

NY Green Bank

Metrics, Reporting & Evaluation Quarterly Report No. 24 (Through June 30, 2020)

Case 13-M-0412

8/14/2020

Table of Contents

1		lights	
	1.1	Performance at a Glance as of June 30, 2020	
2		ness Update	
	2.1	•	
	2.2	Pipeline Activity	
	2.3	Support Clean Energy for Disadvantaged Communities	4
	2.4	Additional Achievements and Activities	4
3	Reg	ulatory Framework	5
	3.1	Purpose	5
	3.2	NYGB Mission and Operating Principles	5
	3.3	Relationship to NYS Clean Energy Policy	6
4	Tabl	es	6
	4.1	Quarterly Metrics	
	4.2	Direct and Indirect Metrics Benefits1	0
5	Prog	ress Against Plan Deliverables1	1
T	ables	and Figures	
		ew Investments	
		uarterly Metrics	
Ιċ	able 3 A	nnual Deliverables Table1	'
		Overall Investments to Date	
		Progress Toward Annual Investment Target (\$225.0MM)	
		Cumulative Pipeline Activity	
	_	Distribution of Active Pipeline by Investment Stage	
	_	End-Use Segment of Active Pipeline	
Fi	gure 7 (Geographic Distribution of Active Pipeline	3

Schedule

Transaction Profiles:

- Valcour OpCo Upsize (Large Scale Renewables Wind)
- Generate Capital Term Loan (1&2) (Community Distributed Generation Solar)
- BQ Energy Mt. Kisco (Community Distributed Generation Solar)
- East Light Partners (Multiple End Users Solar)
- Distributed Sun SunX (Community Distributed Generation Solar)
- Ecosave Upsize (Commercial and Industrial Energy Efficiency)
- NineDot Bridge Loan (Community Distributed Generation Fuel Cells)

1 Highlights

During the quarter ended June 30, 2020, NYGB closed \$78.1 million in commitments across eight new investments. As mentioned in NYGB's Annual Business Plan 2020 – 2021 (the "Plan") filing, during the first quarter of the fiscal year ending March 31, 2021 (the "2020 - 2021 Plan Year") NYGB achieved a milestone of more than \$1.0 billion committed to clean energy and sustainable infrastructure projects in NYS since inception.¹ Additionally, during the quarter NYGB generated \$6.4 million in revenue, bringing its cumulative total since inception to \$93.2 million. NYGB's investments continue to mobilize capital in NYS; at quarter end its portfolio was expected to support up to \$2.9 billion in project costs for clean energy and sustainable infrastructure projects. Section 4.1 of this report summarizes the estimated energy and environmental benefits attributable to projects supported by NYGB's investments.

1.1 Performance at a Glance as of June 30, 2020²

Cumulative commitments of over \$1.0 billion

\$78.1 million committed across 8 investments during the quarter

Expected to mobilize up to **\$2.9 billion** in NYS project costs

Generated **\$93.2 million** of cumulatvie revenue

Expected to deliver an estimated 11.1 - 19.8 million metric tons of CO_{2e} emissions reductions

<u>Figure 2 Progress Toward Annual</u> <u>Investment Target (\$225.0MM)</u>

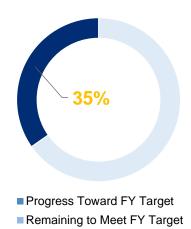


Figure 1 Overall Investments to Date



- Investments to Date
- Commitments During Quarter
- Remaining to Meet FY Target

¹ See: https://greenbank.ny.gov/-/media/greenbanknew/files/2020-Business-Plan-NYGB.PDF?la=en

² NYGB's investments to date drive estimated gross lifetime greenhouse gas ("GHG") emissions reductions equivalent to removing between 132,197 and 189,975 cars from the road for a period of 22 years.

2 Business Update

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

- (a) Transactions that have closed, which collectively comprise NYGB's investments, discussed in <u>Section 2.1</u>; and
- (b) Transactions that are in process but not yet closed, which collectively comprise NYGB's Active Pipeline, discussed in Section 2.2.

2.1 Investment Portfolio Activity

NYGB's current portfolio was more than \$635.4 million at quarter end, registering for the third consecutive quarter the highest end-of-quarter total since the inception of the fund. NYGB continued to provide flexible capital to active project developers, owners, service providers, or manufacturers of NYS projects.

<u>Table 1</u> summarizes Investment Activity made during the quarter ended June 30, 2020. NYGB make its Transaction Profiles publicly available on at <u>www.greenbank.ny.gov/Investments/Portfolio</u>. Transaction Profiles for the investments described in this <u>Section 2.1</u> are also included in the <u>Schedule – Transaction</u> Profiles to this Report.

Table 1 New Investments

New Transactions	Description	NYGB Commitment	Closing Date
Valcour OpCo Upsize	In response to favorable market conditions and the transaction's deleveraged credit profile, NYGB committed additional funds to six wind farms located in the State's North Country and Western NY regions, over 600 MW of wind capacity.	\$7.3 million	April 13, 2020
Generate Capital Term Loan	The first of NYGB's two back-leveraged credit facilities to finance the acquisition of 14 community distributed generation ("CDG") solar projects sponsored by Generate Capital, Inc. ("Generate") in New York State	\$5.6 million	April 23, 2020
BQ Energy - Mt. Kisco	The sixth installation of a larger portfolio of projects financed in collaboration with NYGB, BQ received a construction-to-term loan to complete a CDG 550-kilowatt solar array paired with a battery storage system to be located on a brownfield site in the Town of Mt. Kisco, NY.	\$2.3 million	April 30, 2020
Generate Capital Term Loan Upsize	The second of NYGB's two back-leveraged credit facilities to finance the acquisition of 14 CDG solar projects sponsored by Generate in New York State.	\$21.3 million	April 30, 2020
East Light Partners	NYGB provided a bridge loan facility to support projects developed by East Light Partners. This Bridge loan will finance late stage development costs for a mix of community solar and utility scale projects.	\$3.0 million	May 4, 2020
Ecosave Upsize	NYGB has committed to finance at least five energy efficiency or distributed generation projects in NYS. NYGB's participation in this transaction provides a scalable financing model and establishes performance history for financing involving energy efficiency for medium sized, unrated commercial and industrial customers, a market segment that historically has had difficulty accessing capital for otherwise technically and economically feasible efficiency projects.	\$15.0 million	June 4, 2020
Distributed Sun – Sun X	Expansion of NYGB's investment in the solar development pipeline of Distributed Sun, LLC as part of its ongoing efforts to participate in sustainable infrastructure investments in NYS.	\$3.8 million	June 23, 2020
NineDot Bridge Loan	Providing a bridge loan facility to support the development of a portfolio of fuel cell projects. This bridge loan will finance development costs for 12.5 MW of CDG fuel cells.	\$19.9 million	June 30, 2020
Total		\$78.1 million ³	

Note that due to rounding for the purposes of presentation in this Report, the sum of each NYGB Commitment may not be identical to the Total NYGB Commitment amounts.

_

2.2 Pipeline Activity

Each proposed NYGB investment is categorized by the stage it has reached in NYGB's internal credit underwriting and transaction execution processes. *Figure 3* summarizes NYGB's overall transaction status and Active Pipeline from inception through June 30, 2020.⁴At quarter end NYGB was managing an Active Pipeline of \$987.2 million.

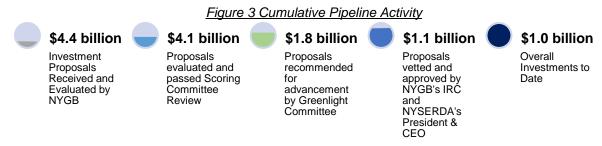


Figure 4 Distribution of Active Pipeline by Investment Stage



Figure 5 Technology Distribution of Active Pipeline

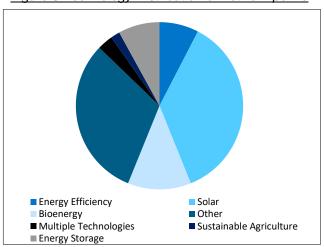


Figure 6 End-Use Segment of Active Pipeline

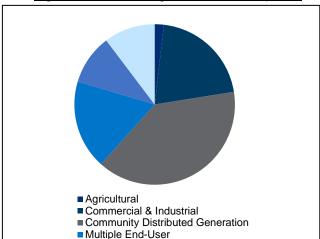
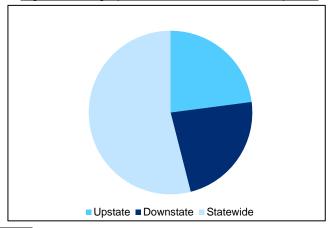


Figure 7 Geographic Distribution of Active Pipeline



⁴ "IRC" takes the meaning Investment and Risk Committee

2.3 Support Clean Energy for Disadvantaged Communities

The Climate Leadership Community Protection Act ("CLCPA"), which took effect on January 1, 2020, mandates that disadvantaged communities receive at least 35% of overall benefits from NYS climate programs. To support this critical environmental justice goal, NYGB committed to launching a new initiative during the 2020 – 21 fiscal year that positions NYGB to achieve the requirements of the CLCPA as they pertain to disadvantaged communities.

During the quarter ended June 30, 2020 NYGB led an engagement with independent consultants to help identify financing barriers and opportunities through facilitated conversations with the State's and New York City's housing finance agencies; CDFIs and specialty finance companies specializing in the sector; public, private and non-profit developers and owners of affordable housing; and key advocacy groups such as Energy Efficiency for All New York. By offering flexible capital underwritten to higher expected energy savings than is typical of other finance providers, NY Green Bank will not only deliver direct benefits to affordable housing properties, but will also play a role in transforming financing markets, where capital scarcity often precludes the implementation of energy-related measures.

