

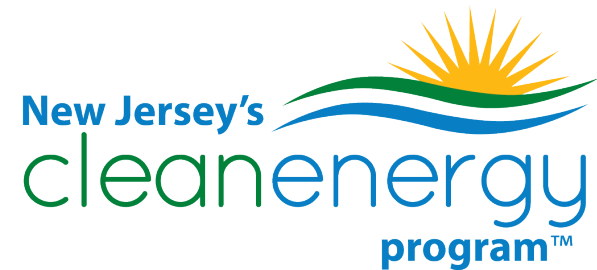
# **SOLAR SUCCESSOR STAKEHOLDER WORKSHOP #2: COMMUNITY SOLAR, COST CAP, AND CAPACITY TARGETS**

**April 26, 2021**



# **PRESIDING OFFICER: ABE SILVERMAN**

**GENERAL COUNSEL, NEW JERSEY BOARD OF PUBLIC UTILITIES**



# WELCOME AND LOGISTICS: ARIANE BENREY

OFFICE OF POLICY AND PLANNING, NJBPU



# Meeting Logistics

- All attendees will be automatically muted and will be unmuted when called upon.
- Questions? Comments? Please use the **Q&A** function in Zoom.
- This meeting is being recorded. A copy of the recording and slides will be made available on the NJ Clean Energy Program website:  
<https://njcleanenergy.com/renewable-energy/program-updates-and-background-information/solar-proceedings>

# Agenda

## Opening Session:

- 10:00 a.m. Meeting Start; Welcome and Introduction

## Morning Session: Community Solar

- 10:15 a.m. NJBPU Staff Presentation
- 10:45 a.m. Stakeholder Comments and Discussion

LUNCH BREAK 12:30 p.m. – 1:00 p.m.

## Afternoon Session: Cost Cap and Capacity Targets

- 1:00 p.m. Staff Presentation
- 1:45 p.m. Stakeholder Comments and Discussion

# Stakeholder Engagement

- Stakeholders will discuss the Straw Proposal in **five** topic-specific workshops:
  - Workshop #1 (April 21): Incentive Program Design
  - Workshop #2 (April 26): Community Solar, Cost Cap and Capacity Targets
  - Workshop #3 (April 28): Solar Equity and Inclusion; Community Solar
  - **NEW** Workshop #4 (May 3): Incentive Values Modeling and Recommendations
  - **DATE CHANGE** Workshop #5 (May 7): Review of Current Proposal and Program Transition

# Stakeholder Engagement

- Stakeholders may speak directly with Board Commissioners at the Quarterly Public Meeting on April 30, 2021.

See the Public Notice for details:

[https://www.nj.gov/bpu/pdf/publicnotice/Notice\\_Quarterly%20Public%20Comment%20Meeting\\_April%2030\\_Solar.pdf](https://www.nj.gov/bpu/pdf/publicnotice/Notice_Quarterly%20Public%20Comment%20Meeting_April%2030_Solar.pdf)

- “Open door policy”: email [solar.transitions@bpu.nj.gov](mailto:solar.transitions@bpu.nj.gov)

# Stakeholder Engagement

- Written comments: **extended to 5:00 p.m. on Thursday, May 27, 2021.**

Must be submitted electronically to the Board Secretary or via the Board's External Access Portal

See the Straw Proposal Notice for details:

[https://njcleanenergy.com/files/file/Solar%20Successor%20Program%20Notice%20and%20Straw%20Proposal\\_04-07-2021.pdf](https://njcleanenergy.com/files/file/Solar%20Successor%20Program%20Notice%20and%20Straw%20Proposal_04-07-2021.pdf)

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# KEY TAKEAWAYS: WORKSHOP #1

