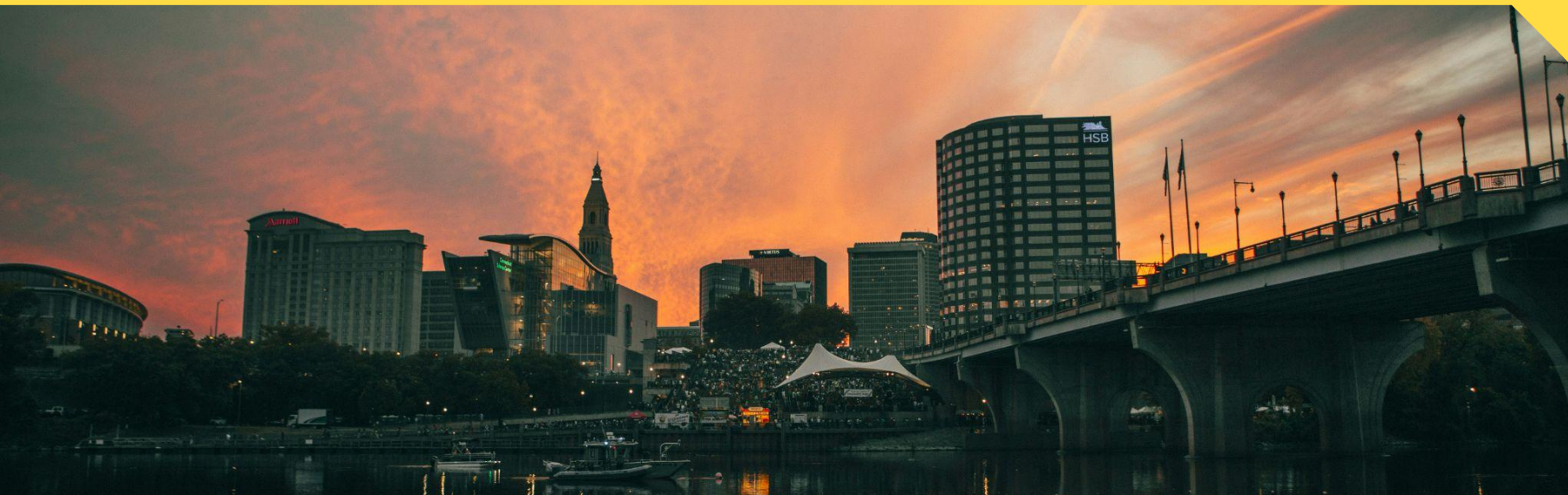




BUILDING  
DECARBONIZATION  
COALITION



# Building Decarbonization Policy in Connecticut

# About the BDC

Americans need safer, healthier, more affordable energy. The Building Decarbonization Coalition (BDC) harnesses the power of coalition to forge paths to upgrade and power homes and buildings with clean electricity.

We unite people, policy makers, stakeholders and environmental groups at every level to join in building decarbonization and build a sustainable future.

Join us! [buildingdecarb.org/join](https://buildingdecarb.org/join)



# Thank you to our Trailblazer Members!



# Webinar Logistics

- Everyone is muted
- During Q&A you will have the opportunity to ask a question via the chat.
- This webinar is being recorded and will be placed in our Resource Library
- For information on future policy calls, sign up for our newsletter: [buildingdecarb.org](https://buildingdecarb.org)



# Agenda

- Introductions
- Panel Presentations
- Discussion

# Today's Panelists



**Shannon Laun**  
Vice President, Connecticut  
Conservation Law Foundation



**Thomas Wiehl**  
Regulatory Director at the  
Connecticut Office of Consumer  
Counsel



**State Rep. Steven Winter**  
Executive Director, Climate and  
Sustainability, New Haven  
State Representative, 94th Assembly  
District, Connecticut House of  
Representatives





# Shannon Laun

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Vice President, Connecticut Conservation Law  
Foundation

# Conservation Law Foundation



Conservation  
Law Foundation  
clf.org



# About Conservation Law Foundation

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- Regional environmental advocacy nonprofit
- HQ in Boston with offices in all six New England states
- Advocacy includes litigation, public utility commission dockets, regulatory and policy proceedings, etc.

