



VECAN

VERMONT ENERGY & CLIMATE
ACTION NETWORK

Collaborations with Educational Institutions



NORWICHTM
UNIVERSITY



Middlebury



**Vermont State
University**



**University
of Vermont**



VERMONT
LAW & GRADUATE SCHOOL



Panelists:

- ➡ Jenny Carter, *Professor of Law, Institute for Energy & the Environment, Vermont Law and Graduate School*
- ➡ Jon Erickson, *Professor and Associate Dean for Research and Graduate Education, University of Vermont*
- ➡ Jon Isham, *Professor of Economics & Environmental Studies, Middlebury College*
- ➡ Erich Osterberg, *Professor of Earth Sciences, Dartmouth College*
- ➡ Andrew Westgate, *Assistant Professor of Atmospheric Sciences, Vermont State University*

(unable to attend) Kahwa C. Douoguih, *Director at the Center for Global Resilience and Security, Norwich University*

Student, Community & Mission Driven



Institute for Energy & the Environment

VERMONT LAW & GRADUATE SCHOOL

- Academics
- Research
- Energy Clinic

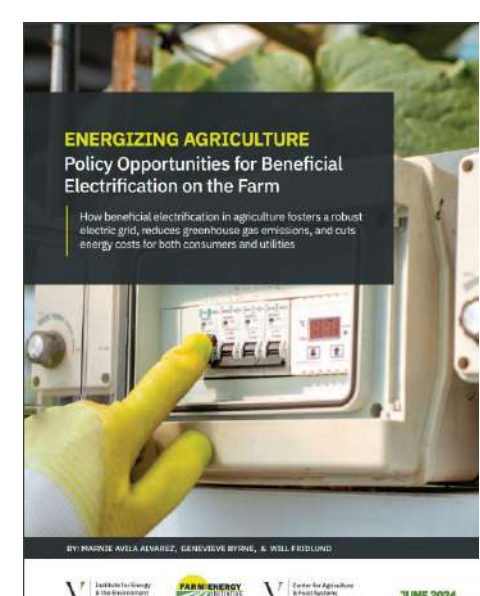
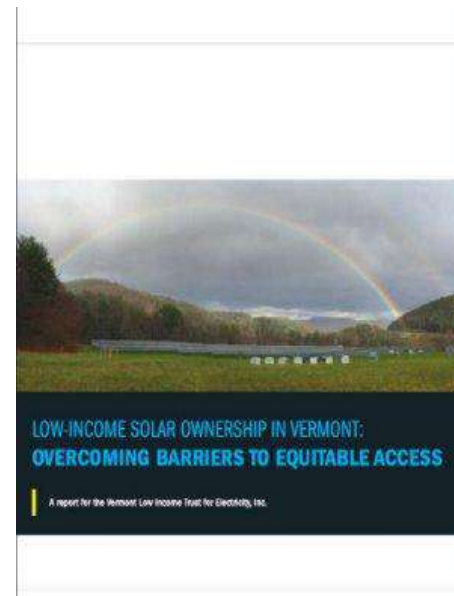
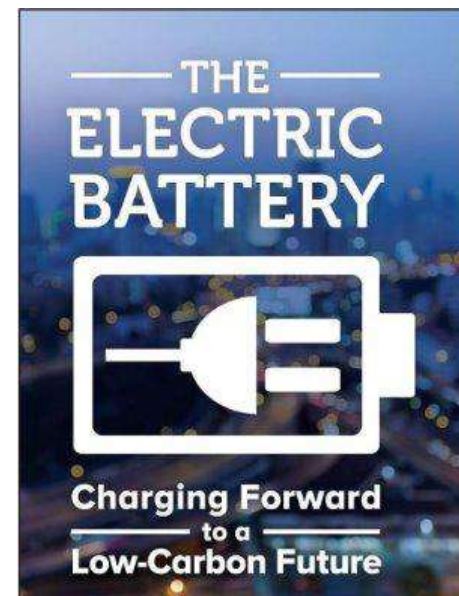
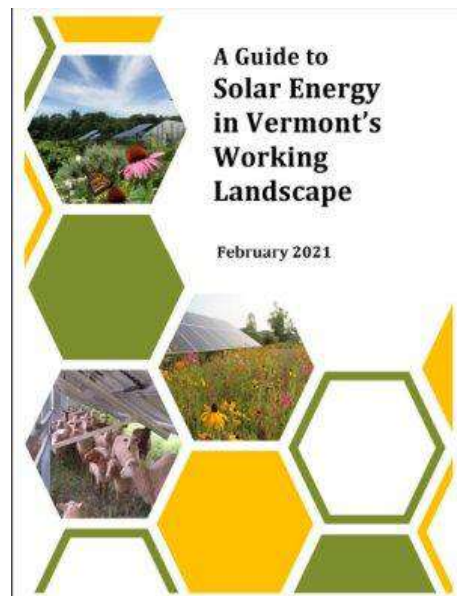
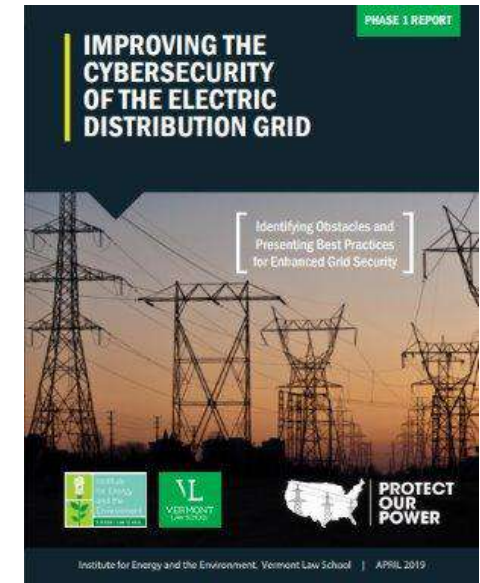
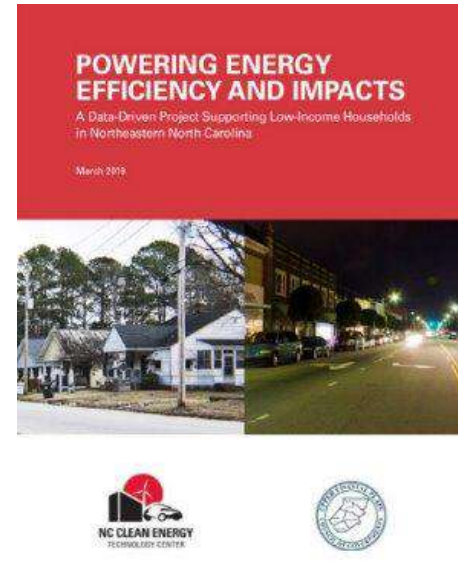
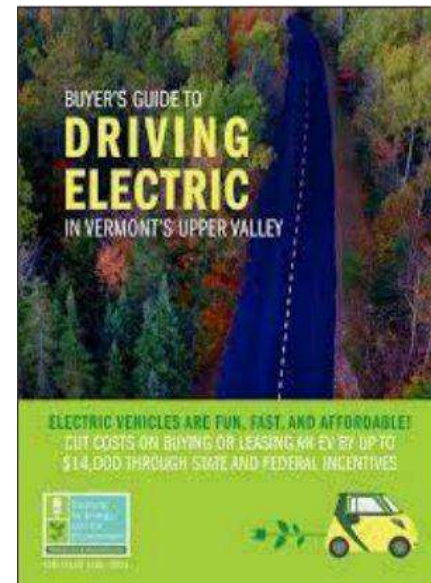
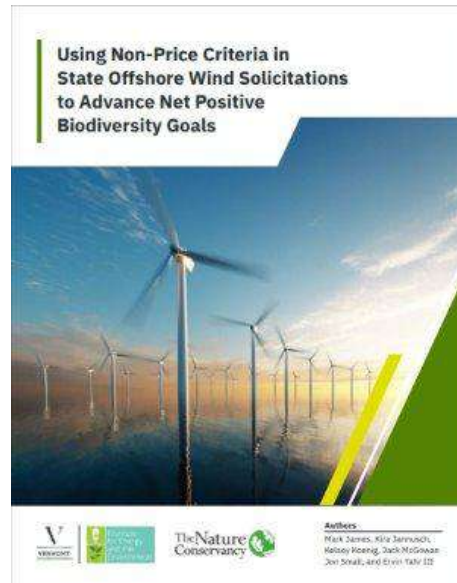


