

# Solar Energy Equity Framework: Community Solar Strategies

September 24, 2020



# Agenda

- > Background
- > Program Strategies
  - Low Income Community Solar Concept with National Grid
  - Incentive Adder for Inclusive Community Solar Projects
- > Q&A
  - All attendees will be muted. You can use the "Q&A Panel" in WebEx to ask questions throughout the webinar. We will read and answer questions during the Q&A section of the presentation.
  - This presentation will be recorded and posted on the NY-Sun website.

# Background

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- > The Public Service Commission's May 2020 NY-Sun Order approved the **Solar Energy Equity Framework** proposed by NYSERDA to fulfill the CLCPA mandate that disadvantaged communities receive a minimum **35%** of overall benefits associated with clean energy investments
- > Over **\$200 million** in NY-Sun funding will benefit low- to moderate-income (LMI) households, affordable housing, and disadvantaged and environmental justice communities
- > The Solar Energy Equity Framework includes a **two-part community solar strategy** that acknowledges differences in barriers faced by low income (<60% of State Median Income) households and moderate income (<80% of Area Median Income) households:
  - utility-managed program for low-income households
  - "adder" incentives for inclusive community solar projects serving LMI households, affordable housing and disadvantaged communities

# Background

## NY-Sun has implemented multiple programs serving LMI households and disadvantaged communities:

### > Predevelopment and technical assistance support:

- Funding to address gaps and barriers to solar and energy storage projects benefitting LMI households, affordable housing and disadvantaged communities
- **\$2,746,342** committed to date

### > Solar for All:

- No-cost community solar for low income households
- **\$11,639,368** committed to date

### > Affordable housing adder and Affordable Solar residential adder:

- Additional NY-Sun incentives for affordable housing properties and LMI homeowners
- **\$12,082,929** committed to date (total incentives to eligible projects)

# Community Solar Strategies

## Low Income Community Solar Concept with National Grid:

- > Automatic enrollment in community solar for all National Grid low-income bill discount (EAP) customers
- > Program managed by National Grid, projects owned/managed by private developers, with NY-Sun funding to ensure reliable customer savings
- > **Estimated Impact: ~140,000** low-income households will receive electricity and guaranteed bill savings from over **500** MWdc of community solar

## Adder for Inclusive Community Solar Projects:

- > NY-Sun adder for community solar projects that provide community solar to low-to-moderate income households and disadvantaged communities
- > Reduces barriers for program participation with “geo-eligibility” option
- > **Estimated Impact: 25,000–50,000** LMI households, affordable housing providers, and facilities serving disadvantaged communities will receive bill savings from **~250–500** MWdc of community solar