# About Shannon

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- Attorney and director of CLF's advocacy in CT
- Counsel for utility commission dockets and regulatory proceedings involving the gas system and building sector
- Leads the Beyond Gas CT coalition

# Connecticut Buildings and Emissions



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# Geographic Context



# CT Housing

- Old housing stock
- Homes are poorly insulated
- Weatherization barriers are common, especially in low-income communities



CT by the Numbers



# Building Sector Emissions

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- Fossil fuel use in residential and commercial buildings accounts for **33% of GHGs** and **23% of Nox** in CT
- Emissions from buildings have *increased* in recent years and remain near 1990 levels

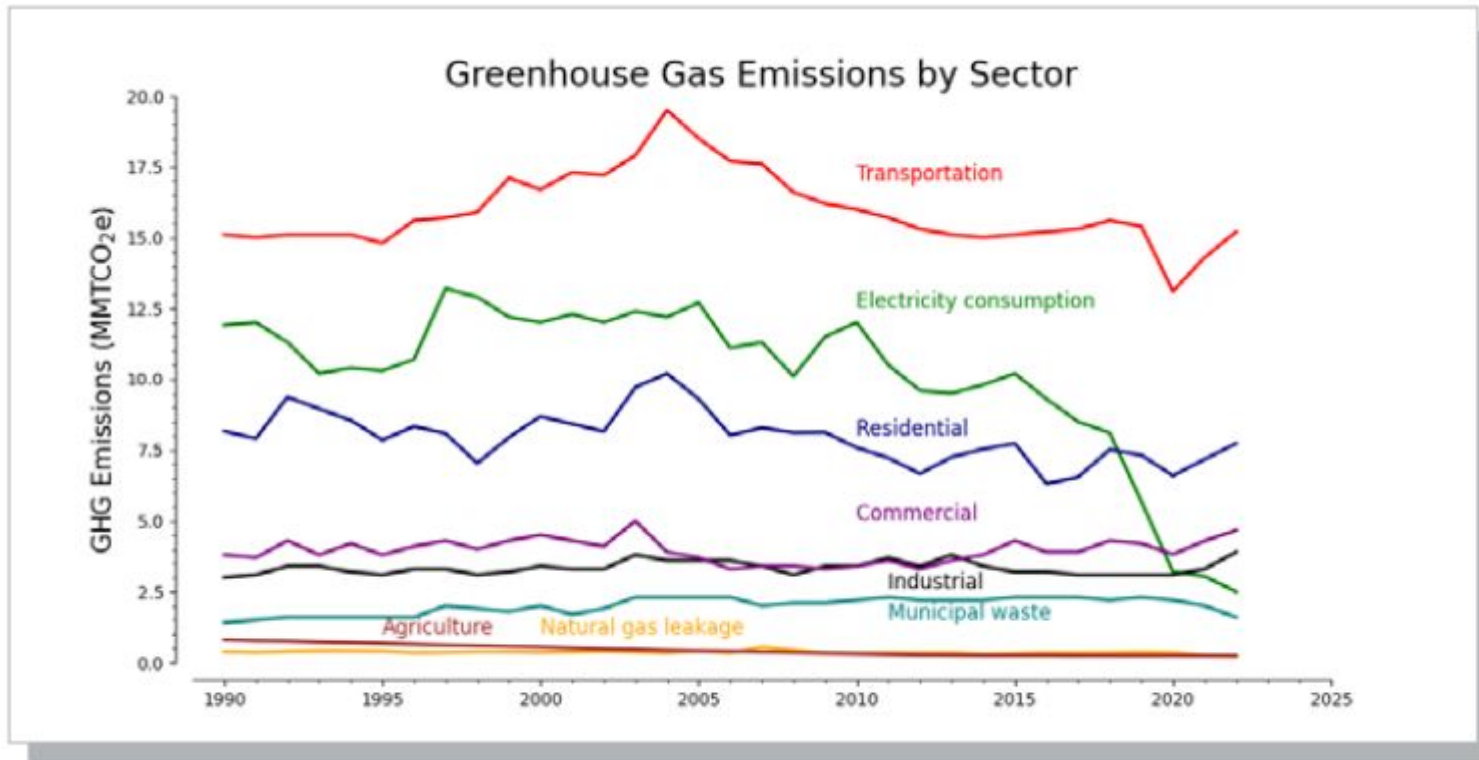
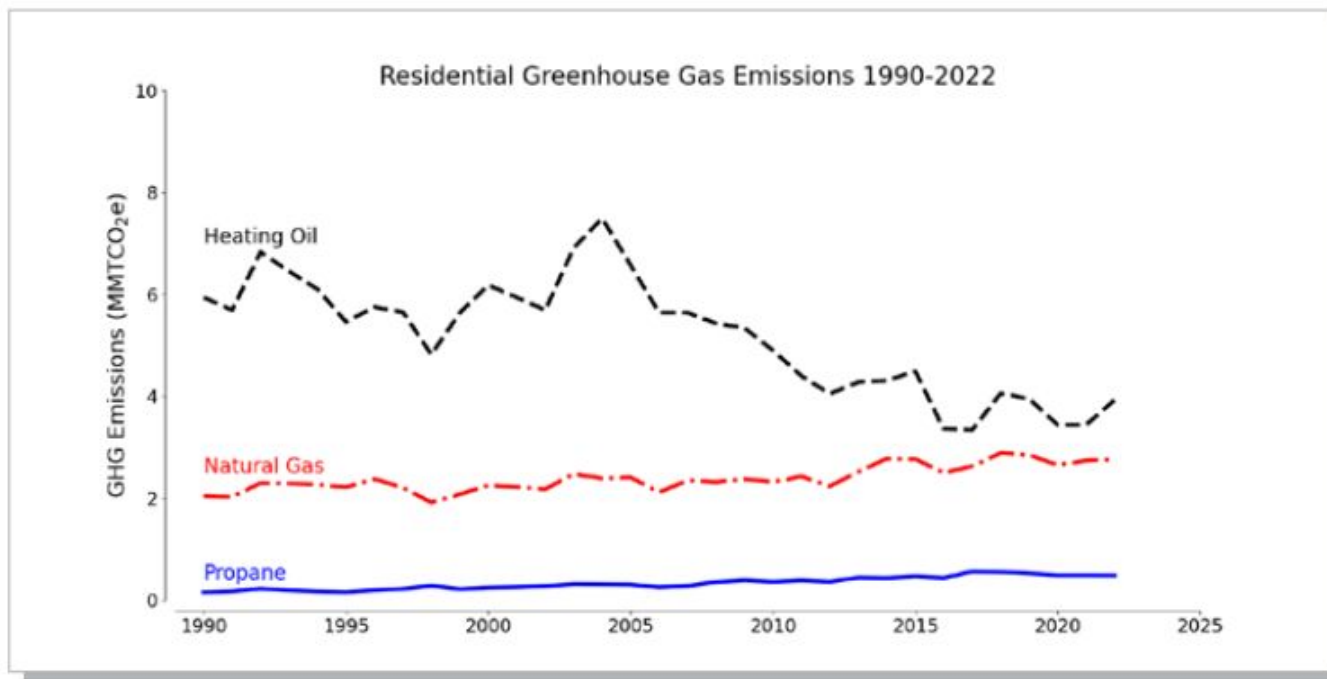