2.4 Additional Achievements and Activities

In the quarter ended June 30, 2020, 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) Continuing Stakeholder Outreach & Communications:

- i. NRDC India Webinar: On June 24, NYGB presented at a webinar titled "Accessing Debt Finance for the Electric Mobility Sector in India" organized by NRDC and partners ASCI, GERMI, TCCL, and Climate Trends, experts and key stakeholders discussed solutions to accelerate India's transition to electric mobility. NYGB presented its approach to financing electric vehicle charging infrastructure, along with medium-to-heavy duty electric vehicles.
- ii. NYGB COVID-19 Impact Survey: Beyond the health impacts of COVID-19, the pandemic introduced challenges for clean energy and sustainable infrastructure businesses, and other companies doing business in NYS. To remain collaborative and responsive to changing financing needs in the clean energy market, on April 14, 2020, NYGB issued its COVID-19 Impact Survey; NYGB received feedback from 140+ developers, operators, lenders, and other parties on how the COVID crisis was affecting their clean energy projects. 39 developers and operators anticipated post-PAUSE financing needs, primarily: project capital, bridge financing, working capital, corporate equity, and corporate debt.
- iii. NYGB COVID-19 Impacts Webinar: In response to the COVID-19 Impact Survey, on June 2, 2020, NYGB held the COVID-19 Impacts Webinar to communicate the financing solutions it developed for borrowers to overcome COVID-19-related issues. For example, NYGB is allowing deferral on interest and/or debt service payments for borrowers in good standing that represent hardship related to COVID-19 and represent they will use best efforts to use added liquidity for payroll purposes. Additionally, NYGB will provide liquidity via interconnection deposit financing to eligible large-scale renewables and community distributed generation participants via corporate guarantees and/or pledge of assets as collateral. NYGB will also be creative in restructuring debt as needed for COVID-19 and PAUSE-related financial issues, and be flexible by permitting existing borrowers to secure federal or state stimulus funding. NY Green Bank will continue to be a relationship-driven partner in working with borrowers to overcome COVID-19-related issues.
- iv. Future In-Person Events: NYGB did not organize or participate in any in-person events during the previous quarter. Following guidelines set by the Centers for Disease Control and

Prevention, NYGB will only organize or participate in remote events under the lowest-risk category for community, work and school events and gatherings.⁵

(b) Public Reporting & Metrics:

- i. On May 15, 2020, NYGB filed its Quarterly Report for the period ended March 31, 2020 (available at www.greenbank.ny.gov/Resources/Public-Filings).
- ii. On June 19, 2020 NYGB filed its Annual Business Plan 2022 2021 (available at www.greenbank.ny.gov/Resources/Public-Filings).
- iii. NYGB will host its regular Quarterly Review Webinar for this Report in early September 2020, including discussion of activities from NYGB's fiscal quarter ended June 30, 2020.

3 Regulatory Framework

3.1 Purpose

As a steward of considerable public capital, NYGB periodically reports its progress and performance to allow all stakeholders, including the NYS Public Service Commission (the "Commission" or the "PSC"), and the general public to assess NYGB's achievement of its overall mission.

This Quarterly Report ("**Report**") is filed by NYGB with the Commission pursuant to the Metrics, Reporting & Evaluation Plan developed in consultation with DPS and filed with the Commission (the "**Metrics Plan**").⁶

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

3.2 NYGB Mission and Operating Principles

NYGB's mission is to accelerate clean energy deployment in NYS by working in collaboration with the private sector to transform financing markets.

The key elements of NYGB's mission are to collaborate with private participants, implement solutions that overcome market barriers and transform financial markets to attract greater private sector investment in clean energy by enabling greater scale, new and expanded asset classes and increased liquidity.

NYGB follows certain important operating principles to increase private sector market participation:

- (a) Focusing on wholesale capital markets (that is, providing structured financial products to developers and specific projects that result in clean energy benefits for all New Yorkers at scale rather than funding consumers/homeowners directly);
- (b) Structuring financial products to foster replicable sustainable infrastructure investments;
- (c) Pricing financial products consistently with commercial approaches to credit quality and risk, earning a return on investment to preserve and grow NYGB's capital base;
- (d) Collaborating with, rather than competing against, market participants that can engage, or are already engaging, the financial markets, but where that engagement or progress is constrained by a lack of available financing; and
- (e) Recycling its capital into new clean energy projects when income is generated and as investments mature or are realized, maximizing the impact of its capital across multiple deployments.

⁵ See: <a href="https://www.cdc.gov/coronavirus/2019-ncov/community/large-events/considerations-for-events-gatherings.html#:~:text=Limit%20attendance%20or%20seating%20capacity,at%20least%206%20feet%20apart.

⁶ Case 13-M-0412, "NY Green Bank – Metrics, Reporting & Evaluation Plan", Version 3.0, dated June 20, 2016.

3.3 Relationship to NYS Clean Energy Policy

NYGB contributes to the primary CEF objectives of GHG emissions reductions, customer bill savings, energy efficiency, clean energy generation and mobilization of private sector capital.⁷ In turn, the CEF objectives support the State's clean energy targets, including under the Green New Deal which mandates a significant increase in the State's Clean Energy Standard ("CES") with a goal of 70.0% energy generation from renewable sources by 2030 and 100.0% carbon-free electricity by 2040.⁸ The CEF objectives also support the Climate Leadership and Community Protection Act,⁹ which puts NYS on a road to economy-wide carbon neutrality, through a target of reducing GHG emissions from all anthropogenic sources 85.0% over 1990 levels by the year 2050, a plan to offset remaining emissions, and an interim mandate of 40.0% GHG emission reductions by 2030.^{10,11}

4 Tables

4.1 Quarterly Metrics

NYGB monitors its counterparties' clean energy project installations throughout the duration of each investment through the receipt and review of periodic reports and by applying updated impact benefit calculation factors advised by DPS. Based on information received, NYGB regularly assesses the actual and expected energy and environmental impact benefits across its 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 and reflected in Transaction Profiles). Consistently monitoring and refining expected outcomes improves the accuracy of NYGB's portfolio-level estimate of impact benefits as it works toward meeting the CEF objectives to support the State's clean energy goals. Given such periodic adjustments, the aggregate estimated benefits reported

⁷ As set out in the CEF Order (Cases 14-M-0094 etc.) issued and effective on January 21, 2016, page 40.

Announced by Governor Andrew M. Cuomo in the 2019 State of the State, See https://www.governor.ny.gov/sites/governor.ny.gov/files/atoms/files/2019StateoftheStateBook.pdf.

⁹ Governor Cuomo signed Senate Bill S6599 into law on July 18, 2019. See <u>legislation.nysenate.gov/pdf/bills/2019/a8429.</u>

The CLCPA codified and expanded New York's Green New Deal and other nation-leading clean energy and climate targets for the State, including: (a) quadrupling New York's offshore wind target to 9,000 MW by 2035 (up from 2,400 MW by 2030); (b) doubling distributed solar deployment to 6,000 MW by 2025 (up from 3,000 MW by 2023); (c) deploying 3,000 MW of energy storage by 2030 (up from 1,500 MW by 2025); (d) more than doubling new large-scale land-based wind and solar resources through the CES; (e) maximizing the contributions and potential of New York's existing renewable resources; (f) expanding and enhancing the Solar For All Program to increase access to affordable and clean energy for low-income, environmental justice and other underserved communities; and (g) initiatives to achieve carbon neutral building stock Statewide, including through the energy efficiency target to reduce energy consumption by 185 trillion Btus below forecasted energy use in 2025.

Additionally, the CLCPA required a Climate Action Council ("CAC") be formed and Policy Roadmap developed to ensure that 35% of clean energy program resources benefit disadvantaged communities and individuals working in conventional energy industries are provided with training and opportunities in the growing clean energy economy.

in Quarterly Reports are the most up-to-date estimates (and no longer reflect the sum of the low and high estimated benefits specified in the Transaction Profiles at the time of each transaction close).

<u>Table 2</u> presents required metrics for the period April 1, 2020 through June 30, 2020 and the previous quarter ending March 31, 2020.

Table 2 Quarterly Metrics

Quarterly Metric	Prior Quarter	Current Quarter			
Capital Position	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 (\$) ¹²	\$86.8 million	\$93.2 million			
 Cumulative Operating Expenses (\$)¹³¹⁴ 	\$46.7 million	\$49.7 million			
 Direct Operating Expenses (\$) 	\$28.8 million	\$30.6 million			
Allocated Expenses (\$)	\$18.0 million	\$19.1 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 (\$)	\$143.4 million	\$145.5 million			
Deployed Funds (\$) ¹⁵	\$441.6 million	\$490.0 million			
Current Portfolio (\$) ¹⁶	\$585.0 million	\$635.4 million			
Overall Investments to Date (\$)	\$959.9 million	\$1.0 billion			

¹² Cumulative Revenues include quarterly fair market value adjustments related to NYGB capital held in U.S. Treasury securities, consistent with U.S. generally accepted accounting principles. In addition, Cumulative Revenues are always stated net of impairments.

¹³ Cumulative Operating Expenses currently include \$585,722 in evaluation expenses.

¹⁴ Due to rounding, Cumulative Operating Expenses does not equal the sum of Direct Operating Expenses and Allocated Expenses

 $^{^{15}}$ Deployed Funds as presented in $\underline{\textit{Table 2}}$ are net of all capital repaid to the reporting date.

¹⁶ The dollar value of the Current Portfolio is expected to fluctuate from quarter to quarter, including to reflect any increases or decreases in Committed Funds and/or Deployed Funds. Committed Funds increase when new transactions are executed with commitments that have not yet been funded, and/or in connection with existing transactions, where repaid amounts may be available to be redrawn pursuant to the terms of investment agreements. Deployed Funds increase where the total dollars funded into investments exceed amounts repaid in the same period. Decreases in Committed Funds 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. Note that due to rounding for the purposes of presentation in this Report, the sum of Committed Funds and Deployed Funds may not be identical to Current Portfolio. In addition, Current Portfolio is always stated net of any portfolio losses.

