

# Distributed Solar Roadmap

## Overview Webinar

February 1 & February 3, 2022



**NYSERDA**

**Department  
of Public Service**

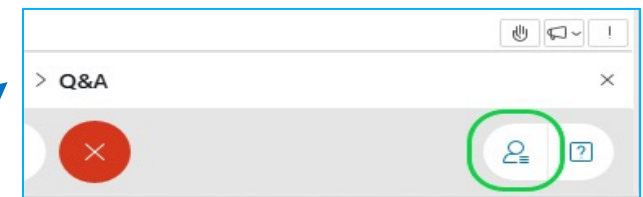
# Meeting Procedures

## Before beginning, a few reminders to ensure a smooth discussion:

- > Today's webinar is being recorded
  - A copy of the recording and presentation slides will be posted to NY-Sun's [Resources for Contractors](#) page
- > Members of the public will be muted upon entry

## To ask questions:

- > Questions and comments may be submitted in writing through the Q&A feature at any time during the event. Questions will be answered at the end of the presentation.



If technical problems arise, please contact  
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# Agenda

- > Introductions
- > Context
- > Distributed Solar Roadmap
  - Proposed MW Block Design
  - Disadvantaged Communities and LMI Households
- > Questions and Answers

# Webinar Structure

- > NYSERDA is presenting this webinar twice, on Tuesday February 1, and Thursday February 3.
- > Both presentations feature the same slide deck.
- > The Tuesday presentation will include greater discussion and focus on the proposed incentive structure and MW Block design, and is intended for solar developers, financiers, and contractors.
- > The Thursday presentation includes expanded discussion of the Solar Energy Equity Framework, and issues of relevance to Disadvantaged Communities and Low-to-Moderate Income subscribers. The Thursday webinar is intended for advocacy groups, housing authorities, and others working in this sphere.
- > Both webinars will be recorded and posted to the NY-Sun's [Resources for Contractors](#) page.

# Distributed Solar Roadmap Context



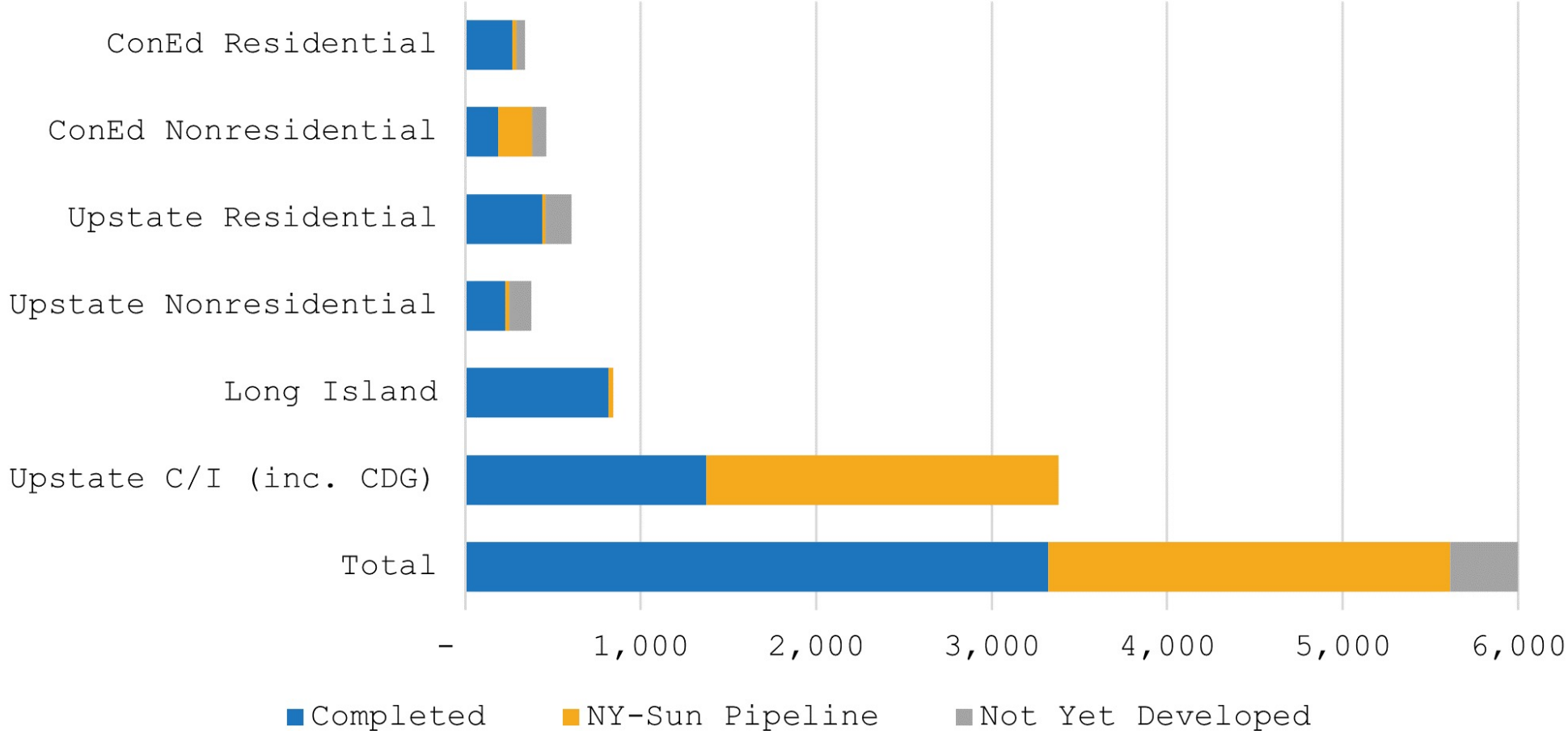
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# Roadmap Context

