

# ReVision Energy

Community Solar Farms (CSFs)

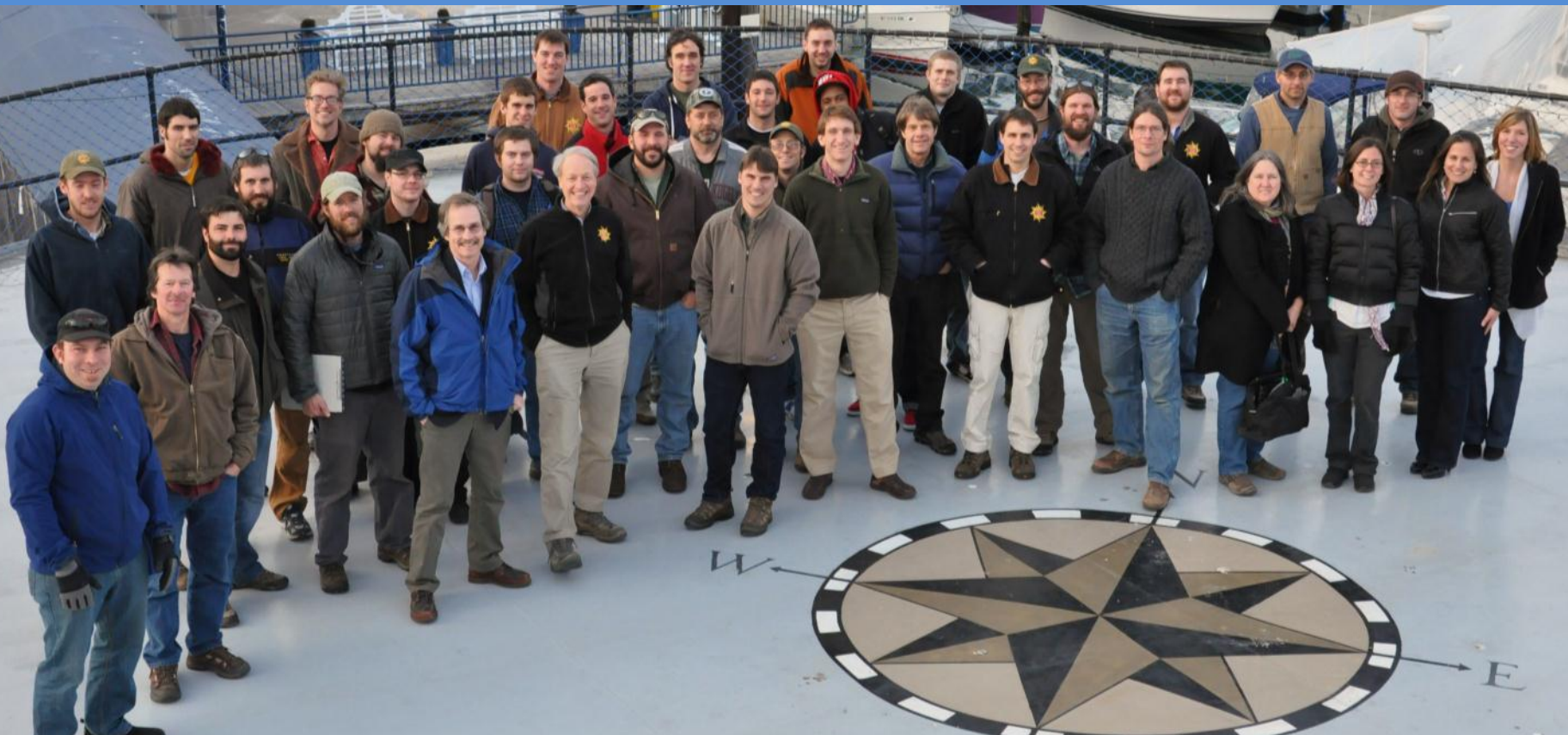
&

Power Purchase Agreements (PPAs)



# Who is ReVision Energy?

Engineers:	Brown, Dartmouth, MIT, UNH
NABCEP:	8 Certifications
Solar Certifications:	90% of employees
College Degree:	95% of employees
Projects:	More than 3,500 solar energy systems



