NY Green Bank

Metrics, Reporting & Evaluation

Quarterly Report No. 12

(Through June 30, 2017)

Case 13-M-0412

August 14, 2017

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- *Motivate International Inc. (Sustainable Transportation)*
- *Sunrun, Inc. (Residential Solar)*

1 Performance at a Glance – As of June 30, 2017

Stimulating New Clean Energy Proposals in the State	NY Green Bank ("**NYGB**") has received **$2.1 billion** in investment proposals since inception.
Strong Active Pipeline	The Active Pipeline of potential investments proceeding to close is **$588.3 million**.[1]
Driving Material Clean Energy Investments Across NYS	NYGB's investments support clean energy projects with a total project cost of **between $1.2 and $1.4 billion**[2] in aggregate, based on Overall Investments to Date of **$409.4 million**.
Mobilizing Capital	NYGB's investment portfolio as a whole represents an expected mobilization ratio of Total Project Costs to NYGB funds in line with the target level of **3:1**,[3] which will be realized as planned clean energy projects are successfully implemented by NYGB's clients and counterparties. Over 10 years, assuming periodic reinvestment in comparable transactions, the expected mobilization ratio remains on track to meet or exceed **8:1**.
Revenue Growth - Maintaining Self-Sufficiency	Continued revenue growth – **$17.8 million** in revenues has been generated since NYGB's inception.
Contributing to CEF Objectives, REV & the CES	NYGB's investments to date drive estimated gross lifetime GHG reductions of **between 4.3 and 5.8 million metric tons**[2], equivalent to removing **between 51,300 and 65,300 cars** from the road for a period of **20 years**.

[1] Note that at any time, the value of the Active Pipeline is separate from the value of the investment portfolio. So, for example, as of June 30, 2017, the $588.3 million in Active Pipeline does not include the $409.4 million in closed transactions that comprises NYGB's Overall Investments to Date.

[2] NYGB monitors its counterparties' clean energy project installations throughout the duration of each investment through the receipt and review of periodic reports. Based on information received, NYGB continually manages the actual and expected energy and environmental benefits across its overall portfolio. As new information becomes available informing NYGB of NYS market uptake of clean energy projects, NYGB may correspondingly adjust (up or down) the overall portfolio's high and low estimated Total Project Costs and energy and environmental metrics (identified at closing of each investment, working with the relevant clients and counterparties and reflected in Transaction Profiles). This constant monitoring and refinement of expected outcomes improves the accuracy of NYGB's overall portfolio level estimations of impact benefits as it works towards meeting the CEF objectives to support the NYS CES and SEP goals. Given such periodic adjustments, the aggregate estimated benefits reported in Quarterly Reports will be the most up-to-date and accurate estimate, and so no longer will reflect the sum of the low and high estimated benefits specified in the Transaction Profiles at the time of each transaction close.

[3] Given the range of Total Project Costs that NYGB investments mobilize, the Mobilization Ratio also represents a range; currently of 2.9:1 to 3.5:1.

2 Introduction

This Quarterly Report ("**Report**") is filed by NYGB with the New York State Public Service Commission (the "**Commission**") pursuant to the Metrics, Reporting & Evaluation Plan developed in consultation with the New York State Department of Public Service ("**DPS**") and filed with the Commission[4] (the "**Metrics Plan**").

Defined terms used in the text of this Report but not separately described have the meanings respectively given to them in the Metrics Plan.

3 Business Update

3.1 Overview

NYGB's investment activities fall into two broad categories, respectively relating to:

(a) Transactions that have closed, which collectively comprise NYGB's investments; and

(b) Transactions that are in process but not yet closed, which collectively comprise NYGB's pipeline.

Each proposed NYGB investment is categorized by the stage it has reached in NYGB's internal processes.

NYGB closed **two new investments** during the quarter ending June 30, 2017, adding **$63.3 million** to NYGB's growing investment portfolio. These transactions are discussed in Section 3.2.

NYGB's overall transaction status and Active Pipeline are summarized in Figure 1,[5] showing that since inception through June 30, 2017:

(a) **$2.1 billion** of proposals have been received and evaluated by NYGB's Scoring Committee;

(b) **$1.9 billion** of proposals have passed Scoring Committee evaluation – representing potential investments that meet NYGB's mandate and proposal evaluation criteria;

(c) **$904.5 million** of proposals have received Greenlight Committee recommendation for advancement;

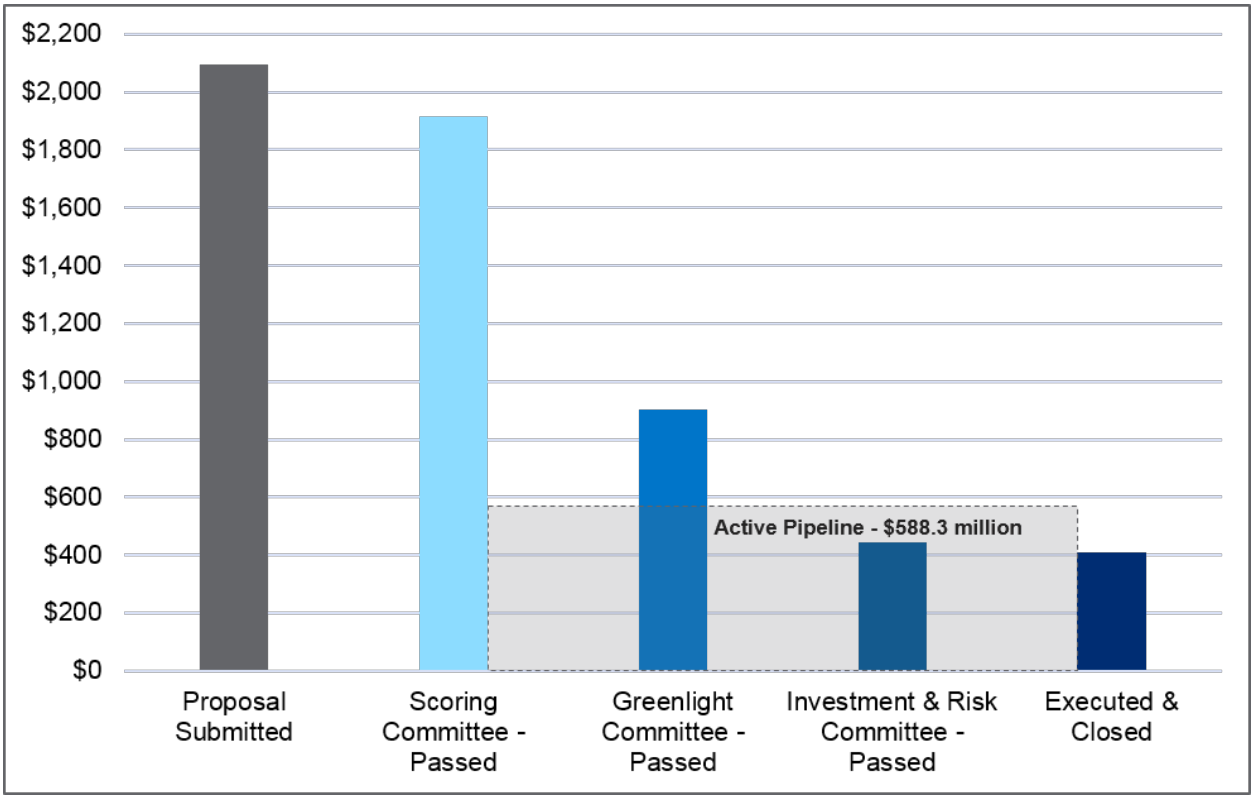
(d) **$445.8 million** of proposals have been vetted by the IRC and approved by NYSERDA's President & CEO; and

(e) **$409.4 million** of transactions have been closed - comprising NYGB's Overall Investments to Date - mobilizing public and private investments to support in the range of **$1.2 to $1.4 billion** in Total Project Costs for new clean energy deployment in the State.