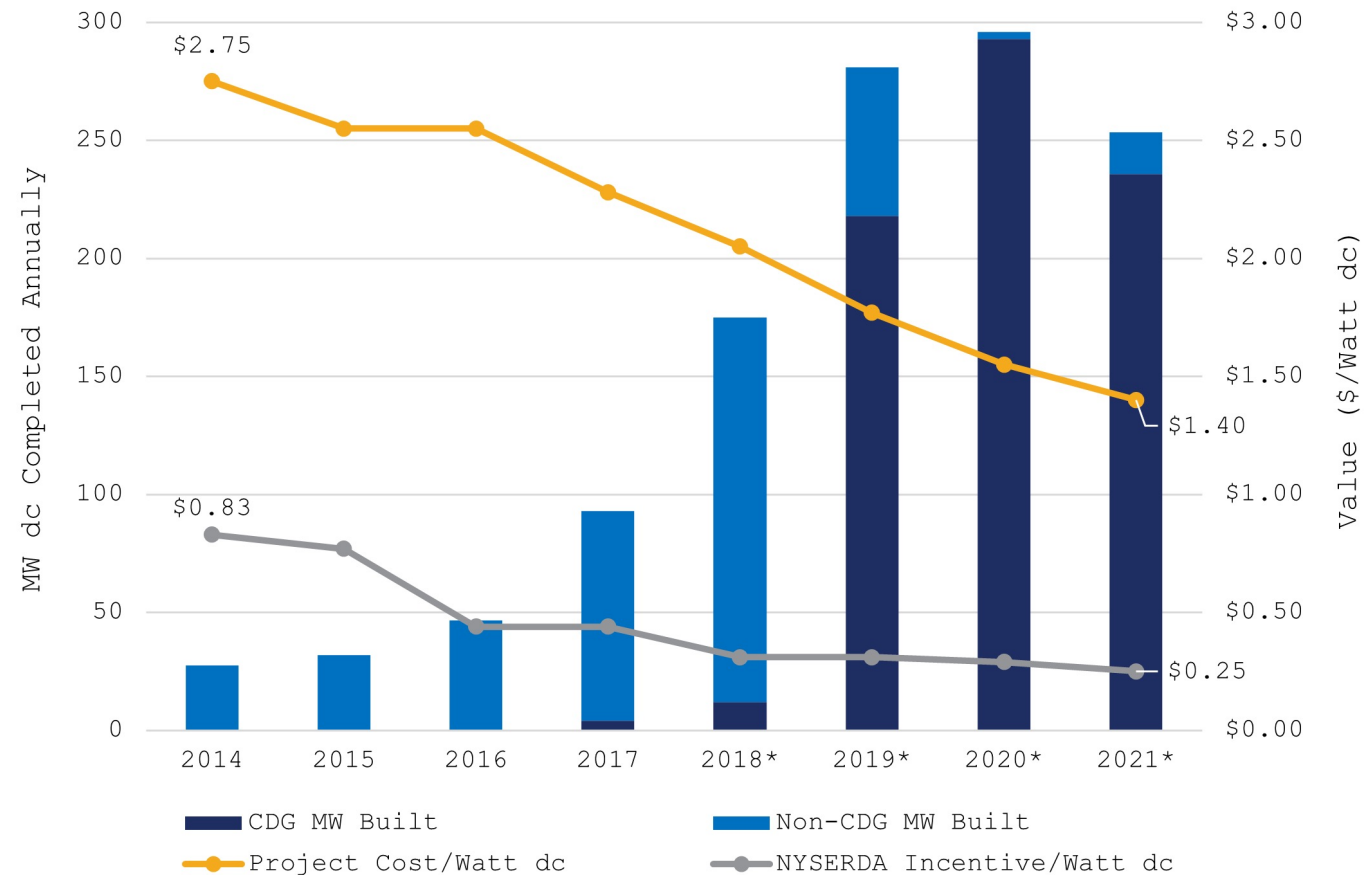
- > The current 6 GW NY-Sun distributed solar program target is nearly achieved; nearly **95%** of the target is either completed or at an advanced stage of development.
- > Distributed solar costs and incentives have declined over time, while a thriving solar market has created **~12,000** jobs.
- > Most existing incentives are exhausted – NY-Sun MW Block Program, Community Credit, Community Adder – and the industry needs guidance on what comes next.
- > NYSERDA and DPS Staff developed the Distributed Solar Roadmap to propose a pathway to achieve 10 GW of distributed solar deployment by 2030. The Roadmap is essentially a petition to the PSC, and is not yet an approved policy measure.
- > The Roadmap explores various options for setting incentive levels to achieve the expanded NY-Sun goal of an incremental 4 GW.

