NEW YORK STATE OF OPPORTUNITY. | NY Green Bank A Division of NYSERDA

NY Green Bank

Metrics, Reporting & Evaluation

Quarterly Report No. 14

(Through December 31, 2017)

Case 13-M-0412

February 14, 2018

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- *Cypress Creek Renewables LLC (Community Solar)*

1 Performance at a Glance – As of December 31, 2017

Stimulating New Clean Energy Proposals in the State	NY Green Bank ("**NYGB**") has received over **$2.3 billion** in investment proposals since inception.
Strong Active Pipeline	The Active Pipeline of potential investments proceeding to close is **$673.2 million**.[1]
Driving Material Clean Energy Investments Across NYS	NYGB's investments support clean energy projects with a total project cost of **between $1.27 and $1.50 billion**[2] in aggregate, based on Overall Investments to Date of **$457.5 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 – **$27.6 million** in revenues has been generated since NYGB's inception. NYGB continues to maintain self-sufficiency with cumulative revenues in excess of expenses.
Contributing to CEF Objectives, REV & the CES	NYGB's investments to date drive estimated gross lifetime GHG reductions of **between 5.6 and 7.5 million metric tons**[2], equivalent to removing **between 55,135 and 72,900 cars** from the road for a period of **22 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 December 31, 2017, the $673.2 million in Active Pipeline does not include the $457.5 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 2.8:1 to 3.3:1.

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 credit underwriting and transaction execution processes.

NYGB closed **two new investments** during the quarter ending December 31, 2017, adding **$16.6 million** to NYGB's 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 December 31, 2017:

(a) Over **$2.3 billion** of proposals have been received and evaluated by NYGB's Scoring Committee;

(b) **$2.1 billion** of proposals have passed Scoring Committee evaluation – representing potential investments that meet NYGB's mandate and proposal evaluation criteria;

(c) **$936.0 million** of proposals have received Greenlight Committee recommendation for advancement;

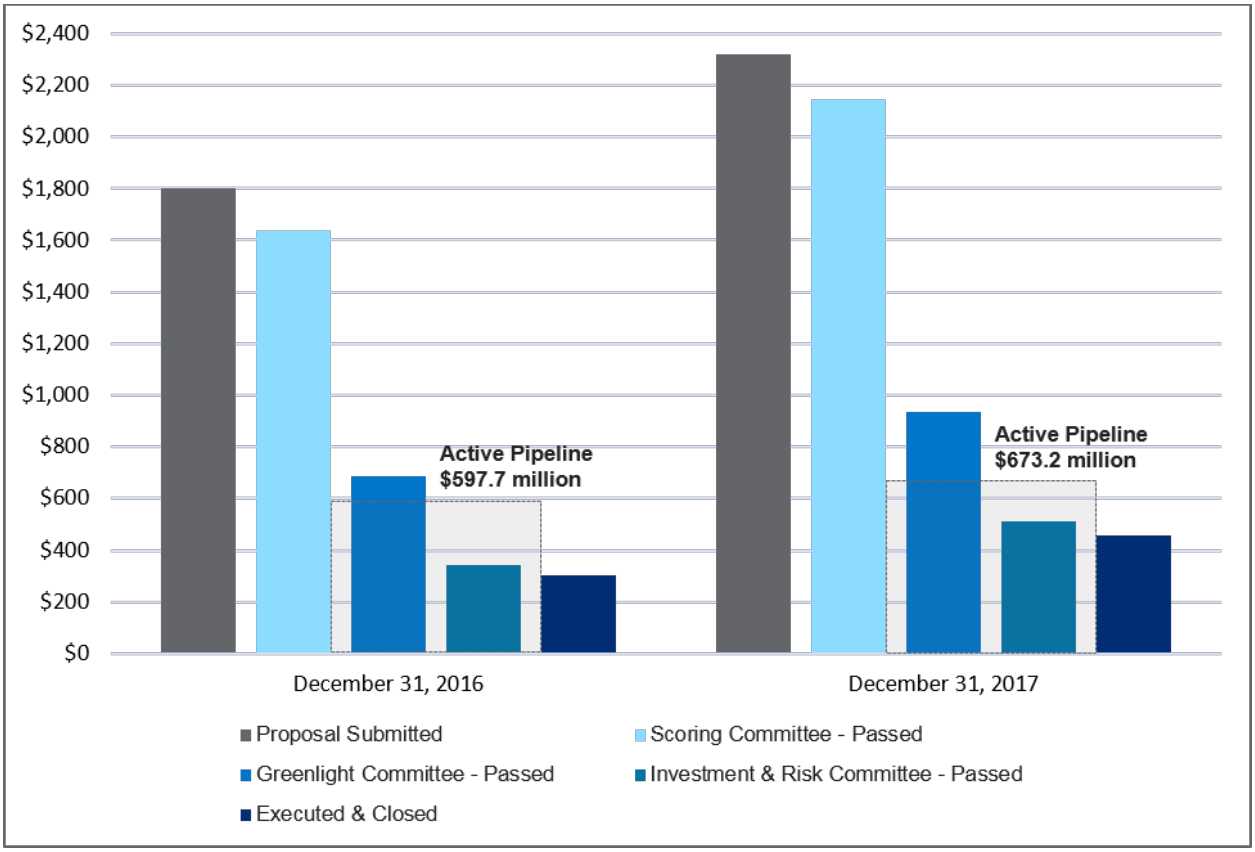
(d) **$511.8 million** of proposals have been vetted by the Investment & Risk Committee ("**IRC**") and approved by NYSERDA's President & CEO; and

(e) **$457.5 million** of transactions have been closed - comprising NYGB's Overall Investments to Date - mobilizing public and private investments to support in the range of **$1.27 to $1.50 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 **$673.2 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): Year-on-Year Review



3.2 Investment Portfolio

3.2.1 Highlights

In the quarter ended December 31, 2017, NYGB closed two transactions, respectively sponsored by BQ Energy and Cypress Creek Renewables, totaling $16.6 million. Each transaction, combined into NYGB's 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.