Also, as shown in Figure 1, NYGB currently has an Active Pipeline of **$588.3 million**.

[4] Case 13-M-0412, "NY Green Bank – Metrics, Reporting & Evaluation Plan", Version 3.0, dated June 20, 2016.
[5] Note that all these amounts change over time as proposals and transactions evolve.

Figure 1. Transaction Status & Active Pipeline ($ Millions)



3.2 Investment Portfolio

3.2.1 Highlights

In the period covered by this Report, NYGB closed two transactions, respectively sponsored by Sunrun Inc. and Motivate International Inc. Each transaction, combined into NYGB's growing portfolio, contributes to the primary CEF outcomes of GHG emissions reductions, customer bill savings, energy efficiency, clean energy generation and mobilization of private sector capital.[6] In turn, the CEF objectives support the NYS Clean Energy Standard ("**CES**") goal of 50.0% energy generation from renewable sources, and the State Energy Plan ("**SEP**") goal of 23.0% reduction in energy consumption by buildings from 2012 levels, which together further the SEP goal of 40.0% reduction in GHG emissions from 1990 levels by 2030.

3.2.2 New Investments

Sunrun Inc. – Increasing Opportunities for NY Residents to Go Solar, Expanding Market Liquidity

- *Reduces GHG emissions by up to 604,000 metric tons over the 25-year life of the underlying assets, with an incremental 108,000 metric tons attributed to the most recent transaction (closed on May 9, 2017)*
- *Generates at least 765,000 MWh of renewable energy over the life of the underlying projects, with an incremental 206,000 MWh attributed to the most recent transaction*
- *Increases renewable energy installed generation capacity by at least 26.0 MW, with an incremental 7.0 MW attributed to the most recent transaction*

[6] As set out in the CEF Order (Cases 14-M-0094 et al.) issued and effective on January 21, 2016, page 40.

On May 9, 2017, NYGB closed a $15.0 million commitment toward a $202.0 million aggregation-to-term loan facility with SunTrust and ING (the "**SunTrust/ING Credit Facilities**") to provide Sunrun, Inc. ("**Sunrun**") with a larger financing to expand its residential solar provider business in NYS and elsewhere. The $202.0 million Sun Trust/ING Credit Facilities support a $100.0 million equity partnership with National Grid plc, an international utility with a sizeable NYS presence.

This is NYGB's third transaction with Sunrun, a national solar provider that markets and develops residential solar energy systems. The three complementary transactions (one construction financing and two post-construction financings) aggregate bundled pools of residential solar systems that will ultimately be refinanced through one or more longer-term take-out financings. Given that the bank market for such credit facilities remains limited, NYGB's participation enables larger aggregation facilities than would otherwise be available, resulting in longer term takeout refinancings at a scale greater than what might otherwise be achieved. Through increased scale, the aggregation-to-term transactions are expected (post-aggregation) to draw new investors and financial institutions into the marketplace, decreasing the cost of capital for solar developers and installers, and in turn, the cost of solar power equipment sold or leased to homeowners.

Motivate International Inc. – Expanding Urban Bike-Sharing Program in New York City

- *Reduces up to 32,500 metric tons of GHG emissions over a seven-year useful life*

On May 18, 2017, NYGB committed $48.8 million to Motivate International Inc. ("**Motivate**"), comprising a $43.3 million term loan and a $5.0 million seasonal variable funding note. Motivate is the leading bike share operator in North America and the parent company of NYC Bike Share, LLC ("**NYCBS**"), the exclusive operator of the New York City bike share system ("**Citi Bike**"). NYGB capital will support Citi Bike's addition of 2,000 bikes primarily in low-to-moderate income ("**LMI**") neighborhoods in Harlem, Queens and Brooklyn, adding to its existing fleet of 10,000 bikes across 600 stations. This expansion will convert up to 200 million miles of public commuting from emissions-based transport to the bike-share system, offsetting up to 32,500 metric tons of GHG emissions over the seven-year term of the transaction.

Despite robust cash flows and growing membership, NYCBS has encountered challenges accessing private capital that is structured and priced to reflect the strength of its business model largely due to the nascence of the bike share asset class and limited comparable transactions. This transaction will help NYCBS grow and develop the operating track record needed to attract further private capital in the future, including pricing to better reflect the strength of its business model and results. For capital market participants, this transaction aims to demonstrate that sustainable infrastructure provides a reliable return on investment, familiarizing lenders with the underlying asset type and increasing confidence for financing in the market. The innovative securitization structure of this transaction provides a template for financial institutions to replicate with other sustainable infrastructure assets that have predictable cash flows.

Further details on all NYGB's investments are contained in the Transaction Profiles publicly available on NYGB's website at www.greenbank.ny.gov/Investments/Transaction-Profiles, and the Transaction Profiles for the investments described above are also included in the Schedule to this Report.

3.3 Active Pipeline

Demand for NYGB investments and participation in transactions is evidenced by proposals that have been submitted to NYGB in response to its open solicitations for investment proposals (the "**Investment RFPs**").[7] Through June 30, 2017, proposals requesting $2.1 billion of NYGB capital have been received, in connection with total proposed clean energy investments in New York State of multiples of that amount. NYGB's Active Pipeline at the end of the period to which this Report relates is $588.3 million. Figures 2,

[7] Clean Energy Financing Arrangements – Request for Proposals (RFP) No. 1, Construction & Back-Leveraged Financing for Ground-Mounted Solar Generation Systems Targeting Corporate & Industrial End-Users - RFP No. 7 and Efficiency & Renewables Financing Arrangements: Building & Property Owners – RFP No. 8, all available at www.greenbank.ny.gov/Partnering-With-Us/Propose-an-Investment.

3 and 4 below show the distribution of proposed investments in NYGB's Active Pipeline by technology, end-use customer segment and geography.

