

Green Jobs Green New York Advisory Council Meeting

September 15, 2020

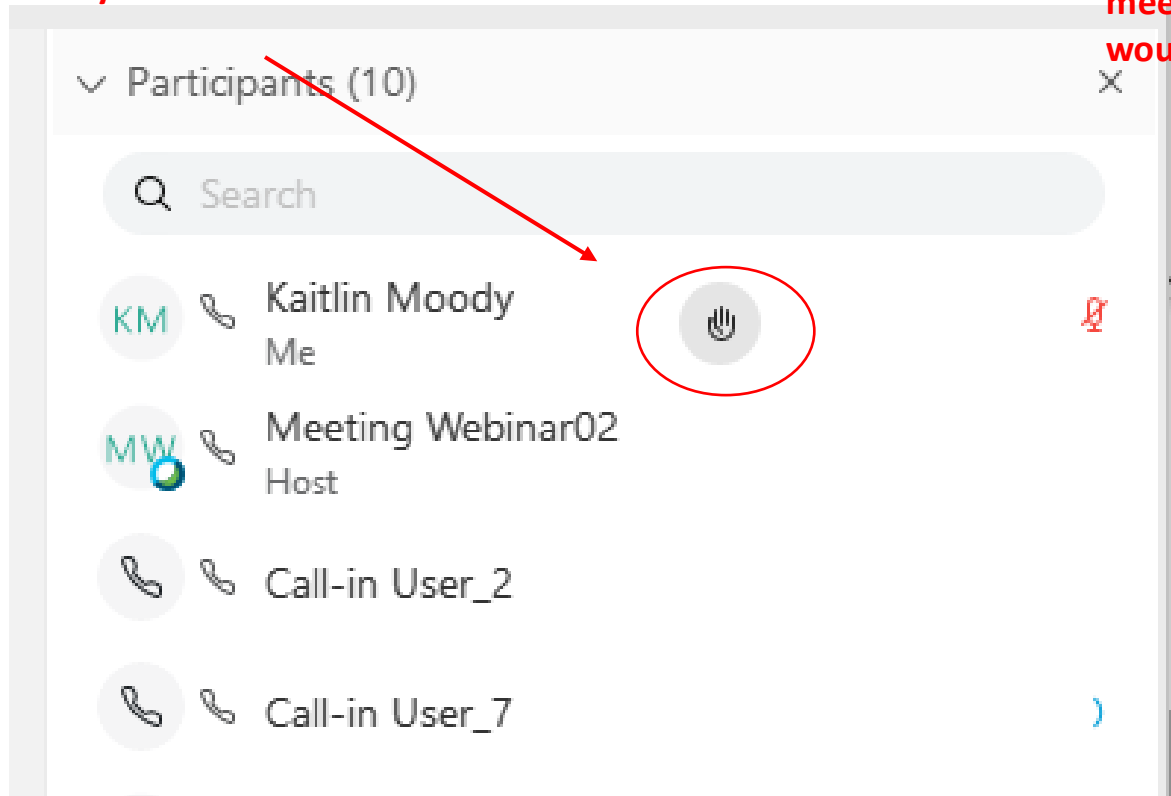


NYSERDA

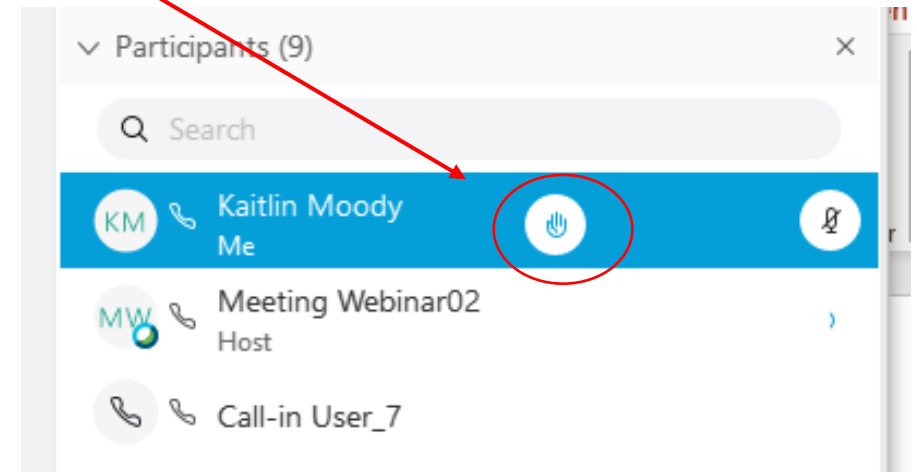
Webex Housekeeping

WebEx Instructions for Raising Virtual Hand

Highlighting Participant
Section: See Virtual
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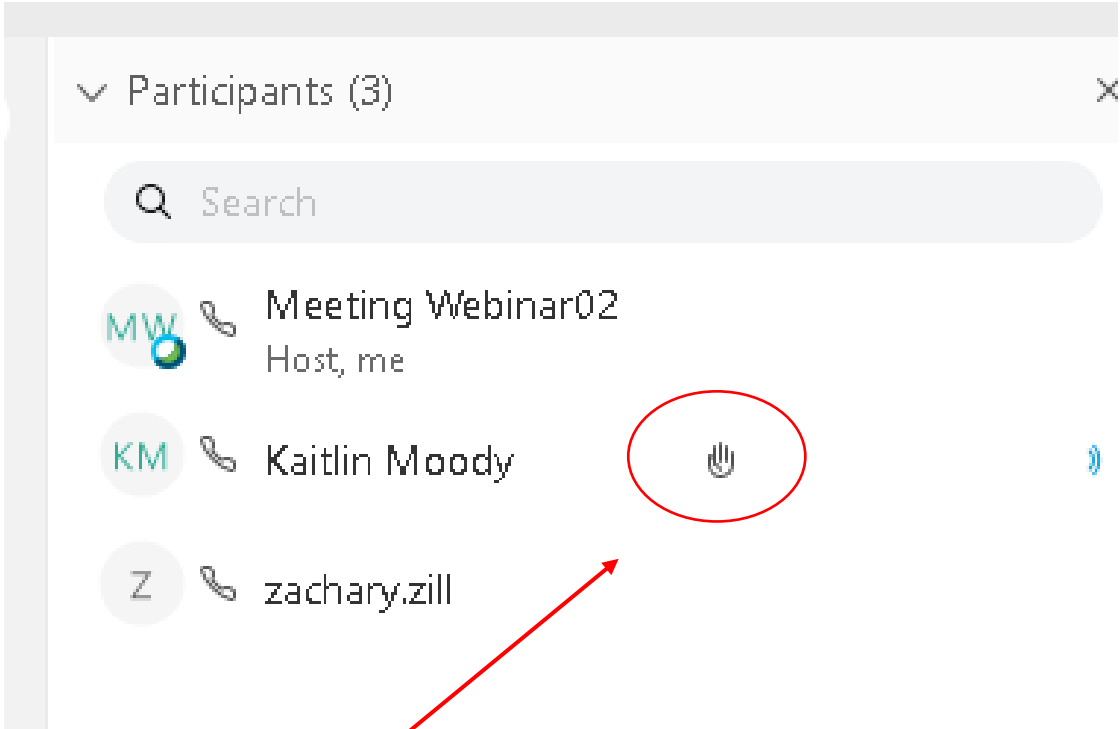
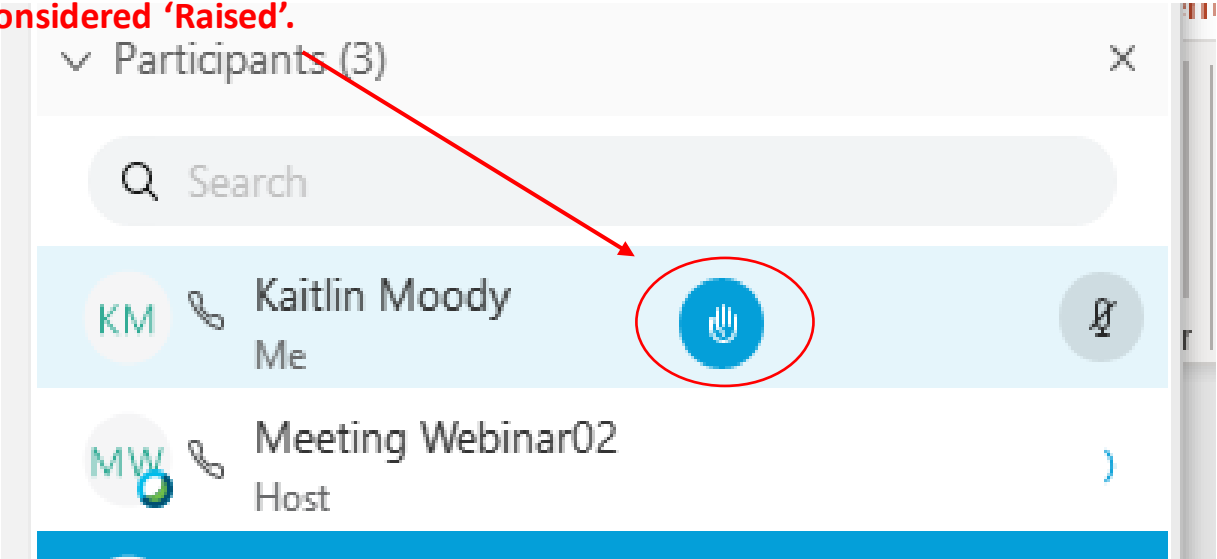


Click on the Virtual
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How your Raised Virtual Hand will appear on the 'Host' Screen

Advisory Council Member – Roll Call

Emily Dean, Moderator

Agenda

- > Opening Remarks
- > GJGNY Financing
- > Residential Programs
- > Small Commercial & Multifamily Programs
- > Community Outreach
- > Workforce Development
- > Evaluation
- > Other Updates

Welcome & Opening Remarks

Doreen Harris, Acting President and CEO

The year that 2020 has been...