During the period, NYGB also issued two Requests for Proposal ("**RFPs**") – one seeking a service provider in connection with NYGB's expansion plans, announced by Governor Andrew M. Cuomo in Fall 2017, and the other related to investment products and origination for community distributed generation ("**Community DG**") solar projects. These are both discussed in detail in Section 3.4.

3.2.2 New Investments

BQ Energy (City of Beacon) – Driving Standardization in the New York Solar Market

- *Reduces up to 47,600 metric tons of GHG emissions over the life of the underlying project*
- *Generates up to 90,500 MWh of renewable energy over the life of the underlying project*

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

- *Increases renewable energy installed generation capacity by up to 2.8 MW*

BQ Energy (**"BQ"**) is a Wappingers Falls, New York-based renewable energy project developer specializing in landfill and brownfield site redevelopment. As the third of a larger portfolio of projects to be financed in collaboration with NYGB, BQ has received a $3.1 million construction loan and term loan facility to complete a 2.8 MW solar project on a remediated landfill located in the City of Beacon, Dutchess County. Solar power from this project will be sold to the City of Beacon and will generate a significant percentage of its total power needs.

This transaction aims to drive growth in the small to mid-size solar sector by encouraging the standardization of contractors, contracts, and equipment thereby increasing underwriting efficiency and reducing overall transaction costs. Developing standardized projects within a portfolio makes the overall financing opportunity more attractive to a larger potential investor group, ultimately providing more funding options and influencing financing costs. Institutional investors and other private sector capital providers have shown limited interest in financing small-to-mid-sized solar project developers which may have shorter operating histories. NYGB's participation in this transaction will help this NYS-based developer further consolidate its track record and achieve the scale needed for broader appeal to traditional capital providers. In turn, this can be expected to enable more refinancing options, which will provide the market with greater levels of familiarity with this asset class – a prerequisite to increasing liquidity. By bridging certain financing gaps in the marketplace, NYGB is enabling a larger group of solar developers to participate in New York's clean energy marketplace. This gives end-users more choice in terms of how they pay for their systems and who they select as their installer. Greater choice and competition in the market will lead to reduced costs, allowing a greater number of New Yorkers and New York businesses to adopt solar.

Cypress Creek Renewables – Bridge Loan to Support the Deployment of Community Solar Projects

- *Reduces GHG emissions by up to 2,610,000 metric tons over the 25-year life of the underlying assets*
- *Generates up to 4,960,000 MWh of renewable energy over the life of the underlying projects*
- *Increases renewable energy installed generation capacity by up to 168.0 MW*

On August 2, 2017, NYGB provided a 12-month senior secured bridge loan facility of up to $11.5 million to Cypress Creek Renewables LLC ("**CCR**"). In December 2017, the bridge loan was upsized by $13.5 million and extended until December 2019 to finance a portion of the balance of the interconnection upgrade estimates. Bridge loan proceeds will finance project interconnection advance payments to utilities across New York State for up to 72 Community DG solar projects. This transaction is expected to support the deployment of up to 168.0 MW of solar photovoltaic ("**PV**") projects in NYS, providing residents and businesses with a greater variety of energy choices and, ultimately, lower-cost clean energy options.

As there is an increasingly strong demand for Community DG throughout NYS, capital providers are, and will continue to be, expected to provide financing to enable the deployment of these projects, including through covering the up-front interconnection payments, and products like NYGB's bridge loan are expected to ultimately be offered by private capital providers in future.

This transaction encourages an efficient use of sponsor equity and supports project development efforts in NYS by bridging the period project sponsors need to finalize financing arrangements for projects that have completed the Coordinated Electric System Interconnection Review ("**CESIR**") process. NYGB's participation creates an easier pathway forward for developers and enables greater deployment of Community DG along with other distributed generation assets throughout the State.

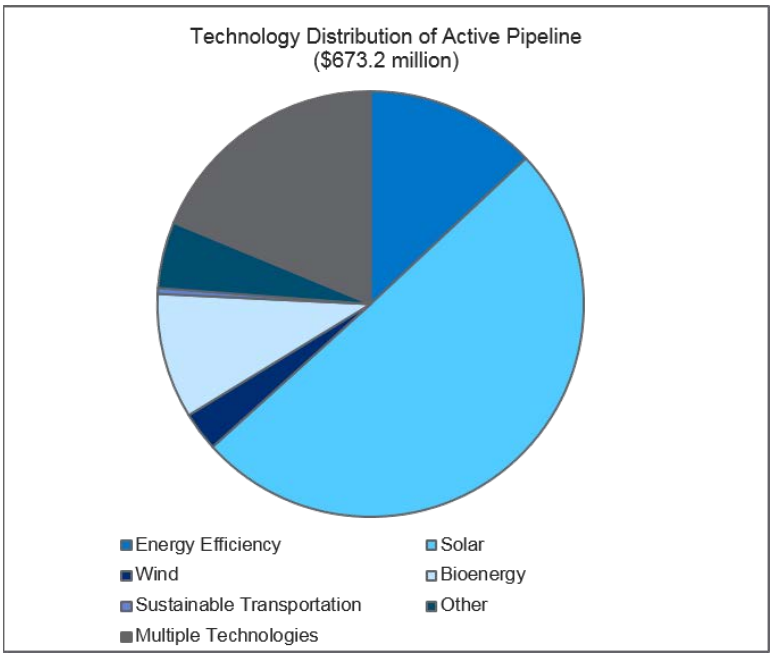
This transaction will generate project and customer performance data, which will help draw new investors and financial institutions into the marketplace by demonstrating that competitive risk-return profiles can be achieved by Community DG enabled business models. This transaction also supports the deployment of Community DG solar projects, which provide those who are not otherwise able to install solar energy generation systems on their property (e.g., homeowners whose rooftops cannot support solar systems, renters and those who cannot afford solar systems, etc.), with voluntary access to clean, low-cost energy, regardless of their home or business location.

