

Continued Support of Residential Clean Energy in New York State

Green Jobs – Green New York Program

On November 16, 2020 NY Green Bank (“NYGB”) committed up to \$5.0 million to purchase individual residential loans through NYSERDA’s Green Jobs – Green New York Program (“GJGNY Program”). These loans will finance the installation of energy efficiency and other eligible technologies for residential customers in New York State (“NYS” or the “State”) for projects exceeding current program loan limits. This transaction is expected to provide NYS residents a greater variety of energy choices and, ultimately, lower-cost clean energy.

Transaction Description

NYSERDA’s GJGNY Program has provided over \$327.0 million in solar, energy efficiency and other energy-related loans to New Yorkers. NYGB will finance new residential loans (“**Companion Loans**”) for clean energy investments as part of the GJGNY Program.

NYGB will participate in a program to provide loans directly to customers that are already eligible to receive residential loans for clean energy projects. The existing GJGNY Program allows residential customers to borrow up to \$25,000. However, there are emerging clean energy technologies such as solar PV and ground source heat pumps whose upfront cost exceeds the \$25,000 limit. The Companion Loans will bridge a financing gap for residential customers who want to finance energy projects that have total project costs of more than \$25,000.

The Companion Loans will finance the incremental cost of energy systems over \$25,000 (up to a total of \$50,000 per loan in the aggregate). In total, NYGB will lend up to \$5.0 million. The Companion Loans will be subject to the GJGNY Program’s underwriting standards.

This Transaction Profile is provided pursuant to the updated NY Green Bank – Metrics, Reporting & Evaluation Plan, Version 3.0 (the “Metrics Plan”) developed in collaboration with the NYS Department of Public Service and filed with the New York Public Service Commission (the “Commission”) on June 20, 2016.¹ This Transaction Profile contains specific information in connection with the GJGNY Program transaction entered into in November 2020, as required by the Metrics Plan.²

Form of NYGB Investment

NYGB Product	Product Sub-Type	Committed Capital
Asset Loan & Investment	Loan Fund	\$5.0 million

Location(s) of Underlying Project(s)

Statewide.³ Projects can be located anywhere in New York State.

¹ Case 13-M-0412.

² See Section 4.0, page 8 and Schedule 3.

³ Defined as projects located in four or more regions of the State.

Types of Client & Counterparty Organizations that are Transaction Participants

	Name	Participant Type
Program	Green Jobs – Green New York Program	Residential Loan Program

Summary of Financing Market Objectives & Barriers Addressed

Beneficiary	Market Barrier	Financing Solution
NYS Residential Customers	New York State residents have limited financing options for energy efficiency and renewable energy improvements because of conventional underwriting standards.	The Companion Loans provide lower interest rates to lower-income New Yorkers and to those who do not qualify for traditional financing. Through the Companion Loans, NYGB supports an underwritten clean energy loan program with a competitive rate and tenor vs. comparable offerings in the unsecured lending market.
	The existing GJGNY Program had a \$25,000 cap, which excluded more capital-intensive projects.	The Companion Loans will bridge a financing gap for residential customers who want to finance energy projects that have total project costs of more than \$25,000.
	Residential borrowers do not traditionally have access to NYGB financing solutions because it has not been cost-efficient for NYGB to manage direct consumer lending without support from dedicated origination and servicing platforms	By issuing Companion Loans through the GJGNY Program, NYGB is leveraging an existing program within NYS to direct its capital to residential customers.

Technologies Involved

Technology	Measures
Renewable Energy	Energy efficiency, solar photovoltaic systems, air-source heat pumps, ground-source heat pump and biomass.

Metrics & Evaluation Plan

Planned Energy & Environmental Metrics

NYGB's minimum investment criteria require that NYGB-supported transactions have the potential for energy savings and/or clean energy generation that will contribute to greenhouse gas ("GHG") emission reductions in support of the State's energy policies.⁴ In addition, the Metrics Plan requires that the following energy and environmental measures, applicable to these transactions, be reported:⁵

- Estimated gross lifetime and annual clean energy generated (MWh);
- Estimated gross clean energy generation installed capacity (MW);
- Estimated gross electricity savings (MWh);
- Estimated gross natural gas savings (MMBtu); and
- Estimated gross lifetime and annual GHG emission reductions (metric tons).