Academics

- Degrees
- Summer Courses
- Hot Topics



Research: Reports & Webinars



Energy Clinic

High Efficiency, Affordable
Housing



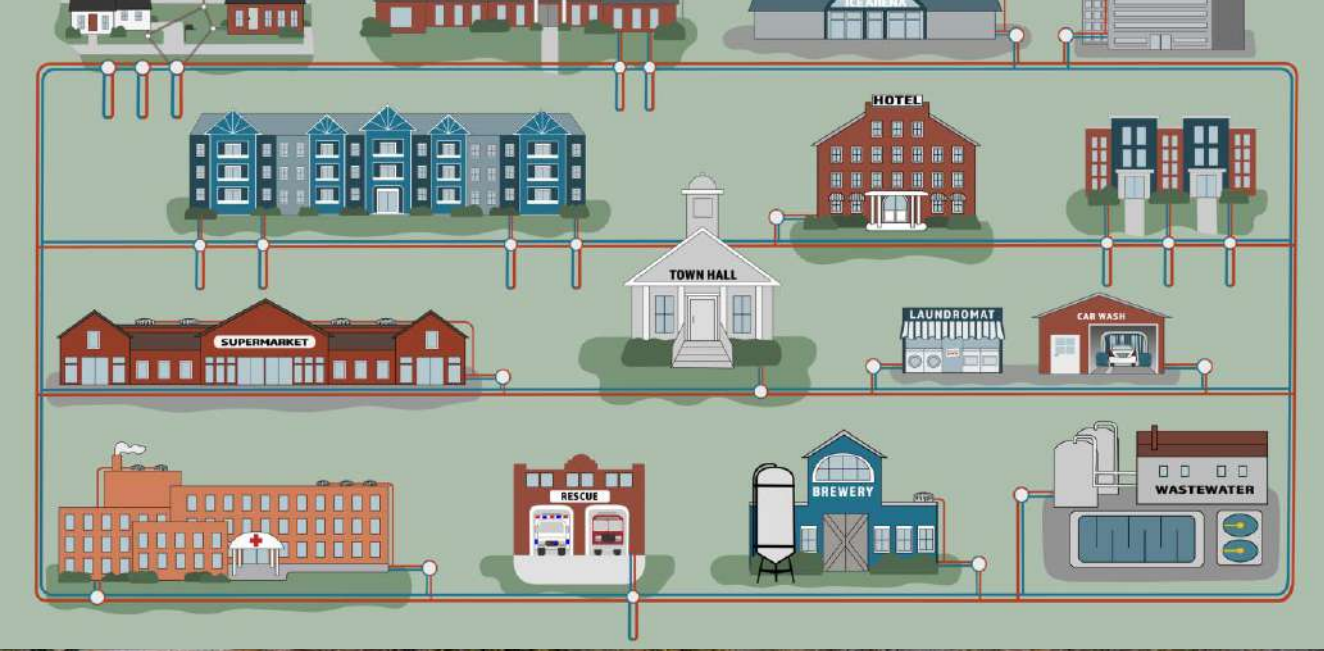
Solar: For Towns And Their Communities





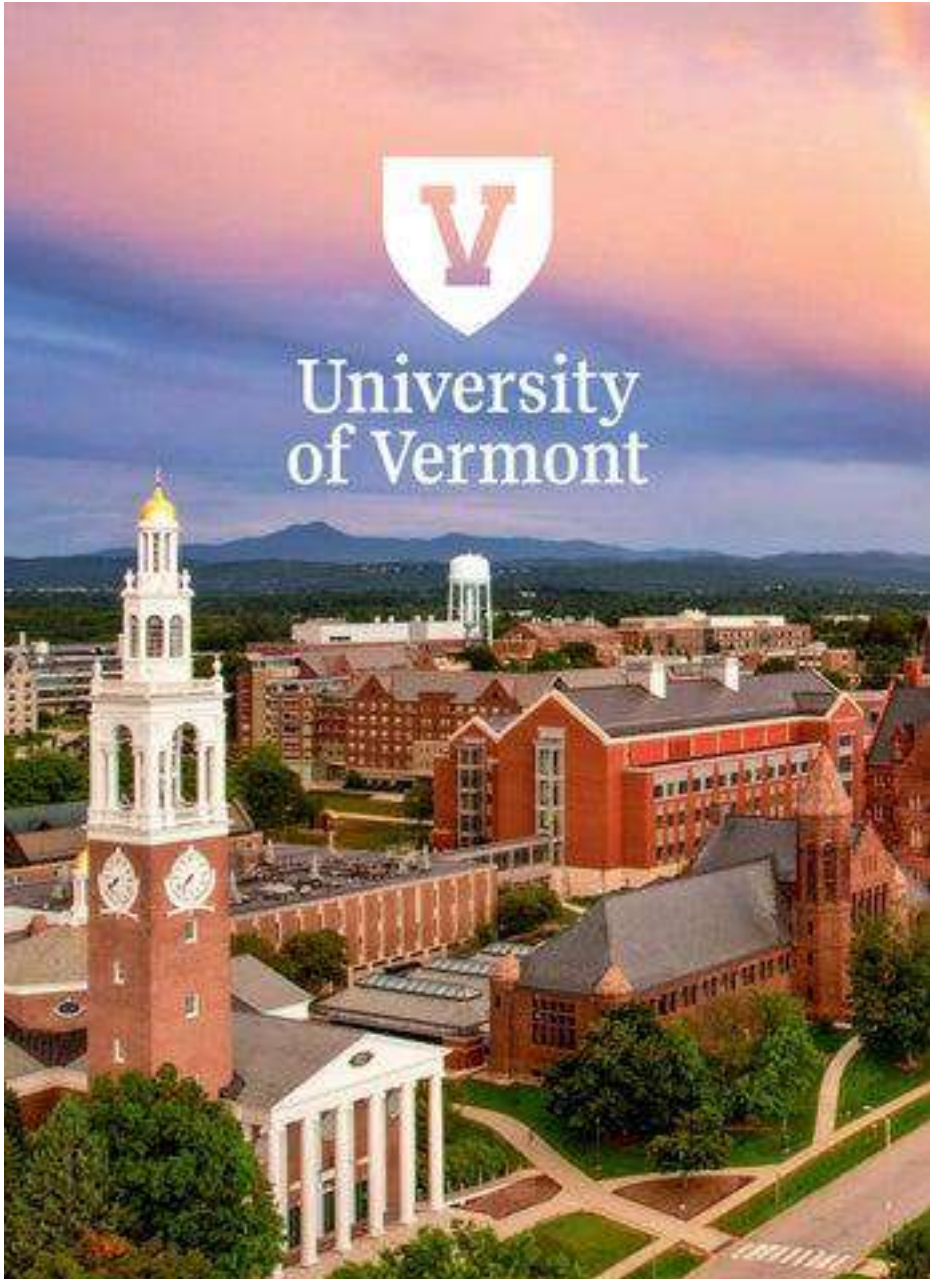
EV Chargers

Geothermal



Economic Development: Burke





Jon D. Erickson

Professor and Associate Dean