# **Low Income Community Solar Concept with National Grid**

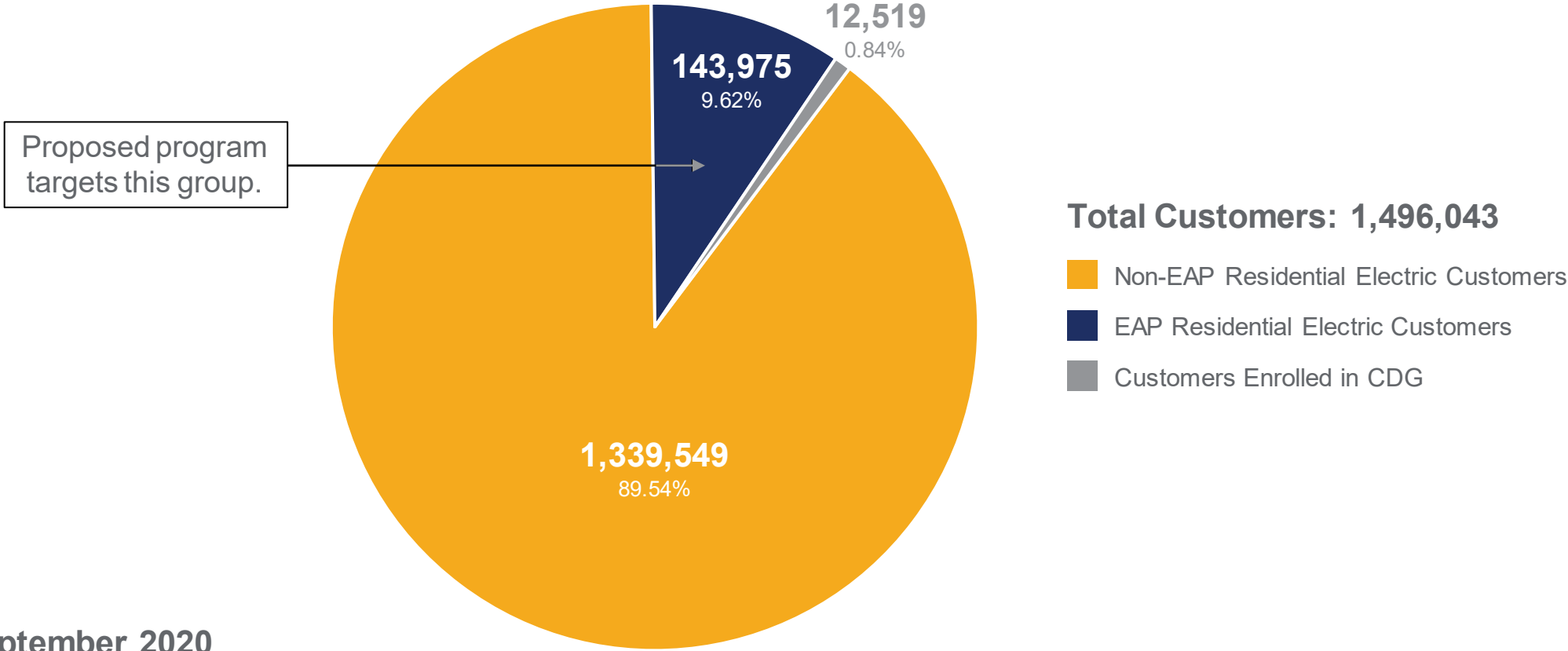
# Overview + Key Benefits

- > Serve **all** National Grid's EAP (low income bill discount) customers (~140,000 households) with community solar
  - **Major cost savings passed onto the customer:** Credits and customers are aggregated by the utility, eliminating developer customer acquisition and management costs
  - **Potential project pipeline:** Over 500 MW DC of community solar in various stages of development in National Grid territory planned to serve low income customers through this program
  - **Seamless customer experience:** Automatic enrollment (no additional verification required for EAP customers), customer education integrated with HEAP/EAP process, target of approximately \$10/month once the program is fully implemented
  - **Builds on Solar for All:** Scales up concept, incorporating lessons learned, best practices, and past Commission directives for low income customer assistance
  - **Performance Incentive Mechanism:** Compensates National Grid with a percentage of the value created by the program
- > Program will be formally proposed by National Grid and NYSERDA via a petition to the Public Service Commission later in 2020



# Low Income National Grid Customers Remain Underserved by Community Solar

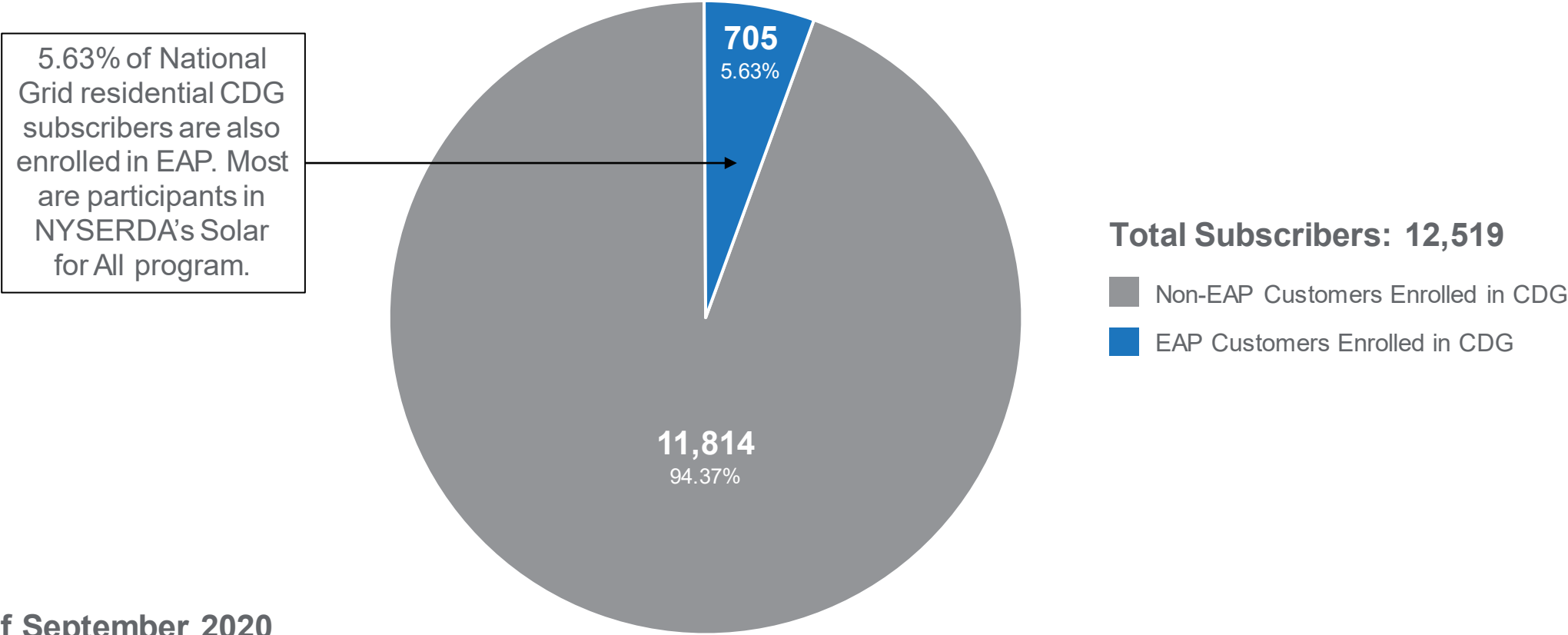
All National Grid Residential Electric Customers