The estimated gross lifetime and annual energy and environmental impacts of the Facility are as follows:

⁴ Case 13-M-0412, "Order Establishing New York Green Bank and Providing Initial Capitalization" issued and effective December 19, 2013 of the Commission, Ordering Clause 6 at pages 24 – 25.

⁵ See Metrics Plan, Section 2.0, pages 2 - 6.

Energy/Environmental Impact	Lifetime Low Estimate	Lifetime High Estimate	Annualized Low Estimate	Annualized High Estimate
Estimated clean energy generated (MWh)	107,825	113,216	4,313	4,528
Estimated clean energy generation installed capacity (MW) ⁶	4.6	4.6	N/A	
Electricity savings (MWh)	31,710	33,296	2,114	2,219
Natural Gas savings (MMBtu)	804,307	844,522	53,620	56,301
Estimated GHG emission reductions (metric tons)	437,495	1,594,133	17,499	23,765

Planned Market Characterization Baseline & Market Transformation Potential

The Metrics Plan requires that market evaluation occur when a critical mass of NYGB financing and investment arrangements are put in place. Market evaluation activities commenced in 2018 on sectors that NYGB has supported since inception, consistent with the requirement for such assessments approximately three to five years following initial NYGB capital deployments.⁷ NYSERDA collected baseline data for the NYGB portfolio 2019 and will update the data to include indicators specific to this transaction. NYSERDA will use baseline data collected for indicators as a comparison point against which to assess market progress in the later studies. Progress indicators are defined below for the short, medium and long terms.

NYGB expects that program and/or future market evaluation will demonstrate progress across short-term indicators; including:

- Size (i.e., generation capacity, energy savings and expected dollar value) and location of projects financed by the Companion Loans; and
- Aggregate expected energy generation/savings for projects financed by the Companion Loans.

NYGB expects that program tracking and/or future market evaluation will demonstrate progress across medium- and long-term indicators; including:

- Increased market volume of residential energy efficiency, solar and related projects;
- Increased general understanding of renewable energy benefits by financial community;
- Increased awareness and use of project/technology performance data by financing entities;
- Demonstration of competitive risk-return profiles for residential clean energy investment;
- Decreased project costs; and
- Presence and number of new lending participants.

Proposed Method of Outcome/Impact Evaluation (by NYSERDA) & Timeframe

NYSERDA will evaluate the direct and indirect impacts that the Companion Loans will have on the clean energy finance markets and the energy/environmental benefits they will deliver.

Market evaluation will assess the short, medium and long-term indicators identified above. Methods will include analysis of program data along with interviews and surveys of market participants to track information including but not limited to: participation rates, project scale information, and influence of NYGB's participation on financial markets. As noted, NYSERDA collected baseline data on key indicators in its first phase evaluation during 2018 – 19. Later follow-up studies will assess progress against baseline levels for other market segments as those evolve. The specific timing of these efforts may be revised based on experience or other factors as NYGB's investment portfolio further develops and evolves.

Impact evaluation will assess the projects funded under the Facility. In accordance with the Metrics Plan, NYGB will track GJGNY Program projects that receive incentives or funding from other entities (e.g., utility, other NYSERDA

⁶ Installed clean energy generation capacity at full deployment of funds is the same for annual and lifetime duration.

⁷ See Metrics Plan, Section 3.3 at page 7.

program) to minimize any double-counting activity on a consolidated basis. As set out in the Metrics Plan, evaluation sampling approaches will also be used as a mechanism to estimate overlap and minimize double counting. NYSERDA and NYGB will attempt to coordinate market and impact evaluation activities for projects that receive support from multiple sources in order to maximize the efficiency of data collection and avoid participant survey fatigue.