Figure 2. Active Pipeline by Technology

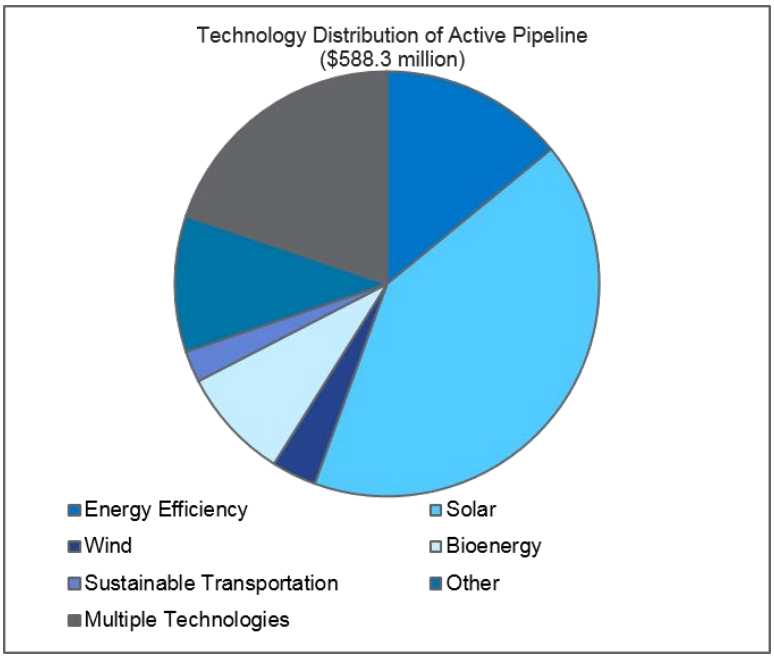


Figure 3. Active Pipeline by End-Use Customer Segment

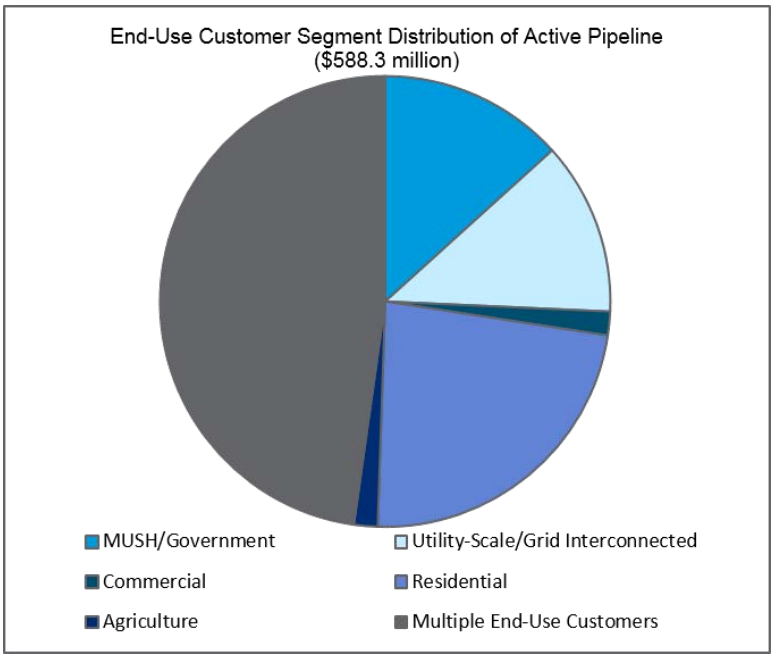
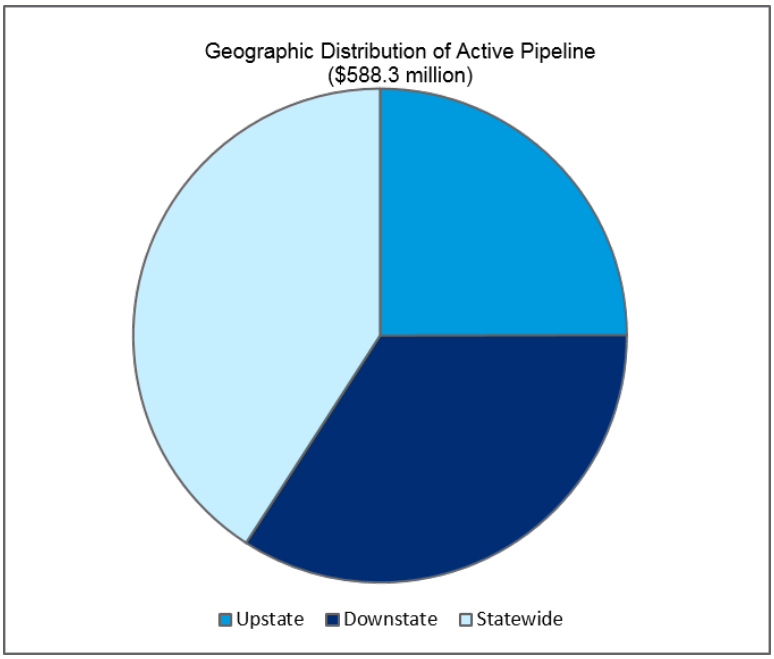


Figure 4. Active Pipeline by Geographic Distribution



3.4 Operational & Risk Matters

In the last calendar quarter, in addition to those matters referenced elsewhere in this Report and ongoing "business as usual" activities (e.g., origination, execution and routine outreach), NYGB's achievements include:

(a) Annual Business Plan: Completed NYGB's Business Plan for the 2017 – 2018 plan year (the "**Plan**"). The Plan, filed with the Commission on June 19, 2017, provides details of NYGB's achievements in the prior plan year, while outlining tangible goals and deliverables (tying directly to NYGB's mission and investment criteria), together with corresponding key performance indicators, all for the current plan year. Plan deliverables also tie specifically to the Metrics Plan and are addressed in Section 5 of this Report;

(b) Public Reporting & Metrics: Filed the Quarterly Report for the period ending March 31, 2017 (on May 15, 2017) and the Annual Financial Metrics Report No. 3 for the fiscal year April 1, 2016 – March 31, 2017, including annual audited financial statements (on June 29, 2017) with the Commission. Both reports are as required by the Metrics Plan and available at www.greenbank.ny.gov/About/Public-Filings;

(c) Continuing Stakeholder Outreach & Communications: Highlights of specific outreach initiatives in the period to which this Report relates include:

i. Participation in 16 events, including but not limited to: multiple technical conferences hosted by DPS with a focus on roles NYGB could play in advancing clean energy financing solutions for Community Distributed Generation ("**CDG**") and LMI, respectively; the annual ACORE Renewable Energy Finance Forum in New York City; and the Business Council of New York State's 2017 Renewable Energy Conference in Poughkeepsie, NY;

ii. Issued Spring 2017 newsletter, highlighting NY Green Bank's latest portfolio and pipeline figures and activities, two new open solicitations, and a specific spotlight on several energy efficiency transactions closed to date;[8]

iii. Began to design and conduct outreach for the next annual international Green Bank Summit, which will be co-hosted by NYGB and the Connecticut Green Bank and held in New York City during Climate Week (September 18 – 22, 2017);

iv. Hosted a Green Bank Network call focused on financing for low emissions vehicles, specifically focused on examining the potential for a secondary market for electric vehicle batteries and to better understand the experience of green financing parties in this sector to date; and

v. Initiated a series of meetings with several CDG developers seeking to advance projects under the emerging Value of Distributed Energy Resources guidelines, with a particular focus on ongoing financeability issues throughout the transition process; and

(d) Advisory Committee: An Advisory Committee meeting was held on June 6, 2017. Information regarding NYGB's Advisory Committee – including its membership and charter - is accessible on NYGB's website at www.greenbank.ny.gov/About/Advisory-Committee. Advisory Committee meetings occur at least semi-annually.

