

# WELCOME

## Welcome to the Shepherd's Run Solar Farm Virtual Informational Open House

Please be sure to join the Hecate Energy team  
on **April 28th, 2021** for the discussion panel  
of the Open House.

There are 2 convenient sessions that will be covering the same topics,  
**1:00 p.m. - 3:00 p.m.** or **5:00 p.m.- 7:00 p.m.**

You can find the invitation for these Zoom meetings at  
**[www.ShepherdsRunSolar.com/Open-House](http://www.ShepherdsRunSolar.com/Open-House)**



# ABOUT THE COMPANY

## Hecate Energy develops solar, wind and battery storage projects for our clean energy future.

- Hecate Energy develops clean energy power plants from planning and inception through construction and operation.
- Founded in 2012 by a team of energy industry veterans who have worked together for more than 25 years, Hecate Energy's team has developed thousands of megawatts of electricity generation projects across the United States.
- Hecate Energy has entered into over 2.1 gigawatts (powering approximately 1.35M homes) of renewable power purchase agreements since 2012 and has approximately 12 gigawatts of additional projects currently under development of which nearly 800 MW of projects are in New York State.



*"One of the most pressing issues of our time, climate change threatens the lives and livelihoods for all of us. Solar energy can help meet the growing demands of today's increasingly electrified society in a local, sustainable way."*

*Alex Campbell, Project Team*



# ABOUT THE TEAM

## Hecate Energy Team

- Alex Campbell, *Development*
- Jim McGowan, *Development*
- Diane Sullivan, *Environmental & Permitting Services*

## Public Outreach

- Steve Sullivan, *Power Communications*
- Will Backes, *Power Communications*

Hecate Energy is taking great care to ensure that the development, construction and operation of the Shepherd's Run Solar Farm benefits the community.

We encourage you to provide feedback on any questions, thoughts or concerns. You may contribute to that effort by participating in several ways:

**Contact:** [Alex Campbell, Project Development](#)

**E-mail:** [ACampbell@HecateEnergy.com](mailto:ACampbell@HecateEnergy.com)

**Phone:** [\(833\) 529-6597](tel:(833)529-6597)

**Visit the Shepherd's Run Solar Farm website:**

[www.ShepherdsRunSolar.com](http://www.ShepherdsRunSolar.com)

## Legal, Environmental & Engineering Team

- Tyler Wolcott, Read & Laniado, LLP, *Legal Team*
- Heather Valiant, TRC, *Environmental Team*
- Brian Schwabenbauer, *Environmental Team*



# OVERVIEW OF PERMITTING

## Overview of Siting & Permitting Law

- Shepherd's Run Solar Farm is proceeding under Section 94-c of the Executive Law of New York State. It provides for the review of new or modified major electric generating facilities by the Office of Renewable Energy Siting (ORES), housed within the Department of State.

## Key Provisions of the Law Include:

- All new renewable energy projects larger than 25 megawatts will be required to seek an approved permit through the ORES prior to construction.
- Creates a review and approval process specifically for large scale renewable energy projects.
- Regulations promulgated under the law address environmental impacts and identify potential mitigation measures to address those impacts.
- For each project, municipalities and community intervenors may apply for funds, provided by the developer and managed by the ORES, to defray the costs of reviewing the project and participating in the ORES process.

## Local Agency Account Funding

- For each project, local agencies and potential community intervenors may apply for funds to defray the costs of reviewing the project and advising the ORES on the project's compliance with local laws and potential environment, public health and safety impacts. The funds are provided by the applicant.
- Eligible local agencies include any municipality and other political subdivisions of the State that may be affected by the proposed major electric generating facility. At least 75 percent of the funds are reserved for local agencies. Potential community intervenors include persons residing in an affected community or non-profits with a concrete and localized interest that may be affected by the proposed major electric generating facility.
- Local agencies or potential community intervenors must submit a request for initial funding within 30 days of the date of the project's application to the Office of Renewable Energy Siting, at the Albany, New York office, Attention: Request for Local Agency Account Funding.
- Further information regarding the availability and rules for intervenor funding can be found at <https://ores.ny.gov/regulations> and in subpart 900-5 of the final ORES regulations.



# WHY 94-C?

## KEY PROVISIONS

Specifically  
for Renewables

Improved Process

Continued  
Community Involvement

### Why Change to 94-c?

Hecate Energy is transferring to 94-c for the Shepherd's Solar Project because the longtime siting process, Article 10, was originally designed for major fossil-fuel and other power plants and ill-equipped for solar. With the adoption of 94-c, the State Legislature provided a siting process more tailored to the unique characteristics of solar and other renewable energy facilities.

