



GOING SOLAR PANEL

SRPC Annual Meeting
June 22, 2023

TODAY'S AGENDA

- Presentations
 - Shanna Saunders
 - Sherrie Trefry
 - Josh Elliott
- Panel Questions
- Attendee Question

Zoning for Solar in the City of Rochester



City of Rochester history of solar permits

Last two years:

- 223 permits
- 3 residential tracker systems
- 4 commercial tracker systems
- 5 residential other-ground mount
- 211 Roof mount systems

In May the Council adopted a Solar Ordinance

Definitions are separated into Accessory and Primary Solar uses:

- Accessory Solar: Intended for on-site consumption of solar energy produced.
- Primary Solar: The majority of power produced would be sold off-site

Accessory Use

Accessory Residential

primarily reduce on-site consumption of utility power with a rated nameplate capacity of 25kW AC or less

Accessory Commercial

intended to primarily reduce on-site consumption of utility power with a rated nameplate capacity of 100kW AC or less.

Accessory Industrial

intended to primarily reduce on-site consumption of utility power with a rated nameplate capacity of 100kW AC or less

Accessory Use

Permitted in all zones, some by Conditional Use Permit or Special Exception

Regulations cover:

Minimum lot size, Height, Setbacks, Visibility/Screening,
Stormwater

Primary Use

Community Solar

one or more free-standing, ground mounted, or roof mounted solar collection systems up to 250 kW AC.

Commercial Solar

one or more free-standing, ground mounted, or roof mounted Solar Collection Systems with a rated nameplate capacity of up to 1 MW AC.

Utility Solar

one or more free-standing, ground mounted Solar Collection Systems larger than 1MW AC

Primary Use

Permitted in almost all commercial zones, mostly by CUP or SE

Regulations cover:

Visibility/Screening, Noise, Vegetation Management, Stormwater, EMS
Response

Issues

- Visible large solar installs in Residential areas – perceived property value vs. don't tread on me mentality – no ordinance needed
- And then: Decommissioning