FIGURE 2: Sector specific GHG emissions 1990-2022

# Sources of Heating in CT

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- Methane gas: 37%
- Heating oil: 34%
- Propane: 6%
- Electric resistance: ~16%
- Heat pumps: ~4% (best estimate, data is unclear)
- Other: ~3%



*FIGURE 6: Residential GHG emissions from delivered fuels (Heating oil: Black, and Propane: Blue) compared with natural gas service (Red). Heating oil is responsible for over 60 percent of residential emissions in 2023, despite serving less than half of CT households.*

# The Economics of Electrification in CT

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- Cost effective to switch to electric heat pumps from oil, propane, or electric resistance
- But more expensive to switch from gas
- Regulators and policymakers want to prioritize heat pump adoption where the economics already make sense



# Regulatory Landscape



# Global Warming Solutions Act (GWSA)

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- Mandates statewide GHG reductions: 45% by 2030, 80% by 2050
- State met its 2020 target (largely due to the pandemic) but is not on track to meet its longer-term targets
- No sector specific targets, not explicitly enforceable, does not require or authorize DEEP to adopt implementing regulations

# Building Sector Policies and Programs

- Gas System Expansion Plan (SEP) – no longer in effect
- 2022 Comprehensive Energy Strategy (CES) – delayed
- Equitable Energy Efficiency (E3) – being implemented



Getty Images

# Building Sector Policies and Programs

- New England Heat Pump Accelerator
- 2025-27 Conservation & Load Management Plan
- CT Green Bank financing programs