4 Quarterly Metrics

Required metrics for the period April 1, through June 30, 2017 are set out in Table 1[9] below.

Table 1. Quarterly Metrics

Quarterly Metric	Prior Quarter	Current Quarter
Capital Position		
▪ **Authorized Capital ($)**	$1.0 billion	$1.0 billion
▪ **Authorized Administrative Expenses ($)**	$17.5 million	$17.5 million
▪ **Authorized Evaluation Expenses ($)**	$4.0 million	$4.0 million
Operational Matters		
▪ **Cumulative Revenues ($)**[10]	$12.9 million	$17.8 million
▪ **Cumulative Operating Expenses ($)**[11]	$16.7 million	$19.0 million
▪ **Direct Operating Expenses ($)**	$9.5 million	$10.8 million
▪ **Allocated Expenses ($)**	$7.2 million	$8.1 million

[8] The Spring 2017 newsletter is available on NYGB's website at www.greenbank.ny.gov/News/In-The-News/2017-05-18-Spring-Newsletter.

[9] NYGB monitors its counterparties' clean energy project installations throughout the duration of each investment through the receipt and review of periodic reports. Based on information received, NYGB continually manages the actual and expected energy and environmental benefits across its overall portfolio. As new information becomes available informing NYGB of NYS market uptake of clean energy projects, NYGB may correspondingly adjust (up or down) the overall portfolio's high and low estimated Total Project Costs and energy and environmental metrics (identified at closing of each investment, working with the relevant clients and counterparties and reflected in Transaction Profiles). This constant monitoring and refinement of expected outcomes improves the accuracy of NYGB's overall portfolio level estimations of impact benefits as it works towards meeting the CEF objectives to support the NYS CES and SEP goals. Given such periodic adjustments, the aggregate estimated benefits reported in Quarterly Reports will be the most up-to-date and accurate estimate, and so no longer will reflect the sum of the low and high estimated benefits specified in the Transaction Profiles at the time of each transaction close.

[10] Cumulative Revenue reflects quarterly fair market value adjustments related to NYGB capital held in U.S. Treasury securities, consistent with GAAP.

[11] Currently includes $42,300 in Evaluation Expenses.

Quarterly Metric	Prior Quarter	Current Quarter
▪ **Credit Facility (if in place)**		
▪ **Credit Facility Amount ($)**	Not Applicable	Not Applicable
▪ **Credit Facility Drawn Amount ($)**	Not Applicable	Not Applicable
▪ **Credit Facility Fees & Interest (Cumulative) ($)**	Not Applicable	Not Applicable
Investment Portfolio		
▪ **Committed Funds (Cumulative) ($)**	$85.8 million	$76.7 million
▪ **Deployed Funds (Cumulative) ($)**[12]	$258.5 million	$320.0 million
▪ **Current Portfolio ($)**	$344.3 million	$396.6 million
▪ **Overall Investments to Date ($)**	$346.1 million	$409.4 million
▪ **Total Project Costs (Cumulative) ($)**[13]	In the range of $1.0 - $1.43 billion	In the range of $1.2 - $1.4 billion
▪ **Mobilization Ratio**	Tracking at least 3:1 on average across portfolio	Tracking at least 3:1 on average across portfolio[14]
▪ **Portfolio Concentrations (%)**[15]	75.0% Renewable Energy	66.8% Renewable Energy
	15.0% Energy Efficiency	12.3% Energy Efficiency
	11.0% Other	20.9% Other[16]
▪ **Number & Type of NYGB Investments**	16 – Renewable Energy	17 – Renewable Energy
	6 – Energy Efficiency	6 – Energy Efficiency
	2 – Other	3 – Other
▪ **Number & General Type of NYGB Counterparties**[17]	45 – Local Development Corporation; Global Corporate & Investment Banks; Commercial/Regional Banks; Specialty Finance Company; Energy Project Developers; Municipal, University, Schools & Hospitals; Energy Technology Provider & Vendors; Government Authority	46 – Local Development Corporation; Global, Corporate and/or Investment Bank; Regional Bank; Specialty Finance Company; Energy Project Developer; Municipal, University, Schools & Hospitals; Energy Technology Provider & Vendors; Government Authority; Insurance Company

[12] Deployed Funds (Cumulative) as presented in Table 1 is net of all capital repaid to the reporting date.

[13] Further to the definition of "Total Project Costs (Cumulative)" in the Metrics Plan (see page 15), Total Project Costs (Cumulative) may include fair market value ("**FMV**") data for some of NYGB's investments. FMV is an estimated market valuation of fully installed energy projects provided by NYGB's counterparties and is often required for federal income tax purposes, by institutional investors and for certain grant program purposes unconnected with NYGB.

[14] Given the range of Total Project Costs that NYGB investments mobilize, the Mobilization Ratio also represents a range; currently of 2.9:1 to 3.5:1.

[15] Based on executed transactions, and reflecting dollar values invested by NYGB in renewable energy and energy efficiency transactions, each as a proportion of the Current Portfolio.

[16] "**Other**" technology classification includes: CHP, sustainable transportation, fuel cells, energy storage, microgrids and other types of projects that, while falling within "clean energy", are not readily classified as either renewable energy or energy efficiency.

[17] In reporting the number and type of NYGB counterparties, NYGB seeks to reflect counterparties that are discrete (i.e., where NYGB is involved in different transactions with the same counterparty, that party is counted only once for the purposes of this metric); and directly in the transaction with NYGB (i.e., vendors or other counterparties to NYGB's clients or expected future transaction participants are not counted).