Since March, the earth has shifted under our feet

- > COVID-19 pandemic and economic fallout
 - New York State mounted an unprecedented response, making it “through hell and back” (Gov. Cuomo)
 - ~450,000 positive test results in NYS; 25,300+ fatalities through early September
 - Millions of unemployment claims filed; billions of dollars in projected budget shortfalls
 - New York On Pause – slowed the spread and saved lives
 - New York Forward – careful reopening of the economy and society in phases
 - NYSEERDA took feedback from stakeholders to respond quickly with program adjustments and increased flexibility
 - Provided resources and training to help our clean energy industry safely get back to work
 - Through September: 9M+ tests performed; 35+ days straight of positive rates < 1%
- > Widespread call to action and protests for racial and social justice
 - National reckoning with the reality of systemic racism
 - From Minneapolis to Kenosha to Rochester, we all have to ask ourselves: are we doing all we can?

Harnessing momentum to drive policy change

Implementing the Climate Leadership and Community Protection Act (CLCPA), with a central focus on serving disadvantaged communities

- > Under the Climate Action Council (CAC), intensive work is now underway to implement the many directives of the 2019 Climate Law
 - Advisory Panels have been formed, along with Just Transition and Climate Justice Working Groups
 - Advisory Panel's sector-specific recommendations will inform Council's Scoping Plan development
 - Climate Justice Working Group will issue definition/criteria for disadvantaged communities
 - Just Transition Working Group will take up needs and opportunities related to the energy workforce
 - Panels and WGs reflect diverse cross-section of New York, including strong EJ representation
 - Plus: DEC Emission Methodology regulations, Section 7 (State facilities) compliance, and much more
- > Monitoring CLCPA implementation and CAC activities for synergies with GJGNY

Equity at the forefront

Equity priorities have been a focal point of NYSERDA program/policy activity in 2020

- > Trio of major announcements in July showcased focus on energy equity
 - **Statewide LMI Implementation Plan:** almost \$1B in LMI efficiency investments through 2025 (w/ utilities), more than doubling the current number of LMI households receiving services
 - **EV and Clean Transportation:** \$206M in EV charging investments to benefit LMI and Disadvantaged Communities, including \$85M for three innovative Clean Transportation "Prizes," run by NYSERDA
 - **Offshore Wind and Large-Scale Renewables:** projects to prioritize hiring in environmental justice communities, benefit disadvantaged communities, and adopt project labor agreements/prev. wage
- > Affordable solar energy (June) - \$10.6m in funding to address market barriers for solar and storage adoption by LMI customers/communities (part of \$200m LMI/DAC NY-Sun funding)
- > GJGNY 0% Financing – limited duration, COVID rapid-response offering to spur activity
- > Clean Energy Engagement and Community-Based Outreach
 - New level of investment (\$45m under LMI Implementation Plan) reflects significant increase, goes above and beyond (and builds on) existing obligations/commitments under GJGNY

GJGNY Advisory Council Membership

Promoting diverse membership and voices as part of broader NYSERDA efforts

- > NYSERDA has undertaken a holistic review of our institutional practices and processes with regard to diversity, equity and inclusion
- > Efforts to seize opportunities within our own organization to include diverse perspectives and promote underrepresented voices wherever possible
- > Our holistic look at diversity also includes our stakeholder engagement groups, such as this Advisory Council.
 - We are interested in taking a fresh look at the composition/membership of this Council
 - With your help, we can do more to bring more voices, new perspectives to the table
- > NYSERDA team will be making outreach to all Council members. Please connect with Kevin Carey (Kevin.Carey@nyserda.ny.gov) to share suggestions and discuss any questions.

GJGNY Financing

Jeff Pitkin, John Joshi, Heather Clark

COVID-19 Response Actions

- Suspension of late payment fees
- Suspension of delinquency collections and referrals to NYS Attorney General's office
- 2-month deferrals upon request
- 0% Financing
 - Commenced June 1, 2020
 - Announced to run for 12 months or until
 - \$20M in loan approvals
 - Surpassed target and suspended offer June 15

	Total #	% of #	Estimated Loan Amount	% of \$
EE	701	33%	\$6,006,761	20%
PV	1,149	54%	\$18,408,196	62%
GSHP	174	8%	\$3,705,559	12%
ASHP	112	5%	\$1,667,392	6%
RHNY	1	0%	\$25,000	0%
Total	2,137	100%	\$29,812,908	100%