Siting & Permitting Solar in NH

Presented by
Sherrie Trefry, CSS

June 22, 2023

Siting Solar

Brownfields versus Greenfields

Screening Sites

NH Permits





Siting solar on developed sites



Siting solar on landfills



Landfill Solar Facility

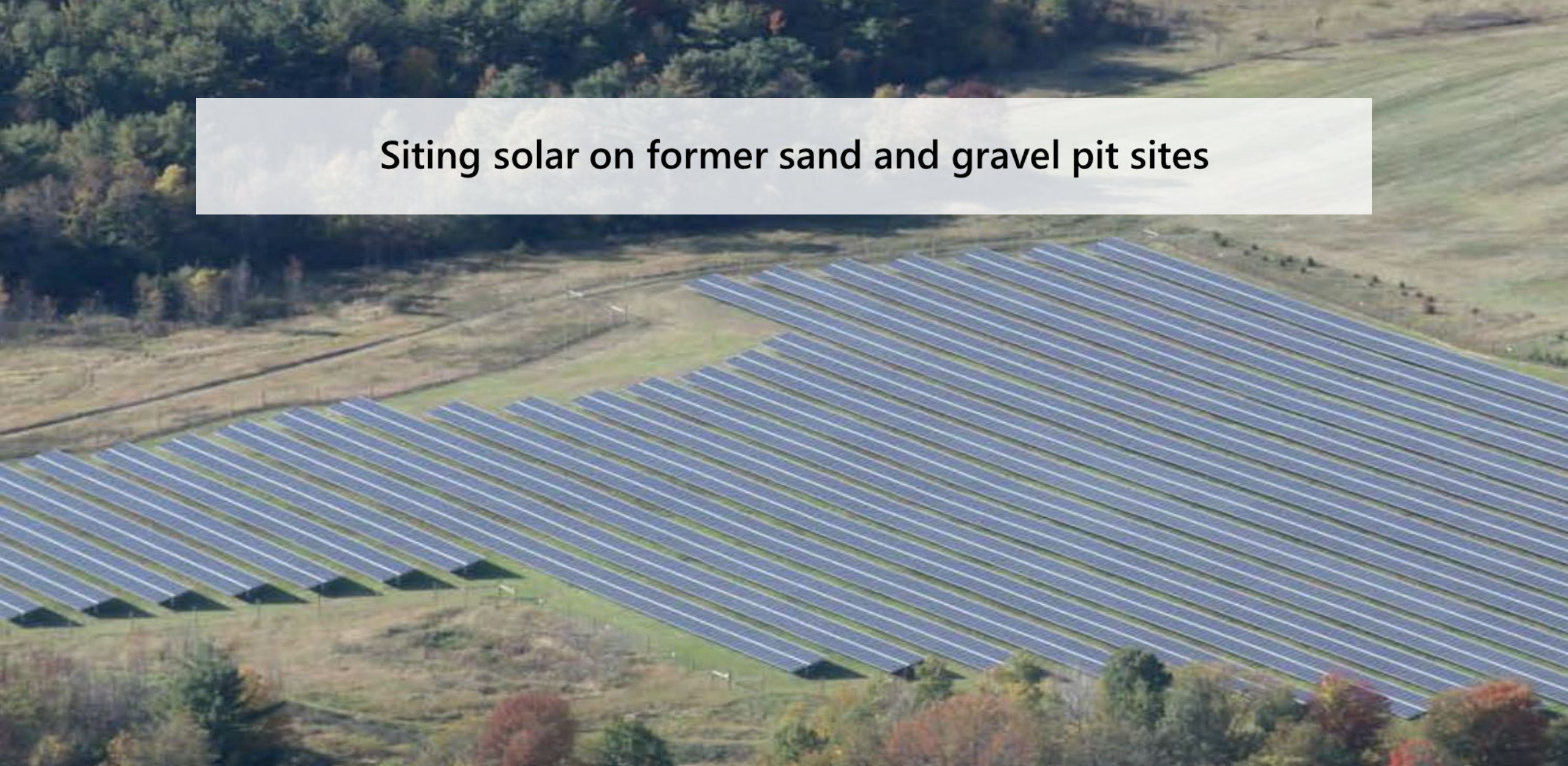
Canton, MA | Southern Sky Renewable Energy, LLC

An aerial photograph showing a large-scale solar carport project. The structure consists of multiple long, parallel rows of solar panels supported by metal posts, covering a significant portion of a parking lot. The surrounding area includes green fields, trees, and other buildings in the distance. A white text box is overlaid at the top center of the image.

Siting solar on existing parking lots

Eastern Long Island Carports

Suffolk County, NY | Enxco



Siting solar on former sand and gravel pit sites

CleanGen Partners, LLC

East Brookfield, MA

Screening Sites

Wetlands

Shoreland

Contaminated Sites

Interconnection



On-Line Tools and Resources

- NH GranitView
 - National Wetlands Inventory
 - Protected Shoreland
 - Floodplains
- DES OneStop Data Mapper
 - Remediation Sites
 - Solid Waste Facilities
 - Asbestos disposal sites
- NHDES Website
 - SWQPA waterbodies
 - Designated rivers
 - Prime wetlands
- BMP Manual for Utilities
 - Guidance to ID resources

Best Management Practices Manual for Utility Maintenance in and adjacent to Wetlands and Waterbodies in New Hampshire

4. Resource Identification

4.1 Wetland Types

Wetlands are defined as those areas that are inundated or saturated at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.

Wetlands tend to be located in depressions, at the toe of slopes or in other areas where one might envision water collecting. Wetlands in New Hampshire are identified using a three-parameter approach of 1) hydrophytic (wetland) vegetation, 2) hydric soils and 3) wetland hydrology. With the exception of heavily disturbed sites, all three parameters are required for an area to be considered a jurisdictional wetland.



