



ELECTRIFY YOUR BUILDING!

A GUIDE FOR DEVELOPERS

Lead the way to a greener, healthier, **electric** future for New Haven



Cut down emissions

CT's electricity supply will be zero-carbon by 2040. Make sure your buildings can keep up!



Help your community

Electric buildings are safer for residents, improve air quality, and reduce noise pollution



Potential for long term savings

Electrification can lead to long term financial savings on energy.

Electrification is simple! In many cases it just requires choosing heat pumps and electric stoves over their fossil fuel reliant alternatives.

Visit ctgreenbank.com to discover how you can finance your transition to green energy

Benefits of Electrification



1

Reduce occupant health impacts through the elimination of onsite fossil fuel combustion and improved indoor air quality.



2

Decrease outdoor air pollution to improve your community's health



3

Long term financial savings by pairing reduced energy consumption with onsite solar photovoltaic panels.



4

Attractive to environmentally-conscious buyers and renters

Benefits (cont.)



5

CT State and Municipal governments have plans to radically reduce greenhouse gas emissions - make sure to get ahead of permitting laws!



6

Decrease noise pollution to create a more peaceful community



7

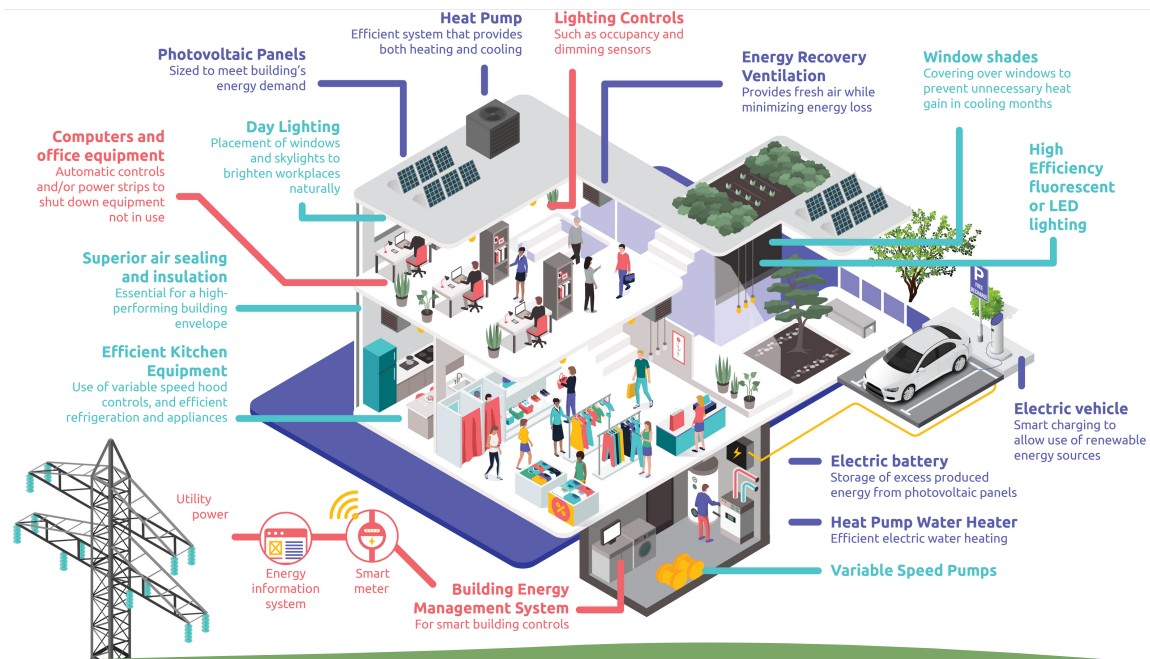
Easier to implement smart technology



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Electrification is the most cost-efficient way to do your part to decrease fossil fuel emissions and ensure a better future for all!