Loan Loss Reserve Update

- A Loan Loss Reserve (LLR) provides partial loss coverage for eligible financings – NYSERDA proposing to use for Energy Efficiency and Renewable Energy (“EE/RE”) Financing Solutions for Residential, Small Commercial, NFP and Multifamily buildings.
- This additional security enhances the risk profile of EE/RE projects and can motivate financial institutions to offer EE/RE financial products.
- In the event of a default, the investor can recoup a portion of their losses from the reserve fund, up to a maximum sizing of the reserve fund thereby broadening access to capital and lowering interest rates.
- Loan loss reserve funds take a portfolio approach to credit structuring. The loan loss reserve approximates the anticipated default rate on all the loans in the portfolio, which can mitigate lender risk and open up the market for additional EE/RE lending.
- Programs have been successfully deployed in CA, CT, MA, MI with direct impact to underserved borrowers

Loan Loss Reserves Impacts

- > The LLR could be expected to have the following impacts:
 - ***Increase the number of capital providers.*** Could encourage local banks, credit unions, and community development finance institutions (CDFIs) to provide EE/RE Financing Solutions.
 - ***Increase size of unsecured lending.*** *Larger loans to finance more deeper upgrades*
 - ***Extend loan term.*** *Loan term could extend for all class of borrowers from 5+ years to 15 – 25 years, allowing for the monthly payment to closely match the energy savings*
 - ***Expand underwriting criteria.*** *Lender can consider expanded underwriting criteria (e.g. lower consumer credit scores or no minimum).*

Loan Loss Reserve Terms

- A minimum of 35% of the Residential Loans must be to consumers with a FICO score = < 680.
- A minimum of 35% of lending in the Multifamily Sector must be for Affordable Multifamily Buildings
- LLR offered for any type of financing – e.g. loan, lease, PPA, energy services agreement
- New financing structures encourages – ESA, MSA, PAYS, off-balance sheet approaches, and performance-based structures
- No prepayment penalty
- LLR stays with financing structure for asset sale or securitization through maturity
- Residential debt products min 580 FICO, but performance-based structures can be offered <580

Sector	Max Loan Amount	Initial LLR Funding Allocation	LLR Portfolio Maximum Coverage
Residential (1-4 family)	\$50k	\$500,000	<ul style="list-style-type: none"> • 10% > 660 FICO • 35% = < 660 FICO • Minimum 35% of Portfolio loans = < 680 FICO
Small Commercial (<100 employees)	\$500k	\$500,000	<ul style="list-style-type: none"> • 20% of 1st \$50k; • 5% remaining \$450k
Multifamily (5+ units)	\$1MM	\$1MM	<ul style="list-style-type: none"> • 20% of 1st \$50k; • 5% remaining \$950k • Minimum 35% of Portfolio loans to Affordable Multifamily Buildings
Not-for-Profit	\$500k	\$1MM	<ul style="list-style-type: none"> • 20% of 1st \$50k; • 5% remaining \$450k

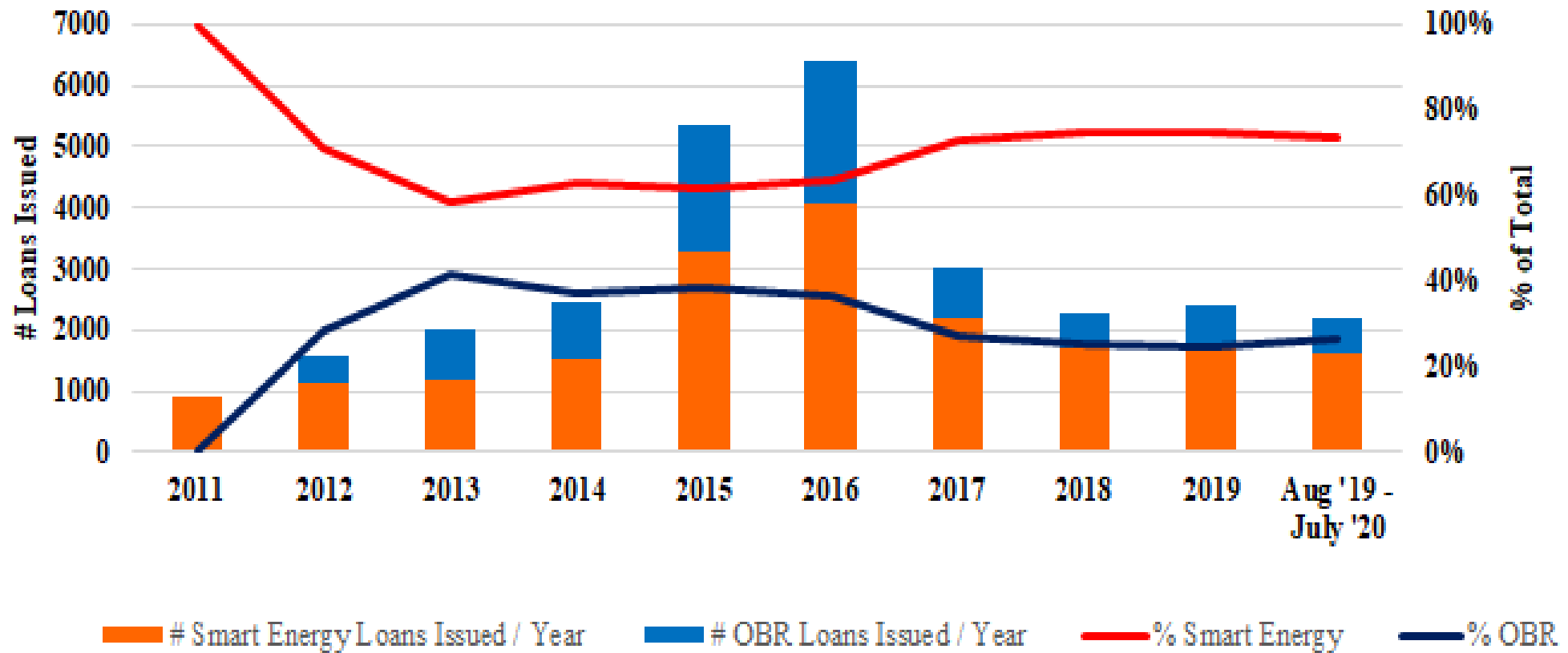
GJGNY “IPNA” Lending For Multifamily Buildings