UVM Rubenstein School of Environment
& Natural Resources

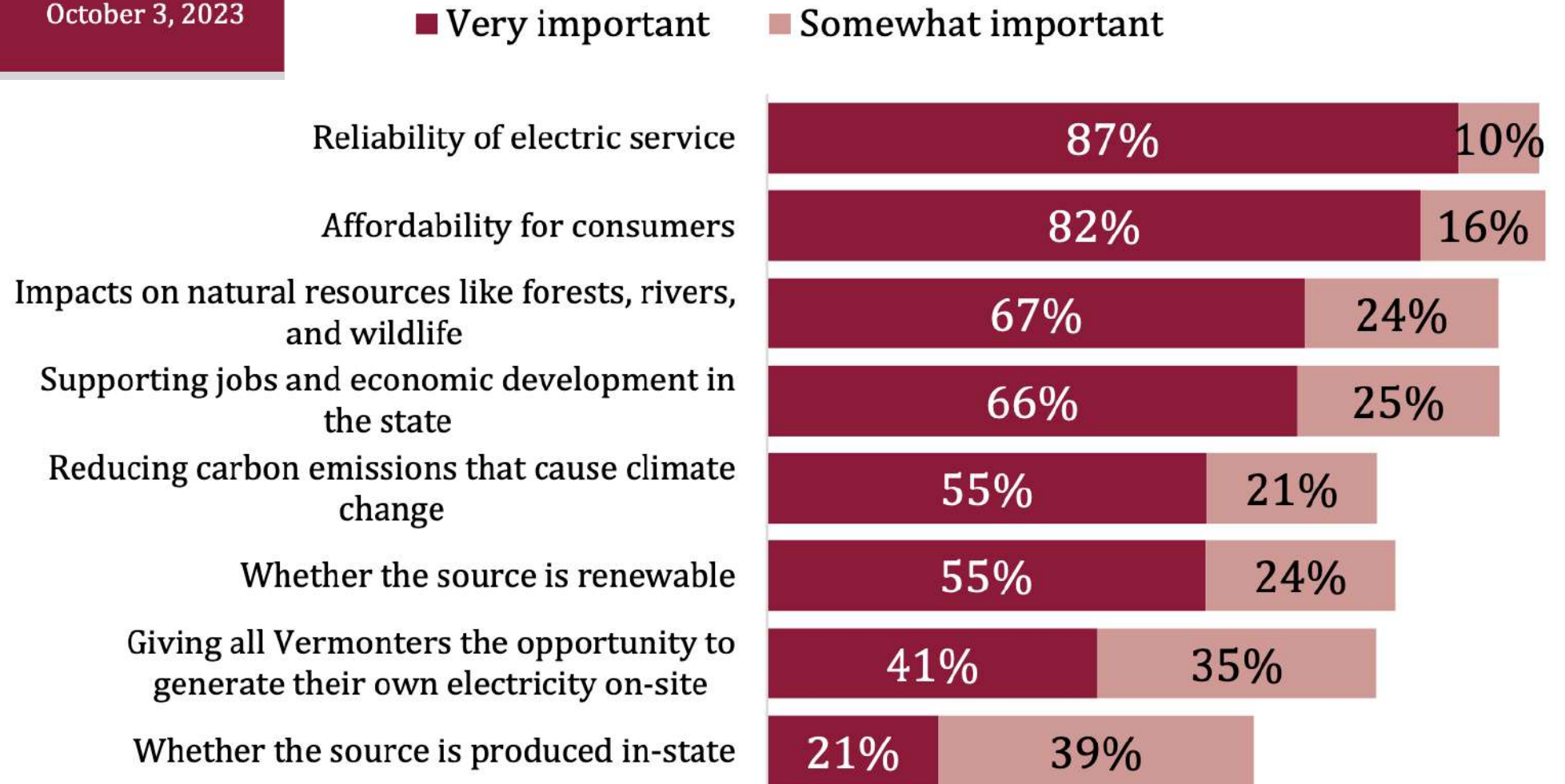
Enabling Place-Based Renewable Power Generation Using Community Energysched Design

Project goal:

Assist community **stakeholders** in **evaluating** the trade-offs of energysed characteristics to enable a more **just** and **resilient** energy transition.

