric alternative to fossil fuel heating equipment.”

DEEP commits to partner with the City of New Haven through technical assistance in public or one-on-one meetings to advise on design, construction, and permitting as needed. DEEP also commits to share the lessons learned from the DOE-funded project it is leading to design a district geothermal heating and cooling system to serve at least 50% of the heating and cooling needs of a 132-unit development, Ulbrich Heights, that is owned and operated by the Wallingford Housing Authority, in Wallingford, CT. This project is one of only 11 projects selected nationwide for funding by the federal Department of Energy for community geothermal heating and cooling systems in 2023. DEEP is thereby uniquely situated to inform the design and deployment of this technology in New Haven as well through the CPRG.

This transformative pilot is of particular interest to DEEP because the agency:

- actively engages the City of New Haven and other Connecticut municipalities through the state’s GreenerGov program, supporting innovative means to aggressively reduce GHG emissions;
- is pursuing heating electrification as the principal means to reduce GHG emissions from residential and commercial use of on-site fossil fuels (30 percent of statewide GHG emissions in 2021) in order to meet the state’s statutory GHG emissions goals for 2030 and 2050;
- recognizes and prioritizes the extraordinary efficiency of ground-source heat pumps, which deliver effective heating and cooling at minimal cost, with minimal electricity consumption, and with minimal demand on grid resources, which is especially important during periods of extreme weather;
- recognizes the capacity of networked systems to systematically and rapidly bring efficient geothermal heating and cooling to large numbers of Connecticut residents and businesses, while reducing the traditionally high capital cost of ground-source heat pump systems;
- recognizes the ability of networked geothermal systems to eliminate major sources of harmful air pollutants within the urban environment generally and specifically within urban neighborhoods burdened by relatively high concentrations of ambient pollution;



- recognizes the potential for deployment of networked geothermal systems in high-profile urban settings to rapidly bring the environmental and financial benefits of ground-source
- heat pumps to the attention of architects, real estate developers, the heating and cooling industry, and the Connecticut public at large; and
- recognizes that USATEN would be one of state's first large geothermal systems and would play a pivotal role in demonstrating the viability and efficacy of this important mode of thermal electrification.

I strongly recommend this proposal as it serves both as a critical step toward decarbonization of the city's housing stock and transit system and as a vehicle for building a coalition of proponents who can support the expansion of thermal energy networks in New Haven and across Connecticut. I urge you to give this proposal full and fair consideration, and I appreciate your time and attention to my comments.

Sincerely,

A handwritten signature in blue ink that reads "Katie S. Dykes".

Katie Dykes  
Commissioner



**Connecticut**  
Department of Energy &  
Environmental Protection

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