Erin Clarke / *Boston Globe*

# Additional Regulatory Frameworks Are Needed





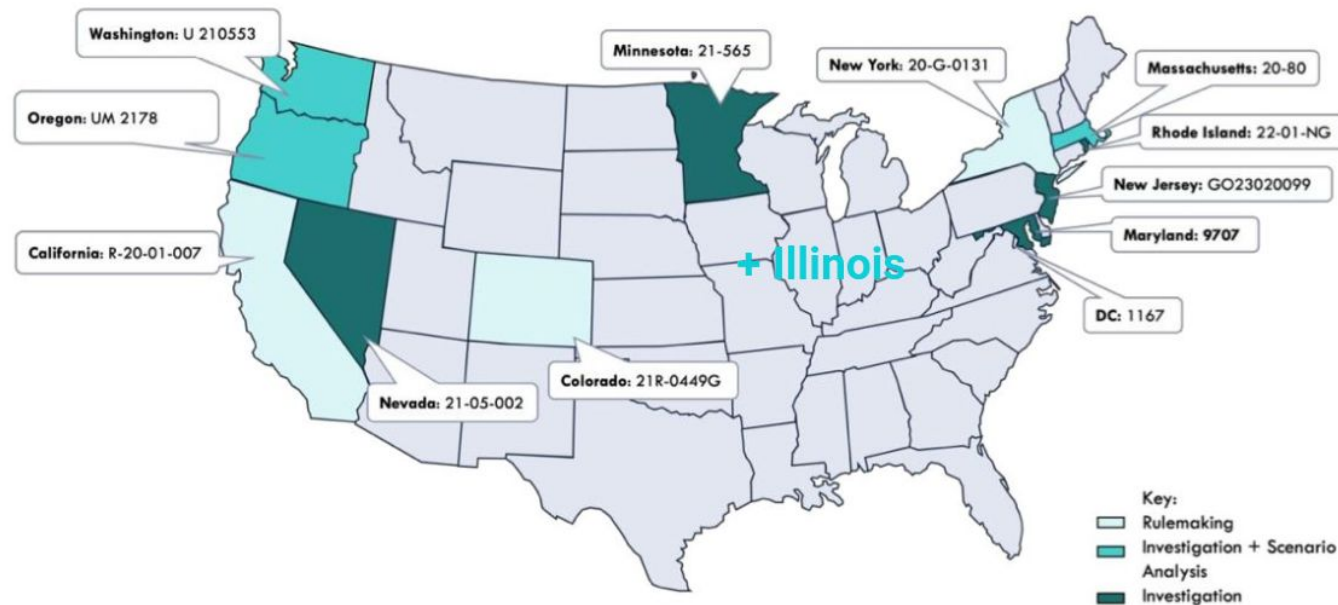
# Key Regulatory Frameworks Don't Exist (Yet)

- Future of gas proceeding
- Non-pipeline alternatives, including thermal energy networks
- Long-term gas planning or integrated gas-electric planning



Vermont Community Thermal Networks

# States with Future of Gas Proceedings



Source: The Future of Gas Regulatory Overview, Joe Dammel, RMI, slide 18 (Sept. 26, 2024), [https://buildingdecarb.org/wp-content/uploads/BDC-Presents\\_-The-Future-of-Gas-2.pdf](https://buildingdecarb.org/wp-content/uploads/BDC-Presents_-The-Future-of-Gas-2.pdf)

# Challenges

# High Electricity Costs

- Public outrage over high electricity costs
- Ongoing legislative attempts to eviscerate ratepayer-funded public benefits programs



Stacey Renee / Connecticut History

# Lack of Political Leadership

- Gov. Lamont and legislative leadership largely support gas
- CT DEEP has not provided clear policy direction
- PURA reluctant to take initiative



Shahrzad Rasekh / CT Mirror



# Opportunities



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# Ongoing Efforts to Advance Electrification

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- Eversource has proposed a thermal energy network pilot for new construction in their pending gas rate case
- CLF and Office of Consumer Counsel advocating for a future of gas docket and non-pipeline alternatives in that rate case
- Bills passed out of committee that would require a future of gas study and establish thermal energy network programs
- Advocates pushing for zero-interest loan programs

Thank you!