## ReVision Energy's Mission...

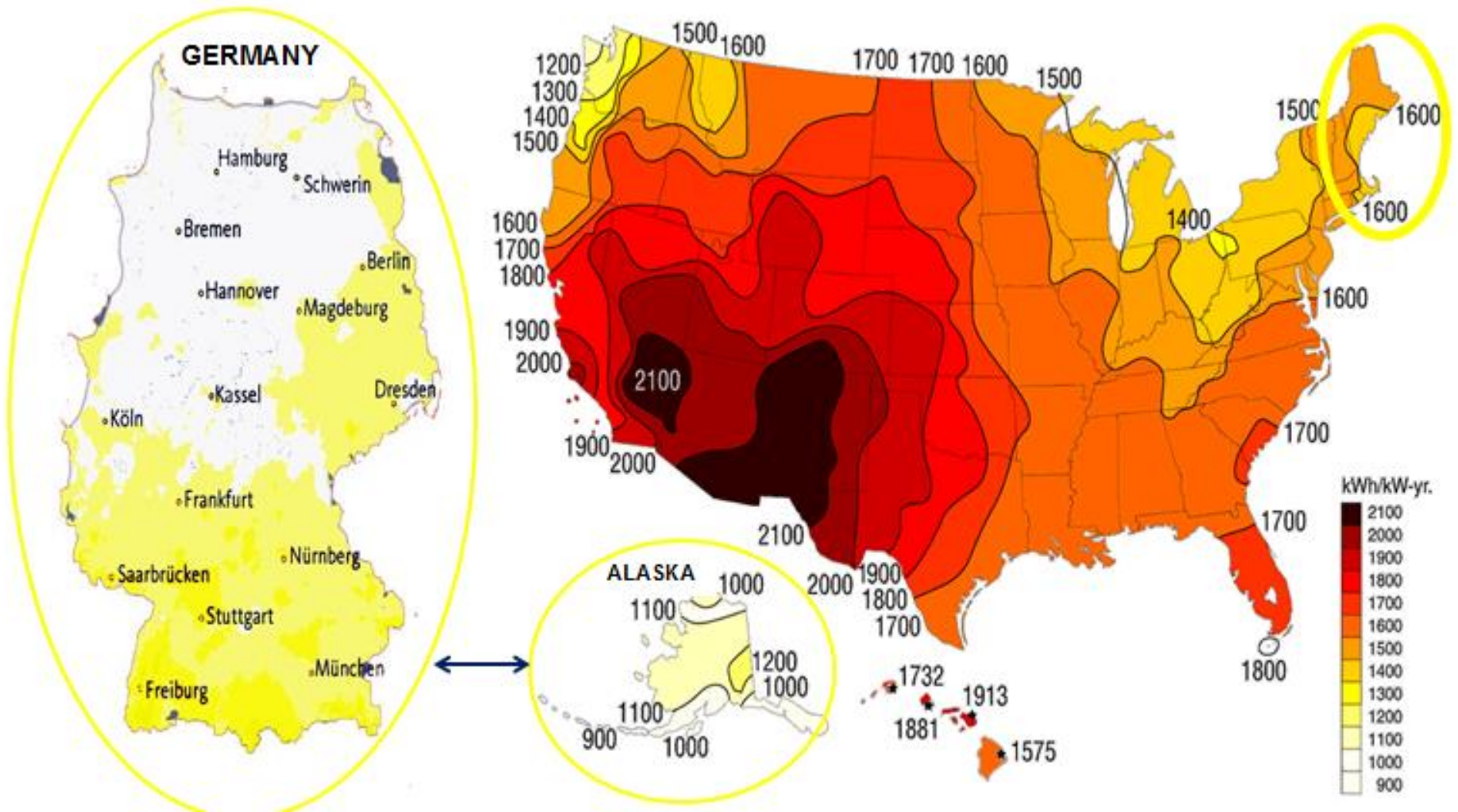
To accelerate the transition of northern New England to clean, renewable energy sources.



74 kw array, Proctor Academy

# ME & NH receive 33% more sunshine per year than Germany, the world leader in solar energy deployment

Solar Energy Resource Maps for Germany and North America



**ReVision Energy practices sustainability and is continually innovating to solve regional energy problems, like the fact that 50% of emissions come from transportation.**



Roughly 9 solar panels provide enough electricity to power an electric vehicle for 12,000 miles annually.

Level II charging station delivers full vehicle battery charge in 4 to 8 hours depending on vehicle range.