# Progress towards 6 GW by 2025 Mandate



Completion data is as of 10/31/2021.

# Annual C/I Projects Installed Cost and Incentive Levels



\*Note that 2018-2021 completions included new incentive adders for brownfield/landfill projects and those in strategic grid locations.

2021 data is as of 11/30/2021.



# Technical Conferences

- > On April 21, 2021, NYSERDA and DPS hosted a technical conference. The presentation:
  - Recapped industry progress, including cost declines and benefits of distributed solar.
  - Suggested that additional incentives would be needed to achieve C/I solar deployment beyond 6 GW.
  - Suggested that the E Value could be increased to better account for the clean energy benefits of renewable generation.
- > In a response presentation on May 7, 2021, the Clean Energy Parties stressed the importance of a transparent and quickly-implemented program change, suggesting that incremental changes were preferable to a full policy overhaul.

# Distributed Solar Roadmap Process

- > Following the Technical Conferences, NYSERDA and DPS began work on the Roadmap to propose a path forward for New York's PV industry.
- > The Roadmap involved extensive research, and took into account current industry developments, costs, and trends.
- > The team modeled project costs and revenues for a variety of project use cases, including variations by project technology, geography, and customer offtake. This modeling was used to calculate incentive levels.
- > Goal of 10 GW by 2030 is consistent with Governor Hochul's expanded goal, which was announced on September 21, 2021.

# Distributed Solar Roadmap Process

- > Roadmap was officially filed on December 17, 2021.
- > Open for public comments through **March 7, 2022**. Comments can be filed on the [Department of Public Service's website](#) under Case Number **21-E-0629**.
- > NY Public Service Commission may then issue an Order approving or denying the items requested in the Roadmap. The PSC has the ability to approve a modified version of the Roadmap.
- > NYSERDA would then implement the expanded program design. This would be relatively quick to implement, building on existing program platforms and resources.