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# Thomas Wiehl

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Regulatory Director at the Connecticut Office of Consumer  
Counsel

# The Connecticut Office of Consumer Counsel



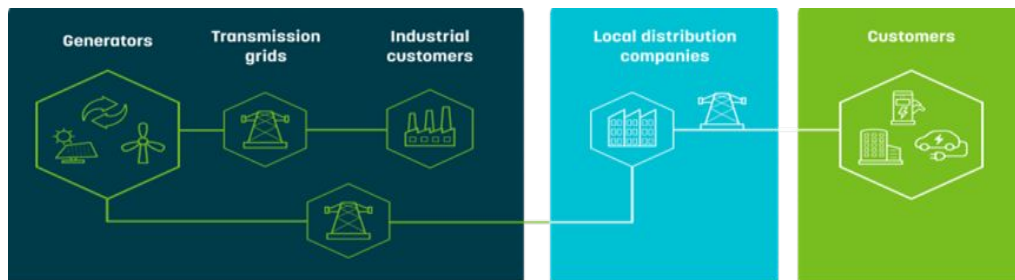
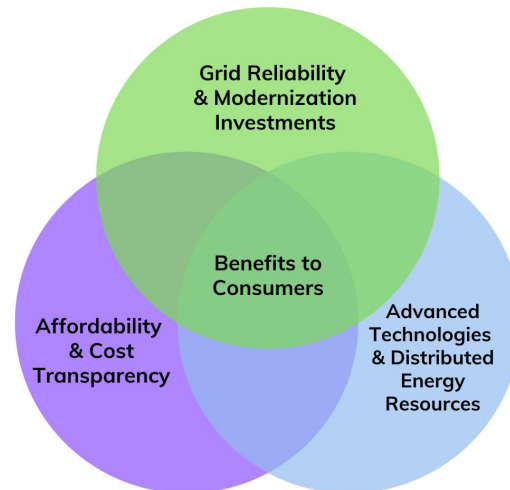
Tom Wiehl  
OCC Legal & Regulatory Director  
[thomas.wiehl@ct.gov](mailto:thomas.wiehl@ct.gov)

The scope of OCC's work on behalf of energy, water, and telecommunications consumers requires both breadth and depth in expertise –and sustained advocacy in several key forums.



# Balancing Interests

OCC balances sometimes competing goals to achieve the best possible electric utility service for consumers – quality & cost effectiveness.



At the most basic level, utility rates are the regulated company's total cost of service (the "revenue requirement"), distributed among customer classes.

Two inputs to utility rates:

1. Revenue Requirement: Upward rate pressure
2. Sales (i.e. number of customers): Downward rate pressure (all else equal)



# OCC Represents both Electric and Gas customers

## Both Energy Sources Compete for the Same Resources

- Majority of electric generation in Connecticut comes from natural gas
- Winter electric supply prices increase as regional heating demand for natural gas increases

## Supply/Demand Impacts on Pricing

- The supply/demand interplay between gas and electric is itself a barrier to the energy transition (electricity prices in Connecticut)

## Differing Customer Interests

- Gas customers (many of whom do not have reasonable heating/cooking alternatives): reliable service at the lowest possible cost.
- Electric customers: reliable service at lowest cost.
- Customers seeking to transition: minimize capital investments in the gas system that will ultimately be stranded.

## Equitable Access and Cost Responsibility

- All customers should have equitable access to energy options

# Energy Transition: Stranded Investments

Absent regulatory or statutory intervention:

- If gas companies continue to invest in the system under the traditional model, rates will be set to recover those capital investments over the decades of their useful lives.
- Investments made now that are ultimately not used in the future will STILL need to be paid for, pursuant to the 5<sup>th</sup> Amendment's Takings Clause.
- If capital planning for gas companies is not adjusted to align with Connecticut's decarbonization goals, we face the prospect of paying hundreds of millions of dollars for infrastructure that will not benefit customers.

# Energy Transition: Equity issues for gas customers

Absent regulatory or statutory intervention:

- Transitioning from gas to electric requires substantial individual investment (e.g. purchase and installation of heat pumps, replacing stoves or water heaters).
- Renters have inequitable degrees of agency to engage in the transition.
- Both of these issues mean that lower-income customers face much higher barriers to electrification.
- As higher-income customers transition away from gas, the same fixed costs for gas infrastructure will be distributed among fewer and fewer customers – at lower and lower income ranges.

# OCC Advocacy on Behalf of Customers

**Rate Cases:** Advocacy against excessive natural gas investment and in favor of regulatory guidance for the future of gas:

- CNG/SCG: Docket 23-11-02 – OCC’s [Testimony](#) and [Brief](#) (also check out CLF/Sierra Club [Testimony](#) and [Brief](#))
- Yankee: Docket 24-12-01 (PENDING) – OCC’s [Testimony](#)

**PURA Dockets:** Advocating for improved electric system planning and for equitable and affordable access to clean energy resources:

- [Docket 21-05-15RE03](#) (Electric Distribution Planning)
- [Docket 17-12-03RE07](#) (Non-Wires Alternatives)
- [Docket 21-05-15RE02](#) (Performance Incentives)

**Legislative Advocacy:** Supporting legislation to facilitate the transition from gas, explore the future of gas, and non-gas alternatives like networked geothermal:

- [Testimony on S.B. 1531](#) (Section 13)
- [Testimony on S.B. 1352](#) (Sections 5, 6, 7)
- [Testimony on H.B. 5004](#) (Sections 4, 20, 21)

# Concluding Thoughts

OCC is available  
as a resource  
and consumer  
voice.