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/Portfolio, 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 investment is evidenced by the total value of proposals that have been submitted to NYGB in response to its open solicitations for investment proposals (the "**Investment RFPs**").[7] Through December 31, 2017, proposals requesting over $2.3 billion of NYGB capital have been received. NYGB's Active Pipeline at December 31, 2017 is $673.2 million. Figures 2, 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



[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, Efficiency & Renewables Financing Arrangements: Building & Property Owners – RFP No. 8, and Construction and Aggregation-to-Term Financing for CDG Solar Projects – RFP No. 10, all available at www.greenbank.ny.gov/Work-with-Us/Propose-an-Investment.

Figure 3. Active Pipeline by End-Use Customer Segment

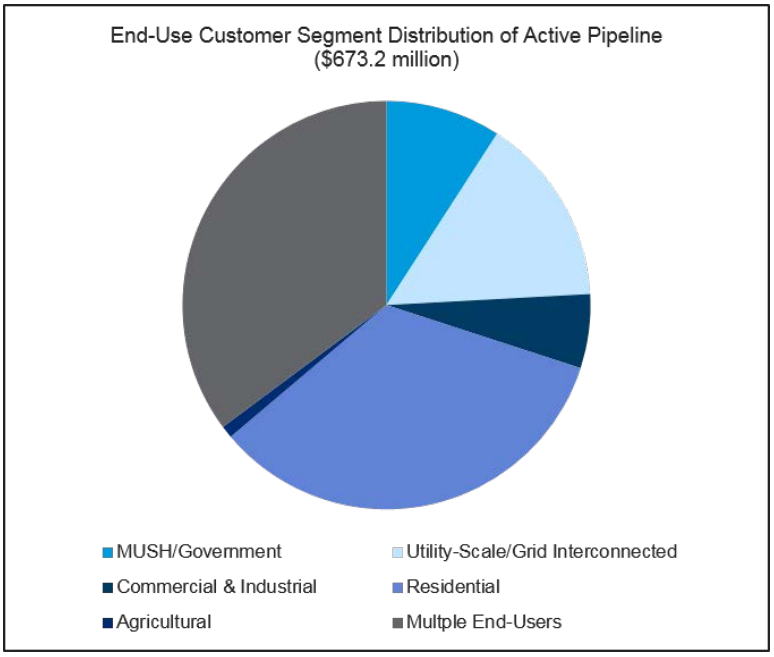
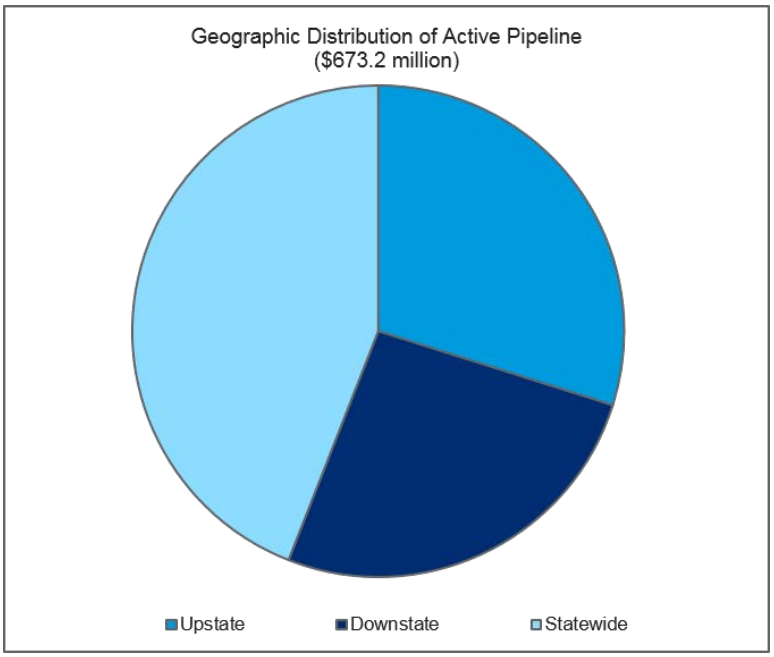


Figure 4. Active Pipeline by Geographic Distribution



3.4 Strategic, Operational & Risk Matters

In the quarter ended December 31, 2017, 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) NYGB Expansion Efforts: On December 1, 2017, in support of Governor Cuomo's Fall announcements that NYGB would explore options for raising at least an additional $1.0 billion in private sector funds to invest at the portfolio level and support sustainable infrastructure investments both in- and out-of-state[8], NYGB publicly issued its "Strategic Advisory & Capital Arranger Services – Request for Proposals" ("**RFP9**"). NYGB hosted an informational webinar focused on the RFP9 opportunity for potential proposers on December 15, 2017. On the proposal due date (January 16, 2018), multiple proposals were received, and these are currently being evaluated. Final selection of a provider is expected by the end of February 2018. Following execution of an advisory/capital arranger services contract with the selected provider, the advisory scope of work will commence, with final recommendations as to target investor type, governance and structure expected to be received within two to three months thereafter. Subject to the receipt of necessary approvals for the recommended approach to, and structure for, NYGB expansion, capital commitments will be sought. NYGB anticipates that it could be in position to begin closing on third-party capital commitments by year-end 2018. NYGB will continue to provide updates on material developments related to its expansion and capital-raising efforts in future Quarterly Reports.