### Just the Facts:

- One of the main differences between 94-c and Article 10 is that 94-c requires less rigorous pre-application procedures. Hecate has already conducted all of the thorough Article 10 pre-application procedures.
- 94-c still requires extensive community engagement throughout the process. To date, the Project has conducted the wide-ranging pre-application community engagement activities that have exceeded the arduous requirements under Article 10 and the Project's Public Involvement Program Plan.
- The State's new comprehensive siting and permitting process continues to ensure a rigorous and responsible environmental review process and requires many of the same studies that were required under Article 10.
- Hecate is committed to continuing to work closely with local officials and the community during the 94-c siting process. We look forward to active engagement with Copake in the new process and delivering a Project that benefits the community, boosts the economy and protects the environment.



# ENVIRONMENTAL STUDIES

**Potential impacts are rigorously studied in the permitting process administered by New York State in conjunction with local stakeholders. Issues pertaining to community, wildlife, and wetland impacts, among others, are addressed as part of this comprehensive process.**

## Visual

- A common misconception about solar photovoltaic (PV) panels is that they inherently cause or create glare. Light absorption rather than reflection is the central function of solar PV panels. By design, glare is minimized because any light reflected is no longer available to be converted into electricity.
- Solar PV panels are constructed of dark-colored (usually blue or black) materials and are covered with anti-reflective coatings. Modern PV panels reflect as little as 2% of incoming sunlight. Glare impacts are not anticipated for the Project.
- Hecate Energy is committed to working with the adjacent landowners and the community to ensure minimal visual impact occurs. A vegetative landscape plan will be designed to screen the Project from highly visible areas.

## Wildlife

- Hecate Energy is focused on preserving wildlife habitat.
- The Project has undertaken environmental surveys to minimize adverse impacts to wildlife and will mitigate any adverse impacts of the Project to the maximum extent practicable.

## Additional Studies Conducted

- Land use, agriculture, wetlands and other water resources, soils, cultural resources, noise, transportation and socioeconomics are all studies that are currently being conducted by professionals hired by Hecate Energy.
- These studies will be included in the Section 94-c application and the results will be made available to the public.