If you have any questions, please reach out!

[OCC.info@ct.gov](mailto:OCC.info@ct.gov)  
860-827-2929





# State Rep. Steven Winter

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**Executive Director, Climate and Sustainability, New Haven  
State Representative, 94th Assembly District, Connecticut  
House of Representatives**



# State Legislative Session Update

# Bills focused on TENs and transition from gas


**H.B. 5004** – Passed House on May 1 on party line vote

- Increases the state's GHG emissions reduction requirement with new interim goal of 65% 2001 level by 2040 and economy-wide net-zero by 2050
  - Allows Department of Administrative Services (DAS) to approve air source and ground source heat pumps applications for school construction grants and associated reimbursements
  - Requires DAS to plan and budget for building decarbonization retrofits
  - Expands eligibility for CT DEEP income-eligible retrofit funds
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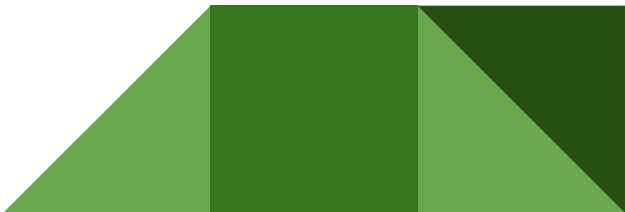
# Bills focused on TENs and transition from gas

## **H.B. 5004** – What was removed from the bill that passed the House

- Requirement for PURA before Jan 1, 2026 to initiate an uncontested proceeding on the future of natural gas distribution system in relation to the state's GHG reduction goal
  - Requirement for PURA to establish a utility-scale thermal energy network program, including a requirement for gas companies to file proposals for 1-2 pilot projects and for PURA to consider appropriate cost recovery methodology and study economic feasibility and deployment strategies
  - Gas company incentives for municipally-owned TENs
  - Authorization for DEEP to solicit active or passive gas demand response proposals
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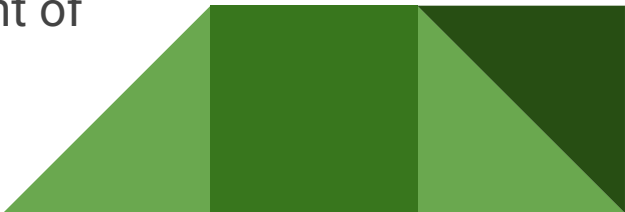
# Bills focused on TENs and transition from gas

## **S.B. 4** – Bill recommended by the Energy and Technology committee

- Requirement for PURA to establish a utility-scale TEN program, including a requirement for gas companies to file proposals for 1-2 pilot projects and for PURA to approve recovery of prudent costs through rates
  - Authorization for DEEP to solicit active or passive gas demand response proposals
  - No future of gas language
  - No requirement for gas company incentives for municipally-owned TENs
- 
- A decorative graphic in the bottom right corner consisting of several overlapping green triangles and rectangles in various shades of green.

# Bills focused on TENs and transition from gas

**S.B. 4** – Subject to negotiations related to S.B. 1560 and concerns regarding near-term energy affordability

- S.B. 1560 would create a new energy supply procurement agency, repeal net metering, and shift programs like Conservation and Load Management from ratepayer-supported to General Obligation bond-supported
  - S.B. 1560 to be referred to Energy and Technology committee
  - Office of Fiscal Analysis estimates that efficiency and demand response provisions in S.B. 4 are likely to reduce utility bills and avoided costs of gas system expansion through development of TENs may also reduce utility bills.
- 
- A decorative graphic in the bottom right corner consisting of several overlapping green triangles and rectangles in various shades of green.