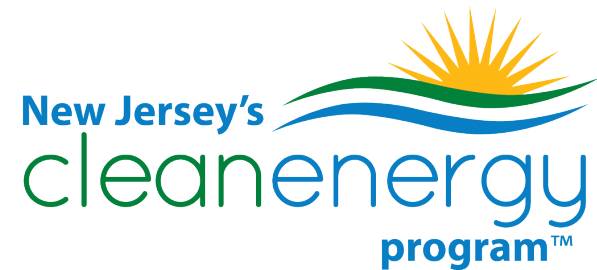
## INCENTIVE PROGRAM DESIGN



# Workshop #1

- Staff's immediate key takeaways include:
  - Request for more time for written comments and an additional session on modeling assumptions.
  - Break-point between competitive solicitation and administrative program should be at 5 MW for net metered projects.
  - Timing of the transition from the TI Program for projects in development.
  - Institute a one-year “check-up” for incentive levels.
  - Increase differentiation in administrative incentive levels:
    - Consider utility-specific incentive levels;
    - Consider increases to car ports / canopies segment; and
    - Consider floating solar incentive.
  - Projects on contaminated sites (former “subsection t”) have large up-front development costs, which may warrant locking-in incentive levels early.
  - Interconnection must move hand-in-hand with incentive reform.
  - Community Solar target of 150 MW should be increased.

# COMMUNITY SOLAR PERMANENT PROGRAM



# Community Solar Permanent Program

## Discussion Session #1: Program Structure

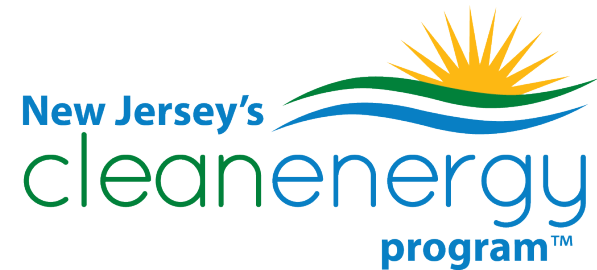
- Please comment generally on whether the Board should consider maintaining the competitive solicitation for community solar projects in the Permanent Program, or if it should adopt strict qualifications and otherwise establish a first-come, first-served model (detailed as Option 1 and Option 2 on pages 40-41 of the Straw Proposal).

# Community Solar Permanent Program

## Discussion Session #2: Other Issues

- Please comment on the Pilot Program rules (detailed beginning on page 41 of the Straw Proposal) and discuss which, if any, the Board should consider modifying for the Permanent Program, and why.
- Should the Board allow aggregation of rooftop projects, up to the 5 MW capacity limit? What should the Board consider with respect to the competing value of rooftop space, particularly on multi-unit residential and small commercial buildings, in locating HVAC or other equipment necessary for future energy efficiency and building decarbonization measures?

# POLL: SPEAKERS LIST



# The Clean Energy Act of 2018

- The Clean Energy Act laid the framework for community solar in New Jersey:
  - ✓ The Board first established a three-year Community Solar Energy Pilot Program in January 2019.
  - ✓ The CEA mandates that the Board establish a Community Solar Permanent Program within 3 years (i.e. by February 2022).

# Community Solar Policy Priorities

- Ensure that all customers, regardless of income level, have access to the benefits of solar.
- Increase access to solar energy, particularly for low- and moderate-income households.
- Enable electric utility customers to participate in a solar generation facility that can be remotely accessed from their residence or place of business.



# Community Solar Permanent Program

- The Board is currently reviewing 410 applications received for Program Year 2.
- Building on the experiences of the Pilot Program, Staff intends to develop the Permanent Program in conjunction with the Successor Program.
- Additionally, the Board will need to determine whether to modify existing Pilot Program rules, or whether they can be rolled over into the Permanent Program.

# Community Solar Permanent Program

- Staff proposes two primary options for the Permanent Program:
  - Option 1: Rollover and continue the Pilot Program structure and design, using the competitive solicitation model.
  - Option 2: Eliminate the annual competitive solicitation and implement a first-come, first-served model, subject to an annual MW- or cost-based cap, with very high requirements for entry.