Components of Electrification



✓ Electric heating and cooling (air source or geothermal heat pump)

✓ Efficient weatherization (thermally resistive windows, super insulated and airtight building envelope, energy recovery ventilation)

✓ Energy efficient electric equipment (heat pump water heating, induction cooking, LED lighting)

✓ On-site renewable energy generation (solar photovoltaic panels)

✓ Green community (EV charging stations, bike racks, trees, green space)

Electrification Incentives

All Commercial

- **C-PACE (Commercial Property Assessed Clean Energy):** a financing solution where improvements are repaid through an assessment placed on the property, to help build higher performing, and more cost-effective and competitive buildings.
<https://www.cpace.com/developer/>
- **Energy Conscious Blueprint**, Path 1 for Zero Net Energy
<https://energizect.com/your-business/solutions-list/Energy-Conscious-Blueprint>
 - Up to **\$3.5/SF in construction costs incentives**
 - Up to **\$10,000 for consultant fee incentives**
 - **\$10,000 towards zero net energy or Passive House certification**

Multifamily Specific

- **New Construction:** <https://energizect.com/your-home/solutions-list/residential-new-construction-program>
 - **Energy-efficiency rebates:** up to \$4,250 per unit
 - **All-electric rebates:** \$1,000 per unit for up to \$50,000 per project
- **Existing Upgrades Program:** <https://energizect.com/your-home/solutions-list/Multifamily>
 - **Assistance, assessment, incentives, and financing for energy efficiency upgrades**

Electric Projects



Thomas Breen photos

Hotel Marcel, New Haven

- First net-zero emissions hotel in the country, thanks to its efficient building envelope retrofit, use of high efficiency heat pumps, solar panels on the roof, and 3 large solar carports.
- Designed to Passive House and LEED Platinum Standards, this project will use 1/5 of the amount of energy than an average Energy Star project of this scale would use
- Developer: Becker & Becker Associates



Thomas Breen photos

The Elm, New Haven

- Entirely electric-powered. Uses high efficiency heat pumps to heat and cool 44 units.
- This "high efficiency" system is less expensive to install, and will result in energy and emissions savings over time.
- Developer: Cambridge Realty

Passive Projects



The Tyler, East Haven

- Designed to meet the Passive House Institute's EnerPHit Standard with applicable historic exclusions. This standard includes several energy efficiency and thermal comfort requirements. This project is expected to be the first EnerPHit certified multifamily project in Connecticut.
- Developer: Winn Development

Collection of Passive Projects in CT can be found at:

<https://ctpassivehouse.org/projects/>

Passive Projects



New Haven Housing

- Mass timber and passive housing technology, relatively new to New Haven, are being used to inexpensively build affordable multi-family housing without sacrificing quality. There are also significant associated environmental benefits.
- Developers: Beulah Land Development Corporation and Dixwell Housing Associates LLC



1075 Nelson Street Skyscraper, Vancouver, CA

- Exterior will be made airtight using 40% high-performance triple glazing and 60% super-insulated wall to prevent heat loss through building's skin and ensure that very little heating is required.
- Will use 2 low-energy heat recovery ventilation systems to deliver fresh air, prevent drafts, and maintain an airtight shell. This system will reclaim heat energy from stale air and reuse it to heat fresh air.
- Developer: WKK Architects

Electrification Resolution

In April, 2021 the Board of Alders passed an electrification resolution.

"Now therefore be it resolved, that the City of New Haven recognizes the broad benefits of accelerating the transition to electric buildings and transportation throughout the City."

The full text of the resolution [is linked here](#).

Additional Resources

Interested in electrification?

CT Green Bank (<https://www.ctgreenbank.com>) and **Energize CT** (<https://energizect.com>) are two great places to start!

Financing options

- The **CT Green Bank** may be able to help finance electrification projects (<https://www.ctgreenbank.com/>)

ELECTRIFICATION EXAMPLES

- **Brookline, Massachusetts** is pushing to prohibit fossil fuel infrastructure in new buildings.
- **Berkeley, California** was the first city to require all-electric new construction.
- **Ithaca, NY** has approved a plan to decarbonize the city's entire building stock through the electrification and retrofit of 6,000 buildings.
- Information on **heat pumps**, and **water heaters**.

The NH Electric Future group can be contacted at newhavenclimatemovement@gmail.com