



Dual-Use Solar Energy Program: 2023 Update

**N.J. Pinelands Commission
Climate Committee Meeting
July 19, 2023**



Solar in New Jersey

- In July 2023, NJ surpassed 4.5 GW of installed capacity
 - 4.5 GW can generate ~5,193 GWh of electricity per year, or 7.11% of total retail sales
 - In the top 10 states nationwide for solar installed capacity
 - ~180,000 total solar installations statewide
 - 2022 record year for solar! (total 455 MW added, 800+ new commercial installations)
- Energy Master Plan targets:
 - 12.2 GW by 2030
 - 17.2 GW by 2035

Solar Act of 2021, P.L.2021, c.169

- 7.5 GW of solar installation by 2026
 - Mandates new program for grid supply solar
 - Siting rules for grid supply solar
 - Caps on farmland
 - Waiver requirement for forests, wetlands, Highlands & Pinelands
 - Annual goal of installing 750 MW of new solar capacity:
 - 300 MW of net metered solar
 - 300 MW of grid supply solar
 - 150 MW of community solar
- } Successor Solar Incentive (SuSI) Program

➤ Legislation mandating a new Dual-Use Pilot Program was enacted in 2021, under the Dual-Use Act, P.L.2021, c.170

Dual-Use Solar Act, P.L.2021, c.170

- July 7, 2021, P.L.2021, c.170
- BPU must establish rules: Dual-Use Pilot Program to inform a Permanent Program
- Consultative role for Secretary of Agriculture and NJDEP
- Dual-Use projects (also known as agrivoltaics) on unreserved farmland selected via a competitive process



Dual-Use Solar Act

Definition of “Dual-Use solar energy project”



*Image courtesy of the U.S. Department of Agriculture:
<https://www.climatehubs.usda.gov/hubs/northeast/to-pic/agrivoltaics-coming-soon-farm-near-you>*

1. Solar energy aspect of a facility
2. Land must remain in active agricultural or horticultural production

Dual-Use Pilot Program

- Under development (at least 3 years, with possible 4th and/or 5th year)
- Pilot goals as established by the Act:
 - Individual project limit of 10 megawatts in direct current (MW(dc))
 - Annual capacity targets (TBD)
 - 200 MW(dc) total capacity cap for approved pilot projects (3 years)
 - Potential 50 MW per an additional 12-month period (4th, 5th years)
 - Incentive requirements for consideration of project selection
- Pilot objectives:
 - Select a diversity of crops and varying size projects
 - Determine economic feasibility of different types of agrivoltaics
 - Inform permanent program
- May 2023: Grant agreement executed with Rutgers University Agrivoltaics Program (RAP) to help facilitate development and implement Pilot

Dual-Use Pilot Program

Siting Prohibitions on Land

- Preservation area of the Pinelands
- Forest area in the Pinelands Comprehensive Management Plan
- Wetlands: freshwater or coastal
- Highlands preservation area

Dual-Use Pilot Program

- Waiver Process:
 - Board approval required, following filing of petition
 - Based on unique factors that make the project consistent with the character of the specific parcel
 - Consultation with NJDEP and NJ Dept. of Ag required
 - Strategy under consideration
 - Plans to engage with Pinelands Commission

Dual-Use Pilot Program

Waiver Process continued...

- Waiver considerations, examples such as:
 - Land use determinations/status from regulatory bodies, including Pinelands Commission
 - Maps, soils, erosion, negative impacts to farmland
 - Etc., TBD

Dual-Use Pilot Program

- Development of incentive structure, solicitation process
- Development of application & process (C.48:3-87.13)
 - Section 1c(1): Criteria (a) through (k)+
 - Examples:
 - Proposals for monitoring the quality of agricultural or horticultural use of the land
 - Minimizing negative impacts to farmland
 - Technical feasibility and innovation
 - Quality of the research
 - Various sizes and diverse types of agricultural and horticultural production

Dual-Use Pilot Program

General Overview of Next Steps

- Stakeholder engagement
- Straw proposal
- Board Order
- Program solicitation
- Rule adoption
- Pilot projects – research results



Dual-Use Permanent Program

- Adopt Dual-Use rules following end of Pilot
- Part of the permanent successor to the solar incentive program established (Solar Act of 2021)
- Key elements:
 - Capacity limits for individual projects and total program
 - Requirements to protect NJ's prime agricultural soils and soils of Statewide importance and the State's agricultural and horticultural diversity
 - Standards to minimize negative impacts to farmland
 - Provisions for continued active agricultural or horticultural use
 - Siting criteria and application process
 - Data Collection, Research, and Evaluation!

THANK YOU!

A decorative graphic consisting of several overlapping, wavy lines in shades of green and blue, flowing from the left side of the slide towards the right.

NJBPU: <https://nj.gov/bpu/>

NJ's Clean Energy Program, Solar Program:

<https://njcleanenergy.com/renewable-energy/home/home>