# Distributed Solar Roadmap Content & Recommendations



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# Roadmap Recommendations

## Incentive Structure

- > The Roadmap considered many potential program designs:
  - Upfront incentive (NY-Sun) vs. tariff-based incentive per kWh
  - Administratively-set vs. auction
  - Fixed incentive vs. indexed
- > NYSERDA and DPS Staff determined that extending the longstanding NY-Sun Megawatt Block Program is the best method to achieve 10 GW by 2030.
  - The MW Block Program has a proven track record for transparency and flexibility, and an expansion can be operationalized immediately after approval.
  - Advantages over other options include: implementation feasibility, compliance with Climate Act DAC investment requirement, market compatibility, and ratepayer risk mitigation.
  - Auction approach not compatible with Standardized Interconnection Requirements (SIR).
  - Potential savings from indexed incentive might not offset risk and complexity.

# Roadmap Recommendations

## Interconnection Policy Improvements

- > The Roadmap recommends interconnection policy improvements including:
  - Modification of utility planning processes
  - The inclusion and consideration of distribution system investments that expand hosting capacity in future utility Capital Investment Plans
  - Expansion of the Cost-Sharing 2.0 framework.

# Roadmap Recommendations

## Labor Considerations

- > The Roadmap anticipates future labor policies including the reduction of the MW threshold for projects being subject to prevailing wage requirements or project labor agreements from 5 MW AC to **1 MW AC**, through either/both the federal (extended ITC eligibility) and state levels (legislation).
- > In line with this, the Roadmap proposes the payment of Prevailing Wage as a programmatic requirement for NY-Sun eligibility for projects 1 MW AC and above.
  - Projects submitting their initial utility application before Dec 17, 2021, would not be impacted.
  - An incentive adder (\$0.125/Watt upstate, \$0.20/Watt in ConEd) for impacted projects is proposed to help the market transition.

# Additional Capacity Breakdown

- > The Roadmap recommends the following geographical and segment-based breakdown of incentive blocks for the Incremental 4 GW Target:

Incentive Group	MW
Upstate MW Block Incentives – C/I	2,943
Con Edison MW Block Incentives - Residential	150
Con Edison MW Block Incentives - Small Projects	150
Con Edison MW Block Incentives - Large Projects	150
<b>Subtotal: MW Block Incentives</b>	<b>3,393</b>
Long Island, and Upstate Unincentivized Projects	607
<b>TOTAL</b>	<b>4,000</b>

- > Long Island projects may require non-CEF funding from LIPA.



# Budget/Funding

- > NYSERDA requests a total budget of **\$1,474 million** in NY-Sun Program funding to achieve the Incremental 4 GW Target by 2030.
  - Approximately **\$420 million** is for MW Block base incentives and siting adders for projects in Con Edison's territory.
  - Approximately **\$400 million** is for MW Block base incentives for Upstate projects.
  - Approximately **\$179 million** in Community Adder and beneficial siting incentive adders will be available to both Upstate and Con Edison projects
  - **\$239 million** is included to assist the industry with a transition to increased prevailing wage requirements.
- > The Roadmap proposes that program costs will be paid for by ratepayer collections through **2032**.

# Proposed Budget

Budget Item	Requested Additional
MWB Incentives and Adder	\$999M
Funds to Assist Transition to Prevailing Wage	\$239M
Solar Energy Equity Framework	\$207M
NY Cost Recovery Fee	\$16M
Administration	\$12M
Evaluation	\$1M
<b>TOTAL</b>	<b>\$1,474M</b>

# Ratepayer Impact

- > Ratepayer impact will vary by year based on expenditures, but on average is estimated to be **0.79%**, or **\$0.71** per month for the average residential customer for the 11-year period of ratepayer collections, and to peak in 2024 at 1.07%, or \$0.92 per month.
- > Developers are expected to leverage the federal investment tax credit (ITC) and other tax incentives to reduce the costs of these solar projects. Additional cost reductions could occur as a result of federal policy changes, which would reduce the estimated ratepayer impact.

# Benefits

- > The distributed solar projects associated with expanding the State's goal from 6 GW by 2025 to 10 GW by 2030 are expected to:
  - Support approximately **\$4.4 billion** in private investment.
  - Reduce greenhouse gas emissions by over **64 million US tons** (58 million metric tons) over the lifetime of the projects deployed (2022-2054).
  - Bring bill savings to an estimated **127,000** new solar customers and off-takers.
  - Create approximately **6,000** jobs statewide, many of them providing prevailing wages.
  - Generate enough clean electricity per year to power nearly **700,000** additional New York homes.