(b) New Investment Solicitation Launched: To complement NYGB's ongoing investment solicitation "Clean Energy Financing Arrangements – Request for Proposals", in December 2017, NYGB launched an additional product-specific RFP. NYGB's activity in the clean energy financing market in the State enables it to identify project types constrained due to financing barriers that NYGB is positioned to address with a targeted offering. In the past quarter, NYGB released the following investment opportunity, which is ongoing (i.e., without any specified closing date, such that proposals are reviewed on a rolling basis as received):

i. *RFP 10: Construction & Aggregation-to-Term Financing for Community Distributed Generation Solar Projects.* RFP 10 is targeted at developers and/or owners of solar PV projects that: (1) are in advanced stages of development; (2) form part of the Community Distributed Generation Program; (3) are compensated under the Value of Distributed Energy Resources Phase One Tariff; (4) comply with all applicable provisions established under the Uniform Business Practices for Distributed Energy Resource Suppliers; (5) generate power using Tier 1 technology; (6) earn revenue by selling volumetric or monetary credits to project members under revenue contracts; and (7) are 500 KW to 2.0 MW in size, ground-mounted, canopy-mounted or non-residential rooftop PV solar projects at a single location.

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

i. Participation in 10 events including the Renewable Integration and the Power Markets panel during the Platts Financing US Power Conference; The Green Bank Movement event, which gathered ~20 states to discuss the next phase of green bank development in the United States and coordinating efforts to increase clean energy investment more broadly; and NYGB's regular Quarterly Report Review Webinar, held on November 30, 2017; and

ii. Issued NYGB's Winter Newsletter, highlighting recently released RFPs, latest portfolio numbers, additional $1.0 billion fundraise activities and anticipated energy and environmental impacts.

(d) Public Reporting & Metrics: Filed the Quarterly Report for the period ending September 30, 2017 (on November 14, 2017), as required by the Metrics Plan, which is available at www.greenbank.ny.gov/Resources/Public-Filings.

[8] See relevant press releases at www.greenbank.ny.gov/News-and-Media/In-The-News.

4 Metrics

4.1 Quarterly Metrics

Required metrics for the period October 1, through December 31, 2017 are set out in Table 1.[9]

Table 1. Quarterly Metrics

Quarterly Metric	Prior Quarter	Current Quarter
Capital Position		
▪ **Authorized Capital ($)**	$1.0 billion	$1.0 billion
▪ **Authorized Administrative Expenses ($)**	$17.6 million	$17.6 million
▪ **Authorized Evaluation Expenses ($)**	$4.0 million	$4.0 million
Operational Matters		
▪ **Cumulative Revenues ($)**[10]	$23.0 million	$27.6 million
▪ **Cumulative Operating Expenses ($)**[11]	$20.8 million	$22.7 million
▪ **Direct Operating Expenses ($)**	$12.0 million	$13.3 million
▪ **Allocated Expenses ($)**	$8.8 million	$9.4 million
▪ **Credit Facility (if in place)**		
▪ **Credit Facility Amount ($)**	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 ($)**	$71.4 million	$90.0 million
▪ **Deployed Funds ($)**[12]	$329.4 million	$290.1 million
▪ **Current Portfolio ($)**[13]	$400.8 million	$380.1 million
▪ **Overall Investments to Date ($)**	$440.9 million	$457.5 million
▪ **Total Project Costs (Cumulative) ($)**[14]	In the range of $1.31 - $1.59 billion	In the range of $1.27 - $1.50 billion

[9] In connection with all energy and environmental metrics reported, note that 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 Revenues reflect quarterly fair market value adjustments related to NYGB capital held in U.S. Treasury securities, consistent with GAAP. In addition, Cumulative Revenues are always stated net of impairments.

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

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

[13] The dollar value of the Current Portfolio is expected to fluctuate from quarter to quarter, including to reflect any decreases in Committed Funds and/or Deployed Funds. Decreases in Committed Funds could occur, for example, in connection with the release of undrawn funds at the end of an availability period or otherwise consistent with the terms of an investment, while decreases in Deployed Funds occur primarily when NYGB investments are repaid from time to time, allowing those monies to be recycled into new clean energy investments in the State, generating further benefits for ratepayers.

[14] 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 a subset 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. As projects progress and the cost of installed equipment and labor are known and reported to NYGB by its counterparties, NYGB will seek to adjust reported values and replace FMV in its aggregated data sets and periodic reporting with reported actual costs.