# Bills focused on TENs and transition from gas

**H.B. 6929** – Raised by Energy and Technology, had public hearing 2/18

- Requires Department of Energy and Environmental Protection (DEEP) to establish a TEN grant and loan program
- Provide funding for entities to develop TENs, at the discretion of DEEP funding may be used for planning/ feasibility, design/engineering, and nonfederal cost share for grant or loan applications.
- Similar grant programs for planning/feasibility and design in Colorado and Massachusetts





# Union Station Area Thermal Energy Network (USATEN)

# City of New Haven Office of Climate and Sustainability

- Mission: to implement climate mitigation and adaptation solutions that intersect with and address the immediate challenges facing our residents
- Energy affordability, affordable housing and transportation, and air quality + associated health issues are key concerns for residents
- Supplementing Home Energy Solutions program funding using American Rescue Plan resources (expanding eligibility and reducing/eliminating copays for barrier remediation and electrification) and assisting with development of new transportation options (microtransit, micromobility)
- Developing solar and geothermal resources



# Union Station Area Thermal Energy Network



- The Union Station Area Thermal Energy Network (USATEN) is a networked geothermal system to provide the lowest-cost, carbon free heating and cooling to Union Station and the Union Square development across Union Ave
- Additional buildings (e.g., Trowbridge Square, 1 Union Ave) can be added as system expands in the future at lower cost.

# EPA Climate Pollution Reduction Grant

Funds partnership between the City, Elm City Communities, CT Department of Transportation, and New Haven Parking Authority to decarbonize one of New Haven's most important buildings – historic Union Station – and provide clean, affordable heating and cooling to the new Union Square development (up to 1,000 units housing in Phase 1).

- Reduce climate and air pollution
- Build shared platform for affordable, neighborhood-level decarbonization
- Create high-quality jobs/apprenticeship opportunities



