

# Energy Action Plan



*New England's over-dependence on imported fossil fuels to power the electric grid and heat buildings makes our regional energy supply vulnerable to geopolitical disruptions and extreme weather events.*

The Connecticut Department of Energy and Environmental Protection (DEEP) is working to address these concerns through initiatives to replace fossil fuels with energy efficiency and other clean resources. These actions will reduce electricity costs and price volatility (because efficiency is the lowest-cost grid resource and renewables have zero fuel/marginal costs) and improve reliability (because resources like offshore wind, hydropower, and nuclear produce well during the winter when gas for power generation is scarce). These measures are also essential to meeting Connecticut's commitments to a zero-carbon grid by 2040 and to reduce GHG emissions 45% by 2030 and 80% by 2050 below 2001 levels.

***DEEP is working to build a cleaner, more affordable, and more reliable energy supply that will reduce our reliance on supply-constrained, price-volatile fossil fuels, while taking advantage of unprecedented federal funding for clean energy under the Bipartisan Infrastructure Law and Inflation Reduction Act.***



## **Offshore Wind**

To date, CT has contracted for 1,108 MW of offshore wind. Inflation Reduction Act tax credits could further significantly improve the economics of offshore wind procurements. DEEP and other New England states have launched a Regional Transmission Initiative (RTI) to explore joint investments in new transmission to facilitate offshore wind and are pursuing federal funding for such transmission under the Bipartisan Infrastructure Law.



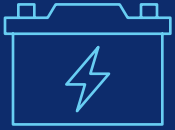
## **Hydropower**

The state is exploring opportunities to build new transmission for large-scale hydropower energy from Canada, including by pursuing federal funding for transmission under the Bipartisan Infrastructure Law.



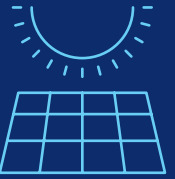
## **Nuclear**

In 2019, DEEP selected contracts with the Millstone and Seabrook nuclear facilities to prevent premature retirements that would have jeopardized winter grid reliability, increased New England grid emissions by 20%, and cost ratepayers \$1.8 billion to replace. DEEP is working to ensure nuclear facilities with state contracts are eligible for the Inflation Reduction Act's Production Tax Credit, which would provide further financial benefits to Connecticut ratepayers.



## **Reliability**

As we transition the grid, we're also advocating for the regional grid operator, ISO New England, to provide better analysis to ensure reliability, including during low probability high impact events like extreme winter storms.



## **Other Clean Resources**

Since 2012, DEEP has procured approximately 1 GW of solar, land-based wind and other renewables, of which 433 MW are now operational. DEEP plans additional procurements in 2023 of grid-scale storage and renewables (such as solar, small-scale hydropower, and onshore wind), with a particular focus on new energy resources that would enhance winter energy security. These resources will benefit from enhanced Inflation Reduction Act tax credits while helping to reduce gas dependence, price volatility, and GHG emissions.

## ***Building energy efficiency and electrification is also a critical DEEP strategy for lowering energy costs and improving energy reliability for CT businesses and residents.***

- » Connecticut's energy efficiency and building retrofit programs have a strong track record of success and have been recognized as some of the best in the nation. In 2021, the Conservation and Load Management (C&LM) programs – also known as EnergizeCT programs – generated over \$62 million in savings for Connecticut residents and businesses, eliminating the need for 114 megawatts of electricity generation capacity, enough to power approximately 43,138 homes for a year, and avoiding more than 196,807 tons of carbon dioxide emissions.
- » The energy-saving investments funded by the 2022-2024 C&LM Plan are projected to provide over \$1.7 billion in cumulative benefits. The C&LM programs are funded by ratepayer funds collected through the Conservation Adjustment Mechanism (CAM), proceeds from the Regional Greenhouse Gas Initiative (RGGI) pursuant to Conn. Agencies Reg. § 22a-174-31, and proceeds from C&LM savings sold into the ISO New England Forward Capacity Market (FCM).
- » Other building programs in Connecticut include the weatherization assistance program (WAP) which is funded by federal funds from the US Department of Energy and a Residential Energy Preparation Services (REPS) program being launched with the help of American Rescue Plan Act (ARPA) funds through DEEP's Office of Affordable Housing Energy Retrofits (AHER). Both of these programs are focused on enabling or completing weatherization upgrades in homes of income eligible residents.

**Together, these building programs address statewide affordability concerns by:**

- » Reducing monthly energy bills for program participants – the average single-family home in Connecticut receives about \$800 in services and realizes \$180-\$250 in annual energy bill savings through the market rate C&LM residential program (Home Energy Solutions)
- » Lowering overall energy system costs by reducing peak demand
- » Deploying additional residential and commercial customer education resources
- » Making energy efficiency equipment and services more accessible and affordable through rebates and equipment price reductions

**The programs also increase decarbonization and reliability by:**

- » Giving customers access to the most efficient, least emitting technologies including heat pumps
- » Strengthening workforce development and customer education initiatives to remove barriers to heat pump adoption
- » Supporting the market's transition to all-electric new construction, and
- » Removing barriers such as mold, asbestos, and vermiculite to building weatherization which makes building heating and cooling more efficient

**And advance equity by:**

- » Prioritizing energy efficiency improvements for income eligible customers, those with the largest past due balances and the most frequent shutoffs
- » Providing community groups with resources to conduct targeted outreach on energy efficiency programs in their communities
- » Delivering workforce development offerings in distressed municipalities
- » Developing processes to leverage and coordinate both state and federal funding sources
- » Enhancing the promotion of loan products for businesses and targeting customers in distressed communities

Federal Funding through the recent IRA law will also help to make building energy efficiency and electrification even more affordable in CT. By providing tax credits and financial incentives for both energy efficiency and electrification upgrades, IRA funding will build upon CT's existing building energy programs to further reduce the financial barriers to upgrades. To help streamline access to the various programs and funding sources, DEEP is working closely with EnergizeCT program administrators and the CT Green Bank to develop clear and simple processes that contractors and residents can use to maximize available federal and state funding. Although federal guidance has not yet been issued for all IRA funds, Rewiring America estimates that over 250,000 CT households will be eligible for an average of \$186 in federal performance rebates and over \$5,000 in federal tax credits.

**Together, all of these actions enable energy cost savings, building electrification in partnership with an increasingly zero-carbon electric supply which can reduce Connecticut's exposure to volatile fossil fuel markets, and achievement of CT's climate goals.**



**For more information, check out DEEP's *Integrated Resources Plan* and DEEP's *Procurement Plan*.**