As of September 2020

# Low Income National Grid Customers Remain Underserved by Community Solar

## National Grid Residential CDG Subscribers



As of September 2020

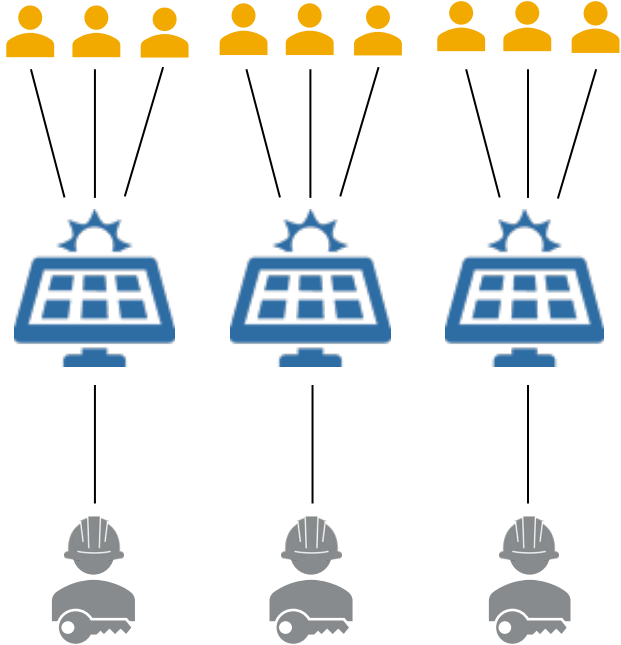
# Proposed Model

Participating Customers

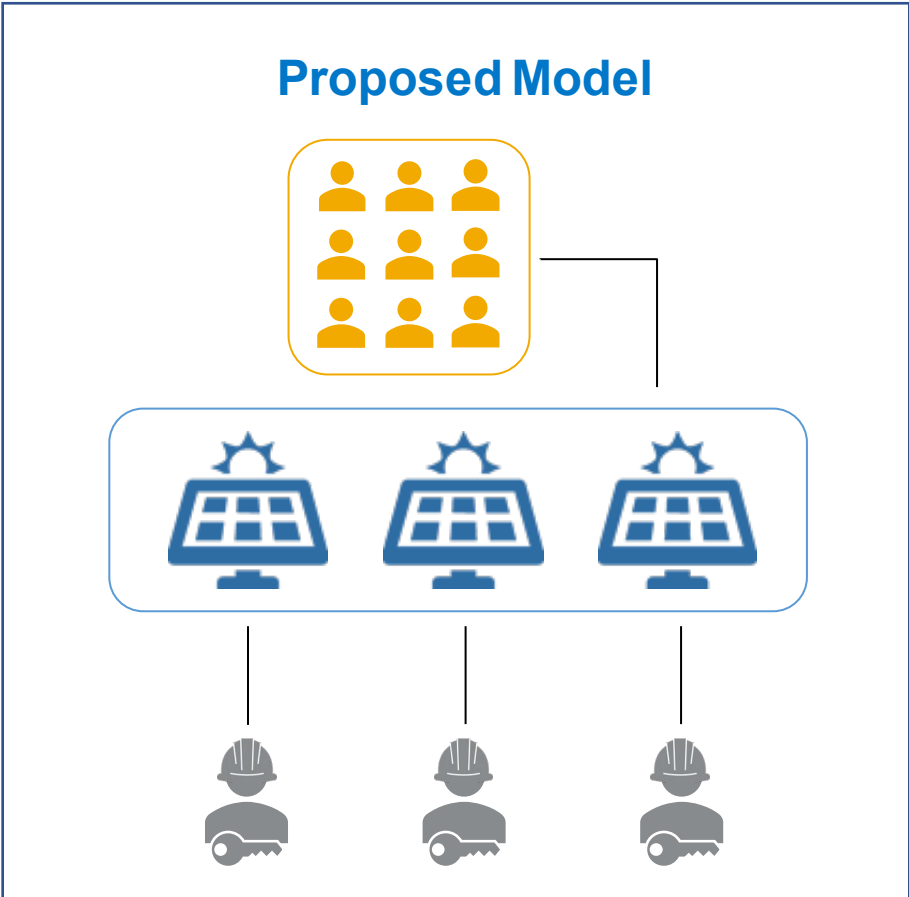
CDG Projects

CDG Owners

Current CDG Model



Proposed Model



# Proposed Model Benefits

	<b>Current Crediting Model</b>	<b>Proposed Model</b>
<b>Customer Participation</b>	Developers must identify and recruit low income customers and those customers must opt-in.	All EAP customers participate through automatic enrollment.
<b>Bill Credit Distribution</b>	Allocation % and discount % will need to be calculated on an individual customer level and updated monthly. Difficult to account for EAP credits in subscription sizing.	Credits are a fixed amount every month and are distributed from a single pool equally across all EAP customers.
<b>Customer Churn</b>	Customers who unenroll from the program must be replaced on a project-by-project basis. Higher low income customer churn increases project costs.	Customer enrollment will be tied directly to EAP and not a project

