

**Current Projects of the  
Campton Climate Advisory Committee  
Feb. 28, 2023**

# Topics to be covered:



1. Solar power for town offices
2. Campton Community Power
3. Charrette
4. Support for Vulnerable Citizens during emergencies
5. Reports to town committees

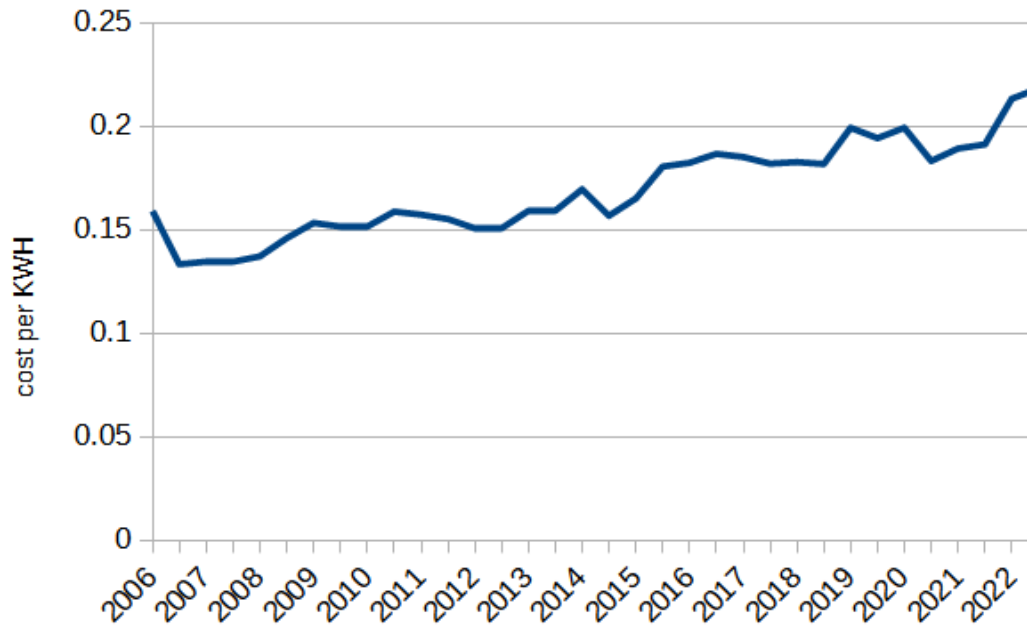
# Solar Power for Town Offices



- Status:
  - Met with vendors providing systems for other NH towns
  - Had discussions and site evaluation with Corey and Campton Village Precinct
- Next steps:
  - Need to resolve issues on our end, then get quotes from vendors
  - Submit findings to select board

# Why Install Solar ?

Average Eversource rate



- **Campton electric bills already exceed \$25,000/year**
  - **Electricity costs have been increasing >4%/year**
  - **Solar costs are mostly fixed**
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- **If system is financed over 25 years and annual solar costs are same as current electric bills, town could save over \$350,000 by avoiding future rate increases.**

# Net Metering

- Solar panels produce electricity a few hours each day, but electricity used 24/7.
- Batteries expensive - cheaper to use the electric grid as battery
- "Net metering": sell to Eversource when producing more than used; buy when less
- Utilities pay less than they charge

# NH DPU Sets the Buyback Costs

<b>Supplier</b>		
Eversource		
Service Reference: 855233006		
Energy Chrg - Rate G	5058.00kWh X \$0.08826	\$446.42
Subtotal Supplier Services		\$446.42
<b>Delivery</b>		
(RATE G GENERAL SERVICE)		
Service Reference: 855233006		
Customer Chrg 3-Phase		\$32.39
Distribution Chrg	10.80KW X \$11.69000	\$126.25
Regulatory Reconciliation Adj	10.80KW X \$-0.05000	-\$0.54
Transmission Chrg	10.80KW X \$7.86000	\$84.89
Strnded Cst Recovery Chrg	10.80KW X \$0.86000	\$9.29
Distribution Chrg	500.00kWh X \$0.02805	\$14.03
	1000.00kWh X \$0.02268	\$22.68
	3558.00kWh X \$0.01709	\$60.81
Transmission Chrg	500.00kWh X \$0.02840	\$14.20
	1000.00kWh X \$0.01068	\$10.68
	3558.00kWh X \$0.00573	\$20.39
Strnded Cst Recovery Chrg	5058.00kWh X \$0.00800	\$40.46
System Benefits Chrg	5058.00kWh X \$0.00743	\$37.58
Subtotal Delivery Services		\$473.11