# Pilot Program Rules: Siting

- The Pilot Program Rules state that projects are not permitted on preserved farmland, land designated as Green Acres open space or on land owned by NJDEP.
- All other siting criteria are via the evaluation criteria with higher scores assigned to projects on “high-preference” sites, including:
  - Rooftops
  - Parking canopies/carports
  - Brownfields
  - Landfills
- Staff recommends that these siting preferences be maintained in the Permanent Program (either via evaluation criteria or restricted eligibility).

# Pilot Program Rules: Subscription Requirements

- Each community solar project must have a minimum of 10 subscribers and a maximum of 250 per MW of installed capacity.
  - All rate classes are eligible for participation, but no subscriber can participate in more than one project.
  - Subscriptions may not exceed 100% of the subscriber's historic annual usage and cannot exceed 40% of a community solar project's total annual net energy.
  - Subscriptions are portable and transferrable.
- Staff proposes to recommend the adoption of similar rules in the permanent program.

# Pilot Program Rules: Bill Credits

- The value of the community solar bill credit was set at retail rate net metering, inclusive of supply and delivery charges, and excluding fixed, non-by-passable charges.
- Bill credits can carry over from monthly billing to monthly billing period until the end of the annualized billing period, at which time excess credits shall be compensated at the avoided cost of wholesale energy.
- Staff recommends that the same bill credit calculation be used in the Permanent Program.

# Pilot Program Rules: Low-and Moderate-Income Provisions

- The rules define a low- and moderate- income subscriber for the purposes of community solar and describe the eligibility criteria that may be used for income verification.
- The rules require that at least 40% of the annual capacity allocated to community solar projects be allocated to LMI projects.
- Staff recommends that preference for LMI projects be maintained in the Permanent Program (either via evaluation criteria or restricted eligibility). Staff recommends expanding eligibility verification criteria where possible.

# Pilot Program Rules: Codes and Standards

- The rules incorporate by reference the Board's solar interconnection standards and all applicable codes, standards and licensing requirements.
  - The rules require that the EDCs make available and update hosting capacity maps in a commercially reasonable fashion.
- Staff proposes to recommend the adoption of similar rules in the permanent program.

# Pilot Program Rules: Consumer Protection

- The rules include substantial consumer protection provisions on matter relating to:
  - Subscriptions
  - Advertising
  - Contracts
  - Non-discrimination
  - Document retention
  - Marketing
  - Solicitations
  - Disclosure statements
  - Inquiry and remediation
- The rules require that subscriber organizations register with the Board no less than 30 days prior to first conducting community solar business in NJ.
- Staff proposes to recommend the adoption of similar rules in the permanent program.



# Pilot Program Rules: Reporting

- The rules require that EDCs provide monthly electronic reports on community solar project interconnections and energy production to the Board.
- The rules require that the Board be notified of any change in the project developer, owner or operator and be kept apprised of major project developments.
- Staff proposes to recommend the adoption of similar rules in the permanent program.

# QUESTION & ANSWER



# Community Solar Permanent Program

## Discussion Session #1: Program Structure

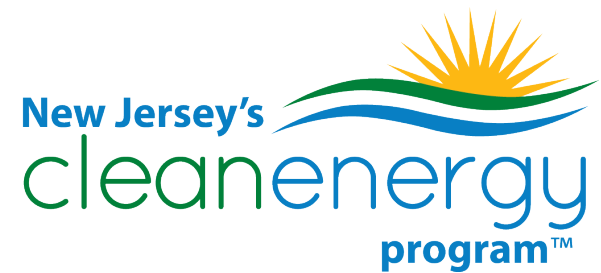
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# LUNCH BREAK



# COST CAP AND CAPACITY TARGETS



# Cost Cap and Capacity Targets

## Discussion Session #1: Cost Cap Denominator

- Staff proposes that the Board include the total amount of expenditures by electricity customers on annual retail bills and the costs associated with all net metered and other solar projects. Do you agree with the proposed categories? Please comment on the sources of information, calculations, and assumptions underlying the categories.
- Should the Board use the moving three-year average of annual electricity demand versus annual amounts in calculating and forecasting the annual cost cap percentage?
- Please comment on the 0.5% growth factor for forecasting future electric costs.