Quarterly Metric	Prior Quarter	Current Quarter
▪ **Estimated Gross Lifetime Energy Saved by Fuel Type from Energy Efficiency Projects (MWh/MMBtu) and/or Estimated Gross Lifetime Clean Energy Generated (MWh) for Committed Funds & Deployed Funds**	Estimated Gross Lifetime Energy Saved by Fuel Type (Energy Efficiency): 1.12 – 1.23 million MWh; and 9.43 – 10.3 million MMBtu	Estimated Gross Lifetime Energy Saved by Fuel Type (Energy Efficiency): 1.12 – 1.23 million MWh; and 9.43 – 10.3 million MMBtu
	Estimated Gross Lifetime Clean Energy Generated: 5.89 – 9.71 million MWh	Estimated Gross Lifetime Clean Energy Generated: 5.96 – 8.52 million MWh
▪ **Estimated Gross First Year[18] Energy Saved by Fuel Type from Energy Efficiency Projects (MWh/MMBtu) and/or Estimated Gross First Year Clean Energy Generated (MWh) for Committed Funds & Deployed Funds**	Estimated Gross First Year Energy Saved by Fuel Type (Energy Efficiency): 89,400 – 97,500 MWh; and 801,000 – 873,000 MMBtu	Estimated Gross First Year Energy Saved by Fuel Type (Energy Efficiency): 89,400 – 97,500 MWh; and 801,000 – 873,000 MMBtu
	Estimated Gross First Year Clean Energy Generated: 256,000 – 413,000 MWh	Estimated Gross First Year Clean Energy Generated: 258,000 – 366,000 MWh
▪ **Estimated Gross Lifetime Energy Saved from CHP (MWh) for Committed Funds & Deployed Funds**	Estimated Gross Lifetime Energy Saved from CHP: 7,070 – 8,640 MWh	Estimated Gross Lifetime Energy Saved from CHP: 7,070 – 8,640 MWh
▪ **Estimated Gross First Year Energy Saved from CHP (MWh) for Committed Funds & Deployed Funds**	Estimated Gross First Year Energy Saved from CHP: 293 - 358 MWh	Estimated Gross First Year Energy Saved from CHP: 293 – 358 MWh
▪ **Estimated Gross Lifetime Energy Savings from CHP (MMBtu)[19] for Committed Funds & Deployed Funds**	Estimated Gross Lifetime Energy Savings from CHP: -(41,000 – 50,100) MMBtu	Estimated Gross Lifetime Energy Savings from CHP: -(41,000 – 50,100) MMBtu
▪ **Estimated Gross First Year Energy Savings from CHP (MMBtu) for Committed Funds & Deployed Funds**	Estimated Gross First Year Energy Savings from CHP: -(1,700 – 2,070) MMBtu	Estimated Gross First Year Energy Savings from CHP: -(1,700 – 2,070) MMBtu
▪ **Estimated Gross Clean Energy Generation Installed Capacity from CHP (MW), if applicable, for Committed Funds & Deployed Funds**	1.6 MW	1.6 MW
▪ **Estimated Gross Clean Energy Generation Installed Capacity (MW), if applicable, for Committed Funds & Deployed Funds**	217.0 – 341.0 MW	220.0 – 300.0 MW
▪ **Estimated Gross Lifetime GHG Emission Reductions (metric tons) for Committed Funds & Deployed Funds**	4.26 – 6.37 million metric tons	4.32 – 5.77 million metric tons

[18] All "estimated gross first year" metrics refer to the first year of estimated gross benefits (e.g., energy saved, installed capacity, GHGs etc.) which are expected to occur when each underlying project is fully installed. This means that estimated gross first year benefits across NYGB's Portfolio do not (and are not intended to) correspond to installed benefits in any given year, and instead represent cumulative estimated benefits across NYGB's Portfolio based on transactions executed through the CEF term. Note that underlying projects will usually be installed over one or more years following execution of investment agreements (reflecting project development/implementation and funding deployment cycles). The sum of all estimated gross first year measures will approximate the total annual CEF benefits goals for NYGB investments at the end of the CEF term (i.e., in 2025). As set out in Section 2.2.2 of the Metrics Plan, NYGB reports on installed energy and environmental benefits associated with NYGB's Portfolio in the prescribed form annually, with such reporting included in the Quarterly Metrics Report for each quarter ending December 31.

[19] For CHP systems, energy savings in thermal unit form is computed as the difference between the natural gas displaced by the recovered thermal energy and natural gas consumption by the generator. See www.nyserda.ny.gov/-/media/Files/Publications/PPSER/Program-Evaluation/2015ContractorReports/2015-Distributed-Genertation-CHP-Impact-Evaluation-Final.pdf for information on CHP Impact evaluation methods in NYS.

Quarterly Metric	Prior Quarter	Current Quarter
Investment Pipeline		
▪ **Active Pipeline (In the Quarter) ($)**	$591.7 million	$588.3 million
Investment Process		
▪ **Proposals Received – Value (Cumulative) ($)**	$2.0 billion	$2.1 billion
▪ **Approvals - Scoring Committee (Cumulative) ($)**	$1.8 billion	$1.9 billion
▪ **Approvals - Greenlight Committee (Cumulative) ($)**	$783.6 million	$904.5 million
▪ **Approvals - IRC (Cumulative) ($)**	$382.5 million	$445.8 million

5 Progress Against Plan Deliverables

In its annual Business Plan, filed on June 19, 2017, NYGB identified specific deliverables (the "**Plan Deliverables**") that collectively mark its progress in implementing key initiatives in the period April 1, 2017 through March 31, 2018 (the "**Plan Year**").

Progress against the Plan Deliverables is required to be addressed in NYGB's Quarterly Reports, together with a brief narrative (as appropriate) of status and an explanation of any material variances relative to expectations.

NYGB's performance against the Plan Deliverables for the quarter ending June 30, 2017 is summarized in Table 2 below.

Table 2. Status of Plan Deliverables (2017 – 2018)

Category	Deliverable	Status in Quarter Ending June 30, 2017
Strong Active Pipeline		
▪ **Active Pipeline**	▪ Maintain an Active Pipeline of at least $300.0 million on average throughout the year.	☑ **Achieved for this Quarter:** Active Pipeline of **$588.3 million**.
▪ **Streamline Investment Proposal Submission Process & Data Collection**	▪ Create an online portal for submission of Investment RFPs to NYGB with straight-through processing and data collection in NYGB's CRM system to make management and reporting tools more efficient and effective.	☑ **Achieved for the Plan Year:** In May 2017 NYGB launched the online portal for submission of investment proposals to NYGB pursuant to all current Investment RFPs.[20]
Portfolio Driving Material Clean Energy Investments Across NYS		
▪ **Committed Funds**	▪ Commit $550.0 million (cumulative) to NYGB investments, equating to an average of $50.0 million in closed transactions per quarter.	☑ **Achieved for this Quarter: $63.3 million** of closed transactions in the quarter.
▪ **Issue CDG RFP**	▪ Publicly Issue RFP.	☐ **Not Started:** NYGB is due to start this activity in Q3 2017.
▪ **Issue Interconnection Bridge Loan RFP**	▪ Publicly issue RFP.	☐ **Not Started:** NYGB is due to start this activity in Q3 2017.

[20] The new online portal for submission of Investment RFPs to NYGB can be accessed by clicking the "Submit Proposal Online" button available at: https://greenbank.ny.gov/Working-with-Us/Propose-an-Investment

Category	Deliverable	Status in Quarter Ending June 30, 2017
▪ **Perform Initial Evaluation Activities**	▪ Engage with independent evaluators to conduct baseline assessments for both financial market transformation and energy and environmental impact of NYGB's Investment Portfolio.	☑ **Ongoing & On Track:** NYGB is developing the Baseline Evaluation Plan with NYSERDA Performance & Market Standards group and in consultation with DPS. Evaluation of NYGB's Portfolio by independent third-party evaluators is expected to commence in Q4 2017.
Mobilizing Private Capital		
▪ **Mobilization Ratio**	▪ Achieve an average, portfolio-wide Mobilization Ratio of at least 3:1, driving towards a ratio of 8:1 across all NYGB investments by the end of the CEF term in 2025.	☑ **Achieved for this Quarter:** Current quarter Mobilization Ratio on track at least **3:1** on average across NYGB's portfolio.[21]

[21] Given the range of Total Project Costs that NYGB investments mobilize, the Mobilization Ratio also represents a range; currently of 2.9:1 to 3.5.1:1.

