



# Thetford Community Solar Forum

Thetford Energy Committee



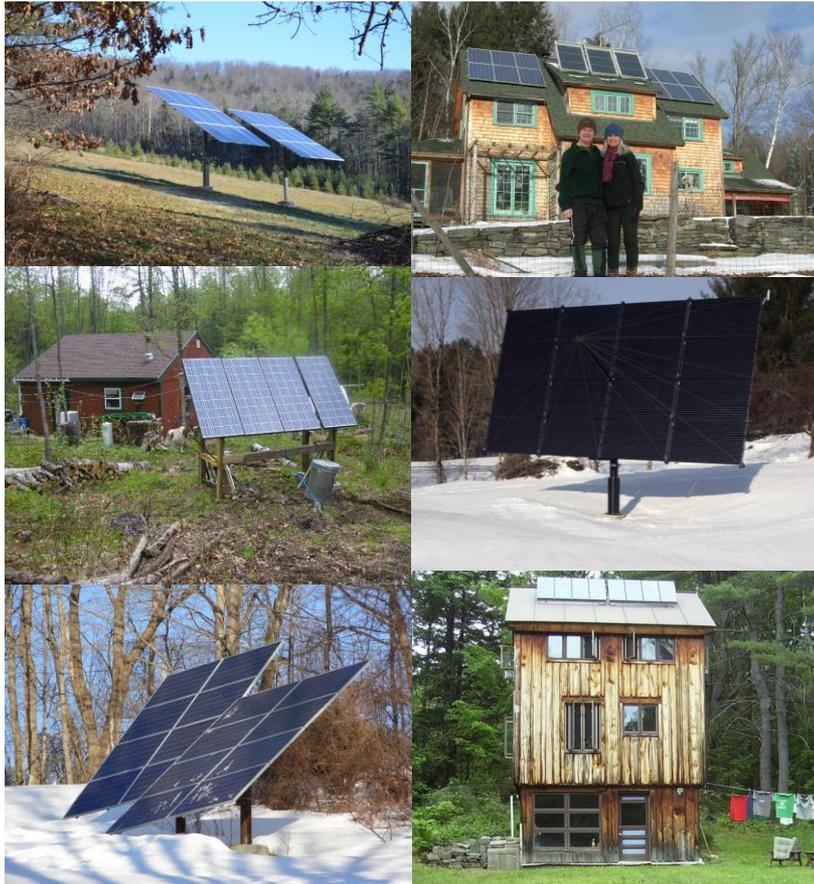
# Purpose

The purpose of this forum is to...

- Educate Thetford residents about community solar
- Describe participation options, including town-owned projects
- Survey the town's interest to inform TEC action



# Thetford Going Solar!



- More than **220 kW** of solar panels have been installed for **42 Thetford households** through Solarize and spinoff projects
- New 141 kW solar array developed for TES

# Why go Solar now?



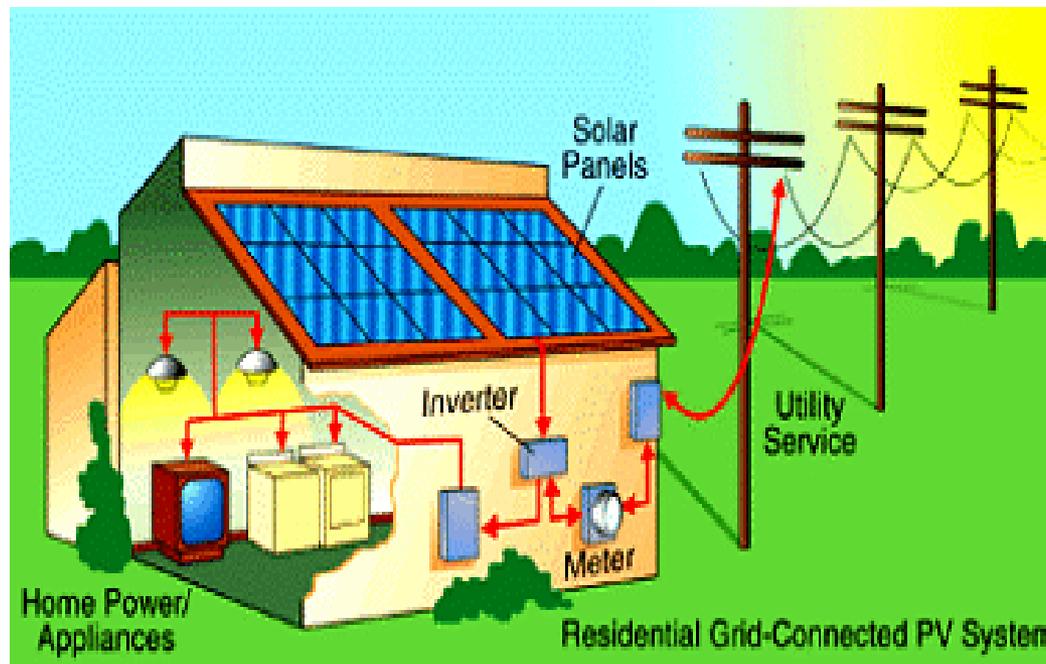
- Prices for solar have dropped dramatically in recent years
- 30% Federal Tax Credit expires at end of 2016
- GMP Production Incentive (“Adder”)
  - 15 kW or smaller: 5.3 cents/kWh for 10 years
  - Larger than 15kW: 4.3 cents/kWh for 10 years
- Typical savings of 10% or more on electric bills