Quarterly Metric	Prior Quarter	Current Quarter
■ Total Project Costs (Cumulative) (\$)¹7	In the range of \$2.1 to \$2.6	In the range of \$2.3 to \$2.9
	billion	billion
Mobilization Ratio	Tracking at least 2.5:1 on	Tracking at least 2.6:1 on
	average across portfolio	average across portfolio18
 Portfolio Concentrations (%)¹⁹ 	74.0% Renewable Energy	75.7% Renewable Energy
	7.5% Energy Efficiency	7.6% Energy Efficiency
	18.5% Other	16.7% Other ²⁰
 Number & Type of NYGB Investments 	44 – Renewable Energy	51 – Renewable Energy
	9 – Energy Efficiency	10 – Energy Efficiency
	8 – Other	9 – Other
Number & General Type of NYGB	63 – Local Development	64 – Local Development
Counterparties ²¹	Corporation; Global, Corporate	Corporation; Global, Corporate
	and/or Investment Bank;	and/or Investment Bank;
	Regional Bank; Specialty	Regional Bank; Specialty
	Finance Company; Energy	Finance Company; Energy
	Project Developer; Municipal,	Project Developer; Municipal,
	University, Schools & Hospitals;	University, Schools & Hospitals;
	Energy Technology Provider &	Energy Technology Provider &
	Vendors; Government Authority;	Vendors; Government Authority;
	Insurance Company; Transportation	Insurance Company; Transportation
	Παποροπαποπ	Παποροπαποπ
- Estimated Gross Lifetime Energy Saved by	Estimated Gross Lifetime	Estimated Cross Lifetime Energy
 Estimated Gross Lifetime Energy Saved by Fuel Type from Energy Efficiency Projects 	Energy Saved by Fuel Type	Estimated Gross Lifetime Energy Saved by Fuel Type (Energy
(MWh/MMBtu) and/or Estimated Gross	(Energy Efficiency):	Efficiency):
Lifetime Clean Energy Generated (MWh) for	369,000 - 451,000 MWh; and	369,000 - 451,000 MWh; and
Committed Funds & Deployed Funds	1.48 – 2.14 million MMBtu	1.48 – 2.14 million MMBtu
Doninition I diluo di Dopio you I diluo		
	Estimated Gross Lifetime Clean	Estimated Gross Lifetime Clean
	Energy Generated:	Energy Generated:
	21.1 – 28.3 million MWh	21.5 – 29.7 million MWh

¹⁷ 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 seeks to adjust reported values and replace FMV in its aggregated data sets and periodic reporting with reported actual costs.

¹⁸ Given the range of Total Project Costs that NYGB investments mobilize, the Mobilization Ratio also represents a range: currently of 2.3:1 to 2.9:1.

¹⁹ 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.

^{20 &}quot;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.

²¹ 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 First Year²² Energy Saved 	Estimated Gross First Year	Estimated Gross First Year	
by Fuel Type from Energy Efficiency	Energy Saved by Fuel Type	Energy Saved by Fuel Type	
Projects (MWh/MMBtu) and/or Estimated	(Energy Efficiency)	(Energy Efficiency)	
Gross First Year Clean Energy Generated	25,800 - 31,600 MWh; and	25,800 – 31,600 MWh; and	
(MWh) for Committed Funds & Deployed	86,000 - 122,000 MMBtu	86,000 – 122,000 MMBtu	
Funds	Estimated Gross First-year	Estimated Gross First-year	
	Clean Energy Generated	Clean Energy Generated	
	1,321,000 – 1,633,000 MWh	1,06,000 – 1,408,000 MWh	
Estimated Gross Lifetime Energy Saved	Estimated Gross Lifetime	Estimated Gross Lifetime Energy	
from CHP (MWh) for Committed Funds &	Energy Saved from CHP:	Saved from CHP:	
Deployed Funds	60,700 - 74,200 MWh	60,700 - 74,200 MWh	
Estimated Gross First Year Energy Saved	Estimated Gross First Year	Estimated Gross First Year	
from CHP (MWh) for Committed Funds &	Energy Saved from CHP:	Energy Saved from CHP:	
Deployed Funds	2,973 – 3,634 MWh	2,973 – 3,634 MWh	
Estimated Gross Lifetime Energy Savings	Estimated Gross Lifetime	Estimated Gross Lifetime Energy	
from CHP (MMBtu) ²³ for Committed Funds	Energy Savings from CHP:	Savings from CHP:	
& Deployed Funds	190,900 – 233,300 MMBtu	-6,017,500 – -7,096,000 MMBtu	
	· · · · · · · · · · · · · · · · · · ·	i i	
 Estimated Gross First Year Energy Savings 	Estimated Gross First Year	Estimated Gross First Year	
from CHP (MMBtu) for Committed Funds &	Energy Savings from CHP:	Energy Savings from CHP:	
Deployed Funds	9,890 – 12,100 MMBtu	-610,940 – -720,830 MMBtu	
Estimated Gross Clean Energy Generation	1.9 MW	14.4 MW	
Installed Capacity from CHP (MW), if			
applicable, for Committed Funds &			
Deployed Funds			
Estimated Gross Clean Energy Generation	630.2 – 863.8 MW	690.7 – 983.2 MW	
Installed Capacity (MW), if applicable, for			
Committed Funds & Deployed Funds			
Estimated Gross Lifetime GHG Emission	11.37 – 15.15 million metric	11.06 – 15.43 million metric tons	
Reductions (metric tons) ²⁴ for Committed	tons		
Funds & Deployed Funds			
	<u> </u>	<u> </u>	
Indirect Impact Benefits ²⁵			
 Estimated Lifetime Energy Saved (MWh) 	-	-	
 Estimated Lifetime Energy Saved (MMBtu) 			
	4.1 – 8.5 million MWh	4.1 – 8.5 million MWh	
 Estimated Lifetime Clean Energy 	-	-	
Generation (MWh)			
 Estimated Installed Capacity CHP (MW) 	-	-	

All "estimated gross first year" metrics refer to the first year of estimated gross benefits (e.g., energy saved, installed capacity, GHGs, etc.) that 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 ended December 31.

²³ 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-Generation-CHP-Impact-Evaluation-Final.pdf for information on CHP Impact evaluation methods in NYS.

²⁴ NYSERDA utilizes a 1,103 lbs/MWh conversion factor to estimate GHG emissions reductions for electric generation and energy efficiency savings across all components of the CEF.

²⁵ NYGB reports and tracks Indirect Impact Benefits to reflect the contribution to NYS clean energy goals made by NYGB activities and related incremental value for all NYS consumers.

Quarterly Metric	Prior Quarter	Current Quarter		
 Estimated Installed Capacity (MW) 	61.2 – 129.7 MW	61.2 – 129.7 MW		
 Estimated Lifetime GHG Emissions 	2.2 – 4.5 million metric	2.2 – 4.5 million metric		
Reductions (Metric Tons)	tons	tons		
Investment Pipeline				
 Active Pipeline (In the Quarter) (\$) 	\$757.4 million	\$987.2 million		
Investment Process				
 Proposals Received – Value (Cumulative) 	\$4.1 billion	\$4.4 billion		
(\$)				
 Approvals - Scoring Committee 	\$3.9 billion	\$4.2 billion		
(Cumulative) (\$)				
 Approvals - Greenlight Committee 	\$1.7 billion	\$1.8 billion		
(Cumulative) (\$)				
Approvals - IRC (Cumulative) (\$)	\$1.0 billion	\$1.1 billion		

4.2 Direct and Indirect Metrics Benefits

As NYGB has developed and grown since inception, with increasing diversity in the nature and type of transactions in which it participates, its activities have the potential to generate both direct and indirect impact benefits for NYS residents. While the Metrics Plan was designed with an initial focus on direct impact benefits, NYGB differentiates between direct and indirect impact metrics, tracking both to more comprehensively quantify the estimated impact of each NYGB investment on the NYS clean energy and sustainable infrastructure market. This is consistent with the CEF Order, which specifically recognizes the importance of catalyzing markets and generating indirect benefits as part of CEF initiatives, including over longer time horizons.²⁶

The quantification of indirect impact benefits is intended to capture the market transformational effects of NYGB investment activity. Many other CEF initiatives also anticipate accruing indirect benefits related to longer-term effects from follow-on market activity. These indirect impacts are grounded in a theory of change developed for each initiative, and NYSERDA will use market evaluation approaches, consistent with the rest of the CEF, to verify the indirect impacts as they accrue over time. Estimated indirect benefits are reflected in NYGB progress reporting, in general and towards meeting NYGB CEF goals. The realization and evaluation of NYGB indirect benefits over time will also be reflected in periodic reporting as appropriate. Both direct and indirect metrics contribute to the reductions of GHGs in the State from NYGB activity.

For NYGB, direct and indirect impact metrics are further defined as follows:

(a) *Direct Impact Metrics:* Direct impact metrics quantify the estimated impact of the counterparty's project development or business-building activity. The types of direct impact metrics that NYGB tracks are those outlined in the Metrics Plan (and publicly reported quarterly), in aggregate on a path

See CEF Order (Cases 14-M-0094 et al.) pages 68 – 69: "The approved [CEF eligibility criteria] provide NYSERDA with the needed flexibility to choose initiatives that will create the greatest benefits for the least cost and to support innovative new technologies and approaches. We recognize that initiatives oriented towards market development, while they have the potential to create the greatest benefits for ratepayers in the long run, will have more indirect and less easily calculated clean energy benefits as compared to resource acquisition programs. We require NYSERDA to take a broad view of these indirect benefits when considering whether an initiative is eligible for CEF funding and to also take into account other benefits of the initiative, including its contribution to all of the CEF goals and its economic development benefits. Funding market-based projects with an indirect impact on clean energy is wholly consistent with the Commission's historic approach to clean energy programs. For example, the Commission approved workforce development programs, designed to achieve both indirect clean energy benefits and economic development benefits, as part of both [the energy efficiency performance standard] and [the renewable portfolio standard]. Holistic consideration of these benefits will best support the SEP, the goals described in the New York State Energy Law, and the interests of ratepayers".

- to achieving the impact benefit objectives by the end of the CEF in December 2025. Benefits are tracked on an estimated and actual basis (with actuals reported annually for NYGB's Investment Portfolio in each calendar year). NYGB investments typically involve terms that limit or incentivize the use of NYGB investment proceeds to new or incremental project development in NYS.
- (b) Indirect Impact Metrics: Indirect Impact Metrics seek to measure the effect of NYGB investment for projects, pipelines, or other counterparty structures that wholly or in part catalyze other developments in the clean energy and sustainable infrastructure market beyond that in which NYGB directly invests (e.g., providing liquidity in the secondary markets and in relation to large-scale renewables with merchant exposure). While some particular NYGB investments might not fund new project development, material indirect benefits are nevertheless expected to accrue to the State over time as a result of this type of NYGB activity. NYGB tracks such estimated benefits (which can be in MWs, MWh, MMBtus, or metric tons of GHG reduced/avoided) on a lifetime basis. The realization of indirect impact benefits is expected over time. To confirm the nature and extent of indirect impact benefits that are in fact realized by the State, periodic market assessments will occur as needed to confirm that new development activity has in fact eventuated, validating NYGB's estimated indirect impact benefits.