# Community Solar Farms

Cost-effective clean energy for your community



50 kW Community Solar Farm  
South Paris, ME

# Why Community Solar Farms?

- + On-site solar is best if possible:
  - + Lowest install cost
  - + Lowest administrative cost
  - + Fastest return on investment
- + Owning a share of a CSF might be the solution if:
  - + The customer's home not well-suited for solar
    - + Excessive Shading
    - + Poor Orientation
  - + The customer does not own the home
    - + Home is leased
  - + The customer would prefer solar not be located on his/her home or property

# Benefits of Community Solar Farms

## + To Members

- + Optimized generation
- + Community approach
- + Economy of scale
- + Zero impact to your property
- + Portability of investment

## + To Host

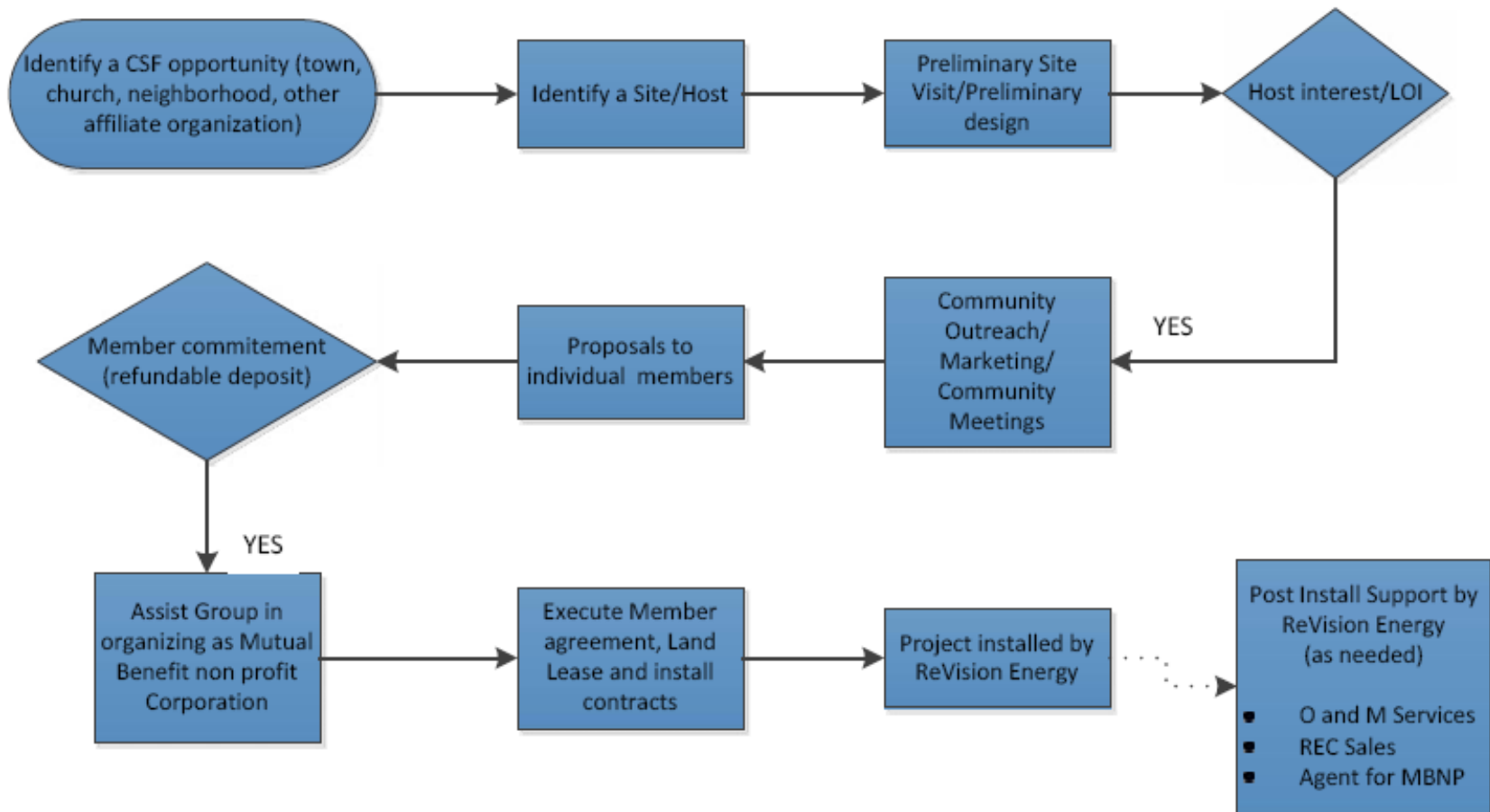
- + Environmental stewardship
- + Modest income stream