- > *IPNA could be expected* to have the following impacts:
 - ***Access to low cost GJGNY capital for borrowers.*** Catalyze uptake of energy efficiency measures
 - ***Increase GJGNY capital leverage:*** for each \$1 of GJGNY, can lead to 25x of deployed project capital for impact.
 - ***Increase the uptake of energy efficiency upgrades.*** Could encourage multifamily building owners to adopt deeper energy upgrades as well stay in an affordable housing program.
 - ***Engage with Housing Agencies to expand impact.*** Expand program outreach and potential for larger loans to finance more deeper upgrades to reduce emissions and operating expenses.
 - ***Impact Housing Preservation and Rehabilitation Programs.*** Loans can assist building owners to meeting the energy and environmental goals of New York City’s Climate Mobilization Act.
 - ***Eligible Green Requirements for Multifamily Buildings.*** Building owners can pursue cost-effective energy efficiency measures identified in the IPNA for Enterprise Green Communities Criteria for higher building performance.

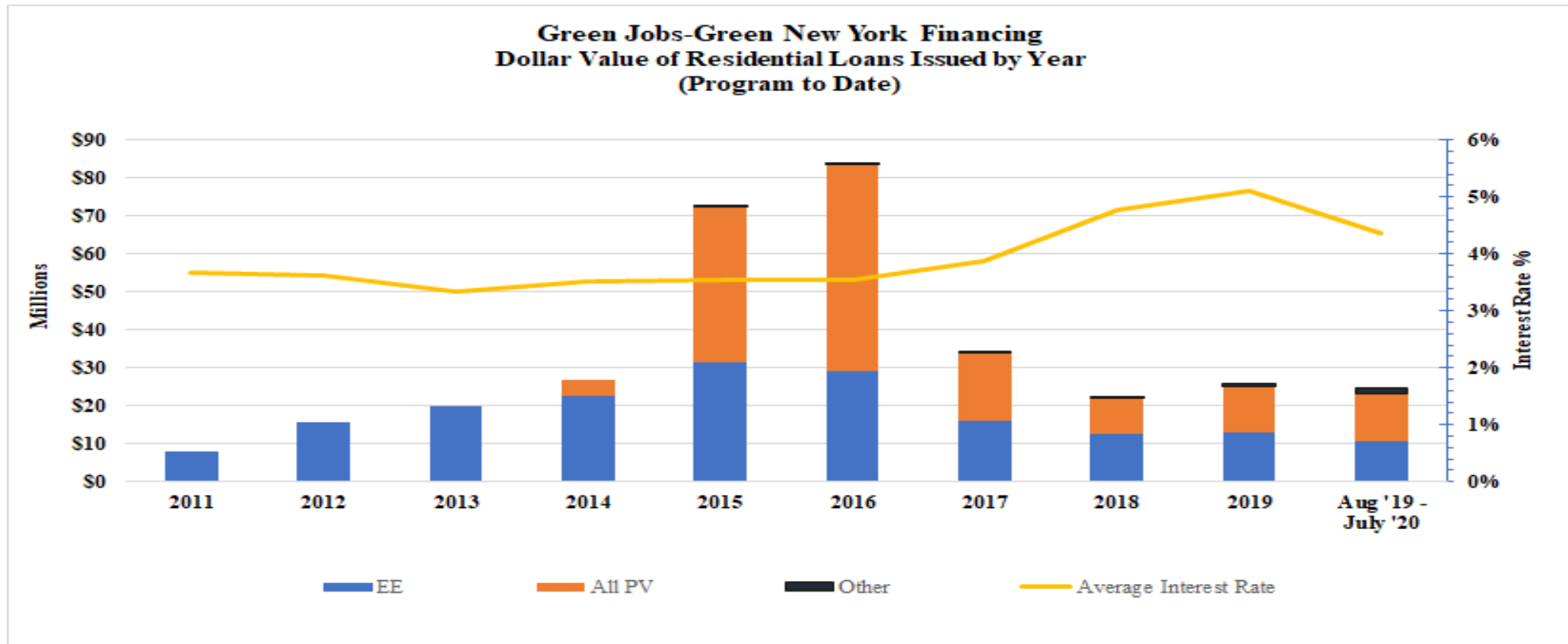
GJGNY Financing – Changes

- Geo-based interest rate eligibility
- Contractor Advance Program
- Revisions to Project Cost Effectiveness Calculations
- Replacement of Loan Origination System
- Companion loan
- Consideration for tax-credit bridge loan
- Consideration of interest rate buydowns

Green Jobs-Green New York Financing Residential Loans Issued by Type (Program to Date)



GJGNY Financing – Loan Portfolio/Performance Updates



Portfolio Performance

	Loan Count	Delinquent Dollar % of Current Balance	Cumulative Losses to Original \$	Extrapolated Lifetime Net Losses%
Tier 1	22,295	3.21%	2.27%	3.58%
Tier 2	5,344	6.58%	6.55%	9.41%
Total	27,639	5.51%	3.04%	4.42%
On-Bill Recovery	8,972	10.02%	2.36%	3.40%
Smart Energy	18,667	2.50%	3.47%	5.13%
Total	27,639	5.51%	3.04%	4.42%
EE	18,622	5.60%	4.39%	5.95%
PV	8,808	5.44%	1.43%	2.30%
Other	209	4.91%	2.92%	6.33%
Total	27,639	5.51%	3.04%	4.42%

Questions or comments?

Residential Programs

Courtney Moriarta, Scott Oliver, and Bill Keating

Residential Programs – COVID response

- > NYSERDA COVID response actions included:
 - Developing recorded webinar for all in-home energy efficiency workers covering safe work practices in accordance with DOH guidelines
 - Temporarily suspending blower door test requirements
 - Supporting the use of low/no touch audit and data collection methods
 - Paying for remote audits and "Remote Audit Challenge" funding opportunity
 - Development of low touch in-field audit procedures with BPI
 - Development of revised blower door procedures with HCR and DOH