5 Progress Against Plan Deliverables

In its Annual Business Plan 2020 – 2021, filed on June 19, 2020, NYGB identified deliverables (the "**Plan Deliverables**") that collectively mark its progress toward key initiatives in the period April 1, 2020 through March 31, 2021.

NYGB's Quarterly Reports are required to address progress against the Plan Deliverables and provide a brief narrative (as appropriate) of status and an explanation of any material variances relative to expectations.

<u>Table 3</u> summarizes NYGB's performance against the Plan Deliverables for the quarter ended June 30, 2020.

Table 3 Annual Deliverables Table

Category	Deliverable	Status in Quarter Ended June 30, 2020
Support Post-CO	VID-19 Crisis Economic Recovery	
Market Engagement	Develop and implement survey to understand COVID-19 impact and post- PAUSE stakeholder financing needs. Convene market participants via Webinar to communicate NYGB's specific approaches to provide liquidity to clean energy financing markets.	Achieved for the Quarter: On April 14, 2020, issued the COVID-19 Impact Survey that 140+ clean energy market participants responded to identifying financing gaps and near-term financing challenges emerging in clean energy industry because of current circumstance. To remain collaborative and responsive to changing market needs, NYGB developed and communicated it's financing solutions in the COVID-19 Impacts Webinar on June 2, 2020.
Liquidity Solutions	Develop and implement financing structures to provide liquidity to clean energy market participants during and following the NY Forward reopening of the State's economy.	☑ Ongoing and On-track: In the COVID-19 Impacts Webinar, NYGB outlined various financing solutions to address financing needs emerging as a result of COVID-19. In addition, on July 15, 2020, NYGB issued PON-1: Paycheck Protection Program Loans ("PON-1"). Under PON-1 eligible applicants could apply to NYGB for a Paycheck Protection Program loan to cover payroll costs and certain other expenses. In order to satisfy NYGB's mandate, PPP loans must

Category	Deliverable	Status in Quarter Ended June 30, 2020
		have the potential to enable borrowers to reduce greenhouse gas emissions in New York State.
	ing Portfolio Driving Material Clean Energy I	nvestments Across NYS
Committed Funds	Deliver at least \$225.0 million of incremental commitments in the 2020 – 21 Plan Year (at an average rate of \$56.25 million in closed transactions per quarter). 27	✓ Ongoing and On-track: NYGB committed \$78.1 million to during the first quarter of the Plan Year.
Active Pipeline	 Maintain an Active Pipeline of at least \$450.0 million per quarter on average throughout the 2020 – 21 Plan Year. 	Achieved for the Quarter: NYGB's pipeline pf \$987.2 million meets the quarterly target.
Clean Energy for Disadvantaged Communities	Design and launch an initiative to deploy capital at scale into LMI and other disadvantaged communities including as appropriate, modified goals, metrics and investment criteria.	Ongoing and On-track: NYGB has been working collaboratively with Community Development Financial Institutions, housing agencies, affordable housing developers and operators, and other groups, and will launch a new initiative this fall aimed at making investments of at least \$150 million to expand clean energy and energy efficiency solutions that benefit New York's affordable multifamily housing market.
Large-Scale Renewables	Assist NYSERDA in evaluating OSW port infrastructure projects to help achieve the State's \$200.0 million goal of supporting port infrastructure investment.	Ongoing and On-track: As announced on July 21, 2020, NYSERDA, with the assistance of NYGB, Empire State Development and the New York State Department of Transportation, will all support ORECRFP20-1, a combined solicitation for investing in the state's port infrastructure.
	Coordinate outreach to awardees of the NYSERDA approved land-based renewable projects to communicate NYGB's financing approach.	Achieved for the Quarter: NYGB conducted outreach to the awardees of the NYSERDA approved land-based renewable projects and outlined its financing approach.
Energy Storage	Convene tax equity providers and other lenders interested in providing capital to projects that include energy storage to explain NYGB's financing approach and demonstrate how tax equity providers could access projects.	☑ <u>Not Yet Started</u>
Energy Efficiency	Contribute to NYSERDA's Advanced Efficiency Solutions Program's initiatives as applicable to describe NYGB's approach to financing energy efficiency projects in commercial buildings.	☑ Not Yet Started
Clean Transportation	Participate in a webinar with EV100 to raise awareness of NYGB's clean transportation financing approach and outline the financing structures NYGB has developed to address the challenges associated with EV and EV infrastructure financing.	✓ Ongoing and On-track: On August 18, 2020, NYGB will be presenting in the EV100 Webinar: Funding Your Company EV Fleet Conversion and Deploying Charging. NYGB will be presenting on its capital solutions for financing company fleet conversions to electric and deploying charging infrastructure.
Technology & Business Innovation	Host a webinar in conjunction with NYSERDA's Technology to Business Innovation Program to articulate how NYGB can help finance emerging	☑ Ongoing and On-track: In collaboration with the NYSERDA Technology to Business

²⁷ The extent to which COVID-19 may impact NYGB's accomplishments, including meeting its capital deployment target, is uncertain.

Category	Deliverable	Status in Quarter Ended June 30, 2020
	business models at the commercial deployment stage.	Innovation Program, NYGB will be holding this webinar in the Fall of 2020.
Mobilizing Capita	l in Support of CEF and CLCPA Goals	
Mobilization Ratio	Continue progress toward mobilizing capital into clean energy and sustainable infrastructure projects in the State through NYGB activity by the end of the CEF in 2025. Reassess original CEF \$8.0 billion capital mobilization target as part of CEF triennial review.	✓ Ongoing and On-track: At quarter end, NYGB investments were expected to mobilize \$2.9 billion of project costs in NYS. NYGB continues to analyze forecasted mobilization as part of the CEF triennial review.
Debt Facility	 Put in place a debt financing (e.g., bank facility, bond issuance or other structure) if prudent decision-making supports, taking into consideration the pace of capital commitment and the time expected to complete the debt financing, to ensure the ability to continue funding clean energy assets at the point that investments are expected to exceed NYGB's current capitalization. 	☑ <u>Not Yet Started</u>
LMI Initiative	Develop mobilization and impact goals related to dedicated commitment to transactions supporting LMI and disadvantaged communities to meet the goals of the CLCPA.	✓ Ongoing and On-track: NYGB concluded its engagement with a consultant
Strengthening Op		
Legal Services for LMI Transactions	 Identify approved law firms with practice groups dedicated to LMI-focused transactions. 	✓ Ongoing and On-track: NYGB has identified law firms from its pool of prequalified law firm that are willing to cap their fees for transactions that support disadvantaged communities.
Valuation Services	 Evaluate and select slate of approved valuation services providers pursuant to RFP 14. 	✓ Ongoing and On-track: NYGB Received and evaluated proposals during the previous quarter.
Investment Proposal Submission Process	 Review and revise RFP 1 to clarify NYGB's investment criteria and streamline the proposal submission process. 	☑ Ongoing and On-track: Proposed quantitative and qualitative changes to NYGB investment RFPs to capture projects' potential to benefit LMI/disadvantaged communities.

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

April 2020

Supporting Large Scale Onshore Wind in New York State

Carlyle Power Partners II - Valcour Wind Energy

In March 2019, NY Green Bank ("NYGB") committed \$68.75 million to finance the acquisition of 612.0 MW of operating large-scale wind projects in New York State ("NYS" or the "State") by funds managed by The Carlyle Group. In April 2020, NYGB increased its commitment by \$7.25 million in response to favorable market conditions and the transaction's improved credit profile. These assets account for approximately 30% of current wind generation in NYS. As a Joint Lead Arranger in this transaction alongside other commercial banks, NYGB's participation supports the long-term financing of large scale renewable projects in NYS that have merchant exposure. The recapitalization and proposed operational improvements are expected to extend the useful life of the projects, resulting in additional greenhouse gas ("GHG") reductions in NYS, and the retention of more than 40 clean energy jobs in the North Country and Western New York.

Transaction Description

Carlyle Power Partners II ("CPP"), a dedicated power investment platform of The Carlyle Group, recently acquired a portfolio of six wind projects in NYS, as originally announced in September 2018. In February 2019, NYGB committed financing for the acquisition of Valcour Wind Energy alongside three commercial banks. In March 2019, NYGB committed an additional financing \$68.75 million to further support CPP's acquisition. In April 2020, in response to favorable market conditions and the transaction's deleveraged credit profile, NYGB committed \$7.25 million of additional funds for an aggregate commitment of \$76.00 million. The wind projects total 612.0 MW and account for approximately 30% of current wind generation in the State. The first project in the portfolio started operating in 2008 and the final project came online in 2009.

NYGB believes the project finance market is becoming more comfortable with merchant exposure for thermal facilities, but the market is less developed for merchant renewable projects. NYGB expects that its participation will signal that long-term financings of NYS wind projects with merchant tails are possible, which in turn will encourage more primary wind development in the State. This transaction supports the secondary market for wind projects in NYS at a time when long-term offtake contracts are increasingly scarce. This is the first large scale renewable project in which NYGB is participating, and further large scale renewable transactions are expected as NYGB continues to support large scale renewables development in NYISO.

The recapitalization and expected operational improvements associated with this acquisition will allow the 612.0 MW of installed generation to remain operational beyond the original 20-year design life. During these additional years, the projects are expected to generate at least 2,913,810 MWh of clean energy and provide at least 1,532,889 metric tons of avoided GHG emissions. In addition to the environmental benefits, this transaction supports economic development in the State: more than 40 clean energy jobs in the North Country and Western NY will be retained through the continued operation of these wind projects, with continued lease payments made to landowners and property taxes contributed to the local communities.

The 612.0 MW Valcour wind portfolio is expected to continue to generate renewable wind energy for the State. NYGB participation in this secondary market transaction is expected to spur further private investment in this type of asset, delivering even more renewable generation options and benefits to ratepayers. The anticipated growth of large scale

Merchant power plants are non-utility owned or independent power generation facilities where energy is sold into competitive wholesale power markets. Merchant plants may contract for the sale of some of their output, but such arrangements tend to be shorter term arrangements, rather than longer term power purchase agreements ("PPAs").

renewables in the State (including onshore wind) can be expected to be maximized in a market where there is ample capital available for both project developments and the subsequent recapitalization and/or sale of operating assets. Many benefits of Clean Energy Fund initiatives in the State (including NYGB investments consistent with its mission, such as the Valcour transaction) comprise follow-on market activity as part of quantifying overall impact. In this instance, the provision of secondary financing of operating wind assets is expected to provide confidence to developers and future financiers that there is increasing liquidity in merchant renewable project asset classes across project lives, spurring even greater interest and activity. NYGB expects to see material indirect benefits from transactions like this one in the form of more large-scale renewable projects for NYS and specific estimated indirect impact benefits associated with this transaction are set out in the "Metrics & Evaluation Plan" section of this Transaction Profile, below.