Quarterly Metric	Prior Quarter	Current Quarter
▪ **Mobilization Ratio**	Tracking at least 3:1 on average across portfolio	Tracking at least 3:1 on average across portfolio[15]
▪ **Portfolio Concentrations (%)[16]**	64.7% Renewable Energy	65.9% Renewable Energy
	11.4% Energy Efficiency	11.0% Energy Efficiency
	24.0% Other	23.0% Other[17]
▪ **Number & Type of NYGB Investments**	18 – Renewable Energy	20 – Renewable Energy
	6 – Energy Efficiency	6 – Energy Efficiency
	4 – Other	4 – Other
▪ **Number & General Type of NYGB Counterparties[18]**	49 – 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	49 – 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
▪ **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): 737,000 – 815,000 MWh; and 3.97 – 4.37 million MMBtu	Estimated Gross Lifetime Energy Saved by Fuel Type (Energy Efficiency): 737,000 – 815,000 MWh; and 3.97 – 4.37 million MMBtu
	Estimated Gross Lifetime Clean Energy Generated: 9.28 – 12.8 million MWh	Estimated Gross Lifetime Clean Energy Generated: 9.35 – 12.9 million MWh
▪ **Estimated Gross First Year[19] 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): 50,500 – 56,100 MWh; and 252,000 – 276,000 MMBtu	Estimated Gross First Year Energy Saved by Fuel Type (Energy Efficiency): 50,500 – 56,100 MWh; and 252,000 – 276,000 MMBtu
	Estimated Gross First Year Clean Energy Generated: 394,000 – 538,000 MWh	Estimated Gross First Year Clean Energy Generated: 396,000 – 541,000 MWh

[15] Given the range of Total Project Costs that NYGB investments mobilize, the Mobilization Ratio also represents a range; currently of 2.8:1 to 3.3:1.

[16] 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.

[17] "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.

[18] 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).

[19] 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.

Quarterly Metric	Prior Quarter	Current Quarter
▪ **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)[20] 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**	330.0 – 446.0 MW	332.0 – 448.0 MW
▪ **Estimated Gross Lifetime GHG Emission Reductions (metric tons) for Committed Funds & Deployed Funds**	5.53 – 7.44 million metric tons	5.56 – 7.48 million metric tons
Investment Pipeline		
▪ **Active Pipeline (In the Quarter) ($)**	$519.0 million	$673.2 million
Investment Process		
▪ **Proposals Received – Value (Cumulative) ($)**	$2.1 billion	$2.3 billion
▪ **Approvals - Scoring Committee (Cumulative) ($)**	$1.9 billion	$2.1 billion
▪ **Approvals - Greenlight Committee (Cumulative) ($)**	$924.0 million	$936.0 million
▪ **Approvals - IRC (Cumulative) ($)**	$497.3 million	$511.8 million

4.2 Annual Installed Energy & Environmental Benefits

The Metrics Plan requires that NYGB report on installed energy and environmental benefits associated with its investment portfolio, in the form of Table 2 below for each calendar year. These annual installed metrics are to be included in the Quarterly Report for the period ending on December 31 in each year.

The purpose of Table 2 is to show the cumulative progress of NYGB's investments (across the whole portfolio) towards delivering the total estimated energy and environmental benefits set out in Transaction Profiles as investments close.[21]

[20] 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.

[21] In addition, as NYGB receives actual impact data from its clients, these are aggregated and included in the overall quarterly estimates per impact category, as contained in Table 1 of each Quarterly Report.

Table 2. Annual Installed Energy & Environmental Benefits (Calendar Year)

Energy & Environmental Benefit	Prior Year Increment[22]	Prior Year Cumulative[23]	Current Year Increment	Current Year Cumulative
▪ **Installed energy saved by fuel type from energy efficiency projects (MWh/MMBtu) and/or installed clean energy generated (MWh)**	Energy Saved by Fuel Type (Energy Efficiency): 678 MWh; and 9,265 MMBtu	Energy Saved by Fuel Type (Energy Efficiency): 678 MWh; and 9,265 MMBtu	Energy Saved by Fuel Type (Energy Efficiency): 13,240 MWh; and 2,562 MMBtu	Energy Saved by Fuel Type (Energy Efficiency): 13,918 MWh; and 11,827 MMBtu
	Clean Energy Generated: 57,051 MWh[24]	Clean Energy Generated: 57,051 MWh	Clean Energy Generated: 101,140 MWh	Clean Energy Generated: 158,191 MWh
▪ **Installed energy savings from CHP (MWh)**	0 MWh	0 MWh	0 MWh	0 MWh
▪ **Installed energy savings from CHP (MMBtu)**	0 MMBtu	0 MMBtu	0 MMBtu	0 MMBtu
▪ **Installed CHP capacity (MW), if applicable**	0 MW	0 MW	0 MW	0 MW
▪ **Installed clean energy generation capacity (MW), if applicable**	48.4 MW[25]	48.4 MW	85.9 MW	134.3 MW
▪ **Installed GHG emission reductions (metric tons)**	30,437 metric tons[26]	30,437 metric tons	64,236 metric tons	94,673 metric tons

NYGB's counterparties reported an incremental 85.9 MW of clean energy installed capacity in the State in the calendar year through December 31, 2017. This brings NYGB's cumulative progress of installed projects to 134.3 MW out of the estimated 332.1 MW in NYS in aggregate over the life of the underlying transactions. This represents a 177.5% increase year-on-year.

NYGB's Overall Investments to Date of $457.5 million have so far delivered 94,673 metric tons of GHG emissions reductions to New Yorkers, a year-over-year increase of over 200.0%. This GHG emissions reduction will further increase as NYGB's counterparties continue to draw down on capital commitments to fund new clean energy project installations, and NYGB continues to close new transactions in 2018 and beyond. To put this into perspective, at December 31, 2016, NYGB's portfolio of investments was expected to involve the build-out of 173.2 MW of clean energy over deployment periods averaging two to three years. Since then, NYGB's portfolio of investments has grown to 332.1 MW in underlying projects, and in the past year NYGB's counterparties have delivered 134.3 MW in NYS, averaging ~7.0 MW of new systems installed per month (based on the current year increment of 85.9 MW).

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

[22] 2016 Calendar Year reported values have been adjusted, where needed, to incorporate lagged data, and improved counterparty performance data monitoring processes.

[23] 2016 Calendar Year reported values have been adjusted, where needed, to incorporate lagged data, and improved counterparty performance data monitoring processes.