 - Suspending "ink signature" customer sign-off for GJGNY market-rate audits (working on systems updates to accommodate electronic signatures)

Residential Programs – COVID response

In addition, NYSERDA made the following changes to the Low-to-Moderate Income Programs including:

1. Assisted Home Performance (AHP) income level increased to 120% AMI
2. AHP subsidy increased to \$5,000 / \$10,000
3. AHP - Direct Install*
4. EmPower project price cap raised to \$10,000*
5. Personal Protective Equipment (PPE) adder for EmPower Home Performance projects of \$200

LMI Program Updates

- > Low-to-Moderate Income program changes include:
 - Launched the Assisted Home Performance geo-based eligibility pilot
 - Monroe, Albany, Schenectady, and Rensselaer counties; census blocks with 50% of population at 80% AMI
 - Program re-design planning – programmatic and system changes needed to combine AHP and Empower into one program with one application, workflow, portal, updated incentives and set of eligible measures
 - LMI Heat pump adder – pilot to provide EmPower and AHP customers with incentives for air-source and geo-source heat pumps

Residential Audit Program Update

New Residential Energy Audit program launched January 1st, 2020

Features include:

- All income levels eligible for no cost audit
- Expanded list of qualifying contractor credentials
- Simplified customer application and contractor reimbursement process
- Streamlined audit data collection tool and customer recommendations report

Residential Audit Program Update (cont'd)

Residential Energy Audit Program Production

- **66** Contractor/Auditor companies currently participating in the Residential Energy Audit Program
- **1,120** energy audits have been completed YTD through 8-31-20

Residential Audit Program Update (cont'd)

- NYSERDA releasing Remote/Virtual Audit Challenge to support remote/virtual energy audit approaches
- Based on learnings, NYSERDA will develop a remote/virtual energy audit offer to launch in 2021

Questions or comments?

Commercial & Multifamily Program Updates

Patrick O'Shei, Joanna Moore, & Brian
Cabezas

COVID response

- COVID response actions include:
 - Effective July 13, 2020 through December 31, 2020, Energy Studies for Small Commercial and Not-For-Profit Entities will be available at no cost for eligible customers.
 - NYSERDA is also reimbursing the remaining portion of eligible FlexTech study costs (up to 100% of study costs) upon installation of measures recommended through an approved FlexTech study for applications submitted between 6/15/20 and 12/31/20, applicable to GJGNY customers interested in more in-depth analysis. Available to commercial and multifamily customers.