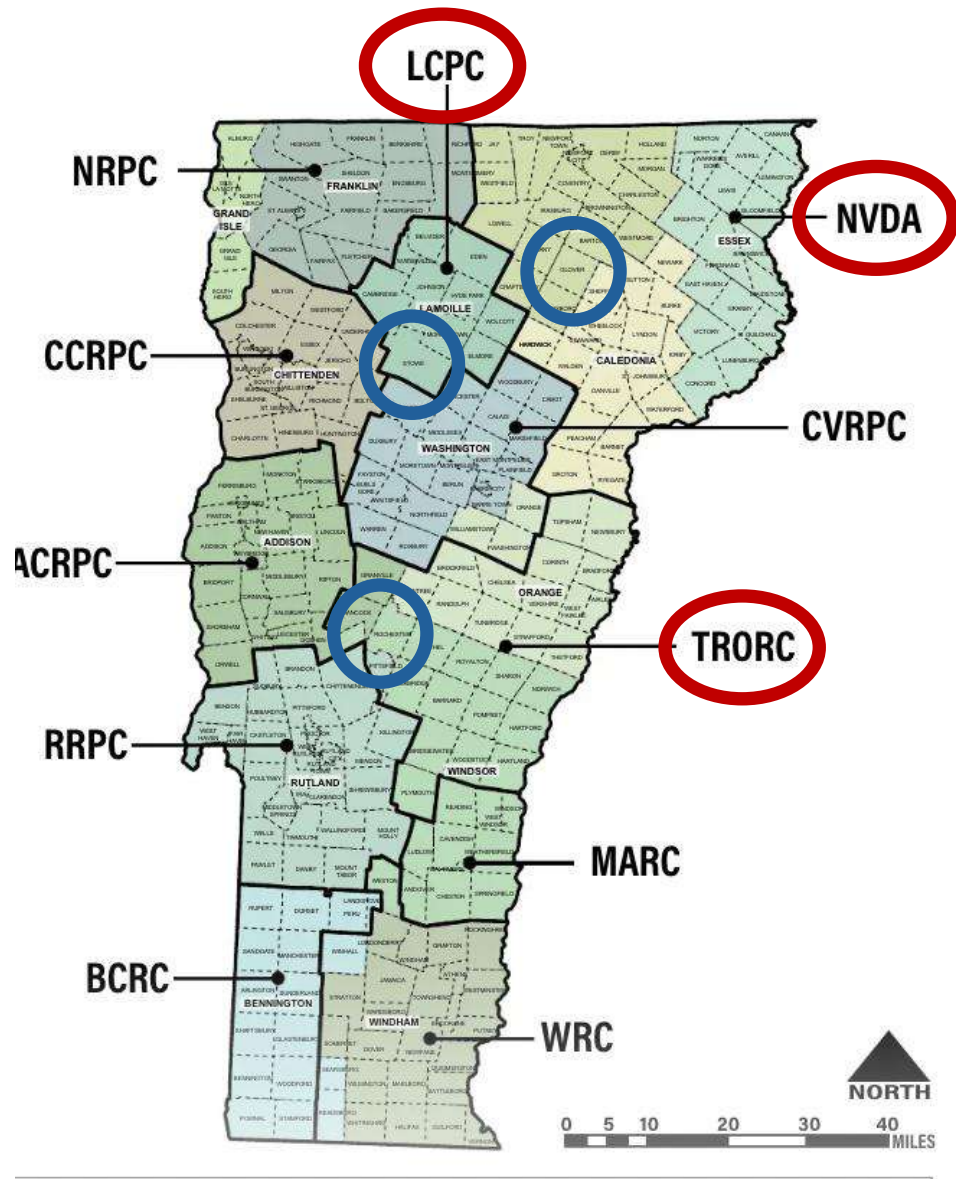


Vermont Weighs In: Public Opinion on Renewable Electricity October 3, 2023



Q: How important should each of the following be when considering how Vermont gets its electricity?

Energy Development Improvement Act (2016)

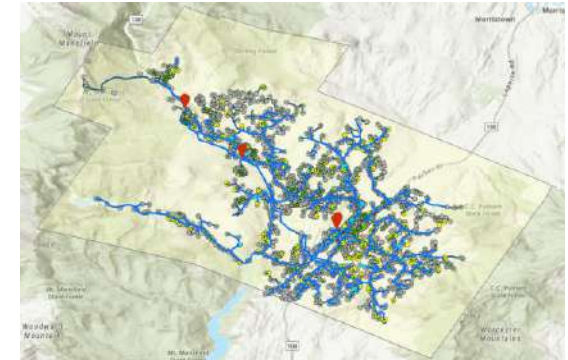


Regional & Local Energy Planning

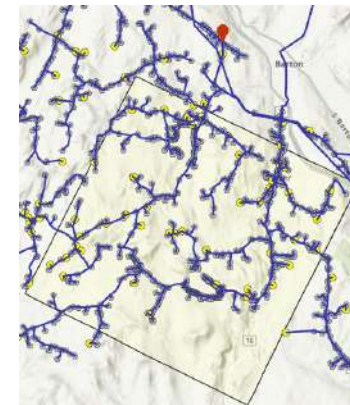
- 11 Regional Planning Commission energy plans
- 110 of 253 municipalities with “enhanced” town energy plans
 - Stowe
 - Glover
 - Rochester