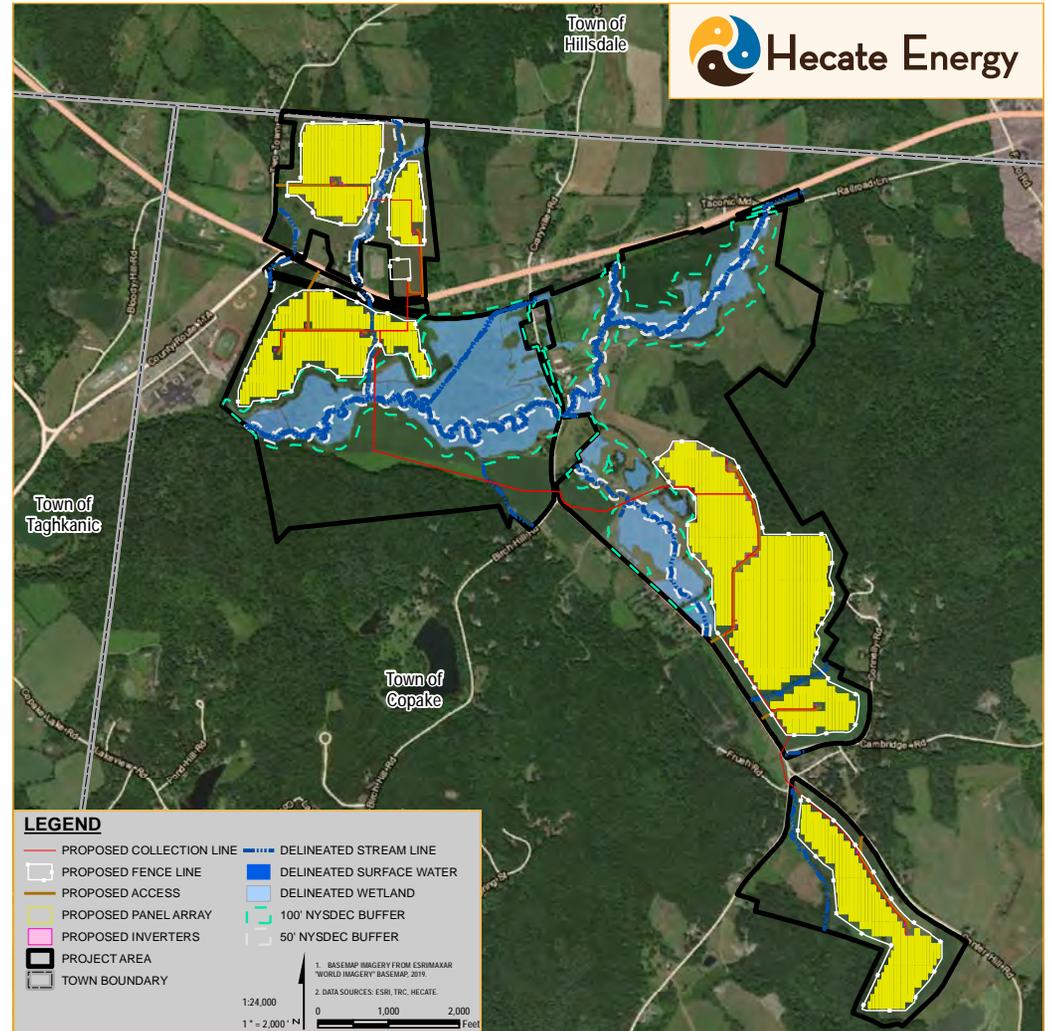


# PROJECT OVERVIEW

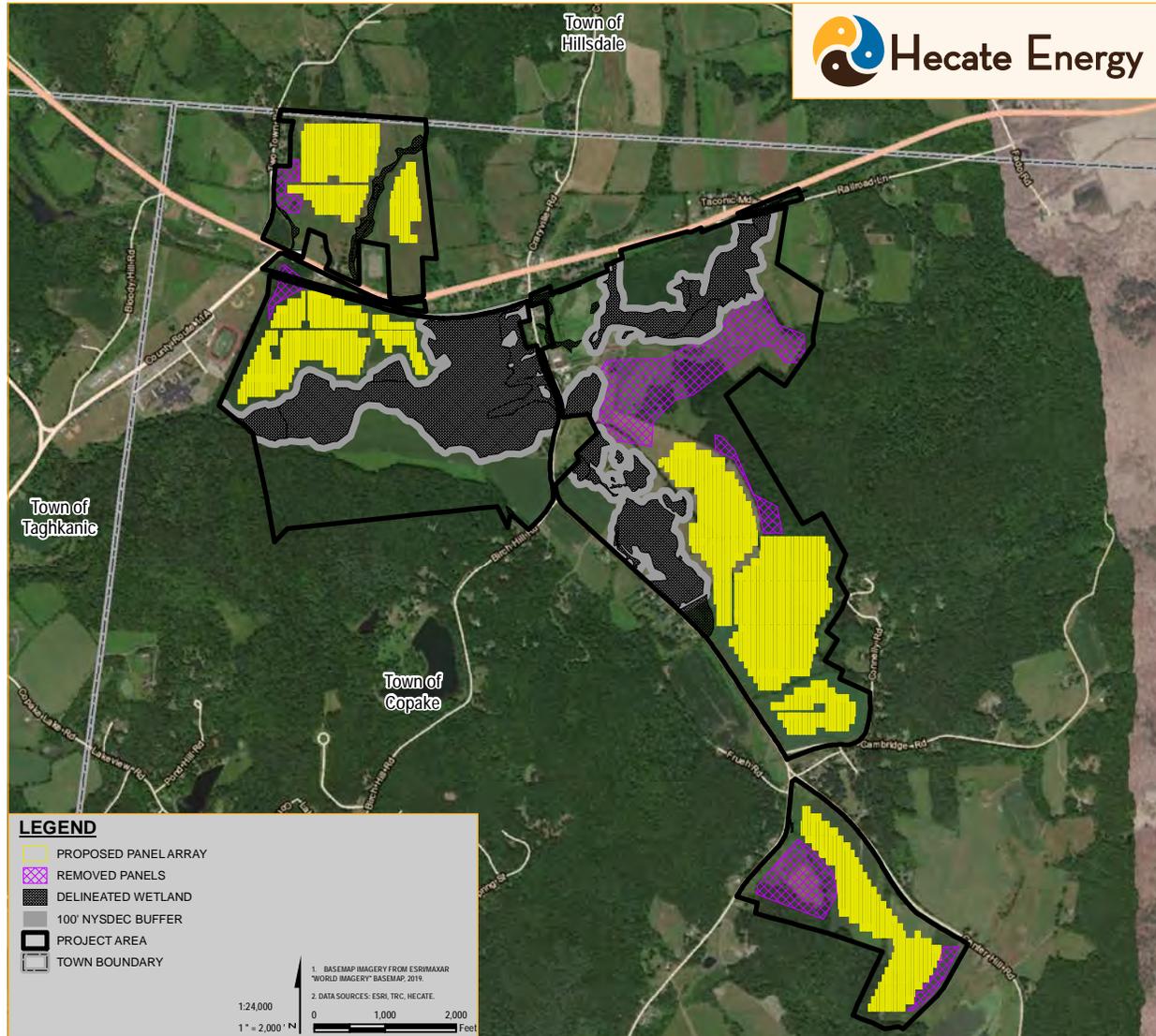
Shepherd's Run Solar Farm will support local farmers and provide renewable energy to Columbia County while protecting and preserving our clean air, water quality, and soil resources.