Small Commercial - Program Updates

- Free Clean Heating and Cooling screenings are now available for customers to explore the benefits of ground source heat pumps, air source heat pumps, and variable refrigerant flow systems.
- Since the start of GJGNY Energy Studies in March 2019, 171 applications have been received and 144 energy study reports have been delivered (as of July 29th, 2020).
- Total savings recommended to date: 835,000 kWh and 14,000 MMBTU

Small Commercial – Most Common Measures

Measure Types	# of Recommendations
Interior Lighting Retrofit	106
Exterior Lighting Retrofit	63
Building Airflow Reduction	50
Insulate Building Envelope	37
Insulate Heating and Domestic Hot Water Pipes	35
Install Double Glazing	34
Implement Night Setback	27
Implement Deeper Setback	26
Insulate Heating Pipes	23
Personal Computer Power Management	23
Insulate Domestic Hot Water Pipes	21
Improve Temperature Control	14
Occ. Sensor Switch	14

Multifamily Program Update

- > NYSERDA continues to offer technical assistance and efficiency incentives for affordable multifamily buildings through the Multifamily Performance Program (MPP)
- > Recent MPP changes include:
 - Reduced energy savings threshold from 20% to 15% relative to baseline making it easier to participate in MPP.
 - Switched from source to site energy savings to encourage electrification of heating.
 - COVID-related program changes through December 2020: adjusted payment schedule and increased program flexibility to support MPP Providers.
- > NYSERDA expanded FlexTech and On-site Energy Manager to all multifamily buildings

Questions or comments?

Community Outreach

Kelly Tyler and Chris Coll

Community Outreach

- In-person outreach events in Q1 and Q2 2020 were cancelled or postponed due to COVID-19.
- Adapted to virtual outreach and engagement and leveraged social media and other channels (e.g. as email blasts, newsletters, local newspaper articles, etc.)
 - The Southern Tier CEAs organized two large-scale online Earth Day celebrations, for Tompkins and Broome & Tioga Counties.
 - Mid-Hudson hosted a virtual outreach series called, “Watt’s Up? Energy Stories with a Purpose” with a focus to provide digital content to audiences about current and emerging energy, while creating more visibility for resources and available programs.



13,518
People Reached

1,929
Engagements

Boost Post

You and 106 others

285 Comments 71 Shares 4.2K Views

Two of four emcees for the Tompkins County Earth Day Celebration

Community Outreach

- Provided Community Energy Advisors with training opportunities from NYSERDA, Steven Winter Associates, etc.
- Established discussion board on SharePoint site to encourage Community Energy Advisors to share resources/tools they've developed to do outreach during COVID.
- Monthly meeting with Community Energy Advisors from across the state to share best practices.

Community Outreach

For the period from July 1, 2019 - June 30, 2020:

- Outreach resulted in approx. 2,763 clean energy opportunities, of which there were 1,485 unique individuals that expressed interest in applying for NYSERDA or non-NYSERDA programs.*
- Approx. \$2.9 million in non-NYSERDA private investment was leveraged for clean energy projects.
- Residential Existing homes programs such as Home Performance with ENERGY STAR®, Assisted Home Performance with ENERGY STAR® and EmPower New York continued to be a focus of customer engagement and outreach activities; and
- Targeted program outreach focused on promoting the Solar for All Program for LMI residents/homeowners and the GJGNY Energy Study Programs for small businesses and nonprofits.

*Opportunities are self-reported information for leads by the Community Energy Advisors

Community Outreach

Five (5) Regional pilot projects underway:

- Powerhouse – mobile energy exhibit to reach people where they are. Exhibits include an ASHP, ERV, Solar PV, insulation, etc.
- School/Student Engagement – Engaging students in three (3) Southern Tier School Districts to encourage.
- Energy Navigator Expansion – expands a train-the-trainer program to build local capacity of local volunteers to educate their network about clean energy actions they can take.
- REALIGN – piloting stakeholder engagement of other service providers and agencies to develop a “no wrong door” referral process for LMI applicants.



Community Outreach

- Case Studies developed to showcase projects, highlight the role of the Community Energy Advisors, and how they help move residents/homeowners from interest to action.

Making smart choices about energy and cost savings is easier with expert advice

Case Study

Location:
Stamford, NY

- Program:
- Community Energy Engagement
 - Renewable Heat NY



Background

Heather Cunningham and Marc Albano previously had two pellet stoves as the sole way to heat their home in New York's Southern Tier region. Last winter, the larger capacity stove in their basement stopped functioning, leaving them to rely on the much smaller stove located upstairs. That stove was too small to efficiently heat the entire house, which made it cold and uncomfortable.

Community Energy Advisors

Often, people are not aware there is available support to help them make informed decisions about making the right purchase for their home or business. Through NYSERDA's Community Energy Engagement program (CEEP), Community Energy Advisors (CEA) provide information and assistance to residents and small businesses about available programs, financing options, and incentives.