Energyshed Research Goals

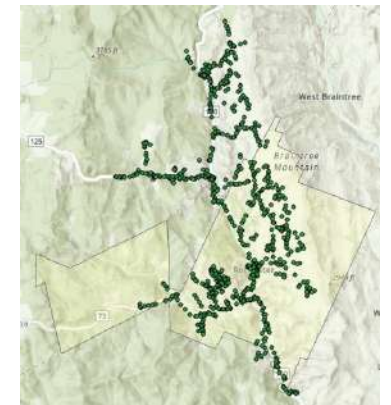
- Develop web-based tool to visualize and manage local and regional tradeoffs
 - Economic – costs, jobs, income
 - Environmental – GHG emissions
 - Social – energy burden, justice, governance
 - Grid performance – reliability and resilience
- Simulate potential impacts of Town Energy Plans
 - Increased renewable generation & energy storage
 - Heating/cooling electrification
 - Transportation electrification
 - Weatherization/energy conservation



Stowe, VT

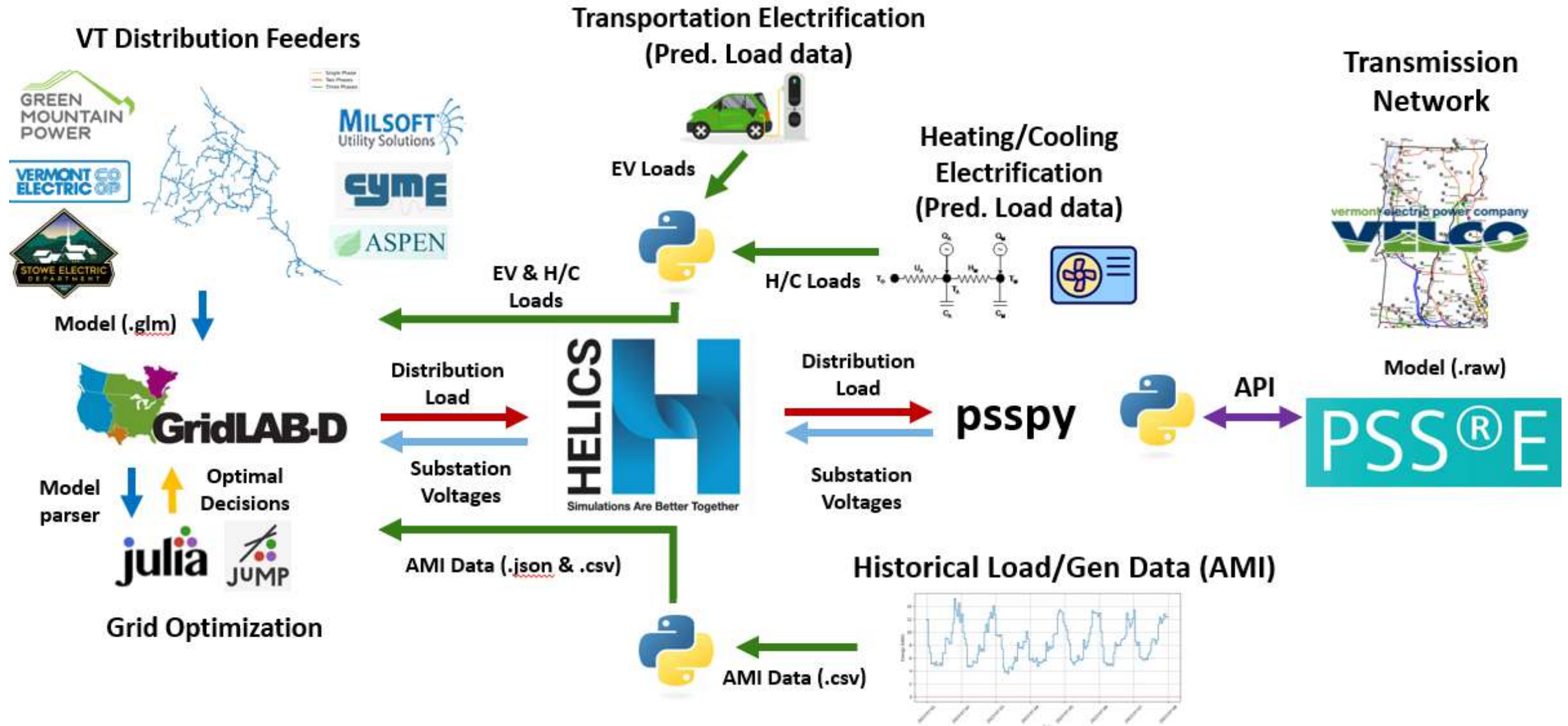


Glover, VT



Rochester, VT

One piece of the puzzle ...