# Benefits to Stakeholders

<b>EAP Customers</b>	Higher bill discounts and support clean energy development
<b>CDG Owners</b>	Reduced costs and lower risk than standard CDG projects
<b>National Grid</b>	Minimal risk and cost to non-participating customers
<b>NYSERDA</b>	Efficient way to use NY-Sun funds to maximize impact
<b>Regulators</b>	Focus benefits where they are most impactful

# Process for CDG Developers: Outstanding Questions

Details of the CDG procurement process are still in development, including:

- > **RFP vs. Standard Offer:** A number of variables (MTC vs. community credit vs. community adder, ITC level, etc.) must be considered to determine feasibility
- > **Selection Process:** May be multiple rounds over a short (1-3 years) period to phase in program
- > **Selection Criteria/Requirements:**
  - Percentage discount on value stack revenues offered to the program
  - High project maturity
- > **Compensation Criteria:** Selected projects may be compensated through a special net crediting tariff, which could run the full (25 year) life of the Value Stack tariff
- > CDG project owner is responsible for operating the project, with **no customer acquisition or management responsibilities (or costs)**

# Building on Solar for All

- > Free community solar program launched in 2018, eligible low-income customers sign up with NYSERDA. As of September 2020, **2,281** customers are currently receiving credits and **1,408** customers are in the process of receiving credits.
  - Customers like the program **once they understand it**, and the savings have made a difference to them. Program received strong support from state/local social service agencies, housing providers, and community organizations.
- > Ongoing challenge with **slow pace of customer sign-ups**, despite support from local/regional partners, significant on the ground outreach, and extensive digital marketing.
  - **Perceived barrier to entry:** Gathering utility documentation and income verification is burdensome and intrusive for the customer
  - **Initial association with other negative experiences:** Many customers have been scammed by predatory ESCOs and do not want to sign up for anything “energy related”
  - **Concern about variability in the bill credit:** Customers prefer a fixed incentive amount that they can plan for and budget

# Automatic Enrollment

- > Currently, National Grid customers that sign up for the Low Income Heating Assistance Program (HEAP) go through an **income verification process** and are also enrolled in the National Grid Energy Affordability Program (EAP)
- > In the proposed model, EAP customers will **automatically enroll** in the new community solar program
- > Immediate access to community solar and bill savings with **no additional verification process or paperwork**
- > Integration with EAP offers customers reassurance that **other benefits (HEAP, etc.) won't be impacted**



# Reliable Bill Savings

- > Proposed model applies lessons from Solar for All and the National Grid EAP program to provide a fixed monthly bill savings from community solar credits
- > Customers can budget and plan around their predictable community solar savings just as they can around their EAP bill discount
- > Initial program concept targets **\$10** per month savings, equivalent to **~15%** of the average EAP customer electric bill
- > A distinct line item will be added to customer bills to show the Community Solar Credit

SERVICE FOR Jane Doe 123 Sample Rd	BILLING PERIOD Apr 20, 2020 to May 18, 2020	PAGE 2 of 4
ACCOUNT NUMBER 00000-00000	PLEASE PAY BY	AMOUNT DUE \$ 7.56
<b>DETAIL OF CURRENT CHARGES</b>		
<b>Delivery Services</b>		
<b>Electricity Delivery</b>		
Service Period	No. of days	Current Reading - Previous Reading = Total Usage
Apr 20 - May 18	28	74674 Actual - 74323 Actual = 351 kWh
METER NUMBER 26507021	NEXT SCHEDULED READ DATE ON OR ABOUT Jun 19	
RATE	Electric SC1 Non Heat - EAP	
Basic Service (not including usage)		17.00
Energy Affordability Credit - Tier 3		-38.00
<b>Community Solar Credit</b>		<b>-10.00</b>
Delivery	0.05614871 x 351 kWh	20.83
SBC	0.005491 x 351 kWh	1.93
Legacy Transition Chrg	0.003305 x 351 kWh	1.16
RDM	0.00056321 x 351 kWh	0.20
Transmission Rev Adj	-0.00329 x 351 kWh	-1.15
Tariff Surcharge	3.09278 %	-0.18
	<b>Total Electricity Delivery</b>	<b>-\$ 8.21</b>
<b>Supply Services</b>		
<b>Electricity Supply</b>		
SUPPLIER National Grid		
Electricity Supply	0.03232 x 351 kWh	11.34
Merchant Function	0.00171521 x 351 kWh	0.60
ESRM	0.010606 x 351 kWh	3.72
Tariff Surcharge	1.0101 %	0.11
	<b>Total Electricity Supply</b>	<b>\$ 15.77</b>