# Proposed Incentives for Upstate NY

- > Base Incentive – 2,943 MW. Initial block of 800 MW at \$0.17/Watt
- > Community Adder – 70% of new MW at \$0.07/Watt
- > Prevailing Wage Adder - \$0.125/Watt for qualifying projects
- > Landfill/Brownfield Adder – continued at \$0.15/Watt

# Proposed Incentives for ConEd Projects

- > Base Incentive –
  - Commercial/Industrial Projects >1MW: 150 MW. Initial incentive of \$0.75/Watt
  - Commercial/Industrial Projects <1MW: 150 MW. Initial incentive of \$1.30/Watt
  - Residential Projects: 150 MW at \$0.15/Watt
- > Community Adder – 70% of new C/I MW at \$0.10/Watt
- > Prevailing Wage Adder - \$0.20/Watt for qualifying projects
- > Landfill/Brownfield Adder – continued at \$0.15/Watt

# Solar Energy Equity Framework (SEEF)

- > No less than **1,600 MW** (40% of proposed new capacity) be targeted toward low-to-moderate income (LMI) residents, regulated affordable housing, disadvantaged communities (DACs), and environmental justice communities
- > Of this, **1,357 MW** would be targeted for new NY-Sun incentives through the SEEF
- > **\$207 million** in dedicated additional incentives for the SEEF, which would leverage approximately **\$400 million** more in “base” incentives for eligible projects
- > Current SEEF programs would be continued, and at least half of the new capacity would be targeted to LMI residential customers with **direct electric bill savings**
- > Co-design of programmatic support for community-led solar projects with stakeholders representing DACs
- > Increased integration with Statewide Energy Affordability Policy and the LMI Portfolio, including building electrification, heat pumps, efficiency, and energy storage

# Current SEEF Programs

## > **Affordable Solar Single-Family Incentive**

- Currently \$0.80/Watt in ConEd and Upstate, \$0.40/Watt on Long Island

## > **Multifamily Affordable Housing Incentive**

- Currently \$1.00/Watt up to 200kW of nameplate capacity (ConEd/Upstate/Long Island), \$2.00/Watt for CDG projects in ConEd that do not receive the Community Credit

## > **Affordable Solar and Storage Predevelopment and Technical Assistance Program**

- Grants up to \$200,000 supporting community-based planning and predevelopment work on projects benefitting LMI households, DACs, and affordable housing

## > **Inclusive Community Solar Adder**

- Additional incentives for CDG projects serving eligible customers
- ICSA structure, rules, and incentive levels will be adjusted based on outcome of Roadmap process and lessons learned from first round of funding



# SEEF and Designated DACs

- > SEEF was initially developed and proposed prior to publication of Interim DAC Designations
- > Draft DAC criteria will be published in February 2022, with public process to follow and adoption of Final DAC criteria in mid-2022
- > SEEF funding eligibility is generally based on who benefits from the electric bill cost-savings of the project, and can differ from the geographic criteria of the Designated DACs
  - Projects benefitting low-income and moderate-income residents who do not live in DACs are still eligible for SEEF funding
  - Projects benefitting upper-income residents or large commercial customers located in DACs are not currently eligible for SEEF funding
  - Approximately 22.9% of NY-Sun residential projects to date are in Draft Criteria DACs
- > Some SEEF programs specifically target benefits to DACs with special funding eligibility
  - Predevelopment grants available for community-based initiatives benefitting DACs
  - Easier ICSA eligibility process for DAC residents, as well as eligibility for nonprofits serving DACs

# Co-design for Community-led Solar

- > NYSERDA is planning to launch a co-design process to develop a program that will support community-led and community-owned solar development in underserved communities.
- > The co-design will run for 6-9 months and result in the creation of a program that supports community-developed solar projects in underserved communities.
- > Co-design participants will collaborate with NY-Sun staff to identify barriers that are impeding community-led solar development in New York State, and develop a list of possible solutions to address the barriers.
- > This Co-design effort is happening **in parallel** to the 10GW Roadmap.