# Sizing Your System



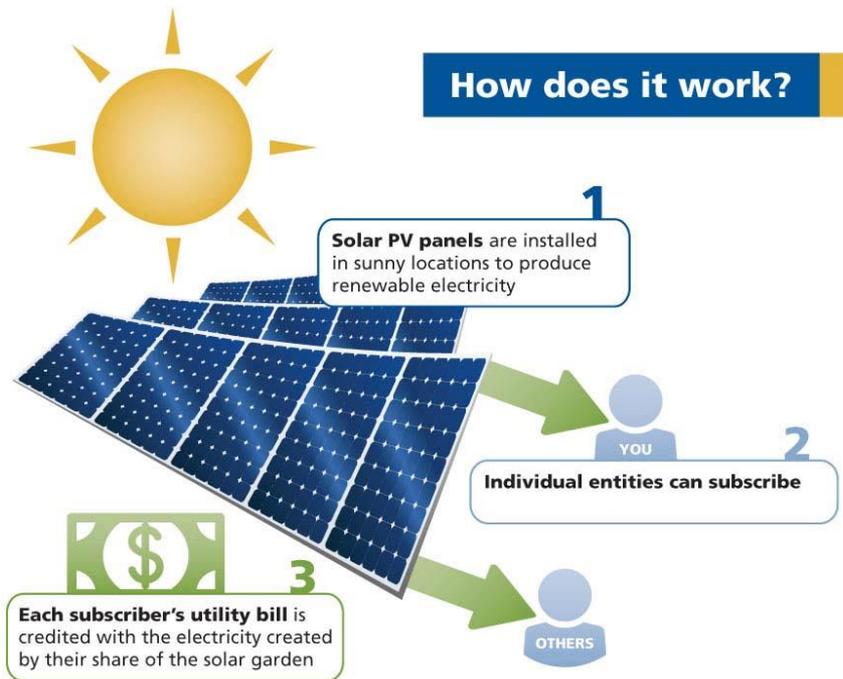
- No compensation for production more than usage
- Average residential systems about 5 kW
- Smaller/partial usage coverage possible
- Incorporate Efficiency Measures – cheaper than renewables
- Consider Future Electric Needs
  - Heat Pumps
  - Electric Vehicle

# What is Net Metering?



- Allows electric customers to offset power costs by connecting customer-owned renewable generators to the utility grid

# What is Group Net Metering?



- Allows individuals within one electric utility territory to form a group, to receive credit on their electric bills for the energy generated from a single renewable power project
- Advantages:
  - Allows individuals with poor sites to get renewable power from an optimally located project
  - Minimizes interconnection agreements
  - Brings economy of scale to project pricing

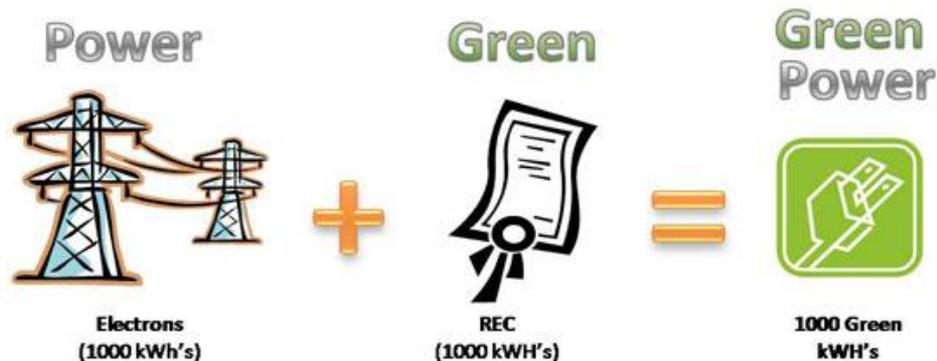
# Is GNM For Me?

GNM might be right for you if...

- Roof is not properly oriented for solar or have structural limitations
- Do not have land for a ground mounted array
- Don't want onsite solar



# Renewable Energy Credits (RECs)



- All grid-tied renewable-based electricity generators produce two distinct products:
  - Physical electricity
  - RECs - the environmental, social and other nonpower qualities of renewable electricity generation
- If the physical electricity and the associated RECs are sold to separate buyers, the electricity can no longer be called “renewable” or “green”

# RECs and You



- There are two options for a group net meter solar project...
  - Keeping the RECs enables you to claim the environmental benefits of the project
  - Selling the RECs may bring you more financial advantage

# Participation Options

- There are 3 typical ways to participate in a GNM project...
  - Leasing
  - Owning
  - Hosting

# Leasing vs. Owning Considerations



- Leasing
  - Usually no money down with monthly payments
  - May be more flexible – easier in and out
  - Smaller long-term savings
  - Typically does not include 30% Federal Tax Credit
  - Is there is an option to buy? When?
- Owning
  - Greater lifetime savings
  - Potential for no monthly payments
  - Various terms of ownership
  - Understand what you will own
  - May include 30% Federal Tax Credit

# Hosting Considerations



- May include decreased electric costs
- May include lease income for land
- Issues to consider
  - Fencing?
  - Effects on property value?

# Considerations for all Options



- Operation, maintenance, warranty and insurance
- Cost and removal at end of system life
- What happens if you move out of utility area
- How does billing work

# TEC Plans

- TEC is working on developing a Thetford solar GNM site for Thetford residents
  - We need your input!
  - Please fill out survey at TEC table so we can establish the level of community interest and identify individuals interested in hosting potential sites
  - For more info on Thetford GNM, contact Mike Kiess, [michaelkiess@gmail.com](mailto:michaelkiess@gmail.com) or 785-2438