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 both Valcour Wind Energy transactions as required by the Metrics Plan³, which transactions were respectively entered into on February 28, 2019 (amended and upsized on April 13, 2020) and March 29, 2019.

Form of NYGB Investment

NYGB Product	Product Sub-Type	Committed Financing
Asset Loan & Investment	Term Loan	\$66.00 million
Asset Loan & Investment	Revolving Credit Facility	\$10.00 million

Location(s) of Underlying Project(s)

Multiple Regions.⁴ The wind projects are located in the North Country and Western New York.

Types of Client & Counterparty Organizations that are Transaction Participants

	Name	Participant Type
Client	Valcour Wind Energy, LLC	Borrower
	Cogentrix Valcour Intermediate Holdings, LLC	Borrower
Counterparties	Carlyle Power Partners II, LP	Sponsor
Partners	Other Lenders	Commercial Banks

³ See Section 4.0, page 8 and Schedule 3.

² Case 13-M-0412.

⁴ Defined as projects located in two or three regions of the State.

Summary of Financing Market Objectives & Barriers Addressed

Beneficiary	Market Barrier	Financing Solution
Wind Project	Wind developers can face difficulties	We anticipate that NYGB's participation will
Developers	refinancing assets exposed to merchant	encourage more efficient use of project
	revenue risk. To date, the majority of wind	developer equity. Ideally, there should be a
	financings have been supported by long-	more liquid market for operating projects,
	term PPAs or hedges with creditworthy	where merchant risks are increasingly better
	offtakers and terms of over 10 years	understood and managed. NYGB's willingness
	alongside fixed price long-term NYSERDA	to support these assets helps to demonstrate
	REC contracts with 20-year terms.	to the broader market lender comfort with
	However, such long-term contracts are	NYISO merchant exposure.
	becoming increasingly scarce.	·
Capital Market	NYGB believes many capital market	NYGB expects that its participation will provide
Participants	participants are not yet comfortable	an important market signal that long-term
	underwriting merchant revenue from	financings of NYS wind projects with merchant
	renewable energy assets. The debt	tails are possible. Supporting operating assets
	financing community has become	allows lenders an opportunity to better asses
	increasingly familiar with generation assets	the technology using asset-specific operating
	supported by 5 – 7-year hedges, but	data as well as increasing experience of
	principally with thermal generating facilities.	wholesale power markets.
New Yorkers	While renewed interest and activity in	By bridging financing gaps in the secondary
	wind projects are increasing rapidly in	marketplace, NYGB endeavors to
	NYS, many are expected to rely on a	encourage more primary wind development
	combination of merchant and REC	in the State. Ultimately this is expected to
	revenue streams.	provide New Yorkers with greater choices
		and access to clean energy at a lower cost.

Technologies Involved

Technology	Measures
Renewable Energy	Onshore wind 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 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).

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.

The estimated additional gross lifetime and first-year direct energy and environmental impacts of the supported wind systems 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) ⁷	2,913,810	3,067,169	582,762	611,900
Estimated clean energy generation installed capacity (MW) ⁸	Not Applicable			
Estimated GHG emission reductions (metric tons)	1,532,889	1,613,567	306,578	321,907

Since this transaction involves the secondary market financing of existing wind assets, in addition to the estimated direct incremental impact benefits outlined above, material indirect impact benefits are expected to result for the State from NYGB investments of this nature.⁹ The estimated additional gross lifetime energy and environmental impacts of the Valcour wind projects are as follows:

Indirect Energy/Environmental Impact	Lifetime Estimate
Estimated clean energy generation installed capacity (MW)	34.6 - 69.13
Estimated clean energy generated (MWh)	2,573,876 - 5,147,752
Estimated GHG emission reductions (metric tons)	1,354,057 - 2,708,114

Planned Market Characterization Baseline & Market Transformation Potential

The Metrics Plan requires that market evaluation occurs when a critical mass of NYGB financing and investment arrangements are put in place, approximately three to five years following initial NYGB capital deployments. Market evaluation activities commenced in 2018 to collect baseline data on key market indicators for the sectors that have been supported by NYGB since its inception, and the dataset will be updated going forward to include indicators specific to this and other transactions. Baseline data will be used 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.

Output indicators will identify early activity levels and will be regularly tracked at least for the duration of the transaction. These include, but are not limited to:

- Number of new large scale renewable projects in development and completed;
- Average and aggregate dollar value of projects;
- Location of projects;
- Size of projects (i.e., installed capacity in MW);
- Renewable energy generated (in MWh); and
- GHG emission reductions (in metric tons).

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

- Favorable financial performance data;
- Favorable technology performance data;

Assuming the installed generation operates for at least 5 years beyond the original 20-year-design life. This does not represent the useful life assumption used for the financial evaluation of the portfolio.

⁸ Built clean energy generation capacity at full deployment of funds is the same for first-year and lifetime duration.

Details with respect to the methodologies and key assumptions for the indirect benefits attribution will be included in NYGB's future Quarterly Metrics & Evaluation Report, with the next such report due to be filed on May 15, 2019.

- Increasing market volume of large scale renewable projects (both developments and primary/secondary financings);
- Investment risk/default rates become increasingly attractive to investors, as a result of positive financial performance data;
- Increasingly positive view of banks and institutional investors on investment value of merchant renewables;
- Scale of onshore wind investment increases, due to increased end-use market demand;
- Replication of finance model by other developers;
- Decreased project technology costs/increasing output and efficiency;
- Decreased financing costs;
- Increased number of financial participants providing similar capital structures;
- Increased financial market volume for large scale renewable projects; and
- Reduced time to execute large scale renewable financings.

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 to track information including but not limited to: project scale information, interest in wind financing, and influence of NYGB's participation on primary and secondary financial markets. As noted, baseline data is being collected on key indicators in the first phase evaluation during 2018 – 19. Later follow-up studies will assess progress against baseline levels for other market segments as those evolve. The specific timing of these efforts may be revised based on experience or other factors as NYGB's investment portfolio further develops and evolves.

Impact evaluation will assess the performance of the projects funded to verify that the wind systems are generating clean energy within the estimated range set forth in this Transaction Profile.

As with all NYGB investments, 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.



TRANSACTION PROFILE

August 2020

Continued Support of Distributed Generation in New York State

Generate Capital, Inc.

In April 2020, NY Green Bank ("NYGB") provided \$26.9 million in back-leveraged credit facilities (the "Term Loans") to finance the acquisition of 14 community distributed generation ("CDG") solar projects sponsored by Generate Capital, Inc. ("Generate") in New York State ("NYS or the State"). These transactions are expected to provide NYS residents and businesses a greater variety of energy choices and, ultimately, lower-cost clean energy opportunities.

Transaction Description

Generate builds, owns and operates sustainable infrastructure in the United States.

With its commitment to the Term Loans, NYGB supported the deployment of 40 MW of CDG projects in NYS. These transactions will help NYGB continue to demonstrate the viability of distributed generation in the State, draw new investors and financial institutions into the marketplace, and lower the cost of capital in this market sector. Increased solar deployment will continue to drive activity in the State, which will help NYS meet its 6.0 GW solar target by 2025. Consumers are expected to be the ultimate beneficiaries in the form of broader access to lower-cost clean energy generation, with corresponding resiliency, affordability, choice, and environmental benefits.

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 New York Public Service Commission (the "**Commission**") on June 20, 2016. This Transaction Profile contains specific information in connection with the Generate transactions entered into in April 2020, as required by the Metrics Plan.

Form of NYGB Investment

NYGB Product	Product Sub-Type	Committed Capital
Asset Loan & Investment	Term Loan	\$26.9 million

Location(s) of Underlying Project(s)

<u>Statewide.</u>² Projects are located New York State Electric & Gas, Central Hudson Gas & Electric, Rochester Gas & Electric utility territories.

Types of Client & Counterparty Organizations that are Transaction Participants

	Name	Participant Type
Sponsor	Generate Capital, Inc.	Energy Project Owner and Operator

¹ Case 13-M-0412.

² Defined as projects located in four or more regions of the State.

Summary of Financing Market Objectives & Barriers Addressed

Beneficiary	Market Barrier	Financing Solution
Solar Project Developers	Financing beyond construction is sometimes an inefficient use of sponsor equity, which limits project deployment efforts and effectively restricts the amount of distributed generation development in NYS.	These transactions encourage a more efficient use of sponsor equity and supports project development efforts in NYS by providing term financing to a project developer. NYGB's role helps to create an easier pathway forward for developers and enable greater deployment of distributed generation assets throughout the State.
Capital Markets Participants	As a relatively new form of clean energy project, CDG lacks financing precedents and has limited performance history in NYS. As such, it can be more difficult for private sector capital providers to assess and price the underlying risk exposures associated with distributed generation project investments.	Projects supported by these transactions will generate project and customer performance data to draw new investors and financial institutions into the marketplace by demonstrating that competitive risk-return profiles can be achieved by distributed generation enabled business models.
CDG Subscribers	Due to project siting, property ownership and consumer preference issues, on-site solar project installations may not be viable for many NYS homeowners, renters, and businesses. This limits the number of solar projects getting done to those with suitably sited homes or businesses.	These transactions support the deployment of CDG 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 stand-alone systems), with increased access to clean, low-cost energy, regardless of where their home or business is located.

Technologies Involved

Technology	Measures
Renewable Energy	Solar photovoltaic systems

Metrics & Evaluation Plan

Planned Energy & Environmental Metrics

NYGB's minimum investment criteria require that NYGB-supported transactions have the potential for energy savings and/or clean energy generation that will contribute to greenhouse gas ("**GHG**") reductions in support of the State's energy policies.³ In addition, the Metrics Plan requires that the following energy and environmental measures, applicable to these transactions, be reported: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 gross lifetime and first-year energy and environmental impacts of the Term Loans are as follows:

2

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.