Figure 1: Shallow Emergent Marsh Wetland System

NH Permits

- NHDES Wetlands Permit Application
- Shoreland Permit Application (250' buffer)
- Alteration of Terrain Permit Application
- Local Zoning Ordinances
 - site plan approval
 - wetland and surface water overlay districts

Funding and Policy Opportunities for Local Governments Pursuing Solar

JOSH ELLIOTT

DIRECTOR, DIVISION OF POLICY AND PROGRAMS

NEW HAMPSHIRE DEPARTMENT OF ENERGY

State Incentives and Programs

- Renewable Energy Fund Rebate Program:
 - Up to \$10,000 rebate for installing a solar array
 - Must be certified to mint renewable energy certificates (RECs)
 - <https://www.energy.nh.gov/renewable-energy/renewable-energy-rebates/commercial-industrial-solar-incentive-program>
- Renewable Energy Certificates (RECs)
 - Sale of the renewable attributes of generated electricity
- Municipal Net Metering
 - Municipalities can net meter on facilities up to 5MW.
 - HB 281 is pending which would remove geographic restrictions
 - For a municipality, this is usually done through group host net metering
 - <https://www.energy.nh.gov/renewable-energy/net-metering-and-group-net-metering/group-net-metering>

Federal Programs – Formula

- Energy Efficiency Conservation Block Grants (EECBG)
 - Direct Award the State: \$1,641,260
 - At least 60% must be sub granted to local units of government that do NOT receive a direct appropriation
 - Direct Awards to Cities and Counties:
 - Rochester: \$76,080
 - Dover: \$76,090
 - Strafford County: \$77,200
 - Eligible Uses:
 - Very flexible funds, everything from energy efficiency projects to solar installations

Federal Programs – Competitive

- Energy Improvement in Rural or Remote Areas:
 - **Funding:** \$1 billion available nationwide in total
 - \$200 million each year through 2026
 - **Who can apply?** Cities and towns under 10,000 population
 - **Solar?** Eligible uses include installation of solar
 - **When can I apply?** Next application period: likely mid-2024
- Grants for Energy Efficiency and Renewable Energy Improvements at Public School Facilities
 - **Funding:** \$500 million available nationwide,
 - Tranches released every year; \$80 million released earlier this year.
 - **Who can apply?** Public schools are the eligible entity
 - **Solar?** Eligible uses include installation of solar
 - **When can I apply?** Next application period: 2024

Where can I find out more?

- Where can I find out more about these program?
 - Energy Efficiency Conservation Block Grants (EECBG) –State
 - More to come!
 - Energy Efficiency Conservation Block Grants (EECBG) – Direct
 - <https://www.energy.gov/scep/eecbg-program-formula-grant-application-hub>
 - <https://www.energy.nh.gov/rules-and-regulatory/funding/infrastructure-investment-and-jobs-act-programs-municipalities>
 - Energy Efficiency Conservation Block Grants (EECBG) – Competitive
 - <https://www.energy.gov/scep/energy-efficiency-and-conservation-block-grant-program-competitive-funding-announcement>
 - Energy Improvement in Rural or Remote Areas:
 - <https://www.energy.gov/oced/energy-improvements-rural-or-remote-areas-0>
 - Grants for Energy Efficiency and Renewable Energy Improvements at Public School Facilities
 - <https://www.energy.gov/scep/renew-americas-schools>

Things to consider with Federal \$\$\$

- Compliance with a whole host of federal requirements:
- Build America Buy America (BABA)
 - Requirements to use American made and built products in projects
 - Increased costs and issues with availability of products
- Davis Bacon (prevailing wage)
 - Less about the rate, more about the compliance
- National Environmental Policy Act (NEPA) & State Historic Preservation
 - Both are important steps, but reviews can slow down projects, especially if not within bounded categories.

Tax Provisions

- **DISCLAIMER:** NH DOE CANNOT and DOES NOT provide tax advice. Consult with a tax professional or tax attorney before making any decisions
- Inflation Reduction Act (IRA) contained several tax provisions related to energy efficiency and renewable energy projects
- IRA includes allowing non-tax filing entities to be eligible for said tax credits through ‘direct pay’ or ‘elective pay’
 - This includes nonprofits and municipalities
- US Treasury has issued draft guidance for how this will work
- Zoom Briefing: Thursday, June 29th at 3 pm
https://pitc.zoomgov.com/webinar/register/WN_n_QrgqNKQDqttJDf9DiuLA



PANEL QUESTIONS



THANK YOU!

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