## Project Details

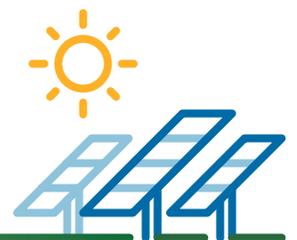
- 60 MW photovoltaic (PV) solar facility
- The facility will be built on several parcels east of Taconic Hills School District and north of Copake Lake. The Project footprint will occupy approximately 255 acres where the panels will cover 80.8 acres.
- Ground-mounted solar farm with PV panels on galvanized steel tracker racking structures
- Low-profile, approximately 10 feet high above grade at the tallest point (about the height of field corn stalks)
- Crystalline type panel commonly used for residential rooftop systems



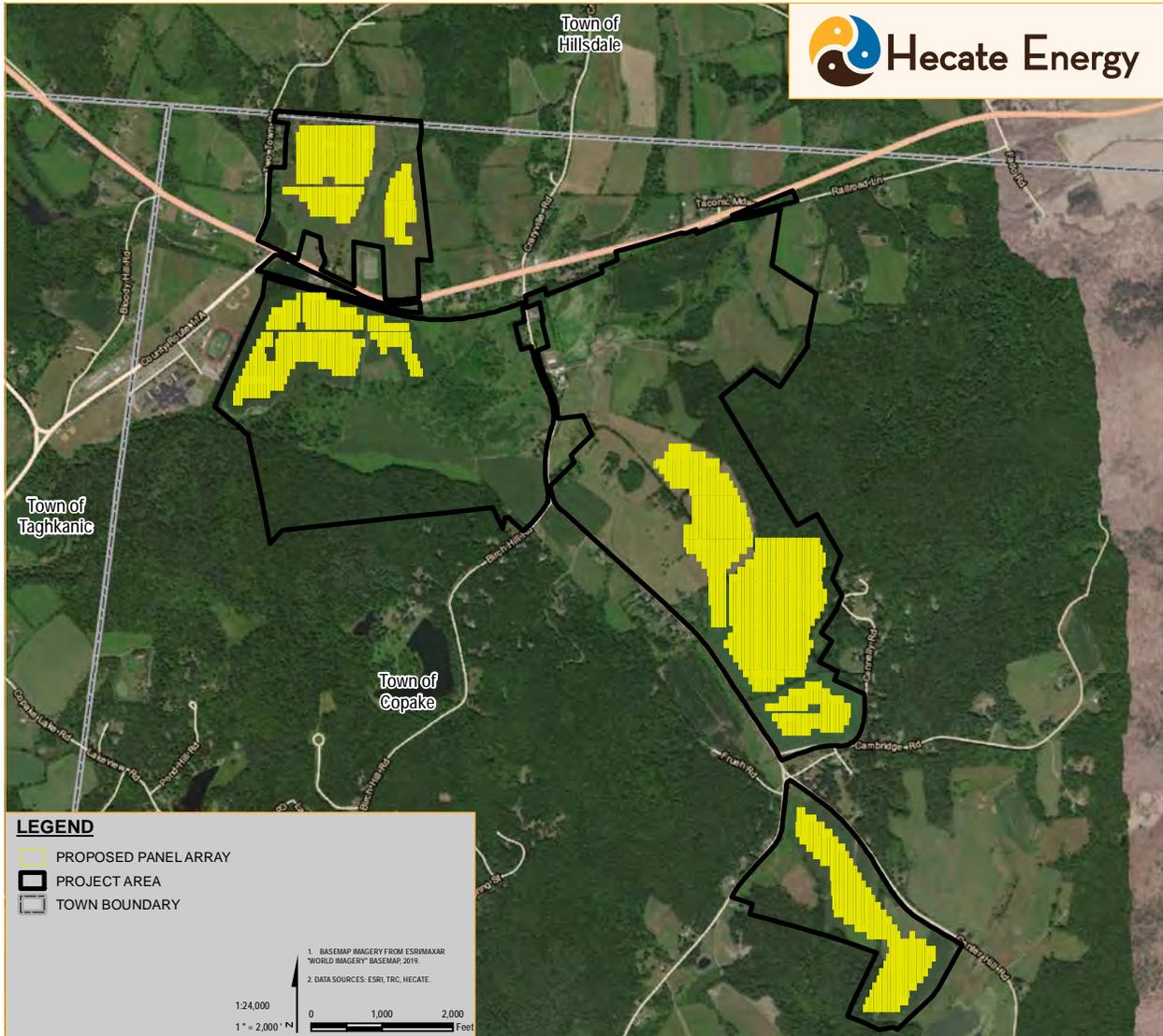
# PROJECT LAYOUT CHANGES



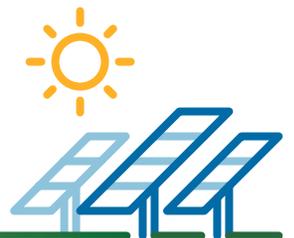
**Note:**  
*Eliminated battery storage component of the project.*



# THE PROJECT



Design Version	Total Acres	Inside Fence	Panels Only
<b>July 1, 2020</b>	<b>873</b>	<b>480</b>	<b>n/a</b>
<i>Percent of Total</i>	<i>n/a</i>	<i>54.9%</i>	<i>n/a</i>
<b>December 9, 2020</b>	<b>873</b>	<b>360</b>	<b>99.6</b>
<i>Percent of Total</i>	<i>n/a</i>	<i>41.2%</i>	<i>11.4%</i>
<b>April 28, 2020</b>	<b>873</b>	<b>255</b>	<b>80.8</b>
<i>Percent of Total</i>	<i>n/a</i>	<i>29.3%</i>	<i>9.3%</i>



# ECONOMIC BENEFITS

**Shepherd's Run Solar Farm will be a good neighbor supplying clean, affordable, renewable energy and an array of benefits for the community.**

## Employment Opportunities

- Approximately 200+ construction jobs will be created during peak construction.
- Local businesses and workers will be contracted for engineering, surveying, site preparation, construction and ongoing operation and maintenance support to the extent practicable.
- Co-development employment through Christmas tree farming, bee keeping, sheep grazing and wool product production.

## Local Economic Impact

- Hecate's investment will result in millions of dollars in positive economic stimulus including jobs created during construction and operations that will benefit local building trades, restaurants, lodging, gas stations, and stores.