[24] Increased from 2016 reported value by 375 MWh.

[25] Increased from 2016 reported value by 0.3 MW.

[26] Increased from 2016 reported value by 161 metrics tons.

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 December 31, 2017 is summarized in Table 3.

Table 3. Status of Plan Deliverables (2017 – 2018)

Category	Deliverable	Status in Quarter Ending December 31, 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 **$673.2 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.[27]
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.	☒ **Not Achieved for this Quarter:** $16.6 million of closed transactions in the quarter, such that current Plan Year commitment is averaging $37.1 million per quarter. (See additional commentary below).
▪ **Issue CDG RFP/RFI**	▪ Publicly Issue RFP/RFI.	☑ **Achieved for this Quarter:** Issued RFP 10 "Construction & Aggregation-to-Term Financing for Community Distributed Generation Solar Projects".[28]
▪ **Issue Interconnection Bridge Loan RFP/RFI**	▪ Publicly issue RFP/RFI.	☑ **Ongoing & On Track:** Preparation of RFP/RFI at advanced stages.
▪ **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:** Baseline Evaluation Plan reviewed and accepted by DPS. Selection of third-party evaluators in Q1 2018. Evaluation activities expected to commence in the first half of 2018.
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 at least **3:1** on average across NYGB's portfolio.[29]

[27] The online portal for submission of Investment RFPs to NYGB can be accessed by clicking the "Submit Proposal Online" buttons corresponding to each investment RFP, available at: www.greenbank.ny.gov/Work-with-Us/Propose-an-Investment.

[28] Available at www.greenbank.ny.gov/Work-with-Us/Propose-an-Investment.

[29] Given the range of Total Project Costs that NYGB investments mobilize, the Mobilization Ratio also represents a range; currently of 2.8:1 to 3.3:1.

One of NYGB's key deliverables for the 2017 – 2018 fiscal year is to commit $550.0 million (cumulative) to NYGB investments, equating to an average of $50.0 million in new investments per quarter.[30] As set out in this Report, NYGB closed two transactions in the fourth calendar quarter totaling $16.6 million. During the previous two quarters NYGB closed investments of $94.8 million, bringing the total for the previous three quarters to $111.4 million.

As a market-focused and market-responsive organization, the momentum of individual transactions towards closing fluctuates due to various factors, including many not under NYGB's control. Uncertain market conditions relating to new market areas and/or the ongoing tax treatment of clean energy investments, supply and pricing of key project components and related matters can produce slower progress in project financing and implementation during specific periods, even where market participants continue to believe that the future for clean energy and energy efficiency remains strong. NYGB experienced such a period in the latter half of 2017, continuing into the beginning of 2018, when some projects did not proceed as quickly as initially expected by its clients due to exogenous factors.

NYGB's $50.0 million target for average new commitments per quarter serves as an indicator of progress towards achieving targets for the year. Given natural cycles that occur in the marketplace, it is to be expected that at any point in time the aggregate value of new investments in any quarter will not equal $50.0 million but be uneven in actual distribution. Despite the slower than expected pace for some projects in 2017, NYGB continues to attract new investment proposals and manage a healthy and robust Active Pipeline. Based on this Active Pipeline, NYGB remains fully engaged in driving towards expeditious closings with its counterparties over the ensuing quarters.

[30] See NY Green Bank, Annual Business Plan 2017 dated June 19, 2017 and filed with the Commission (Cases 14-M-0094 et al), page 29.

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

November 2017

Driving Standardization in the New York Solar Market

BQ Energy – Sunlight Beacon

*BQ Energy ("**BQ**") is a renewable energy project developer specializing in landfill and brownfield site redevelopment. As the third installation of a larger portfolio of projects to be financed in partnership with NY Green Bank ("**NYGB**"), BQ will receive a $3.1 million construction loan and term loan facility to complete a 2.8 megawatt ("**MW**") solar project to be constructed on a remediated landfill located in the City of Beacon, NY (the "**City**"). Solar power from this project will be sold to the City, generating a significant percentage of its total power needs.*

Transaction Description

BQ is a Wappingers Falls, New York-based renewable energy project developer specializing in landfill and brownfield site redevelopment. NYGB's $3.1 million construction loan and term loan facility (the "**Credit Facility**") enables BQ to complete the 2.8 MW project (the "**Project**") to be constructed on a remediated landfill located in and owned by the City, which is located in Dutchess County. All-Electric Construction & Communication ("**All-Electric**") will construct the Project under a standardized balance of plant ("**BOP**") contract utilizing top tier panels, inverters, and racking systems. The Project will generate revenue by selling clean power (or, more specifically, selling the value of clean power evidenced by net metering credits) to the City.

The Project is the third of several similar developments in BQ's pipeline that NYGB anticipates financing as part of a larger portfolio. In an effort to standardize this particular type of construction loan, BQ retained All-Electric for construction services for the majority of the portfolio projects, using similar equipment and contractual arrangements. BQ expects the majority of projects in the portfolio to be located on landfill and brownfield sites in Western NY, Central NY, the Hudson Valley, and Long Island with the power generated providing clean power to municipalities, universities, schools, and hospitals ("**MUSH**"), and utilities.

NYGB's participation in the Project – and in similar future developments included in the proposed portfolio arrangement – will help expand financing opportunities for smaller (less than 10 MW) solar systems, by fostering standardization in underwriting (which is the process a lender uses to assess the creditworthiness or risk of a potential borrower) including a streamlined, uniform approach to integrating contractors, structuring contracts, and utilizing standardized equipment.