Schedule – Transaction Profiles

As required by the Metrics Plan, Transaction Profiles for each of the transactions closed during the quarter to which this Report relates are attached.

TRANSACTION PROFILE

May 2017

Expanding Urban Bike Sharing Program in New York City

Motivate International Inc.

*NY Green Bank ("**NYGB**") is providing a $43.3 million term loan (the **"Term Loan"**) and a $5.0 million seasonal variable funding note (the **"SVFN"**, collectively with the Term Loan, the **"Credit Facilities"**) to NYC Bike Share, LLC ("**NYCBS**"). NYCBS is the exclusive operator of the New York City ("**NYC**") bike share system (**"Citi Bike"**) which is comprised of 10,000 bikes and 600 stations and is the largest bike share system in North America. Proceeds from the Credit Facilities will primarily support the addition of 2,000 bikes primarily in low-to-moderate income (**"LMI"**) neighborhoods in Harlem, Queens, and Brooklyn and will enable NYCBS to address the seasonal nature of its business when there is lower ridership in winter months.*

Transaction Description

Motivate International Inc. ("**Motivate**"), NYCBS' parent company, is the leading bike share operator in North America and operates 9 bike share systems in the US through its subsidiaries. NYCBS operates the Citi Bike system under an exclusive license from the NYC Department of Transportation (**"NYCDOT"**). The Citi Bike system is comprised of 10,000 bikes and 600 stations and is partially integrated with the Jersey City bike share system (**"Jersey City Bike Share, LLC"**) which is comprised of 500 bikes and 50 stations located in Jersey City. Citibank, N.A. (**"Citi"**) is the title sponsor of both programs. NYGB's participation will help fund the completion of NYCBS' Phase II expansion, which will increase the Citi Bike system by 2,000 bikes primarily located in LMI neighborhoods in Harlem, Queens, and Brooklyn.

NYCBS generates revenue through the sale of annual, three-day, or daily memberships and through the sale of corporate sponsorships. As the title sponsor, Citi's support has also helped expand and maintain the program. Despite robust cash flows and growing membership, NYCBS has encountered challenges accessing private capital that is structured and priced to reflect the strength of its business model largely due to the nascency of the bike share asset class and limited comparable transactions.

Proceeds from the Credit Facilities will expand the Citi Bike system to LMI neighborhoods and will restructure NYCBS' current financing to better position the company for future growth. This innovative securitization structure for the sustainable and clean energy asset class will provide a template for other asset-centric companies with predictable cash flows in similar sectors.

This transaction has the potential to offset the equivalent of approximately 29,700 - 32,500 metric tons of greenhouse gas ("**GHG**") emissions over the seven-year term of the transaction, by converting up to 200 million miles of public commuting from emissions-based transport to the bike-share system. NYGB's participation will finance the expansion of the Citi Bike system into LMI neighborhoods in Harlem, Queens, and Brooklyn – communities that are ideally suited to benefit from bike sharing due to long commute times, high levels of pollution, and strong community interest.

This Transaction Profile is provided pursuant to the "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 NYS Public Service Commission (the "**Commission**") on June 20, 2016.[1] This Transaction Profile contains specific information in connection with the NYCBS transaction entered into on May 18, 2017 as required by the Metrics Plan.[2]

[1] Case 13-M-0412.
[2] See Section 4.0, page 8 and Schedule 3.

Form of NYGB Investment

NYGB Product	Product Sub-Type	Committed Capital
Asset Loan & Investment	Term Loan	$43.3 million
Asset Loan & Investment	Seasonal Variable Funding Note	$5.0 million

Location(s) of Underlying Project(s)

New York City: Project to be primarily located in Harlem, Queens, and Brooklyn.

Types of Client & Counterparty Organizations that are Transaction Participants

	Name	Participant Type
Clients	NYC Bike Share, LLC	Project Developer, Sponsor
	Jersey City Bike Share, LLC	Project Developer, Sponsor

Summary of Financing Market Objectives & Barriers Addressed

Beneficiary	Market Barrier	Financing Solution
Sustainable Infrastructure Owner/Operators	Owners and operators of sustainable infrastructure assets have encountered financing challenges due to limited comparable transactions and the nascency of the asset class.	NYGB's participation will help NYCBS grow and develop the operating track record needed to attract further private capital in the future. The Credit Facilities are structured to position NYCBS to raise capital in the future from private sector capital providers as efficiently as possible, including pricing to better reflect the strength of the borrower's business model and results.
Capital Market Participants	Private capital providers are relatively unfamiliar with the bike share asset class due to a limited performance history.	With this transaction, NYGB will demonstrate that sustainable infrastructure provides a reliable return on investment, familiarizing lenders with the underlying asset type and increasing confidence for financing in this market.
	Commercial banks have rigid underwriting guidelines for small businesses with limited operating histories, resulting in higher cost of funds, and restricting the access of private capital into the market.	The whole business securitization structure creates a template for other financial institutions to replicate with other sustainable infrastructure assets. Capital providers can benefit from the familiar, standardized structure of asset-backed transactions like this one.

Technologies Involved

Technology	Measures
Sustainable Transportation Asset/Technology	Bicycles and bicycle stations

Metrics & Evaluation Plan

Planned Energy & Environmental Metrics

NYGB's minimum investment criteria specifically require that "transactions will have the potential for energy savings and/or clean energy generation that will contribute to GHG reductions in support of New York's energy policies".[3] In addition, the Metrics Plan requires that the following energy and environmental measures, applicable to this transaction, be reported on[4]:

- Estimated gross lifetime and first-year GHG emission reductions (metric tons).

The estimated gross lifetime and first-year GHG emissions reductions of the term loan are as follows:

Energy/Environmental Impact	Lifetime Low Estimate	Lifetime High Estimate	First-Year Low Estimate	First-Year High Estimate
Estimated GHG emission reductions (metric tons)[5]	29,700	32,500	4,250	4,650

Planned Market Characterization Baseline & Market Transformation Potential

The Metrics Plan requires that market evaluation will occur when a critical mass of NYGB financing and investment arrangements of a similar type are in place. This market evaluation will be conducted on sectors that NYGB has supported and will occur approximately three to five years following initial NYGB capital deployments.[6] Baseline data will be collected in 2018 for most indicators as a comparison point against which to assess market progress in the later studies. Progress indicators for this transaction are defined below for the short, mid and long-terms.