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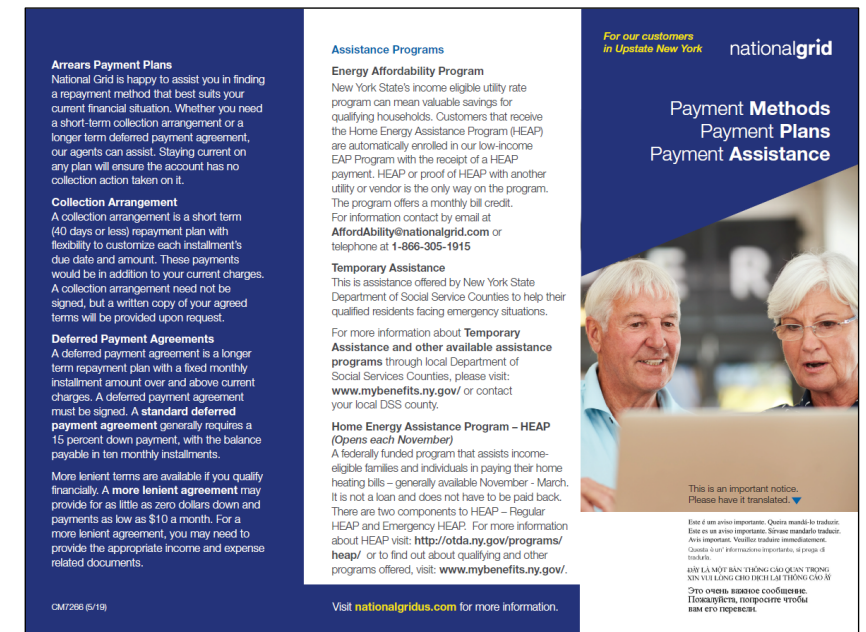
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# Clean Energy Participation and Education

- > Proposed model addresses existing and perceived barriers that limit low income participation in clean energy
- > Community solar information will be integrated into messaging about National Grid's bill savings programs (HEAP, EAP, etc.)
- > Education conducted by National Grid's Customer Advocates
  - Broad, regional network
  - Existing relationships with customers and social service organizations
- > Leverage NYSERDA's existing outreach network: Community Energy Engagement Program (CEEP)

*Thank you for this opportunity to save on my electric bill while helping the environment.*

- SfA Customer, July 2020



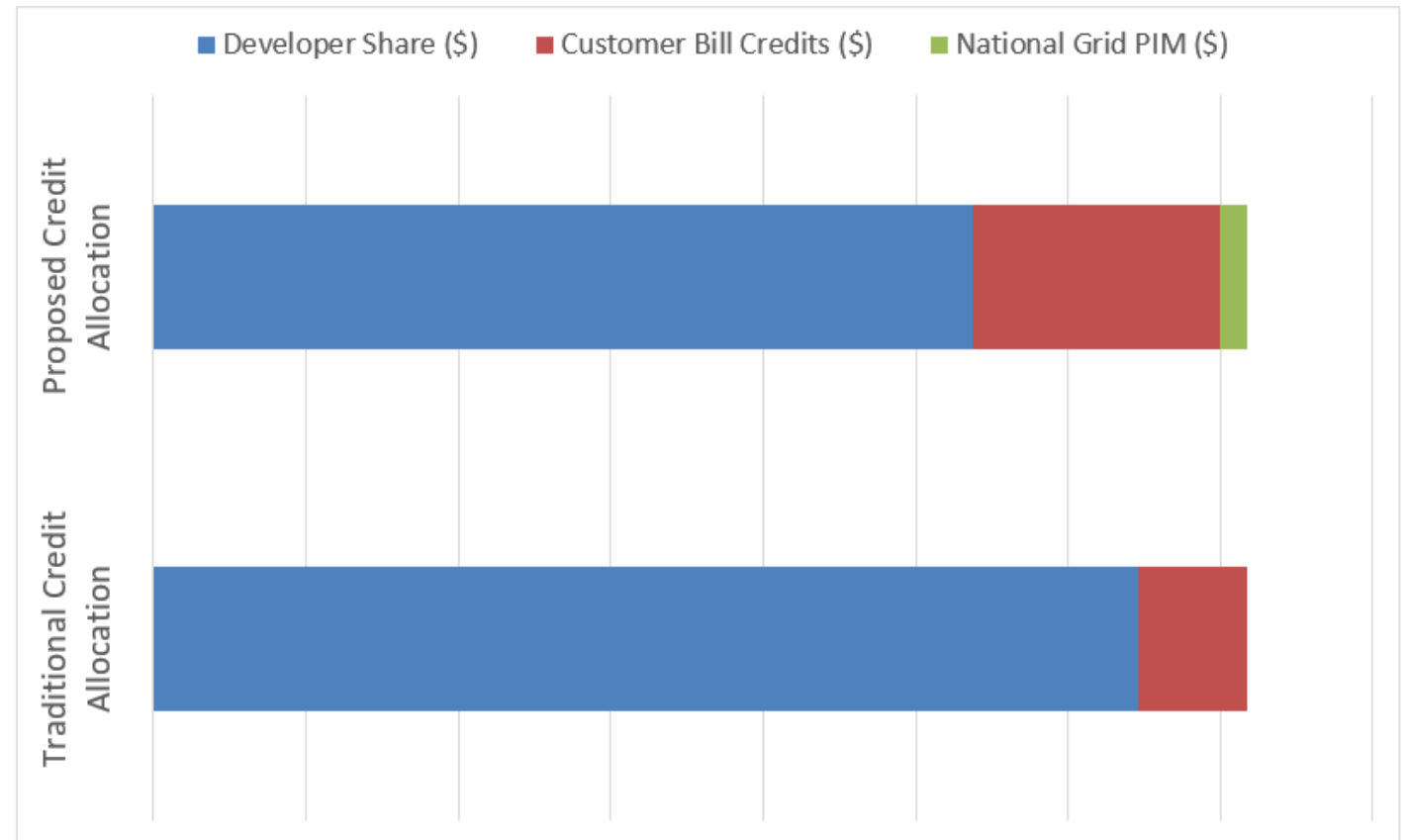
The image shows a brochure for National Grid's Customer Advocates. The top right corner features the National Grid logo and the text "For our customers in Upstate New York". The main heading is "Payment Methods Payment Plans Payment Assistance". The brochure is divided into several sections:

- Arrears Payment Plans:** National Grid is happy to assist you in finding a repayment method that best suits your current financial situation. Whether you need a short-term collection arrangement or a longer term deferred payment agreement, our agents can assist. Staying current on any plan will ensure the account has no collection action taken on it.
- Collection Arrangement:** A collection arrangement is a short term (40 days or less) repayment plan with flexibility to customize each installment's due date and amount. These payments would be in addition to your current charges. A collection arrangement need not be signed, but a written copy of your agreed terms will be provided upon request.
- Deferred Payment Agreements:** A deferred payment agreement is a longer term repayment plan with a fixed monthly installment amount over and above current charges. A deferred payment agreement must be signed. A standard deferred payment agreement generally requires a 15 percent down payment, with the balance payable in ten monthly installments. More lenient terms are available if you qualify financially. A more lenient agreement may provide for as little as zero dollars down and payments as low as \$10 a month. For a more lenient agreement, you may need to provide the appropriate income and expense related documents.
- Assistance Programs:**
  - Energy Affordability Program:** New York State's income eligible utility rate program can mean valuable savings for qualifying households. Customers that receive the Home Energy Assistance Program (HEAP) are automatically enrolled in our low-income EAP Program with the receipt of a HEAP payment. HEAP or proof of HEAP with another utility or vendor is the only way on the program. The program offers a monthly bill credit. For information contact by email at [AffordAbility@nationalgrid.com](mailto:AffordAbility@nationalgrid.com) or telephone at 1-866-305-1915
  - Temporary Assistance:** This is assistance offered by New York State Department of Social Service Counties to help their qualified residents facing emergency situations. For more information about Temporary Assistance and other available assistance programs through local Department of Social Services Counties, please visit: [www.mybenefits.ny.gov/](http://www.mybenefits.ny.gov/) or contact your local DSS county.
  - Home Energy Assistance Program - HEAP (Opens each November):** A federally funded program that assists income-eligible families and individuals in paying their home heating bills - generally available November - March. It is not a loan and does not have to be paid back. There are two components to HEAP - Regular HEAP and Emergency HEAP. For more information about HEAP visit: <http://otda.ny.gov/programs/heap/> or to find out about qualifying and other programs offered, visit: [www.mybenefits.ny.gov/](http://www.mybenefits.ny.gov/).

At the bottom right, there is a photo of two elderly people looking at a laptop. Below the photo, there is a notice: "This is an important notice. Please have it translated." followed by translations in Spanish, Chinese, and Russian.

# Proposed Performance Incentive Mechanism

- > The performance incentive will be calculated annually based on the value of credits disbursed to customers
- > A recurring annual incentive aligns National Grid's incentives with customers and developers to maintain program enrollment
- > National Grid and NYSERDA will refine incentive level in response to further research including industry feedback



# Next Steps

## > **Customer feedback and discovery in process**

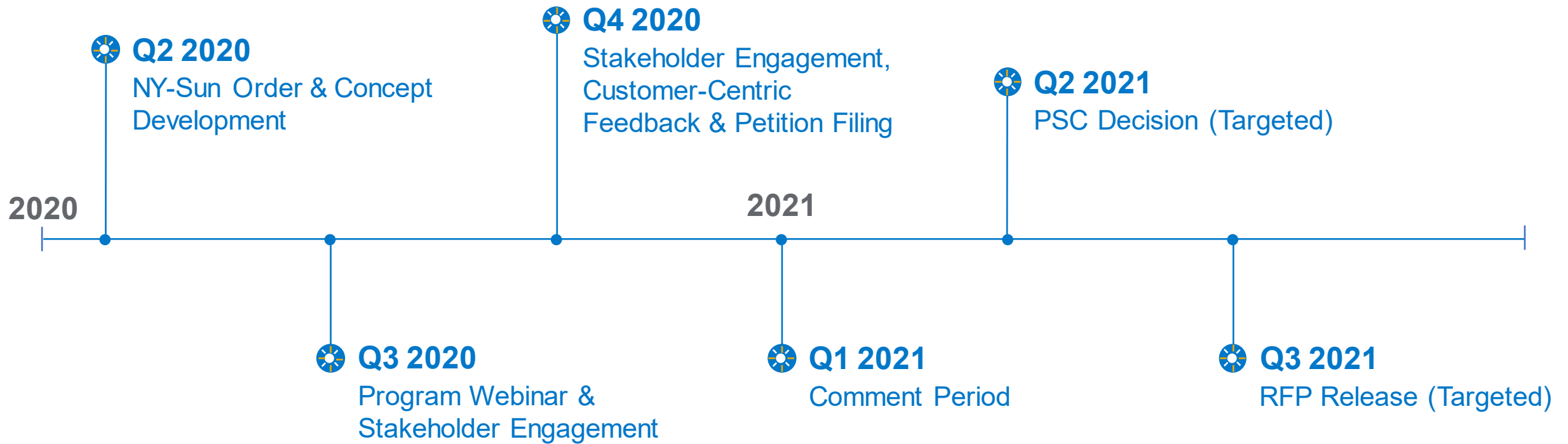
- **National Grid Customer Council:** Virtual focus group about the proposed program with current National Grid EAP customers
- **Solar for All Customer Survey:** Survey of 1,000+ current program participants on their experience