# Cost Cap and Capacity Targets

## Discussion Session #2: Cost Cap Numerator

- Staff proposes to include the following elements in calculating the numerator of the cost cap to reflect the cost of incentives paid by ratepayers: the annual costs of SRECs, TRECs, and Class I RECs, minus the DRIPE benefits of solar.
  - Do you agree with Staff's proposed categories for inclusion? Should any category be omitted? Has Staff overlooked a category that should be included?
  - Please comment on the calculations and assumptions underlying each of the components of the cost cap.
  - How should the Board consider the assumed annual value of SRECs, which is not fixed?



# Cost Cap and Capacity Targets

## Discussion Session #3: Megawatt Targets

- Should the annual capacity targets for the administratively set program be set broadly for the whole program, or should the administratively set program be further sub-divided into market segments with individual cost caps?
- Should the annual capacity targets for the competitive solicitation tranches be set with flexible parameters (should the Board allow more or fewer projects into any particular tranche based on project applications and pricing), as long as the total doesn't exceed the overall annual budget cap?
- Please comment on Staff's proposed megawatt targets for the first year (EY 2022).

# POLL: SPEAKERS LIST



# **COST CAP CALCULATION: BEN WITHERELL, Ph.D.**

**CHIEF ECONOMIST, NJBPU**



# The Clean Energy Act of 2018

- Established a cost cap to manage the total amount of ratepayer spending devoted to certain clean energy programs.
- Section 38(d)(2) states that:

*...the board shall ensure that the cost to customers of the Class I renewable energy requirement imposed pursuant to this subsection shall not exceed nine percent of the total paid for electricity by all customers in the State for energy year 2019, energy year 2020, and energy year 2021, respectively, and shall not exceed seven percent of the total paid for electricity by all customers in the State in any energy year thereafter.*

# The Clean Energy Act of 2018

- The statutory text determines compliance with the Cost Cap using the following equation:

$$\left[ \frac{\text{(Cost to Customers of the Class I Renewable Energy Requirement)}}{\text{(Total Paid for Electricity by all Customers in the State)}} \right] \times 100\%$$

# Cost Cap Calculation

- Programs subject to the cost cap are:
  1. The legacy Solar Renewable Energy Certification (SREC) program;
  2. The Transition Incentive Program (TREC)s);
  3. Any successor program that may be adopted by the Board in the future (Solar Successor Program); and
  4. Class I Renewable Energy Certificates used to meet the RPS.
- Collectively, Staff refers to these programs as “Cost Cap-Applicable Programs”

# Cost Cap Calculation: Denominator

- “Total paid for electricity by all customers in the State.”
  - Requires consideration of payments for electricity by customers to both utilities and non-utilities.
- Begin with EIA electricity sector expenditure data.
  - For 2020, expected to be around \$9.8 billion in total sales.
- Staff expects slight upward trend in total electricity sales over the next decade due to:
  - Future and continued clean energy subsidy costs;
  - Continued robust sales growth of electric vehicles; and
  - Continued and increasing demand for electrification of buildings and public transportation.

# Cost Cap Calculation: Denominator

- Certain clean energy incentives are not yet reflected in the EIA sales data.
  - ORECs
  - Energy efficiency investment
- Staff proposes to estimate the denominator using a 3-year moving average, adjusted for a net annual increase of 0.5%.
- Staff proposes to include an adjustment for behind-the-meter host-owned solar and for ORECs (starting in 2024).



# Cost Cap Calculation: Denominator

- Estimated Denominator and Annual Cost Cap, 2019-2030

Energy Year	Estimated 3-yr Moving Avg. (with BTM host-owned solar and OREC adjustments) (\$ Millions)	Annual Cost Cap (\$ Millions)	Cap %
2019	10,085	908	9%
2020	9,920	893	9%
2021	9,965	897	9%
2022	10,016	701	7%
2023	10,075	705	7%
2024	10,193	713	7%
2025	10,310	722	7%
2026	10,426	730	7%
2027	10,600	742	7%
2028	10,773	754	7%
2029	10,942	766	7%
2030	11,102	777	7%

# Cost Cap Calculation: Numerator

- SRECs: Estimated value of 75% of the Solar Alternative Compliance Payment.
- TRECs: Estimated using the expected solar production from registered projects that have reached commercial operation and 66% of expected solar production from registered projects that have not yet reached commercial operation.
- Class I RECs: Assumes a value of \$13/Class I REC; volume based on Class I RPS (minus SRECs, TRECs, successor RECs, and ORECs).