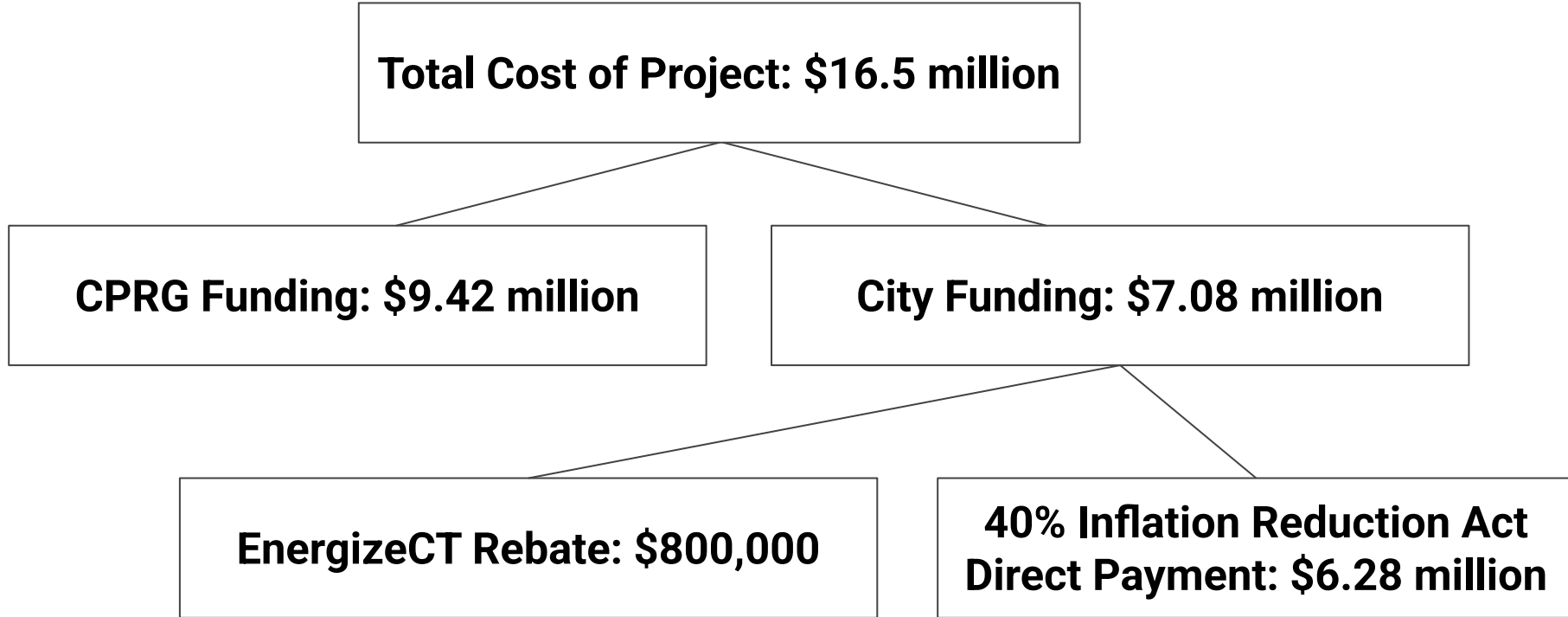


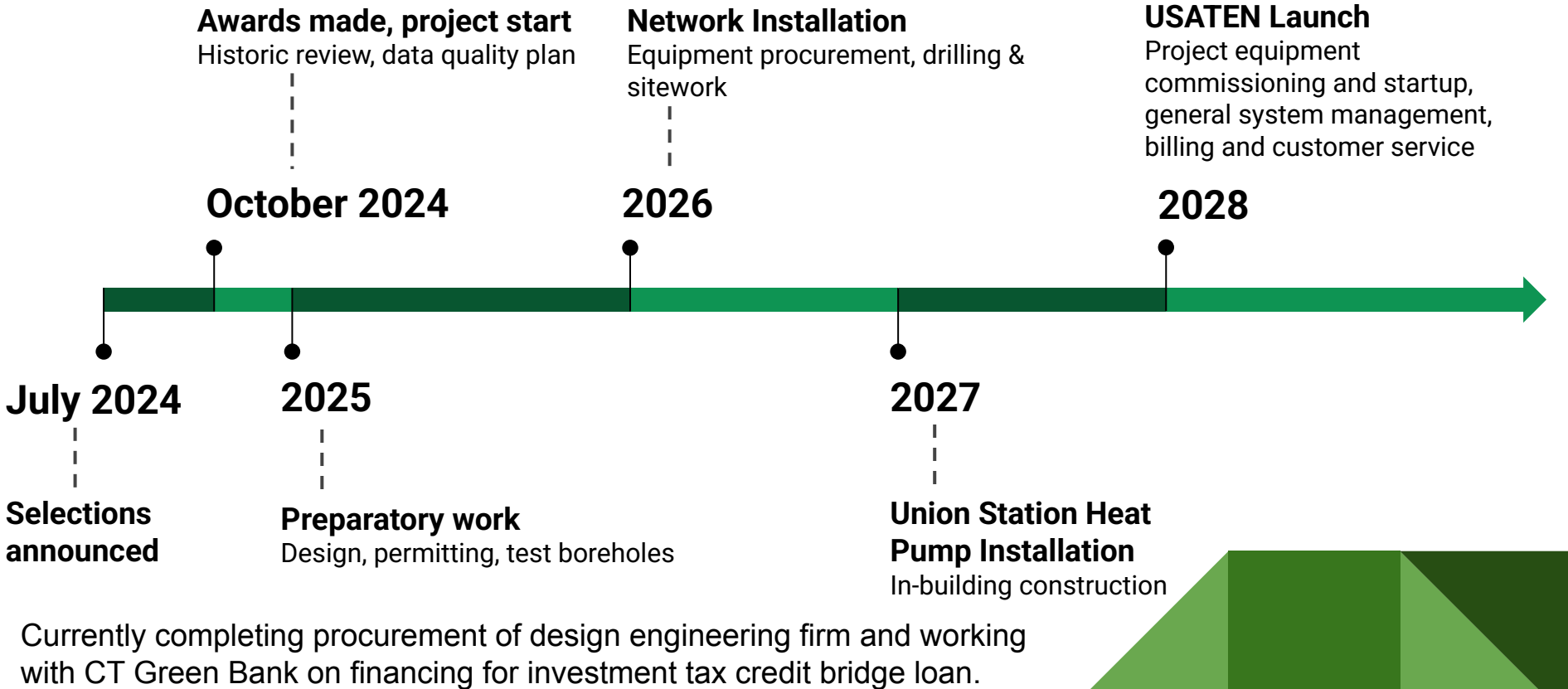
# USATEN's Air Pollution and Climate Impacts

Pollutant	Reduction 2025-2050
Greenhouse Gasses	63,272 metric tons avoided (76% reduction over fossil fuel alternative)
Criteria Air Pollutants (CO, CH <sub>4</sub> , PM, NO <sub>x</sub> , SO <sub>2</sub> )	59,340 pounds avoided
Urban Toxics / Hazardous Air Pollutants	980 pounds avoided



# Sources of Funding





# Discussion

- The host will ask the first question for the panelists
- Raise your hand to ask a question or enter your question in the chat to participate in the discussion



# Thank You!



**State Rep. Steven Winter**  
Executive Director, Climate and  
Sustainability, New Haven  
State Representative, 94th Assembly  
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