Energy/Environmental Impact	Lifetime Low Estimate	Lifetime High Estimate	First-Year Low Estimate	First-Year High Estimate
Estimated clean energy generated (MWh)	1,108,719.26	1,167,072.90	44,348.77	46,682.92
Estimated clean energy generation installed capacity (MW) ⁵	40.25	40.25	N	/A
Estimated GHG emission reductions (metric tons)	554,711.67	583,907.02	22,188.47	23,356.28

Planned Market Characterization Baseline & Market Transformation Potential

The Metrics Plan requires that market evaluation occur when a critical mass of NYGB financing and investment arrangements are put in place. Market evaluation activities commenced in 2018 on sectors that NYGB has supported since inception, consistent with the requirement for such assessments approximately three to five years following initial NYGB capital deployments.⁶ NYSERDA collected baseline data for the solar sector in 2019 and will update the data to include indicators specific to this transaction. NYSERDA will use baseline data collected for indicators as a comparison point against which to assess market progress in the later studies. Progress indicators are defined below for the short, medium and long terms.

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

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

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

- Increased market volume of CDG projects:
- Increased general understanding of renewable energy benefits by financial community;
- Increased awareness and use of CDG 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 CDG investment;
- Decreased project costs;
- Increased volume of secondary market financing of distributed solar assets; and
- Presence and number of new lending participants.

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

NYSERDA will evaluate the direct and indirect impacts that the Term Loans will have on the clean energy finance markets and the energy/environmental benefits delivered by these transactions.

Market evaluation will assess the short, medium and long-term indicators identified above. Methods will include analysis of program data along with interviews and surveys of market participants (e.g., 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 CDG specifically), and influence of NYGB's participation on financial markets. As noted, NYSERDA collected baseline data on key indicators in its first phase evaluation during 2018 – 19. Later follow-up studies will assess progress against baseline levels for other market segments as those evolve. The specific timing of these efforts may be revised based on experience or other factors as NYGB's investment portfolio further develops and evolves.

Impact evaluation will assess which of the projects funded under the Term Loans.

3

Installed clean energy generation capacity at full deployment of funds is the same for first-year and lifetime duration.

⁶ See Metrics Plan, Section 3.3 at page 7.

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



TRANSACTION PROFILE

April 2020

Driving Standardization in the New York Solar Plus Storage Market

BQ Energy - Mt. Kisco

BQ Energy ("BQ") is a renewable energy project developer specializing in landfill and brownfield site redevelopment. As the sixth installation of a larger portfolio of projects to be financed in collaboration with NY Green Bank ("NYGB"), BQ received a \$2.27 million construction-to-term loan to complete an community distributed generation ("CDG") 550 kilowatt ("kW") solar array paired with a 522kW/2088kWh battery to be located on a brownfield site in the Town of Mt. Kisco, NY. This transaction provides Mt. Kisco residents and businesses a greater variety of energy choices and ultimately, lower cost clean energy opportunities.

Transaction Description

BQ is a Wappingers Falls, New York-based renewable energy project developer specializing in landfill and brownfield site redevelopment. NYGB's \$2.27 million construction-to-term loan enables BQ to complete the 550 kW solar array paired with a 522kW battery (the "**Project**") to be constructed and operated on a brownfield site in the Town of Mt. Kisco, NY. The Project will generate revenue by selling clean power (or, more specifically, selling the value of clean power evidenced by VDER credits) to the subscribers in the community of Mt. Kisco.

The Project is the sixth of a number of similar developments in BQ's pipeline that NYGB anticipates financing as part of a larger portfolio. This investment represents NYGB's first transaction with BQ that includes battery storage. BQ expects to develop, construct, and operate additional community solar and storage projects in the future.

NYGB's participation in the Project – and in similar past and future developments included in the proposed portfolio arrangement – will help expand financing opportunities for CDG (less than 5.0 MW) solar plus storage 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. This Transaction Profile contains specific information in connection with the BQ transaction (which was entered into on October 19, 2018, as required by the Metrics Plan).

Form of NYGB Investment

NYGB Product	Product Sub-Type	Committed Capital
Asset Loan & Investment	Construction-to-Term Loan	\$2.27 million

¹ Case 13-M-0412.

² See Section 4.0, page 8 and Schedule 3.

Location(s) of Underlying Project(s)

<u>Westchester County</u>. The Project is located in Mt. Kisco, New York, with past and future portfolio projects 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

Summary of Financing Market Objectives & Barriers Addressed

Beneficiary	Market Barrier	Financing Solution
Smaller- Scale Solar plus Storage Developers	Many smaller-scale solar developers face challenges in securing adequate construction and long-term financing, particularly for smaller to mid-sized solar projects incorporating battery storage, as these developers are restricted in their access to capital by their size and comparatively limited track records.	This transaction aims to drive growth in the CDG solar plus storage sector by encouraging the standardization of contractors, contracts, and equipment to 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 CDG solar project developers that 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, particularly with the addition of storage. Fewer options in the marketplace generally translate into higher prices for endusers 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 installers. 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 and battery storage
	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 NYGB report on the following energy and environmental measures that are, applicable to this transaction., be reported on⁴:

- 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)	15,947.58	20,035.96	637.90	801.44
Estimated clean energy generation installed capacity (MW) ⁵	0.55	0.55		
Estimated GHG emission reductions (metric tons)	7,977.41	10,022.52	319.10	400.90

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. Market evaluation activities commenced in 2018 on sectors, including solar, that NYGB has supported since inception, consistent with the requirement for such assessments approximately three to five years following initial NYGB capital deployments. Baseline data was collected in 2018 and will be updated going forward to include indicators specific to this transaction. Baseline data on indicators will be used as a comparison point against which to assess market progress in later studies. Progress indicators are defined below for the expected short, mid and long-terms outcomes.

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

- Number and type of projects in development and completed;
- Average and aggregate dollar value of projects;
- Size (generation capacity and dollar value) of projects;
- Performance of installed systems; and
- Renewable energy generation and GHG emissions reductions.

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

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.

- Increased awareness of clean energy benefits among financing entities as a result of favorable technology performance data;
- Favorable financial performance data;
- Favorable technology performance data;
- Increases in market volume of projects;
- Increased attractiveness of investments to investors, based on positive financial performance data and acceptable risk/default rates;
- Decreased project technology cost;
- Increased number of financial participants providing similar capital structures; and
- Reduced time to execute clean energy financings.

The above listed indicators listed above 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 outcome 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 starting 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 assess how the Project is performing within the estimated clean energy benefits ranges set out in this Transaction Profile.

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 May 2020

Bridge Loan to Support the Deployment of NYS Solar Projects

East Light Partners, PBC

On May 6, 2020, NY Green Bank ("NYGB") provided a 24-month senior secured \$3 million bridge loan facility (the "Bridge Loan") to ELP BV 1, LLC ("Borrower"), owning projects developed by East Light Partners PBC ("East Light"). Bridge Loan proceeds will finance late stage development costs for community distributed generation ("Community DG") and Large Scale ("LSR") solar photo-voltaic projects. The projects supported by this transaction are expected to provide New York State ("NYS") residents and businesses with lower-cost clean energy opportunities.

Transaction Description

East Light is developing a portfolio of Community DG and LSR solar projects in NYS and requested that NYGB provide a \$3 million Bridge Loan to finance late-stage development costs for such projects, including interconnection deposits due under the New York State Public Service Commission (the "Commission") Standardized Interconnection Requirements and Application Process.¹

This transaction supports 72 MW of solar assets in the State which are expected to: (i) provide commercial and residential project subscribers access to reliable, clean, low-cost energy; and (ii) reduce up to 754,228 metric tons of greenhouse gas ("GHG") emissions annually in NYS. As there has been an increasingly strong demand for Community DG and LSR solar throughout NYS, capital providers are recognizing, and will continue to recognize, the value in providing financing to enable the deployment of these projects. NYGB expects the Bridge Loan product to serve a template for private capital to build on.

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 Commission on June 20, 2016.²

Form of NYGB Investment

NYGB Product	Product Sub-Type	Committed Capital	
Asset & Investment	Bridge Loan	\$3 million	

Locations of Underlying Projects

<u>Capital Region</u>. The first projects in the Bridge Loan will be located in Dutchess County, NY, Columbia County, NY.

Under the revised NYS Standardized Interconnection Requirements, within 90 business days of receiving the Coordinated Electric System Interconnection Review ("CESIR") results, interconnection applicants must pay the applicable utility 25.0% of the interconnection upgrade estimates.

² Case 13-M-0412.

Types of Client & Counterparty Organizations that are Transaction Participants

	Name	Participant Type
Client	East Light Partners, PBC	Energy Project Developer
Counterparties (current)	National Grid, NYSEG, and Central Hudson	Electric Utilities

Summary of Financing Market Objectives & Barriers Addressed

Beneficiary	Market Barrier	Financing Solution
Solar Project	Project sponsors are often expected	This transaction encourages a more efficient use
Developers	to pay for interconnection expenses with equity funds as they finalize construction financing arrangements. This results in a relatively inefficient use of sponsor equity, which limits project deployment efforts and effectively restricts the amount of Community DG and LSR being deployed in NYS, slowing the rate of deployment.	of sponsor equity and supports project development efforts in NYS by bridging the period in which project sponsors need to finalize project financing arrangements for projects for which the CESIR or Facilities Study process has been completed. NYGB's role will create an easier pathway forward for developers and will enable greater deployment of community and other distributed generation assets throughout the State.
Capital Market Participants	As a relatively new form of clean energy project, Community DG lacks financing precedents and has limited performance history in NYS. As such, it can be more difficult for private sector capital providers to assess and price the underlying risk exposures associated with Community DG project investments.	Projects supported as a result of this transaction will generate project and customer performance data to 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 of NYS homeowners, renters, and businesses. This limits the number of solar projects getting done to those with suitably 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 stand-alone systems), with voluntary access to clean, low-cost energy, regardless of where their home or business is located.