# Cost Cap Calculation: Numerator

- Staff recommends defining the cost of Cost Cap Eligible Programs as the net costs to customers.
- Quantifiable annual net benefits should be subtracted to better reflect the full range of costs and benefits of the Cost Cap Eligible programs.
- Adjustments of energy benefits could include:
  - Market benefits of solar energy development (Electric Energy and Capacity Demand Reduction Induced Price Effect, or DRIPE)
  - Environmental and Health Benefits – not currently added to numerator

# Cost Cap Calculation: Numerator

- Demand-Reduction-Induced Price Effects (DRIPE)
- Electric Energy DRIPE: based on literature analysis, Staff proposes to use a value of \$0.0000095/MWh.
- Electric Capacity DRIPE: based on literature analysis, Staff proposes to use a value of \$000833/MWh.
- Staff proposes to not include the value of the social cost of carbon in calculating the cost cap.

# Cost Cap Calculation: Available Cost Cap Headroom

- Projected Solar Successor Costs and Annual Surplus/Deficit, 2019-2030

Energy Year	Cap Space on Annual Basis (pre-Solar Successor Program; no carryover) (\$ Millions)	Prior Year Carryover (\$ Millions)	Cost of Successor Program for Annual Target Buildout (\$ Millions)	DRIPe Benefit of New Build (\$ Millions)	Benefit from Reduced Class 1 REC Obligation (\$ Millions)	Surplus or Deficit (including prior year carryover) (\$ Millions)
2019	308		0	0	0	308
2020	170	308	0	0	0	478
2021	139	478	0	0	0	617
2022	(100)	617	First Year Build	0	0	517
2023	(96)	517	67	20	10	384
2024	(100)	384	133	39	23	213
2025	(95)	213	200	59	34	11
2026	4	11	260	79	45	(121)
2027	139	(121)	320	100	56	(145)
2028	284	(145)	380	120	68	(54)
2029	399	(54)	434	141	79	130
2030	334	130	488	162	90	228

# MEGAWATT TARGETS



# Summary of Successor Straw Recommendations

- Megawatt Targets: capacity targets initially informed by historical levels. They would be limited by budget caps based on a calculation of the statutory cost caps.

Project Type	Year 1 Capacity Target (MW)	Budget Cap (\$ Millions)
Residential Net Metered	150 MW	\$15 million
C&I Net Metered ≤ 2 MW (rooftop, carport, canopy)	110 MW	\$11 million
C&I Net Metered ≤ 2 MW (ground mount)	40 MW	\$4 million
Community Solar	150 MW	\$16 million
Non-Residential Net Metered > 2MW	40 MW	\$4 million
Basic Grid Supply	130 MW	\$6 million
Desired Land Use Grid Supply	130 MW	\$12 million
<b>Total</b>	<b>750 MW</b>	<b>\$67 million</b>

# QUESTION & ANSWER





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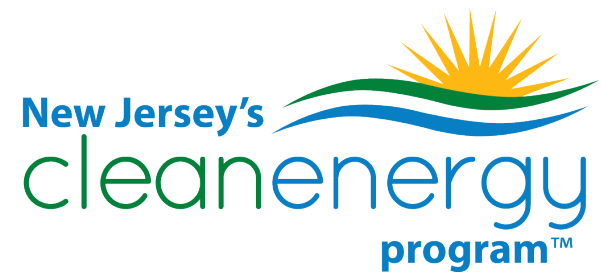
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# NEXT STEPS



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# MEETING CLOSE