## > **Stakeholder engagement and feedback**

- NY-Sun will work with an outside facilitator to inclusively engage stakeholders and gather feedback
- Details will be shared with attendees in the coming weeks

## > **Petition and public comment period**

# Timeline



# **Adder for Inclusive Community Solar Projects**

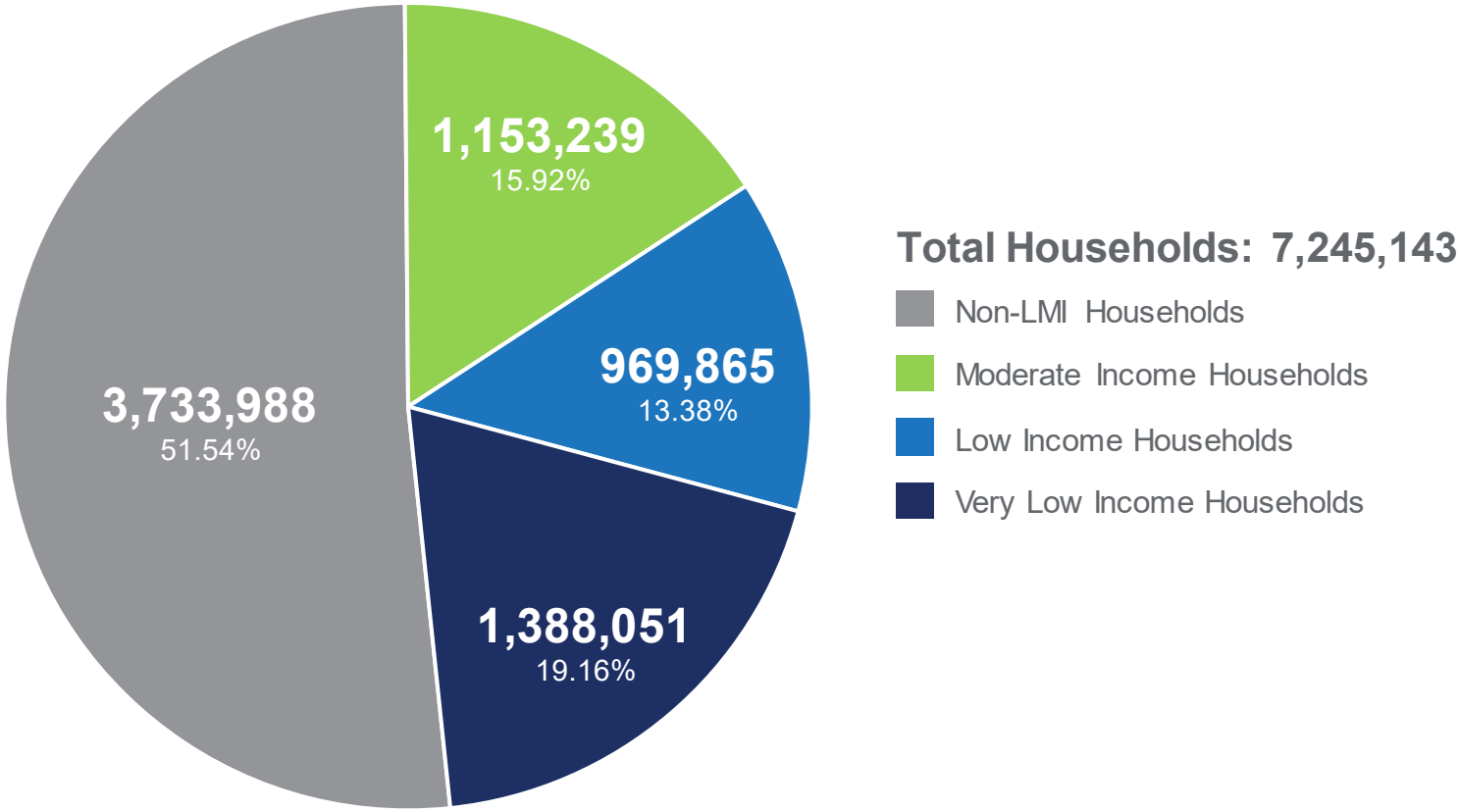
# Overview + Key Benefits

- > NY-Sun adder for community solar projects that provide community solar to low-to-moderate income households and disadvantaged communities
- > **We welcome and encourage feedback on this program design**
- > This presentation serves as a "straw proposal" that reflects the NY-Sun team's current thinking on program design.
  - Key values requiring additional analysis and feedback are presented as bracketed and italicized
- > Adder to be offered on a standard "per Watt" basis, similar to other NY-Sun adders
- > Works within existing CDG rules and NY-Sun program structure. All NY-Sun Participating Contractors can receive the adder for eligible projects.
- > Would be available for projects serving low-to-moderate income subscribers, affordable housing, and other facilities serving disadvantaged communities.
  - Primarily targets moderate income households.