Technologies Involved

Technology	Measures
Renewable Energy	Solar photovoltaic 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 [('**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 on⁴:

- Estimated gross lifetime and first-year electricity savings (MWh);
- Estimated gross lifetime and first-year fuel savings (MMBtu); 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	Annualized Low Estimate	Annualized High Estimate
Estimated clean energy generated (MWh)	582,811.56	1,507,771.20	23,312.46	60,310.85
Estimated clean energy generation installed capacity (MW) ⁵	20.10	52.00		
Estimated GHG emission reductions (metric tons) ⁶	291,537.94	754,227.50	11,661.52	30,169.10

Planned Market Characterization Baseline & Market Transformation Potential

The Metrics Plan requires that market evaluation occurs when a critical mass of NYGB financing and investment arrangements are put in place, approximately three to five years following initial NYGB capital deployments. Market evaluation activities commenced in 2018 on sectors that have been supported by NYGB since its inception, and the data set will be updated going forward to include indicators specific to this and other transactions. Baseline data will be used 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 East Light Partners 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;

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.

Installed clean energy generation capacity at full deployment of funds is the same for first-year and lifetime duration.

As of January 1, 2010, the New York State Energy Research and Development Authority ("NYSERDA") utilizes a 1,103 lbs./MWh conversion factor to estimate GHG emissions reductions for electric generation and energy efficiency savings across all components of the Clean Energy Fund. NYSERDA previously utilized a 625 lbs./MWh conversion factor.

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

- Volume of secondary market financing of Community DG solar assets; and
- Number of new lending participants.

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 which it delivers.

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 was collected on key indicators in the first phase evaluation during 2018 – 19. Later follow-up studies will assess progress against baseline levels for other market segments as those evolve. The specific timing of these efforts may be revised based on experience or other factors as NYGB's investment portfolio further develops and evolves.

Impact evaluation will assess 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, East Light Partners 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.



TRANSACTION PROFILE

July 2020

Supporting the Deployment of Solar Projects in New York State

Distributed Sun - SunX

NY Green Bank ("NYGB") has committed \$3.8 million to finance the deployment of solar photovoltaic ("PV") projects in the development pipeline of SunX, LLC ("SunX"), which is wholly owned by Distributed Sun LLC ("DSun"). This is an expansion of NYGB's investment in solar development capital as part of its ongoing efforts to participate in sustainable infrastructure investments in support of New York State's ("NYS") Clean Energy Fund objectives. The \$3.8 million financing facility is expected to support the deployment of up to 39.8 megawatts ("MW") of solar PV in NYS, providing residents and businesses with a greater variety of energy choices and, ultimately, lower-cost clean energy options.

Transaction Description

DSun is a Washington, D.C. based solar energy project developer that develops, finances, operates and provides advisory services for renewable energy projects. DSun has expertise in designing and developing utility-scale, community distributed generation ("CDG") and commercial and industrial solar PV projects. NYGB's \$3.8 million multidraw term loan investment (the "Investment") finances the costs of SunX's CDG project development efforts. The Investment establishes a structure that can be replicated for other qualified developers to create incremental renewable energy generation and greenhouse gas ("GHG") mitigation benefits. It contributes to accelerated development of solar facilities in NYS, with offtake arrangements targeted to the CDG market.

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, 2016.¹ This Transaction Profile contains specific information about the DSun SunX transaction entered into on June 23, 2020, as required by the Metrics Plan.²

Form of NYGB Investment

NYGB Product	Product Sub-Type	Committed Capital	
Asset Investment	Term Loan	\$3.8 million	

Location(s) of Underlying Project(s)

<u>Finger Lakes and Western New York Region</u>. The projects supported by this loan will be located in Livingston and Allegany counties in NYS.

Types of Client & Counterparty Organizations that are Transaction Participants

	Name	Participant Type
Client	Distributed Sun LLC	Energy Project Developer

¹ Case 13-M-0412.

 $^{^{2}\,\,}$ See Section 4.0, page 8 and Schedule 3.

Summary of Financing Market Objectives & Barriers Addressed

Beneficiary	Market Barrier	Financing Solution
Solar Project Developers	Project developers are often expected to pay for all development 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 deployment of solar PV projects in NYS.	This transaction encourages a more efficient use of sponsor equity and greater project development in NYS. By providing leverage against certain development expenses NYGB incentivizes developers to achieve development milestones; developers gain access to more capital; and the value of NYGB's collateral increases as development milestones are met. NYGB's participation creates an easier pathway forward for developers and enables greater deployment of distributed solar assets throughout NYS.
Capital Market Participants	As a relatively new form of clean energy project, CDG lacks financing precedent, especially in the development capital market. As such, it is difficult for private sector capital providers to assess and price the underlying risk exposures associated with this kind of investment.	This transaction will generate project development and developer's 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 this investment product.
NYS Ratepayers	Due to project siting, property ownership, and consumer preference issues, on-site solar project installations may not be viable for all NYS homeowners, renters, and businesses, which limits ratepayer access to clean energy.	This transaction supports the deployment of CDG 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

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 reductions in support of New York's energy policies". In addition, the Metrics Plan requires NYGB to report on the following energy and environmental measures, as applicable to this transaction:⁴

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

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

2

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.

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

Energy/Environmental Impact	Lifetime Low Estimate	Lifetime High Estimate	Annual Low Estimate	Annual High Estimate
Estimated clean energy generated (MWh)	794,951	993,689	31,798	39,748
Estimated clean energy generation installed capacity (MW) ⁵	27.4	34.3	Not Ap	plicable
Estimated GHG emission reductions (metric tons)	397,656	497,070	15,906	19,883

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. Market evaluation activities commenced in 2018 on sectors that NYGB has supported since inception, consistent with the requirement for such assessments approximately three to five years following initial NYGB capital deployments.⁶ Baseline data was collected for the solar sector in 2019 and will be updated going forward to include indicators specific to this transaction. Baseline data on indicators will be used as a comparison point against which to assess market progress in the later studies. Progress indicators are defined below for the short, medium and long terms.

Output 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 Investment;
- Aggregate expected energy generation for projects financed by the Investment; and
- The number of projects that finalize construction financing arrangements.

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

- Increased market volume of CDG projects:
- Increased general understanding of renewable energy benefits by financial community;
- Increased awareness and use of CDG 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 CDG investments;
- Decreased project costs;
- Increased volume of secondary market financing of CDG assets; and
- Presence and number of new lending participants.

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

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

Market evaluation will address the short, medium and long-term indicators identified above. Methods will include analysis of program data along with interviews and surveys of market participants (e.g., 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 CDG specifically), and influence of NYGB's participation on financial markets. As noted, NYSERDA collected baseline data on key indicators in its first phase evaluation during 2018 – 19. Later follow-up studies will assess progress against baseline levels for other market segments as those evolve. The specific timing of these efforts may be revised based on experience or other factors as NYGB's investment portfolio further develops and evolves.

3

⁵ Installed clean energy generation capacity at full deployment of funds is the same for first-year and lifetime duration.

⁶ See Metrics Plan, Section 3.3 at page 7.

Impact evaluation will assess which of the projects funded under the Investment raised construction financing and were completed, commissioned, and placed in service.

As with all NYGB investments, DSun 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 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 projects that receive support from multiple sources to maximize the efficiency of data collection and avoid participant survey fatigue.



TRANSACTION PROFILE

Revised June 2020

Supporting Commercial Energy Efficiency in New York State

Ecosave – Commercial Energy Efficiency

In June 2019 NY Green Bank ("NYGB") committed \$15.0 million to finance a portfolio of energy efficiency projects operated by Ecosave Inc. On June 4, 2020, NYGB increased the loan size to \$30.0 million. NYGB's participation in this transaction provides a scalable financing model and establishes performance history for financing involving energy efficiency for medium-sized, unrated commercial and institutional customers, a market segment that historically has had difficulty accessing capital for otherwise technically and economically feasible efficiency projects.

Transaction Description

Ecosave is a Philadelphia-based energy services company that provides turnkey design, engineering, procurement, construction, utility management and maintenance solutions for building energy efficiency ("EE") and Distributed Energy Resources ("DER") projects. NYGB established a financing relationship with Ecosave through NYGB's previous \$2.0 million participation in a construction-to-term loan for the Hebrew Home project with NYCEEC. The company opened a New York office in April 2019 with the goal of developing and completing over \$30.0 million in EE and DER projects in New York by 2029.

Ecosave is expected to use the proceeds of the \$30 million credit facility (the "**Term Loan**") to support the deployment of new EE or DER projects in New York.

The Term Loan is supported by receivables from EE projects completed under Energy Savings Agreements ("ESAs") and Energy Performance Contracts ("EPCs"). NYGB's participation in the Term Loan will facilitate the growth of the NYS energy efficiency market by supporting growing market confidence in ESA and EPC cash flows. This investment involves a replicable transaction structure that enables Ecosave's portfolio to scale and ultimately attract private sector investment. Ecosave's pipeline has been financed on a project-by-project basis to date. The structure of the Term Loan should decrease the time necessary to secure financing for new projects.

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, 2016.¹ This Transaction Profile contains specific information in connection with the Ecosave transaction entered into on June 27, 2019 and amended and restated on June 4, 2020, as required by the Metrics Plan.²

Form of NYGB Investment

NYGB Product	Product Sub-Type	Committed Capital	
Asset Loan & Investment	Multi-Draw Term Loan	\$30.0 million	

Location(s) of Underlying Project(s)

Statewide.³ Subsidiaries of Ecosave will acquire projects throughout NYS.

See Section 4.0, page 8 and Schedule 3.

¹ Case 13-M-0412.

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

Types of Client & Counterparty Organizations that are Transaction Participants

	Name	Participant Type	
Client	Ecosave Contract Assets, LLC	Borrower	
Sponsor(s)	Ecosave Holdings Inc.	Parent	

Summary of Financing Market Objectives & Barriers Addressed

Beneficiary	Market Barrier	Financing Solution	
Project Developers	Many energy efficiency providers must seek project-by-project construction finance. This consumes limited time and resources and creates higher transaction costs for each project, diverting funds that might otherwise be used to grow and scale.	NYGB's participation provides funding to construct new projects that meet pre-defined criteria, avoiding the need for separate loan documentation for each project. These transaction efficiencies allow for greater project scalability while lowering transaction costs for the Sponsor.	
Capital Market Participants	Capital market participants may be interested in owning or financing commercial energy efficiency but are unable to find portfolios of similar project types at a scale large enough to justify diligence and transaction costs.	NYGB's participation enables aggregation of commercial efficiency projects into a larger pool that can be refinanced with institutional capital.	
New Yorkers	While interest and activity in commercial and institutional building energy efficiency projects is marked and continues to increase in NYS, certain inefficiencies may exist in financing that limit the number of projects that are completed.	By providing financing for guaranteed savings projects, NYGB is encouraging more primary commercial and institutional building efficiency development in the State. Ultimately this is expected to provide New Yorkers with a more efficient building stock and access to clean energy at a lower cost.	

