

# Carroll County

## Solar Advisory Overview

March 23, 2021



# Advisory Services Overview

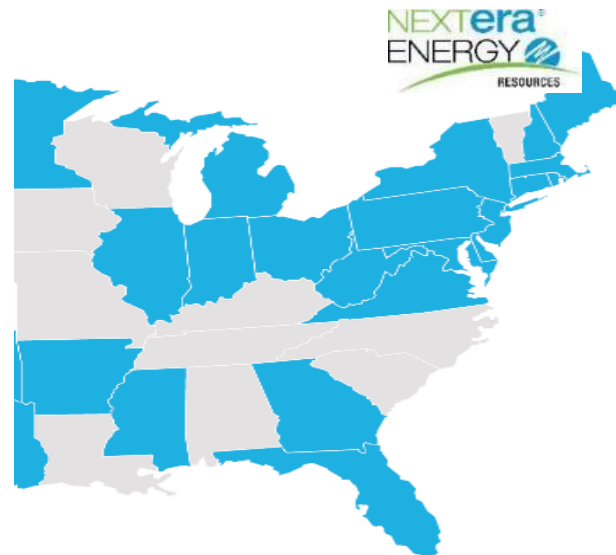
Given the current New Hampshire solar market, Usource believes there is an opportunity for an economical solar array in Carroll County

- ▶ Usource Introduction – Renewable Energy Consulting
- ▶ Why Solar for Business
- ▶ Onsite Solar & Community Solar
- ▶ Purchase vs. Power Purchase Agreement (PPA)
- ▶ The Solar Process
- ▶ Usource Expertise

# Renewable Energy Consulting

Delivering energy procurement and cost management solutions

- We're part of **NextEra Energy Resources**
  - Fortune 200 company subsidiary
  - Largest producer of wind and solar energy
  - World-class energy expertise
- Serving nearly **1,000 clients** in 24 states
- Providing **integrated energy solutions**



Renewable  
Energy



Procurement &  
Risk Management



Energy Strategy

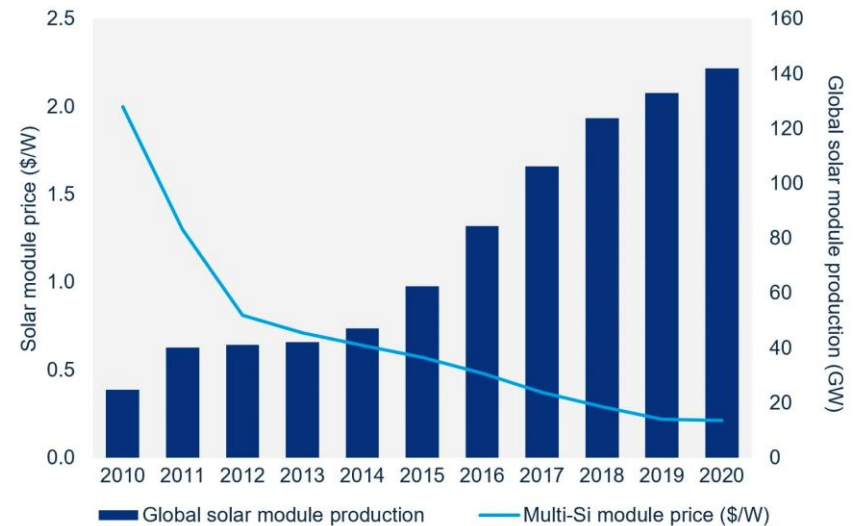


Energy Efficiency

# Why Solar for Business?

Safe, clean, reliable & well-understood energy technology

- Sustainability planning is becoming “table stakes” for businesses and municipalities
- Safe, well-understood, reliable technology can have significant economic benefits
- Cost is significantly lower today, and there are many ways to purchase or finance solar systems
- Long term control over energy spend and budget predictability
- Demonstrates your organization’s commitment to sustainability



1) Source: [Wood Mackenzie](#)

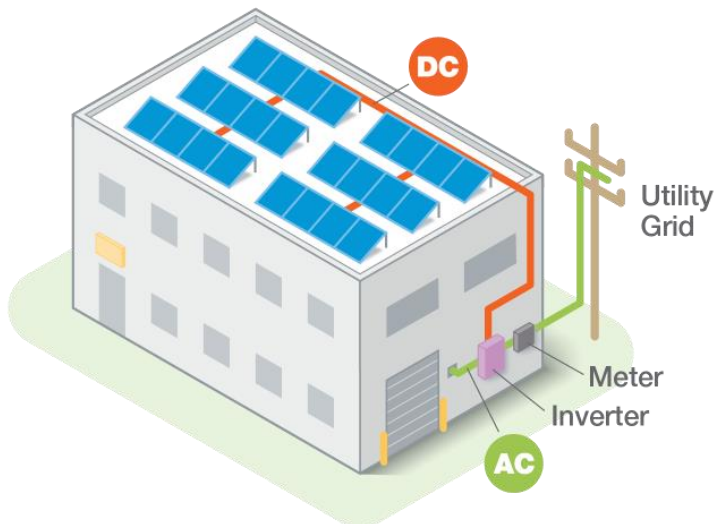
# Onsite Solar

## Behind-the-Meter

### ► Onsite solar options:

- Ground-mounted on your land
- Erected as canopies over property or parking lots
- County-owned rooftops

### How it works:



# Community Solar

A well-established technology with significant economic benefits.