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 BQ transaction (which was entered into on November 9, 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	Construction-to-Term Loan	$3.1 million

Location(s) of Underlying Project(s)

Dutchess County. The Project is located in the Town of Beacon, New York, with future portfolio projects expected to be located in various counties throughout New York State.

Types of Client & Counterparty Organizations that are Transaction Participants

	Name	Participant Type
Client	BQ Energy	Energy Project Developer
Counterparties	All Electric	Industry Vendor
	City of Beacon	Site Host and Commercial End-User

Summary of Financing Market Objectives & Barriers Addressed

Beneficiary	Market Barrier	Financing Solution
Smaller-Scale Solar Developers	Many smaller-scale solar developers face challenges in securing adequate construction and long-term financing, particularly for smaller to mid-sized solar projects, as these developers are restricted in their access to capital by their size and comparatively limited track record.	This transaction aims to drive growth in the small to mid-size solar sector by encouraging the standardization of contractors, contracts, and equipment thereby increasing underwriting efficiency and reducing overall transaction costs. Developing standardized projects within a portfolio makes the overall financing opportunity more attractive to a larger potential investor group, ultimately providing more funding options and influencing financing costs.
Capital Market Participants	Limited private capital interest to date in supporting the construction of distributed energy projects in New York's clean energy marketplace, due to limited history and track record of such financings.	Institutional investors and other private sector capital providers have shown less interest in financing small to mid-size solar project developers which may have more limited operating histories. NYGB's participation in this transaction will help this NYS-based developer further consolidate its track record and achieve the scale needed to appeal more broadly to traditional capital providers. In turn, this can be expected to enable more refinancing options which will provide the market with greater levels of familiarity with this asset class –a prerequisite to increasing liquidity.
New Yorkers	While interest and activity in solar projects are increasing rapidly in NYS, only a relatively small number of companies and financial models are being used. Fewer options in the marketplace generally translate into higher prices for end-users and more limited consumer choice.	By bridging certain financing gaps in the marketplace, NYGB is enabling a larger group of solar developers to participate in New York's clean energy marketplace. This gives end-users more choice in terms of how they pay for their systems and who they select as their installer. Greater choice and competition in the market will lead to reduced costs, allowing a greater number of New Yorkers and New York businesses to go solar.

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

The estimated lifetime and first-year energy and environmental impacts of the Project, facilitated by NYGB's financial participation in this transaction, are as follows:

Energy/Environmental Impact	Lifetime Low Estimate	Lifetime High Estimate	First-Year Low Estimate	First-Year High Estimate
Estimated clean energy generated (MWh)	74,000	90,500	2,960	3,620
Estimated clean energy generation installed capacity (MW)[5]	2.8	2.8	Not Applicable	
Estimated GHG emission reductions (metric tons)	39,000	47,600	1,560	1,905

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 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 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:

- Size (generation capacity and dollar value) of the Project if different from proposed plans; and
- Performance of installed system.

Mid and long-term indicators will be expected to show progress through program tracking or market evaluation over

[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] Installed clean energy generation capacity at full deployment of funds is the same for first-year and lifetime durations.
[6] See Metrics Plan, Section 3.3, page 7.

time. These include, but are not limited to:

- Access to, and accessibility of, solar project performance data produced by the Project and similar developments comprising a single portfolio, particularly in any refinancing of a BQ project;
- Greater availability of construction loan options for small PV projects;
- Decreased project cost for BQ and other developers (e.g., procurement, permitting, fees), due to increased experience and scale; and
- Demonstration of competitive risk-return profiles for solar investment in NYS.

The above listed indicators will remain in development until market characterization and baseline activity commences. Additional aspects may be tracked to further support baseline and market measurements.

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 to track information including but not limited to: project scale information, interest in solar 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 relevant factors as the investment evolves.

Impact evaluation will use actual system performance data to understand energy and environmental outcomes. Impact evaluation is expected to include periodic review and analysis of actual PV portfolio installation data collected by BQ. Actual project performance will be monitored and documented against expected performance. Impact evaluation will help provide verification of performance, in turn aiding the clean energy finance community in better understanding and pricing risk in this technology area.

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

TRANSACTION PROFILE

Revised January 2018

Bridge Loan to Support the Deployment of Community Solar Projects

Cypress Creek Renewables, LLC

*In August 2017, NY Green Bank ("**NYGB**") provided a 12-month senior secured bridge loan facility of up to $11.5 million (the "**Bridge Loan**") to Cypress Creek Renewables, LLC ("**CCR**"), a California-based integrated utility-scale solar provider. In December 2017, NYGB increased the Bridge Loan size by $13.5 million and extended the maturity date to December 2019. The Bridge Loan proceeds will finance project interconnection payments to utilities across New York State ("**NYS**") for up to 72 community distributed generation ("**Community DG**") solar projects. The overall $25.0 million financing facility is expected to support the deployment of up to 168 megawatts ("**MW**") of photovoltaic ("**PV**") solar in NYS, providing residents and businesses with a greater variety of energy choices and, ultimately, lower-cost clean energy options.*

Transaction Description

CCR is developing a portfolio of Community DG solar projects in NYS. Under the New York State Public Service Commission Standardized Interconnection Requirements and Application Process, developers seeking interconnections for their projects are required to make a deposit of 25% of the interconnection upgrade estimates followed by full payment 120 business days later. In August 2017, NYGB and CCR closed a Bridge Loan for up to $11.5 million to finance those interconnection deposit payments to NYS utilities, which will be used for as many as 72 Community DG solar projects.[1] In December 2017, the Bridge Loan was upsized by $13.5 million and extended until December 2019 to finance a portion of the balance of the interconnection upgrade estimates.