Technologies Involved

Technology	Measures
Energy Efficiency & Distributed	Various: LEDs; HVAC; Solar; CHP; etc.
Energy Resources	

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 reductions in support of New York's energy policies". In addition, the Metrics Plan requires that the following energy and environmental measures, applicable to this transaction, be reported on:5

- Estimated gross lifetime and first-year electricity (MWh);
- Estimated gross lifetime and first-year fuel savings (MMBtu);
- Estimated gross lifetime and first-year greenhouse gas ("GHG") emission reductions (metric tons).

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

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

The estimated gross lifetime and first-year energy and environmental impacts of the Term Loan are as follows:

Energy/Environmental Impacts	Lifetime Low Estimate	Lifetime High Estimate	Annual Low Estimate	Annual High Estimate	
Electricity savings (MWh)	158,471	198,089	10,565	13,206	
Natural Gas savings (MMBtu)	486,108	607,635	32,407	40,509	
GHG emission reductions (metric tons)	105,114	131,393	7,008	8,760	

Planned Market Characterization Baseline & Market Transformation Potential

The Metrics Plan requires that market evaluation occurs when a critical mass of NYGB financing and investment arrangements are put in place, approximately three to five years following initial NYGB capital deployments. Market evaluation activities commenced in 2018 to collect baseline data on key market indicators for the sectors that have been supported by NYGB since its inception, and the dataset will be updated in 2019 to include indicators specific to this transaction. Baseline data will be used 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:

- Number of new energy efficiency projects completed by Ecosave or similar market participants;
- Average and aggregate dollar value of projects;
- Number and location of projects:
- Size of projects;
- Energy savings and GHG emission reductions (in metric tons).

Outcome indicators are expected to show progress through program tracking or market evaluation over time. These include, but are not limited to:

- Favorable financial performance data;
- Favorable technology performance data;
- Increasing market volume of commercial and industrial energy efficiency projects (both development and primary/secondary financings);
- Investment risk/default rates become increasingly attractive to investors, as a result of positive financial performance data;
- Increasingly positive view of banks and institutional investors on investment value of energy efficiency projects;
- Amount and scale of energy efficiency investment increases, together with increased end-use market demand:
- Decreased project technology costs/increasing output and efficiency;
- Decreased financing costs based on higher liquidity and price discovery; and
- Increased number of financial participants participating in EE/DER investments and financings.

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

NYSERDA will evaluate the direct and indirect impacts that this transaction has 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 EE/DER in the industrial and commercial sectors, and influence of NYGB's participation on financial markets. As noted, baseline data was collected on key indicators in the first phase evaluation during 2018 – 2019. Subsequent studies will assess progress against baseline levels for other market segments as those evolve. The specific timing of these efforts will be developed (and may be revised) on an ongoing basis based on experience or other factors as NYGB's investment portfolio continues to grow and evolve.

Impact evaluation will use actual performance data to understand energy and environmental outcomes. Impact evaluation is expected to include annual review and analysis of actual energy savings data collected by Ecosave. Actual energy savings 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 understanding the risks and rewards in this clean energy area.

As with all NYGB investments, Ecosave 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.



TRANSACTION PROFILE

June 2020

Bridge Loan to Support the Deployment of NYS Fuel Cell Projects NineDot Energy

On June 30, 2020, NY Green Bank ("NYGB") provided a 2-month senior secured \$19.9 million bridge loan facility (the "Bridge Loan") to New York Community Clean Energy HoldCo, LLC ("Borrower"), a subsidiary of CertainSolar Inc., d/b/a NineDot Energy ("NineDot"). Bridge Loan proceeds will finance development costs for community distributed generation ("Community DG") Fuel Cell projects. The projects supported by this transaction are expected to provide New York State ("NYS") residents and businesses with lower-cost clean energy opportunities.

Transaction Description

NineDot is developing a portfolio of community distributed generation ("CDG") fuel cell projects in NYS and requested that NYGB provide an up to \$19.9 million Bridge Loan to finance development costs for such projects. NineDot is an experienced distributed energy resource ("DER") developer based in the NYU Urban Future Lab in Brooklyn, New York.

This transaction supports 12.5 megawatts ("MW") of fuel cells located in New York City, which are expected to: (i) provide commercial and residential project subscribers access to reliable low-cost energy; and (ii) reduce up to 15,000 metric tons of greenhouse gas ("GHG") annually in NYS, as well as avoid over 50,000 lbs of NOx and 2,500 lbs of SOx emissions annually in New York City.. As there has been an increasingly strong demand for CDG throughout NYS, capital providers are recognizing, and will continue to recognize, the value in providing financing to enable the deployment of these projects. NYGB expects the Bridge Loan product to serve a template for private capital to build on.

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 Commission on June 20, 2016.¹

Form of NYGB Investment

NYGB Product	Product Sub-Type	Committed Capital
Asset & Investment	Bridge Loan	\$19.9 million

Locations of Underlying Projects

New York City. The projects in the Bridge Loan will be located in Staten Island, NY and Bronx, NY.

Types of Client & Counterparty Organizations that are Transaction Participants

	Name	Participant Type	
Client	CertainSolar Inc., d/b/a NineDot Energy	Energy Project Developer	
Counterparties (current)	Bloom Energy	Equipment Manufacturer, EPC, and O&M Contractor	

¹ Case 13-M-0412.

	Name	Participant Type
Counterparties	Consolidated Edison	Electric Utility
(current)		

Summary of Financing Market Objectives & Barriers Addressed

Beneficiary	Market Barrier	Financing Solution
Distributed Energy Project Developers	Project sponsors are often expected to pay for development expenses with equity funds as they finalize construction financing arrangements. This results in a relatively inefficient use of sponsor equity, which limits project deployment efforts and effectively restricts the amount of CDG being deployed in NYS, slowing the rate of deployment.	This transaction supports project development efforts in NYS by bridging the period in which project sponsors need to finalize project financing arrangements for the projects. NYGB's role will create an easier pathway forward for developers and will enable greater deployment of community and other distributed generation assets throughout the State.
Capital Market Participants	As a relatively new form of clean energy offtake, CDG lacks financing precedents and has limited performance history in NYS. As such, it can be more difficult for private sector capital providers to assess and price the underlying risk exposures associated with CDG project investments.	Projects supported as a result of this transaction will generate project and customer performance data to draw new investors and financial institutions into the marketplace by demonstrating that competitive risk-return profiles can be achieved by CDG-enabled business models.
Community DG Subscribers	Due to project siting, property ownership and consumer preference issues, on-site clean energy installations may not be viable for a number of NYS homeowners, renters, and businesses. This limits the number of clean energy projects getting done to those with suitably sited homes or businesses.	This transaction supports the deployment of CDG fuel cell projects, which provide those who are not otherwise able to install clean energy generation systems on their property (e.g., businesses whose rooftops cannot support solar systems, renters and those who cannot afford stand-alone onsite generation systems), with voluntary access to clean, low-cost energy, regardless of where their home or business is located.

Technologies Involved

Technology	Measures	
Fuel Cells	Solid Oxide Fuel Cell Energy Servers	

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". In addition, the Metrics Plan requires that the following energy and environmental measures applicable to this transaction be reported on³:

- Estimated gross lifetime and first-year energy generated from Fuel Cell (MWh);
- Estimated gross energy generation installed capacity (MW);
- Estimated gross lifetime and first-year fuel consumption (MMBtu); 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	Annualized Low Estimate	Annualized High Estimate
Estimated energy generated (MWh)	985,500	1,040,250	98,550	104,025.00
Estimated fuel consumption (MMBtu) ⁴	7,450,013	7,021,341	745,001	702,134.12
Estimated energy generation installed capacity (MW) ⁵	12.5	12.5	N/A	
Estimated GHG emission reductions (metric tons) ⁶	97,345	147,507	9,735	14,750.66

In addition, estimated NOx emissions reductions are over 50,500 lbs annually, and estimated SOx emissions reductions are over 2,500 lbs annually in New York City.⁷⁸

Planned Market Characterization Baseline & Market Transformation Potential

The Metrics Plan requires that market evaluation occurs when a critical mass of NYGB financing and investment arrangements are put in place, approximately three to five years following initial NYGB capital deployments. Market evaluation activities commenced in 2018 on sectors that have been supported by NYGB since its inception, and the data set will be updated going forward to include indicators specific to this and other transactions. Baseline data will be used 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.

Estimated fuel consumption will be included in the estimated energy savings (MMBtu) from CHP categories in NYGB consolidated reporting

3

² 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.

³ See Metrics Plan, Section 2.0, pages 2 - 6.

⁵ Estimated Energy generation installed capacity will be included in the estimated energy generation installed capacity from CHP category in NYGB consolidated reporting.

⁶ As of January 1, 2016, the New York State Energy Research and Development Authority ("NYSERDA") utilizes a 1,103 lbs./MWh conversion factor to estimate GHG emissions reductions for electric generation and energy efficiency savings across all components of the Clean Energy Fund. NYSERDA previously utilized a 625 lbs./MWh conversion factor.

The United States Environmental Protection Agency ("EPA") Emissions and Generation Resource Integrated Database ("eGRID") estimates 0.488 lb/MWh NOx emissions for non-baseload power generation in New York City and Westchester eGRID sub-regions.(See: https://www.epa.gov/sites/production/files/2020-01/documents/egrid2018 summary tables.pdf)

⁸ See: https://www.bloomenergy.com/datasheets/energy-server-es5-250kw

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 NineDot 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 investments;
- Decreased project costs:
- Volume of secondary market financing of Community DG assets; and
- Number of new lending participants.

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 which it delivers.

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 was collected on key indicators in the first phase evaluation during 2018 – 19. Later follow-up studies will assess progress against baseline levels for other market segments as those evolve. The specific timing of these efforts may be revised based on experience or other factors as NYGB's investment portfolio further develops and evolves.

Impact evaluation will assess 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, NineDot 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.