Middlebury

Dartmouth's (New!) Energy and Climate Strategy

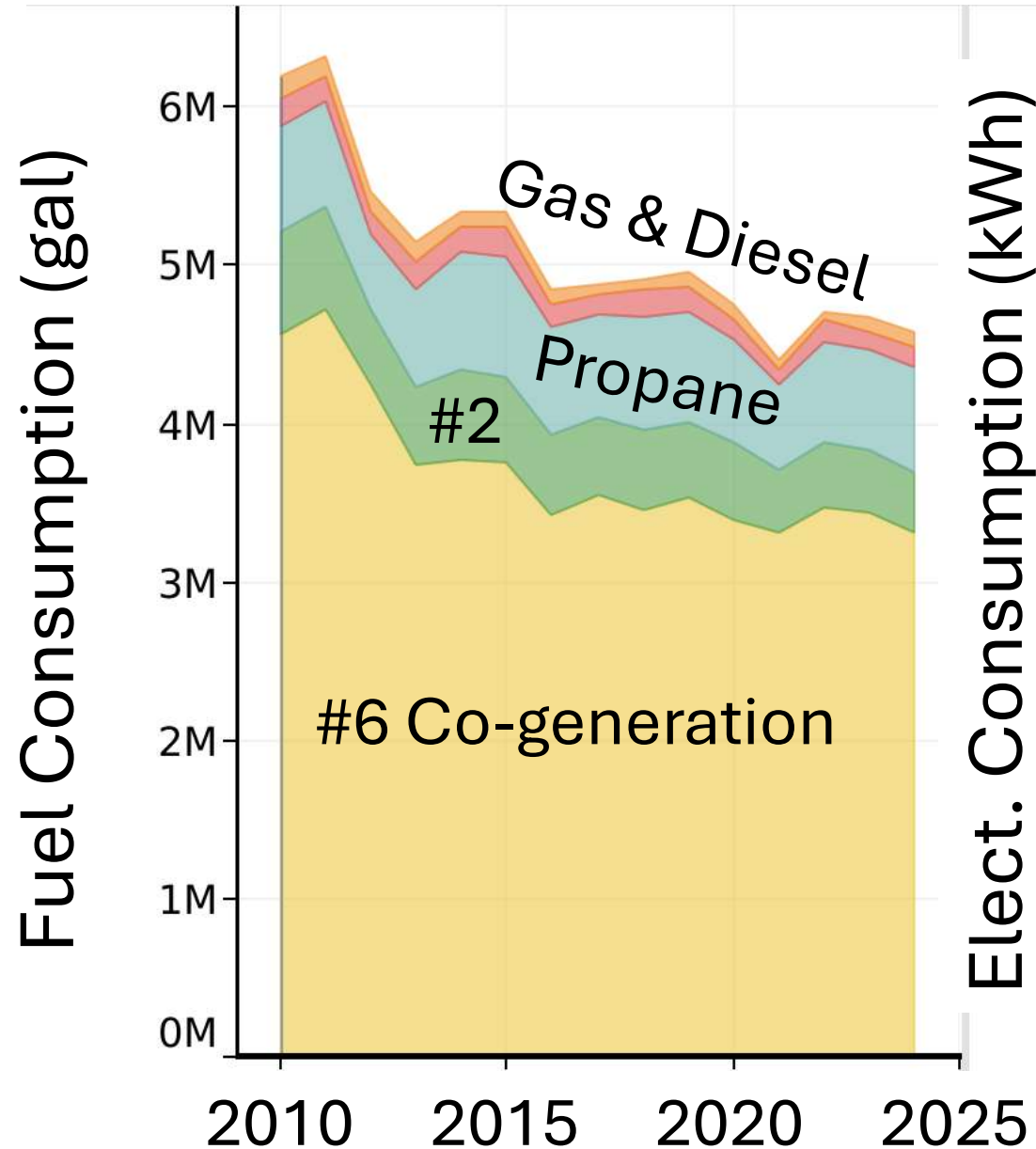


Dartmouth's (New!) Energy and Climate Strategy

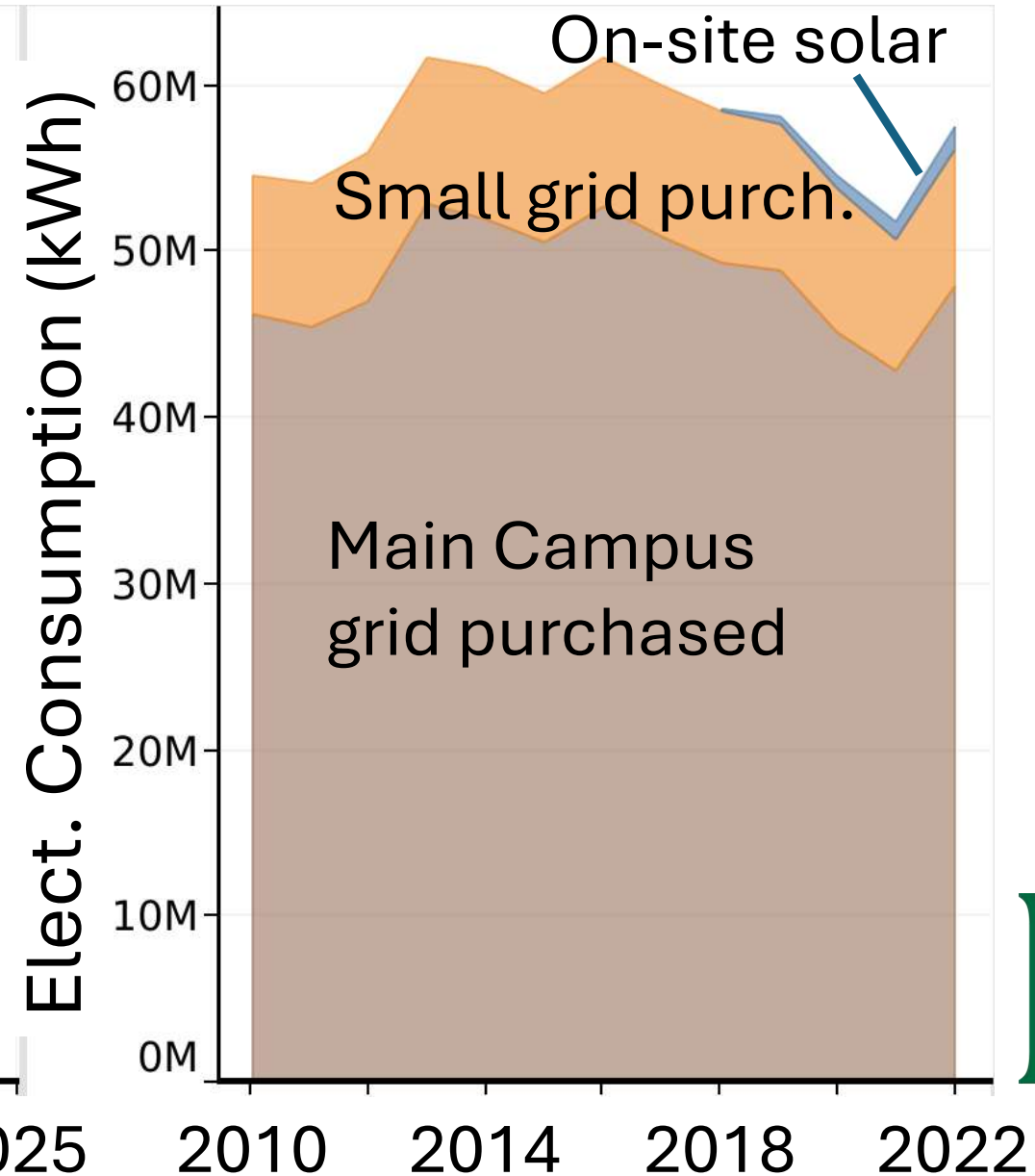
- Reduce energy demand (30% since 2010)
- Steam to hot water transition
- Massive geo-exchange heat pump system
- Zero-carbon electricity sources
- Cultivate climate citizens