Short-term progress indicators will identify early activity levels and will be regularly tracked for the duration of the transaction. These include, but are not limited to:

- Phase II completion;
- Ridership uptake (e.g., subscription rates, retention rates);
- Technology updates completed; and
- Increased LMI participation.

Mid and long-term indicators will be expected to show progress through program tracking or market evaluation over time. These include, but are not limited to:

- Increased and sustained demand for technology;
- Additional one-off or small portfolios receive long-term financing;
- General understanding of asset class by financial community increases;
- Increased awareness and use of project/technology performance data by financing entities;
- Demonstration of competitive risk-return profiles for nascent and esoteric asset classes;
- Decreased project costs; and
- Number of secondary capital market participants.

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

NYSERDA will evaluate the impact this transaction has on the finance markets and the environmental benefits which it delivers.

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[3] 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.

[4] See Metrics Plan, Section 2.0, pages 2 - 6.

[5] The methodology to calculate GHG Emissions Reductions used takes into account the proportion of subscribers that switch from both personal transport and public transport. It assumes a carbon footprint per passenger mile travelled using those modes of transport, and how a passenger offset their contribution by switching. This methodology does not assume those modes of transport will cease to operate as a result of this transaction and the GHG Emissions Reductions calculation does not take into account continued emissions from public modes of transport. For more information on the applicable methodologies, see February 2017 Monthly Report page 4, and http://web.mta.info/sustainability/pdf/2012Report.pdf.

[6] See Metrics Plan, Section 3.3 at page 7.

Market evaluation will address the short, mid and long-term indicators identified above. Methods will include analysis of program data along with interviews and surveys of market participants (developers, subscribers, financial community) to track information including but not limited to: ridership rates, project scale information, interest in financing and influence of NYGB's participation on financial markets. As noted, baseline data will be collected on most key indicators in 2018 and later follow-up studies will assess progress against baseline levels. The specific timing of these efforts may be revised based on experience or other factors as the investment evolves.

Impact evaluation will use actual system performance data to understand environmental outcomes. Impact evaluation is expected to include quarterly review and analysis of actual system data collected by NYCBS. Actual system performance will be monitored and documented against expected performance. Impact evaluation will help provide verification of performance, in turn aiding the finance community in better understanding risk in this technology area and asset class.

As with all NYGB investments, NYCBS projects that receive an incentive or funding from other entities (e.g., government, utility, other NYSERDA program) will, in accordance with the Metrics Plan, be tracked in order to minimize any double-counting of activity or benefits on a consolidated basis. Pursuant to the Metrics Plan, evaluation sampling approaches will also be used as a mechanism to estimate overlap and minimize double counting. Attempts will also be made to coordinate market and impact evaluation activities for these Projects that receive support from multiple sources in order to maximize the efficiency of data collection and avoid participant survey fatigue.

TRANSACTION PROFILE

Revised May 2017[1]

Increasing Opportunities for NY Residents to Go Solar, Expanding Market Liquidity

Sunrun Inc.

*NY Green Bank ("**NYGB**") has entered into three transactions to accelerate the deployment of more than 5,000 solar projects at homes across New York State ("**NYS**") by Sunrun, Inc. ("**Sunrun**"). Sunrun is a national solar provider that markets and develops residential solar energy systems. The three transactions complement each other – as one provides financing to fund the purchase of materials and installation of the solar projects, and the other two provide post-construction financing. One of the post-construction financings was arranged by Investec Bank PLC ("**Investec**"), an international specialty bank and asset manager, and the second post-construction financing was arranged by SunTrust Robinson Humphrey Inc. ("**SunTrust**") and ING Capital LLC ("**ING**").*

Transaction Descriptions

Construction Loan Facility

On June 16, 2016, NYGB committed $25.0 million which, along with financing from other lenders, allows Sunrun to increase its existing revolver from $205.0 million to $250.0 million. The revolver ("**Construction Loan Facility**" or "**CLF**") will be used by Sunrun to fund customer acquisition, purchase of materials, and construction and installation of the systems, and will ultimately be refinanced through Credit Facilities (such as described below) and tax equity commitments arranged by Sunrun. NYGB's participation in this consortium of capital providers broadens the availability of construction financing for distributed energy projects for homeowners across NYS.

Investec Credit Facilities

On May 13, 2016, NYGB closed a $25.0 million commitment to participate in a transaction consisting of two credit facilities – a loan aggregation revolver and a term loan (together the "**NYGB Loan Products**"), which are expected to accelerate the deployment of over 5,000 solar projects at homes across NYS. The transaction was part of a broader $340.0 million financing (the "**Investec Credit Facilities**") arranged by Investec that provides Sunrun with a larger financing to expand its business in NYS and elsewhere. The $340.0 million Investec Credit Facilities (which include the NYGB Loan Products) represents one of the largest aggregation financings for a residential solar developer closed to date.

SunTrust/ING Credit Facilities

On May 9, 2017, NYGB closed a $15.0 million commitment to participate in an aggregation-to-term loan facility. The transaction was part of a $202.0 million financing (the "**SunTrust/ING Credit Facilities**") arranged by SunTrust and ING that provides Sunrun with a larger financing to expand its business in NYS and elsewhere. The $202.0 million SunTrust/ING Credit Facilities support a $100.0 million equity partnership with National Grid plc, an international utility with a sizeable NYS presence. Through increased scale, the aggregation-to-term transactions are expected post-aggregation to draw new investors and financial institutions into the marketplace, decreasing the cost of capital for solar developers and installers, and in turn, the cost of solar power equipment sold or leased to homeowners.

[1] Refer to the Summary of Changes document for details of updates, available at www.greenbank.ny.gov/Investments/Transaction-Profiles.

Overall Context

Sunrun sought NYGB's participation in the CLF, SunTrust/ING Credit Facilities and Investec Credit Facilities to provide further liquidity to support Sunrun's capital needs in growing its business. With both construction and longer-term financing in place, Sunrun is well positioned to meet the growing demand from homeowners and expand its ability to finance the installation of solar projects throughout NYS.

These complementary transactions will result in the aggregation of bundled pools of residential solar systems that will ultimately be refinanced through one or more longer-term take-out financings. Such refinancings may include a securitization – the sale of underlying cash flows resulting from residential leases or power purchase agreements ("**PPAs**") to third party investors – providing additional avenues to develop and scale the emerging residential solar asset class, both for Sunrun and other market participants. Given that the bank market for such credit facilities remains limited, NYGB's participation enables larger aggregation facilities than would otherwise be available, resulting in longer term takeout refinancings at a scale greater than might otherwise be achieved. Greater scale means greater investor interest, which will ultimately result in more attractive debt pricing that will benefit New Yorkers via more attractively priced contracts under which power is purchased. There is a growing market for residential solar securitizations, with the largest term securitization to date raising $254.75 million.[2]

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 NYS Public Service Commission (the "**Commission**") on June 20, 2016.[3] This Transaction Profile contains specific information in connection with the Investec Credit Facilities (entered into on May 13, 2016), the ING/SunTrust Credit Facilities (entered into on May 9, 2017) and the CLF (entered into on June 16, 2016) as required by the Metrics Plan.[4]

Form of NYGB Investment

NYGB Product	Product Sub-Type	Committed Capital
Warehousing/Aggregation	Senior Secured Revolver and Subordinated Term Loan	$25.0 million
Warehousing/Aggregation	Senior Secured Aggregation-to-Term Loan	$15.0 million
Asset Loan & Investment	Construction Financing Revolver	$25.0 million

Location(s) of Underlying Project(s)

Statewide.[5] Sunrun's solar power generation systems will be offered to homeowners through PPA structures in regions across NYS.