# Timeline: Co-design for Community-led Solar

Activity	Month	Description
<b>Kickoff Meeting</b>	1	Review Work Plan, Timeline, Roles. Develop community agreements and consensus process
<b>Trainings</b>	1 & 2	<p>Participate in trainings about community solar development in New York State on topics including installation, financing, and interconnection. 2 of the 6 topics will be developed based on feedback from the co-design participants.</p> <p><b>Outcome:</b> All Co-Design participants have similar baseline of understanding of all information relevant to Community Solar.</p>
<b>Issue Identification</b>	3 & 4	<p>The co-design participants (with NYSERDA) will name, review, explore and summarize issues impeding the development of community-led and/or community-owned solar, and identify precedents or models for addressing issues.</p> <p><b>Outcome:</b> Issue Identification Brief, which clearly articulates all relevant issue areas, categorized into working groups, and prioritized for solution development.</p>

# Timeline: Co-design for Community-led Solar

Activity	Month	Description
<b>Solution Development: Phase 1</b>	4 & 5	<p>Map possible solutions or precedents to identified issues. Identify equity metrics and discuss milestones for the program. If needed, form working groups for multi-pronged barriers and issues.</p> <p><b>Outcome:</b> NYSERDA and co-design participants will develop a Solutions Brief with proposals that address issues areas and enable support for community-led and/or community-owned solar development in New York State.</p> <p>NYSERDA will clearly articulate what solutions NY-Sun can design and implement, and what solutions are outside the limits of NY-Sun but how best to advance those solutions.</p>
<b>Solution Development: Phase 2</b>	5 - 7	<p>Conduct outreach and engagement to gather stakeholder and community input on the Solutions Brief through NYSERDA's Request For Information process.</p> <p><b>Outcome:</b> Stakeholder and community-wide feedback to potential solutions to advance community-led and/or community-owned solar.</p>
<b>Program Development and Release</b>	7 - 9	<p>NYSERDA will review all the Solutions brief materials and develop a final incentive program. Additional reviews of materials may take place with co-design participants prior to release</p>

# Questions & Answers

Please use the Q&A feature in WebEx to submit a question.



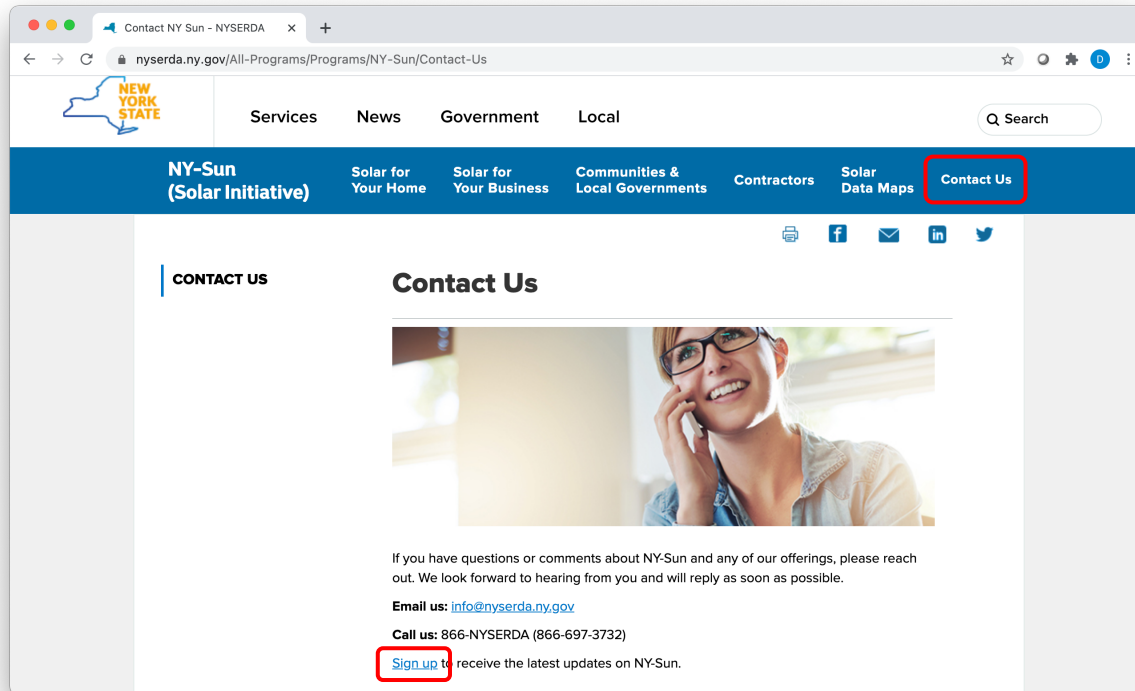
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# Thank You