# What is a CSF?

- + A Community Solar Farm (CSF), is a shared solar array which produces clean solar power and feeds power onto the grid via a dedicated electric service (host meter).
- + Up to nine customers within the same utility territory as the host meter can join the CSF by purchasing a share.
- + Each customer (shareholder) then owns a share of the solar array and the electricity that it produces. The electricity is credited directly to each shareholder's bill through group net metering.

# CSF Development Process



# Sample CSF Scenario

## + CSF Design:

- + Project Size: 50 kW
- + Annual Generation: 60,000 kWh
- + Project Cost: \$175,000

## + Economics of 5 kW share:

- + \$17,500 (10% share) - \$5,250 (30% tax credit) = \$12,250 (net investment)
- + 6,000 kWh/year x 15 cents/kWh, = \$900 (annual savings)
- + Simple Payback Period = 13.6 years
- + Ongoing Income & Expenses
  - + REC Income ~ \$230/year
  - + Organization, Landowner Lease, Insurance, Utilities ~ \$200-\$300/year
  - + Optional Expenses: Annual Inspection/Report, CSF Administration, O&M Reserve Fund

# Solar PPAs

Cost-effective clean energy for schools, non-profits & municipalities



19 kW Solar Array  
Public Library, Durham, NH

# Why Solar PPA?



- + Outright Purchase not feasible for schools, governments, non-profits:
  - + Unable to monetize tax benefits, which cover >50% of project cost.
  - + Typical payback period without tax benefits ~20-25 years
  - + Cannot afford upfront investment

# What is a PPA?

- + Third party investor:
  - + Leases roof or land from non-profit host
  - + Finances, owns and operates solar array for at least six years
  - + Recoups its investment by: Monetizing 30% ITC, Depreciation & RECs
  - + Sells power to non-profit host
- + Host:
  - + Leases roof or land to investor
  - + Purchases power from investor-owned solar array
  - + Holds net billing agreement with utility
- + Benefits to host:
  - + Purchase green power at no upfront cost
  - + Valuable educational/marketing tool
  - + Options to purchase project after year 6 at FMV

# A Cost Effective Path to Ownership

## Capturing Tax Subsidies for Municipalities and Non-Profits Using *PPAs*



Pass-thru tax benefits and  
earnings to investors

# PPA Development Process

- + ReVision Prequalifies Project
  - + Site review- 50 kW minimum
  - + Load, rate analysis
- + ReVision Designs project
  - + Drafts project rendering
- + Investor Generates Offer
  - + Includes annual rate schedule
- + Investor/Host Negotiate PPA contract



“Every cent that we save on this electric bill will go to scholarships for kids who need help. That’s the biggest win for us.”

*Glenn Cummings, President*



**Good Will Hinckley School**  
*25 kilowatt Grid-Tied Solar PPA*

“Our inspiration was to take a positive and significant step in the solar energy arena as part of our college's strategic and very real commitment to living sustainably. The community reaction has been fantastic. We could not be more pleased..” *Tom Galligan, President, Colby Sawyer College*



Colby Sawyer College - New London, NH  
*5 rooftop, 126 kilowatt Solar PPA*

“That [energy] plan seeks to provide Thomas College with diverse renewable energy sources that will lower long-term energy expenses and keep tuition costs down. ” *Laurie Lachance, President*



Thomas College – Waterville, ME  
*170 kilowatt Grid-Tied Solar PPA*

# *Solar for Maine and New Hampshire Towns*

*110 kW – Boothbay, Maine*

*119 kW - Durham, NH*

*41 kW - Eliot, Maine*

*40 kW – Windham, Maine*

*28 kW - Yarmouth, Maine*

*21 kW - South Portland, Maine*



*Fire Station – Windham, ME*  
*40 kilowatt Grid-Tied Solar PPA*



Public Works— Eliot, ME  
*41 kilowatt Grid-Tied Solar PPA*



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