Bill Component	NEM 1.0 (Standard NEM)	NEM 2.0 (Alternative NEM)
Customer Charge	Yes	Yes
Demand Charge (if applicable)	Yes	Yes
Default Service (Energy)	Full Credit	Full Credit
Distribution	Full Credit	25% Credit
Transmission	Full Credit	Full Credit
System Benefits	Full Credit	No Credit
Stranded Cost	Full Credit	No Credit
Storm Recovery	Full Credit	No Credit
Credit Mechanism (end of each billing cycle)	Net kWh Carried Forward	kWh converted to monetary credit. Monetary credit carried forward as a bill credit.

- Electric bills have charges for supply, distribution, etc.
- DPU sets which costs are credited when you sell to Eversource
- Different schedules according to size of installation
- Current buyback price is 50%-70% of sale price

# Solar Issues to resolve

- What capacity do we need ?
  - Current annual usage = 105,000 kWh
  - Possible expansion for new HVAC, library, elect vehicles
- Where can we put system for main campus?
  - Need 6000sf to support current usage
  - Roofs not facing optimally
- Possible joint installation at Precinct
  - Install at Precinct and pay Eversource to deliver
  - Legal and financial arrangements
- Financing:
  - PPA v purchase
  - What processes needed - warrant article ?

# Campton Community Power




- Status:
  - Researching possibilities
  - Met with representatives from Community Power Coalition of NH
- Next steps:
  - Select board authorization needed to join coalition. No obligations or costs associated with membership.



# What is community power ?

- Electric bills have separate charges for Supplier and Delivery

Supplier		
Eversource		
Service Reference: 855233006		
Energy Chrg - Rate G	5058.00kWh X \$0.08826	\$446.42
<hr/>		
Subtotal Supplier Services		\$446.42

- Delivery is via public utility like Eversource
- Consumers can shop for suppliers, but most use the Default such as Eversource
- NH Law allows towns to create local organizations that become the default energy supplier in their community
  - Towns then work with non-profit state organization to negotiate bulk purchases on behalf of those consumers

# Why set up community power ?

- Bulk purchasing typically reduces supply costs by 10%
- Town can decide how to disperse savings
  - pass savings to consumers
  - increase use of renewable sources
  - fund other town programs
- Consumer protection
  - Only default users affected. Anyone can opt out
  - Contracts approved by town only if they save money



# Protection of Vulnerable Citizens during Emergencies

- Projects:
  - Help create database of vulnerable citizens for use by emergency responders
  - Assist with wellness checks and other actions to insure safety during emergencies
- Status:
  - Project identified in 2021 climate adaptation report
  - Current climate committee members include health professionals and trained planners
  - Need to support from Select Board to work with appropriate town emergency responders



# Why provide special support ?

- Many NH towns such ([Seabrook](#), [Merrimack](#), [Hanover](#), etc.) already create these lists and use them to improve responses to weather-related emergencies
- The [CDC guidelines](#) for emergency managers recommends developing and using these lists.
- Fire Chief Defosses expressed interest in idea in discussions with committee in 2020

# Interface with Town Committees

Examples of possible topics for discussion:

- Fire Dept: road access & support for vulnerable citizens during emergencies
- Planning Board: planning for population growth from climate immigration
- Zoning Board: Use of RiskFactor maps in setting up zoning
- Highway Dept: Setting up projects to optimize chances for BRIC funding for 2023 application