# New York State Household Incomes

New York State Households (2013-2015 American Community Survey)



# Straw Proposal: Project Eligibility

- > Projects would be required to dedicate [40%-60%] of their capacity to eligible subscribers, meeting one of the following benchmarks:
  - At least [40%] of total project capacity is assigned to eligible residential subscribers, **or**
  - At least [20%] of total project capacity is assigned to eligible residential subscribers **and** at least [40%] of project capacity is assigned to eligible non-residential subscribers
- > Projects would be required to document to NYSERDA that they have met these requirements at commercial operation/initial allocation, and annually for each of the following [5] years
- > Projects would not be permitted to require minimum FICO scores and/or minimum incomes for the portion of the project used to demonstrate eligibility
- > Projects would submit an example contract for residential subscribers demonstrating guaranteed savings, and a marketing plan that specifically describes how LMI residential subscribers will be engaged by the project host

# Straw Proposal: Residential Subscriber Eligibility

- > Eligible residential subscriber is defined as a residential household that pays an individual utility bill
  - This includes homeowners and renters, and residents of single family or multifamily buildings (i.e., any residential customer eligible for CDG)
  - Submetered customers will also be eligible if a direct savings pass-through can be demonstrated
- > To be eligible, the residential subscriber must:
  - Have a documented household income under 80% of Area Median Income (AMI), **or**
  - Reside within a pre-qualified geographic area (“geo-eligible”)
- > Geo-eligibility will be determined by subscriber residence in a designated census tract or similar geographic criteria
  - No household-specific income information will be required, and NYSERDA will collect documentation of subscriber geo-eligibility from the project owner/host

# Straw Proposal: Non-residential Subscriber Eligibility

- > Eligible non-residential subscriber would include:
  - a regulated affordable housing property that predominately serves LMI households (i.e., the common or owner-paid meter)
  - After the designation of DACs by the Climate Justice Work Group per the CLCPA, NYSERDA may expand the definition to include a nonprofit organization or other entity/facility that is located within a disadvantaged community and primarily serves residents of the DAC
- > Eligible non-residential subscribers may be either non-demand metered or demand metered (i.e., "anchor" subscribers)

# Straw Proposal: Funding

- > Pipeline projects that have secured NY-Sun incentives but have not yet entered commercial operation will be eligible to opt into the adder.
  - Projects receiving the MTC or Community Credit may be ineligible given the strong economics of those projects and the desire to maximize the budget impact.
- > New NY-Sun project applications in the Upstate region would receive funding from a new "Inclusive Community Solar Adder" block, with higher incentive levels than the "standard" CA.
- > Projects in the ConEd territory (including those receiving the Community Credit) would be eligible for an adder, with a structure and level customized to that territory.
- > Projects receiving the existing Multifamily Affordable Housing adder would not be eligible.

# Straw Proposal: Payment Schedule

- > The payment schedule for the adder needs to balance the value of receiving incentives earlier in the project lifecycle (i.e., at or near commercial operation) with the need to confirm and document ongoing benefits to LMI households and disadvantaged communities.
- > The adder would be payable on the [3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup>] anniversary of commercial operation for commercial/industrial projects and the [1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup>] anniversary for nonresidential projects.

# Next Steps

- > **Geoeligibility analysis and baselining**
- > **CDG Developers/Managers:**
  - Help us determine LMI participation "baseline" in current projects and validate geo-eligibility method
  - We are collecting **anonymized** residential subscriber information: zip code, census block/tract
- > **Stakeholder engagement and feedback**
  - Responses to "straw proposal"
  - NY-Sun will work with an outside facilitator to inclusively engage stakeholders and gather feedback
  - Details will be shared with attendees in the coming weeks

# Timeline





# Q&A

# Appendix

# Climate Leadership and Community Protection Act (CLCPA)

- > Most aggressive climate policy enacted by a major global economy
  - **85%** reduction in statewide greenhouse gas emissions by 2050
  - **Net zero** emissions in all sectors of the economy by 2050
  - Passed by the New York State Senate and signed by Governor Andrew M Cuomo in June 2019
- > Established a target of **6 GW** of distributed solar by 2025
- > Established landmark commitments to disadvantaged and environmental justice communities
  - Disadvantaged communities to receive at least **35%**, with a goal of **40%**, of overall benefits associated with clean energy investments
    - Broadly defined disadvantaged communities and created the Climate Justice Working Group to develop a more specific definition and criteria
  - Also created a permanent Environmental Justice Advisory Group, Environmental Justice Interagency Coordinating Council, Just Transition Working Group, and the first statutory Climate Action Council

# Workforce Development Opportunities

- > NY-Sun will integrate the following clean energy workforce development opportunities into our programs:
  - Energy Efficiency and Clean Technology Training
  - On-the-job Training
  - Clean Energy Internships
  - Building Operations and Maintenance Program
  - Clean Energy Training Services