- **No need for roof or land space**  
There is no onsite construction. You tap into solar energy savings from panels located off site in a different location.
- **No upfront costs**  
There is no out of pocket expense. You subscribe to a community solar program and save on your bill — you do not purchase panels. It may even be of value to explore leasing your land to a developer for utility scale solar.
- ▶ **Reduced energy bills**  
As soon as you are a project subscriber, you get a direct discount on your electricity bill every month of approximately 10%.
- ▶ **Environmental & community support**  
Participating in Community Solar promotes solar and renewable development locally. Demonstrates your commitment to clean energy and supports the regional economy.

# Cash vs. PPA

The County can either purchase a system or “lease” the system through a Power Purchase Agreement

	PPA	Cash
Pro	<ul style="list-style-type: none"><li>• No CapEx</li><li>• Third party monetizes tax benefit</li><li>• No O&amp;M or ownership risk</li><li>• There are buyout provisions</li></ul>	<ul style="list-style-type: none"><li>• All system benefits go to County</li><li>• Long term cash flows are significant</li><li>• County can finance with long-term municipal credit or bond</li><li>• System O&amp;M is required, but low risk and very manageable</li></ul>
Con	<ul style="list-style-type: none"><li>• Long term contract</li><li>• “Take or Pay” structure</li><li>• Some economic risk relative to utility pricing</li><li>• Generally, less savings over time</li></ul>	<ul style="list-style-type: none"><li>• Requires upfront capital</li><li>• Requires some operational attention (County responsible for maintenance of solar array)</li><li>• County forgoes tax benefits as they are tax exempt; but long term returns outweigh PPA option</li></ul>

# The Solar Process

Solar is complex and nuanced; having an advisor will streamline the process

Let us help you find the solution you've been looking for:



STEP 1

STEP 2

STEP 3

STEP 4

STEP 5

STEP 6

Usource identifies your needs and the right options for you

Usource writes your Request for Proposal (RFP) and sends it out to our network of qualified solar vendors

Usource gathers all vendor responses, evaluates the solutions and provides you with a recommended solution

You decide on the best solution for your needs

Usource helps you evaluate and complete financing options

Usource provides you with guidance to complete the purchase contract



# Your Usource Team



## ▶ Steve Birndorf, Director Renewable Energy Consulting

Steve has more than 20 years of professional experience and is a seasoned energy and clean-tech executive with a foundation in consulting and analysis. Prior to joining Usource/NextEra Consulting, he worked as a developer for a national solar company and later founded the commercial solar division for a different national integrator. Steve has developed, financed and advised on more than \$250M of commercial/industrial solar projects, primarily to private industry, municipalities, school districts and water agencies. He graduated from the University of Pennsylvania and earned his MS and MBA from the University of California at Berkeley.



## ▶ Tom Dyer, Senior Director Procurement & Analysis

Tom has 19 years of experience in the energy markets, including working for two of the largest energy suppliers on the East Coast, Hess and Sprague. Tom has extensive expertise in natural gas supply, interstate transportation, and electricity markets on both the wholesale and retail levels. For the past seven years, Tom has managed all aspects of electric and natural gas procurement for large Usource commercial and industrial customers behind numerous utilities. Tom has a BS in finance from Franklin Pierce College.



## ▶ Maureen Callahan, Director of Client Engagement

Maureen develops energy procurement and management strategies with mid to large-size commercial and industrial consumers of electricity and natural gas throughout the US. Maureen is a graduate of the School of Industrial Management at Worcester Polytechnic Institute and holds a degree in Public Relations from Humber College in Ontario, Canada. She is a Certified Energy Professional and chairs the NH Chapter of the England Women in Energy and the Environment. Maureen is also a member of the Association of Energy Engineers, and serves on the manufacturers and end users committee of the Business and Industry Association of NH.



## ▶ Jeny Parakkattil, Director Distributed Generation

Jeny consults and advises commercial customers on various renewable solutions, primarily solar. She evaluates quantitative and qualitative customer impacts including on load and economics before and after implementing renewables solutions and provides valuable analysis on the results. Previously, she worked in operations and analytics for a solar financial services company where her primary role centered around analyzing data and improving functions. Jeny graduated from Columbia University and earned her MBA from the University of Chicago Booth School of Business.

# Thank you!



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