This transaction is estimated to support the deployment of as much as 168 MW of solar assets in the State which will: (i) provide commercial and residential project subscribers access to reliable, clean, low-cost energy; and (ii) reduce up to 104,400 metric tons of greenhouse gas ("**GHG**") emissions annually or up to 2,610,000 metric tons of GHG emissions over a 25-year project life. As there is an increasingly strong demand for Community DG throughout NYS, capital providers are, and will continue to be, expected to provide financing to enable the deployment of these projects, including through covering the up-front interconnection payments, and products like NYGB's Bridge Loan are expected to ultimately be offered by private capital providers in future.

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.[2] This Transaction Profile contains specific information in connection with the CCR transaction (which was entered into on August 2, 2017, and increased on December 22, 2017), as required by the Metrics Plan.[3]

Form of NYGB Investment

NYGB Product	Product Sub-Type	Committed Capital
Asset Loan & Investment	Bridge Loan	Up to $25.0 million

Location(s) of Underlying Project(s)

[1] Under the revised NYS Standardized Interconnection Requirements, within 60 business days of receiving the Coordinated Electric System Interconnection Review results ("**CESIR**"), interconnection applicants must pay the respective utility 25% of the interconnection upgrade estimates.

[2] Case 13-M-0412.

[3] See Section 4.0, page 8 and Schedule 3.

Statewide.[4] CCR's Community DG solar projects are in regions across NYS.

Types of Client & Counterparty Organizations that are Transaction Participants

	Name	Participant Type
Client	CCR	Energy Project Developer
Counterparties (current)	New York State Electric & Gas Corporation National Grid Orange and Rockland Utilities Rochester Gas & Electric Central Hudson Gas & Electric	Electric Utility

Summary of Financing Market Objectives & Barriers Addressed

Beneficiary	Market Barrier	Financing Solution
Solar Project Developers	Project sponsors are often expected to pay for interconnection upgrade expenses with equity funds as they finalize construction financing arrangements. This results in a relatively inefficient use of sponsor equity, limiting project deployment efforts and effectively restricting the amount of Community DG being deployed in NYS.	This transaction encourages an efficient use of sponsor equity and supports project development efforts in NYS by bridging the time period project sponsors need in order to finalize financing arrangements for projects that have completed the CESIR process. NYGB's participation creates an easier pathway forward for developers and enables greater deployment of Community DG along with other distributed generation assets throughout the State.
Capital Market Participants	As a relatively new form of clean energy distribution and therefore lesser known business model, Community DG lacks a large volume of financing precedents and has a limited performance history in NYS. As such, it is difficult for private sector capital providers to assess and price the underlying risk exposures associated with Community DG project investments.	This transaction will generate project and customer performance data, which will help draw new investors and financial institutions into the marketplace by demonstrating that competitive risk-return profiles can be achieved by Community DG enabled business models.
Community DG Subscribers	Due to project siting, property ownership, and consumer preference issues, on-site solar project installations may not be viable for a number NYS homeowners, renters, and businesses. This currently limits the number of solar projects getting done to those with perfectly sited homes or businesses.	This transaction supports the deployment of Community DG solar projects, which provide those who are not otherwise able to install solar energy generation systems on their property (e.g., homeowners whose rooftops cannot support solar systems, renters and those who cannot afford solar systems, etc.), with voluntary access to clean, low-cost energy, regardless of their home or business location.

Technologies Involved

Technology	Measures
Renewable Energy	Solar photovoltaic systems

[4] Defined as projects located in four or more regions of the State.

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".[5] In addition, the Metrics Plan requires that the following energy and environmental measures, applicable to this transaction, be reported on:[6]

- Estimated gross lifetime and first-year clean energy generated (MWh);
- 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 the Bridge Loan are as follows:

Energy/Environmental Impact	Lifetime Low Estimate	Lifetime High Estimate	First-Year Low Estimate	First-Year High Estimate
Estimated clean energy generated (MWh)	3,306,000	4,960,000	132,200	198,400
Estimated clean energy generation installed capacity (MW)[7]	112	168	Not Applicable	
Estimated GHG emission reductions (metric tons)	1,740,000	2,610,000	69,600	104,400

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 that NYGB has supported and will occur approximately three to five years following initial NYGB capital deployments.[8] 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 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:

- Size (i.e., generation capacity and expected dollar value) and location of projects financed by the Bridge Loan;
- Aggregate expected energy generation for projects financed by the Bridge Loan; and
- The number of projects that finalize construction financing arrangements.

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:

- Market volume of CCR projects increases;
- General understanding of renewable energy benefits by financial community increases;
- Increased awareness and use of Community DG subscriber performance data by financing entities;
- Increased awareness and use of project/technology performance data by financing entities;
- Demonstration of competitive risk-return profiles for Community DG solar investment;
- Decreased project costs;
- Volume of secondary market financing of Community DG solar assets; and
- Number of new lending participants.

[5] 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.
[6] See Metrics Plan, Section 2.0, pages 2 - 6.
[7] Built clean energy generation capacity at full deployment of funds is the same for first-year and lifetime duration.
[8] See Metrics Plan, Section 3.3 at page 7.

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

NYSERDA will evaluate the impact this transaction has had on the clean energy finance markets and the energy/environmental benefits delivered by this transaction.

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 (project subscribers, financial community) to track information including but not limited to: participation rates, project scale information, interest in solar financing (generally and with regard to Community DG specifically), 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 assess which of the projects funded under the Bridge Loan raised construction financing, and were completed, commissioned and placed in service.

As with all NYGB investments, CCR projects that receive an incentive or funding from other entities (e.g., utility, other NYSERDA program) will, in accordance with the Metrics Plan, 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 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.