When they heard about the CEEP, Heather contacted Valerie Dudley, the CEA in Delaware County. By working with Valerie, Heather learned about incentives for pellet stoves available through NYSERDA's Renewable Heat NY program and was able to arm herself with the information she needed to be prepared when selecting her purchase and working with a contractor. Marc and Heather contacted a NYSERDA-approved pellet stove installation contractor and found they were eligible for the maximum incentive rebate of \$2,000 plus a \$500 credit for recycling their old stove.

After applying to the program and receiving approval in November 2019, they purchased a bigger pellet stove to install in their basement. The new stove warms the whole house and is significantly more efficient than their smaller stove, which they now rarely have to use.

Evolution of Community Outreach & Engagement

- Building on the Community Energy and Engagement Program
 - Co-design process with third party facilitator began in July 2020
 - Three sessions with community groups to identify opportunities to increase access to clean energy solutions, workforce development, and other forms of energy assistance to communities.
 - Stakeholder Engagement (July – September 2020)
 - Surveys – residents, partners, service providers, energy contractors, etc.
 - Engaged Community Energy Advisors
 - Engaged NYSERDA Program teams
- Identified need for increased and longer-term funding to build capacity
- Concept of clean energy hubs that can advance holistic solutions including access to clean energy programs, workforce and economic development opportunities, addressing regional needs, and improving stakeholder engagement at the local level to advance climate and energy justice
- RFP solicitation – target launch October 2020
- Revised Community-based Outreach and Engagement Program launch – target Q2 2021

Questions or comments?

Workforce Development

Adele Ferranti



Workforce Development – Program Overview

- NYSERDA provides funding to develop and implement sustainable clean energy training that meets business needs and addresses market gaps:
 - 24 organizations are training over 7,000 new and existing workers to design, sell, manufacture, install, inspect or operate clean energy technologies; electrification & energy efficiency highest priorities
 - 12 of these projects will serve 1,200 individuals from priority populations, preparing them for new clean energy careers
 - 46 projects have been awarded over \$10 million in funding to train 6,000 building operations and maintenance staff that work in a total of 244 million sf of commercial buildings; \$422 million in energy expenditures

Workforce Development

- Over 115 businesses have hired 450 interns for full- and part-time internships with NYSERDA funding 75-90% of salaries
- 75 businesses have hired 330 new workers, leveraging \$1.9 million in NYSERDA funding for On-the-Job training to support \$10 million in annual salaries at an average hourly wage of \$18.45. The average subsidy per worker is \$7,000.
 - 74 of these workers are from priority populations such as low-income workers, people from environmental justice communities and veterans

Workforce Development – COVID Response

- Developed free, on-line heat pump training and provided annual subscriptions to simulation and other on-line training to contractors
- Revised the Internship Program to extend internships, increase subsidies and make it easier for priority populations to participate
- Revised the On-the-Job Training Program to increase funding to businesses eliminating funding caps for hiring priority populations

Workforce Development

Preference given to projects that train and prepare priority populations for new jobs. Partners include:

Green City Force, Solar One, CUNY BPL, Evolution 1, AEA, HVCC, Soulful Synergy, Stacks and Joules, Sustainable So. Bronx, Oneida Co., Madison Co., Herkimer Co., Youth Action Program and Homes, District Council 37, Energy Economic Dev. Corp. AFL-CIO, Green Jobs Training Center



Questions or comments?

Evaluation update

Victoria Engel-Fowles

GJGNY Residential Audit Impact Evaluation (2016-2018)

> Research Objectives

- Measure Adoption Rate (MAR) and Energy Impacts
 - Estimating impacts otherwise unknown
- Customer Satisfaction Assessment
 - Application Process
 - In-Home Contractor Visit
 - Audit Results, Quality, Comprehensiveness, Usefulness
 - Contractor Responsiveness
 - Post-Energy Audit Involvement
 - Contractor Quality

GJGNY Residential Audit Impact Evaluation (2016-2018)

> MAR and Energy Impacts

- Assessed a sample of completed audits using a survey and engineering review approach
- MAR: 46%
 - Consistent with prior evaluation
- Energy Savings Impacts
 - 7.8 GWh Electricity
 - 277,200 MMBtu Natural Gas
 - 146,100 MMBtu Other Fuels (fuel oil, wood, propane)
- Additional measure installations and associated energy impacts are likely still accruing

GJGNY Residential Audit Impact Evaluation (2016-2018)

> Customer Satisfaction Results

- Responses range from 0-10; 0 represents very dissatisfied and 10 represents very satisfied

Topic	Average Response
Application Process	8.2
In-Home Contractor Visit	8.0
Energy Audit Results, Quality, Comprehensiveness, Usefulness	7.4
Contractor Responsiveness	7.3
Post-Energy Audit Involvement	6.1
Overall Contractor Quality	7.1
Overall Home Energy Audit Experience	7.4

Legislation to amend On-Bill Loan Recording – status update

2020 Annual Report – status update

Final comments?

Thank you for your participation!