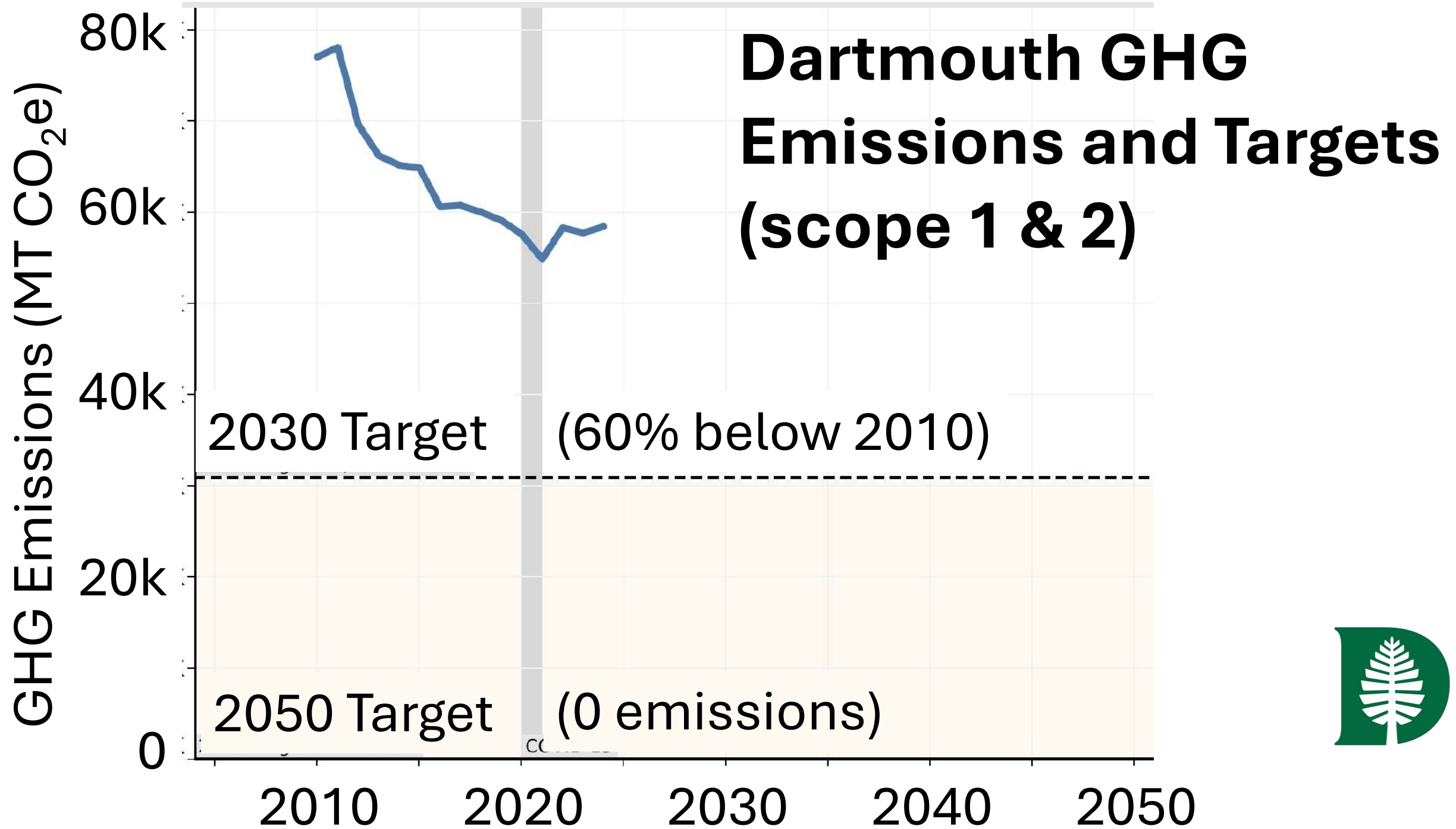


Liquid Fuel Consumption



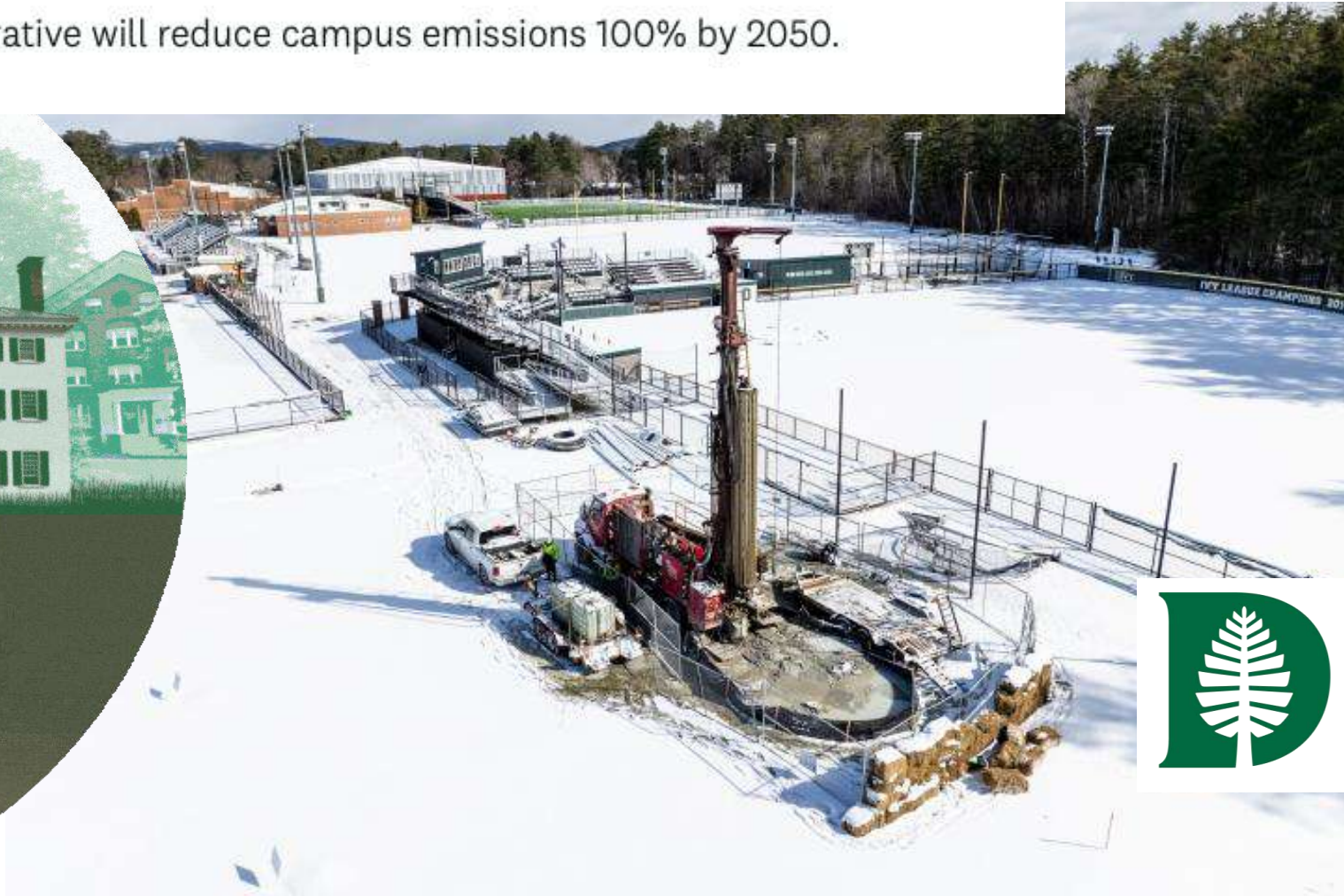
Electricity Consumption





Dartmouth to Invest \$500 Million in Decarbonization

The Dartmouth Climate Collaborative will reduce campus emissions 100% by 2050.



Cultivating Climate Citizens



Dartmouth as a Living Lab



Dartmouth as a Community Partner



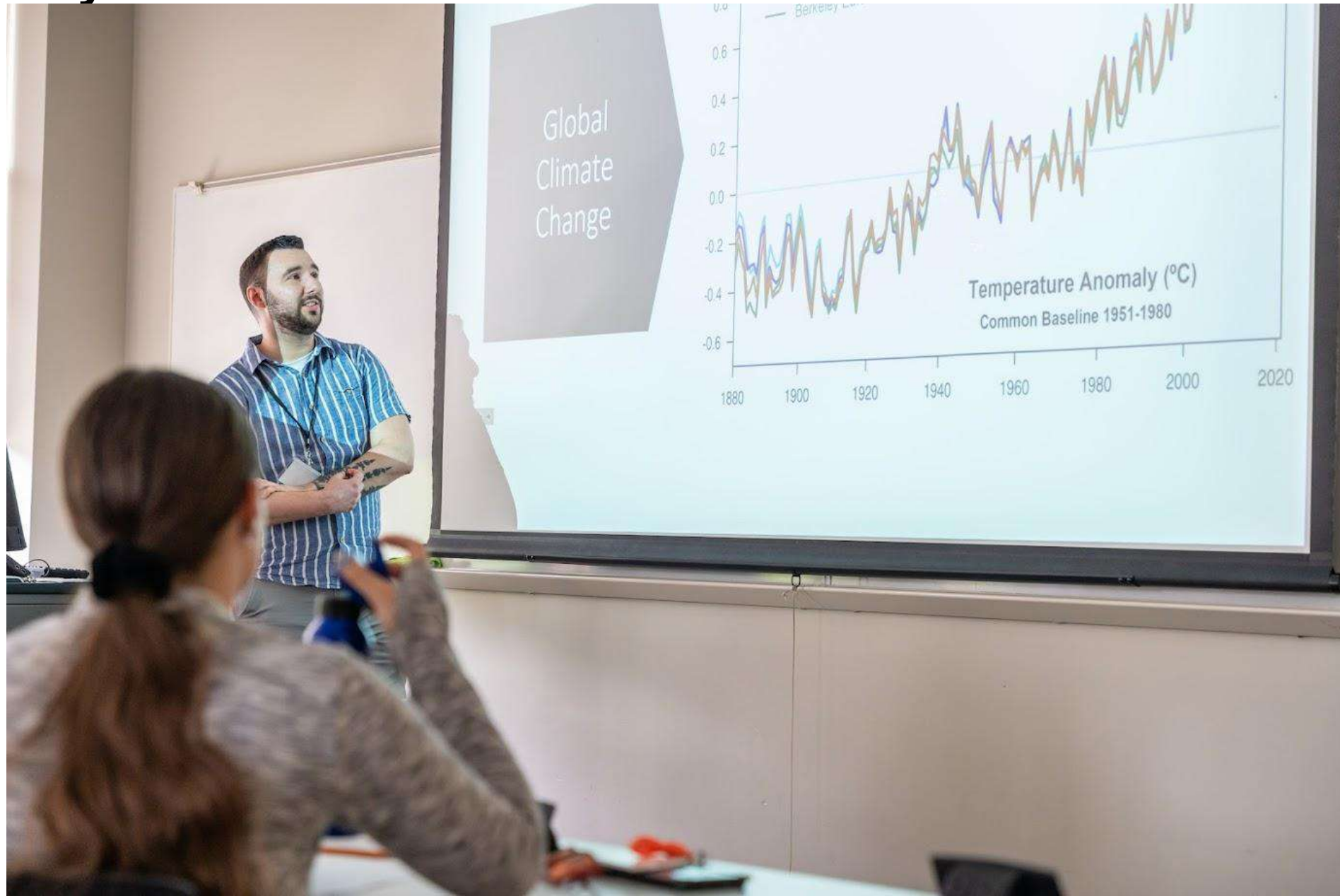
VTSU and The Climate Consensus

Andrew Westgate

Atmospheric Sciences Program,
Department of Natural Sciences



VTSU Lyndon Intro to Climate Gen Ed



Weather and Climate Science Governor's Institute at VTSU Lyndon

The
**GOVERNOR'S
INSTITUTES
of VERMONT**



The Climate Consensus VTSU Lyndon Chapter



**The Climate Consensus**

Speaker:
Dr. Andrew Westgate
Assistant Professor of Atmospheric Sciences



Climate Models:
They're Not Accurate, but They're Useful!

Climate models are our main way of predicting future climates. They provide great insight into how the Earth's temperature and precipitation, among other things, will change not only within our lifetime but beyond. However, with these predictions come a great deal of uncertainty and error. So, are climate models useless? No! We will dive into how models work, what they tend to get right, and what they struggle to forecast.

**THURSDAY
JANUARY 9TH**
2:00PM ET / 1:00PM CT
/ 12:00PM MT on ZOOM

Register here: 



The Climate Consensus VTSU Lyndon Chapter





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VERMONT ENERGY & CLIMATE
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Thank you!



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