## New Revenue

- Shepherd's Run Solar Farm will create a new revenue stream the community can use for services including the local fire department, ambulance company, and library.

### **How Will This Affect Reliability and Price?**

*Solar is one of the least expensive forms of electricity generation and its fuel, the sun, is free. As the price of other power generation grows, solar energy will help to mitigate overall electricity price increases.*



# CLIMATE CHANGE

Shepherd's Run Solar Farm will generate approximately 110,000 MWh of energy annually – that is enough to meet the average yearly electricity needs of 15,000 households.



**Climate change mitigation can't wait for COVID-19 to play out.**

*"Last year was recently declared the hottest year on record – for the 15th time in the past 16 years. New England is warming faster than any other region in the United States except Alaska, and we're already feeling the effects of climate change, from severe drought taking its toll on the iconic dairy farms of New Hampshire, to stronger storms and hurricanes battering the Coney Island boardwalk."*

*Environment America*

## New York's Emission Reduction Goals

New York generated about 206 million metric tons of greenhouse gas emissions in 2016

New York has considerable work to do to achieve the targets of the Climate Leadership & Community Protection Act (CLCPA)

### CLCPA goals:

**40%** emission reduction by 2030

**85%** emission reduction by 2050

Remaining 15% of emissions would be offset to make the state carbon neutral

**70%** renewables by 2030

**Hecate Energy actively supports clean, renewable energy to meet the goals of the changing landscape of electricity markets in New York and beyond.**

- The Project team is paying particular attention to the Project's design, balancing our society's clean energy goals with interest to the local community.
- The Project will offset nearly 85,745 tons of CO<sub>2</sub> per year, equivalent to taking over 18,205 average cars off the road.
- The Project generates approximately 110,000 MWh or 67% of Columbia County's demand.