- > If you have questions on this presentation, please contact [communitysolar@nyserda.ny.gov](mailto:communitysolar@nyserda.ny.gov).
- > A high level overview of the Roadmap is [available here](#).
- > The Roadmap is open for public comments through **March 7, 2022**. Comments can be filed on the [Department of Public Service's website](#) under Case Number **21-E-0629**.

# Sign up to receive emails from NY-Sun



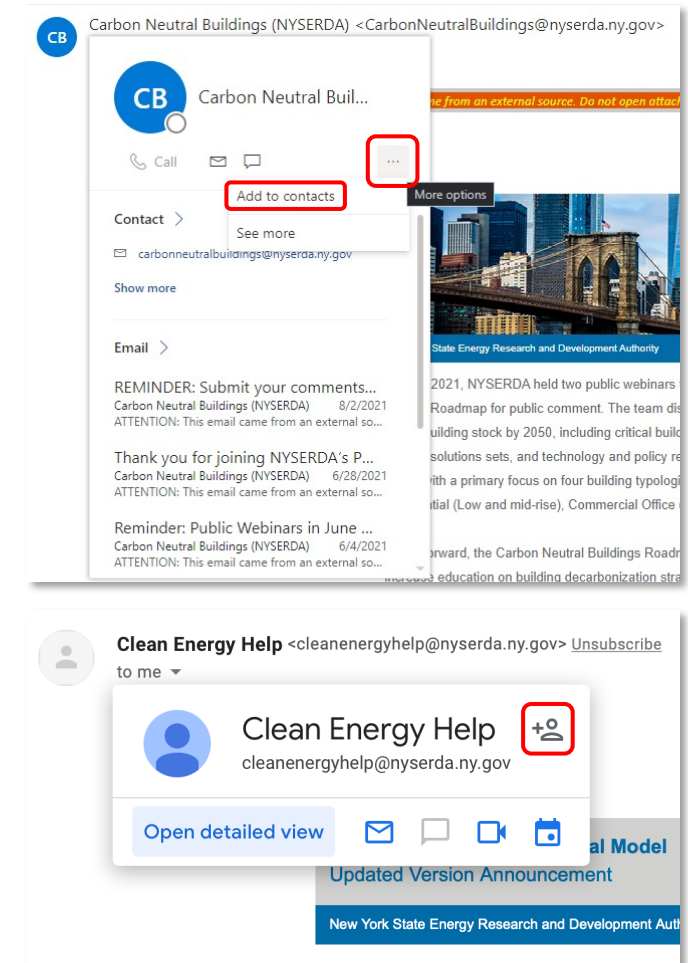
- > Go to [nyserda.ny.gov/ny-sun](https://nyserda.ny.gov/ny-sun)
- > Click **“Contact Us”** in the navigation menu
- > Scroll down the page and click **“Sign up to receive the latest updates on NY-Sun”**
- > Enter your information and be sure to select the lists that interest you under **“Email Lists”**
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## ☑ **Affordable Solar (Low-to Moderate-Income):**

Information and updates on programs serving the low-income population to include Affordable Solar and Affordable Solar Predevelopment and Technical Assistance.

# Add our email to your contacts

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# Appendix



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# Eligibility for New Incentives

- > “Upstate C/I projects that have already received a NY-Sun incentive at the time this Roadmap is published will not be permitted to cancel their applications and re-apply at a higher incentive rate.” **page 74**
- > “Projects that have not previously received a NY-Sun incentive commitment may apply for newly available NY-Sun incentives subject to regular program rules and eligibility requirements.”  
**page 74**
- > “Con Edison Nonresidential projects that apply to the NY-Sun program subsequent to the filing of this Roadmap, as well as Con Edison Nonresidential projects that submitted applications to the current block (Block 10) and were not previously awarded the Community Credit may, subject to an authorizing Commission Order, opt into the new incentive structure proposed above.” **page 75**