



Renewable Heating and Cooling in the broader Energy and Climate Context

Keynote Speaker: Mary Sotos, CT DEEP

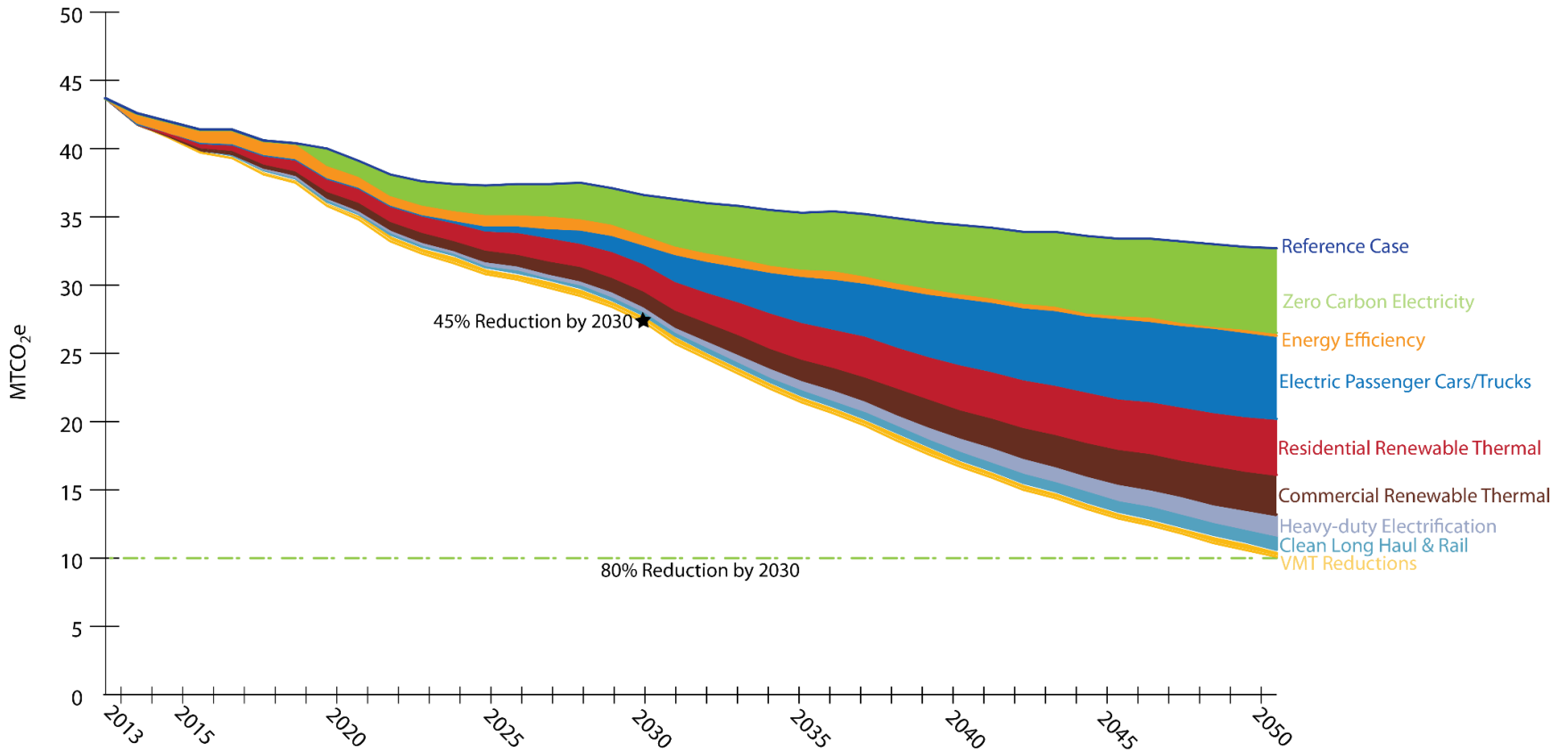


Connecticut Department of Energy and Environmental Protection

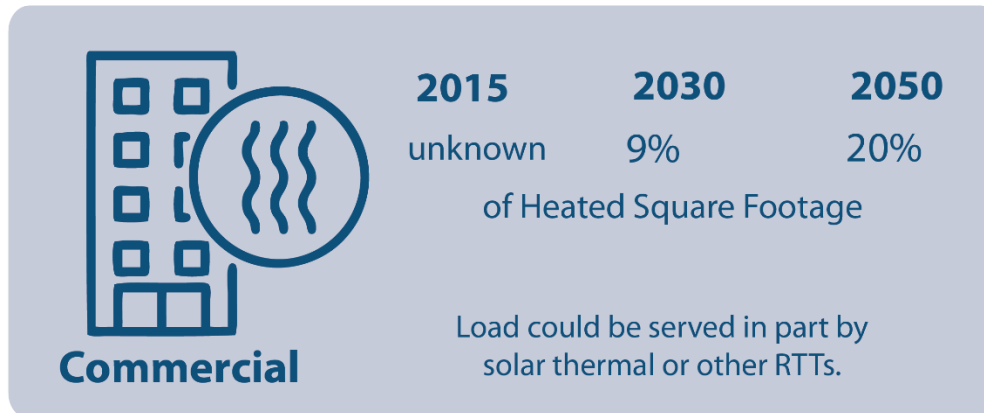
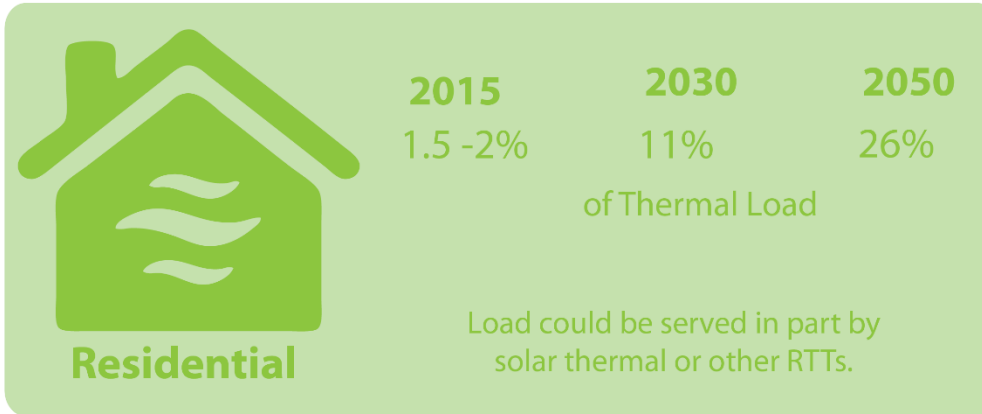


Connecticut Department of
**ENERGY &
ENVIRONMENTAL
PROTECTION**

GHG Mitigation Wedges



Renewable Thermal Deployment




Figures for 2030 assume CT's portion of regional electric grid will be 66% zero carbon.



CT Market Potential of Renewable Thermal Technologies

RTT	As Substitute For	Building Type Applicability						
		Single-Family	Apartment Building	School	Restaurant	Hospital	Hotel	Office Building
ASHP space heating & cooling with no ductwork	Electricity							
	Fuel Oil							
	Natural Gas							
ASHP space heating & cooling with ductwork	Electricity							
	Fuel Oil							
	Natural Gas							
ASHP water heating	Electricity			(not evaluated)				
	Fuel Oil							
	Natural Gas							
Ground-source heat pump space heating & cooling	Electricity							
	Fuel Oil							
	Natural Gas							
Solar water heating	Electricity							
	Fuel Oil							
	Natural Gas							

 *Cost-effective (NPV ≥ 1) in light of cost to finance, install, operate, and maintain in present market conditions and without accounting for available financial incentives*

Source: Gronli, et al. 2017. "Feasibility of Renewable Thermal Technologies in Connecticut: Market Potential."