Types of Organizations that are Transaction Participants

	Name	Participant Type
Clients	Investec	Global Corporate & Investment Bank
	SunTrust	Global Corporate & Investment Bank
	ING	Global Corporate & Investment Bank
Key Counterparties	Sunrun	Solar Energy Project Developer
	National Grid	International Utility & Equity Co-Sponsor
Financiers (current)	Various tax equity providers and commercial banks	Global Corporate & Investment Banks, Commercial/Regional Banks
Financiers (future)	To be identified	Institutional Investors(s)

[2] Sunnova offered the $254.75 million securitization, which took place in April 2017.
[3] Cases 13-M-0412 and 14-M-0094.
[4] See Section 4.0, page 8 and Schedule 3.
[5] Defined as projects located in four or more regions of the State.

Summary of Financing Market Objectives & Barriers Addressed

Beneficiary	Market Barrier	Financing Solution
Capital Market Participants	In clean energy markets, there is only a small (but growing) number of lenders actively financing residential solar projects.	NYGB participation in all three transactions facilitates the ability to achieve substantial transaction scale. This will enable much larger post-aggregation term financings, which may include securitizations, resulting in broader market penetration and enhanced liquidity, both key NYGB goals.
Solar Project Developers	Many solar developers face the challenge of securing sufficient financing to meet customer demand – hampering their ability to grow and achieve economies of scale.	NYGB's participation in the CLF, the Investec Facilities and SunTrust/ING Facilities will enable Sunrun to better meet residential demand in NYS. This type of financing can also be replicated with other developers seeking to secure similar capital access.
Homeowners	"Going solar" is not perceived by some homeowners as being practical or affordable, and some questions as to benefits to be realized remain.	NYGB participation in all three transactions will produce benefits for eligible homeowners seeking to utilize solar power, as homeowners will have greater ability to contract for solar, while simultaneously realizing immediate reductions on their energy bill. Greater scale and deeper and broader financing markets will lead to even more compelling offerings being made available to homeowners and more information available on benefits.

Technologies Involved

Technology	Measures
Renewable Energy	Solar photovoltaic ("**PV**") systems

Metrics & Evaluation Plan

Planned Energy & Environmental Metrics

NYGB's minimum investment criteria specifically require that "transactions will have the potential for energy savings and/or clean energy generation that will contribute to greenhouse gas [('**GHG**')] reductions in support of New York's energy policies".[6] In addition, the Metrics Plan requires that the following energy and environmental measures, applicable to this transaction, be reported on[7]:

- Estimated gross lifetime and first-year clean energy generated (MWh);[8]
- Estimated gross clean energy generation installed capacity (MW); and
- Estimated gross lifetime and first-year GHG emission reductions (metric tons).

The estimated gross lifetime and first-year energy and environmental impacts of Sunrun's development in NYS, facilitated by NYGB's participation in the Investec Credit Facilities, the CLF and the Sun Trust/ING Credit Facilities, are as follows:

Energy/Environmental Impact	Lifetime Low Estimate	Lifetime High Estimate	First-Year Low Estimate	First-Year High Estimate
Estimated gross clean energy generated (MWh)	765,000	1,150,000	30,600	45,900

[6] 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.

[7] See Metrics Plan, Section 2.0, pages 2 – 6.

[8] First year gross energy generation refers to the first year of estimated gross energy generation once a measure is installed and as such generation will not necessarily correspond to the first year of the investment term. The majority of NYGB's investments have a two to three-year development cycle in which projects are originated, installed and placed into commercial operation.

Energy/Environmental Impact	Lifetime Low Estimate	Lifetime High Estimate	First-Year Low Estimate	First-Year High Estimate
Estimated gross clean energy generation installed capacity (MW)[9]	26.0	39.0	N/A	
Estimated gross GHG emission reductions (metric tons)[10]	403,000	604,000	16,100	24,200

Planned Market Characterization Baseline & Market Transformation Potential

The Metrics Plan requires that market evaluation will occur when a critical mass of NYGB financing and investment arrangements are put in place. This market evaluation will be conducted on sectors in which NYGB has participated and will occur approximately three to five years following initial NYGB capital deployments. Baseline data will be collected in 2017 for most indicators as a comparison point against which to assess market progress in the later studies. Progress indicators are defined below for the short, mid and long terms.[11]

Short-term progress indicators will identify early activity levels and will be regularly tracked for the duration of the transaction. These include, but are not limited to:

- The number and size (i.e., generation capacity and dollar value) of projects completed through this transaction;
- Development of the residential solar market in NYS; and
- Performance of the underlying installed systems and loans.

Mid and long-term indicators will be expected to show progress through program tracking or market evaluation over time. These include, but are not limited to:

- Awareness and use of solar PPA data;
- View of banks and institutional investors as to the investment value of residential solar PPAs;
- Demonstration of competitive risk-return profiles for residential solar investment;
- Market volume of residential solar projects;
- Multi-year track-record of residential solar projects;
- Replication of Sunrun model by other solar developers, generally and targeting the residential sector, specifically;
- Expansion of term securitization markets; and
- Number of financial participants in securitization transactions (and in providing revolving warehouse and term loan facilities).

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

Market evaluation will address the short, mid and long-term indicators identified above. Methods will include analysis of program data along with interviews and surveys of market participants (homeowners, financial community) to track information including but not limited to: participation rates, project scale information, interest in solar financing (generally and with regard to residential specifically), and influence of NYGB's participation on financial markets. As noted, baseline data will be collected on most key indicators in 2017 and later follow-up studies will assess progress against baseline level. The specific timing of these efforts may be revised based on experience or other factors as the investment evolves.

Impact evaluation will be based on the size of the systems installed and the projected clean energy generation.

[9] Built clean energy generation capacity at full deployment of funds is the same for first-year and lifetime duration.
[10] As of January 1, 2016, the New York State Energy Research and Development Authority ("**NYSERDA**") utilizes a 1,160 lbs/MWh conversion factor to estimate GHG emissions reductions for electric generation and energy efficiency savings across all components of the Clean Energy Fund.
[11] See Metrics Plan, Section 3.3 at page 7.

As with all NYGB investments, Sunrun projects that receive an incentive or funding from other entities (e.g., utility, other NYSERDA program) will, in accordance with the Metrics Plan, ideally be tracked in order 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. Attempts will also be made to coordinate market and impact evaluation activities for these projects that receive support from multiple sources in order to maximize the efficiency of data collection and avoid participant survey fatigue.