



**NY Green Bank**  
A Division of NYSERDA

# NY Green Bank

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Metrics, Reporting & Evaluation  
Quarterly Report No. 29  
(Through September 30, 2021)

Case 13-M-0412

11/15/2021

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**Schedule**

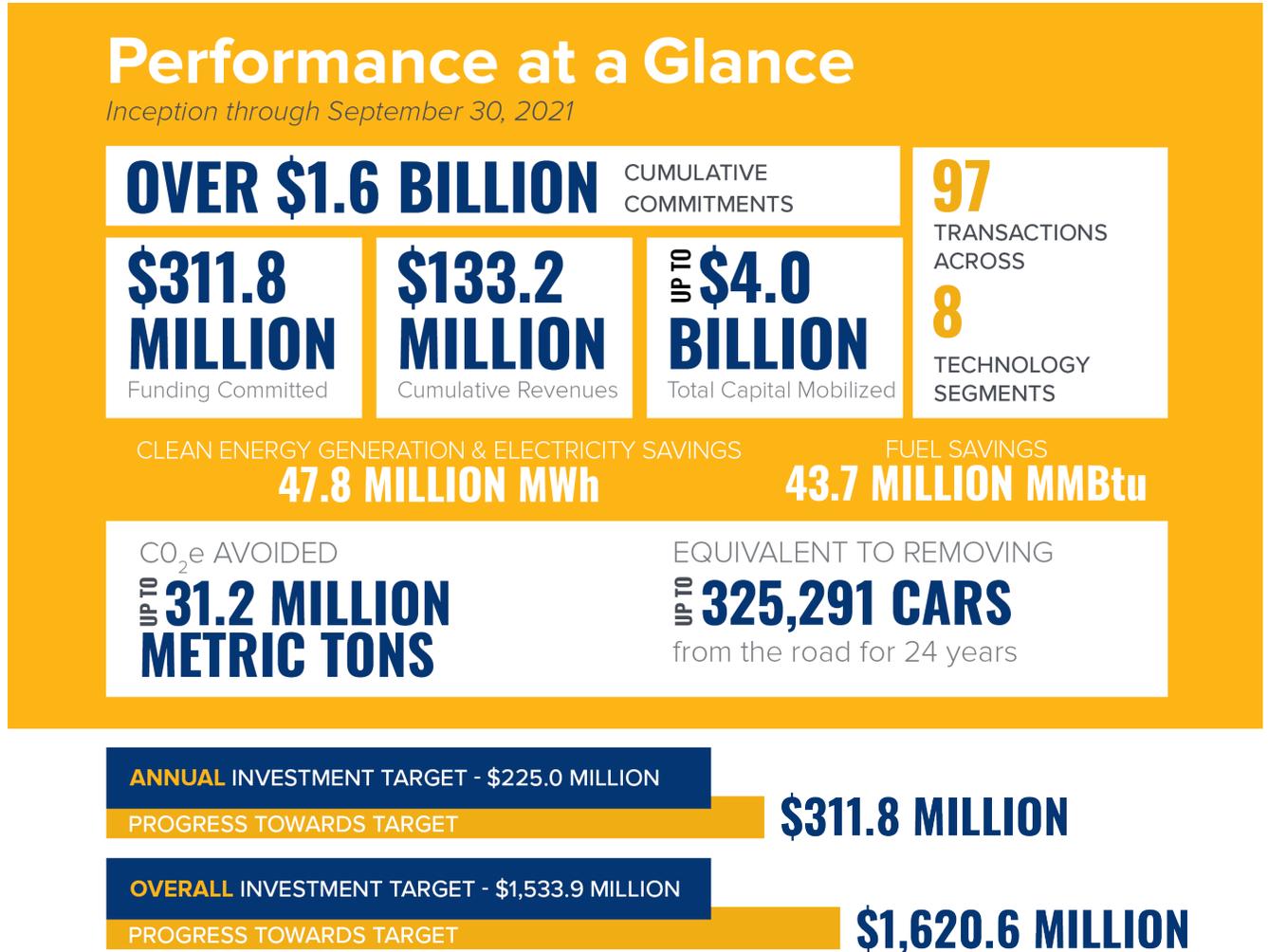
Transaction Profiles:

- Eden, Upsize – Bridge Loan (Community Distributed Generation – Solar)
- Oya Solar, Upsize – Interconnection to Construction Loan – (Community Distributed Generation - Solar)
- NYCEEC – Development Loan Participation (Housing – Energy Efficiency)

## 1 Highlights<sup>1</sup>

During the quarter ended September 30, 2021, NY Green Bank (“**NYGB**”) committed \$7.8 million across two new investments.<sup>2</sup> Since its inception NYGB has committed more than \$1.6 billion to clean energy and sustainable infrastructure projects in New York State (“**NYS**” or the “**State**”). During this quarter, NYGB generated \$3.3 million in revenues, bringing its cumulative total since inception to \$133.2 million. NYGB’s investments continue to mobilize capital in NYS; at quarter end its portfolio was expected to support up to \$4.0 billion in project costs for clean energy and sustainable infrastructure projects.

Figure 1 Performance at a Glance



1 This Quarterly Report (“**Report**”) is filed by NYGB with the NYS Public Service Commission (the “**Commission**” or the “**PSC**”) pursuant to the Metrics, Reporting & Evaluation Plan developed in consultation with the Department of Public Service (“**DPS**”) and filed with the Commission (the “**Metrics Plan**”). Defined terms used in the text of this Report but not separately described have the meanings respectively given to them in the Metrics Plan.

2 The period April 1, 2021 to March 31, 2022 is referred to as the Plan Year or Fiscal Year (“**FY**”) throughout this Report.

## 2 Business Update

NYGB's investment activities fall into two broad categories, which include:

- (a) Transactions that have closed, which collectively comprise NYGB's Investment Portfolio, discussed in [Section 2.1](#); 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 over \$655.0 million at quarter end, which reflects the recent portfolio monetization completed with Bank of America during this quarter. More on the recent portfolio monetization can be found in [2.3](#). NYGB continued to provide flexible capital to active project developers, owners, service providers and manufacturers of NYS clean energy and sustainable infrastructure projects. *Table 1* summarizes investment activity during the quarter ended September 30, 2021. Full Transaction Profiles for the investments described in this [Section 2.1](#) are also included in the [Schedule – Transaction Profiles](#) to this Report. Additionally, NYGB's Transaction Profiles are publicly available at [www.greenbank.ny.gov/Investments/Portfolio](http://www.greenbank.ny.gov/Investments/Portfolio).

*Table 1 New Investments*

New Transactions	Description	NYGB Commitment	Closing Date
Eden 4 <sup>th</sup> Upsize	In November 2019, NYGB provided a 24-month senior secured \$2.5 million bridge loan facility to Eden Devco Borrower LLC, which is owned by Eden Devco LP, a limited partnership that is managed by Eden Renewables LLC. In March 2020, NYGB increased the loan size to \$4.3 million, which was further increased to \$6.3 million in August 2020 and to \$7.7 million in December 2020. In July 2021, NYGB closed on a fourth upsize to the facility, increasing the loan to \$9.2 million. The loan proceeds will finance project interconnection deposits to National Grid for community distributed generation solar projects.	\$1.5 million	7/15/2021
OYA Solar, Upsize	In September 2020, NYGB committed to an up to \$35.0 MM construction and interconnection facility to finance the development of up to 13 community distributed generation solar projects in New York State. In July 2021, NYGB authorized a \$3.8 million upsize to the facility, which allowed Oya Solar Inc. to support more projects entering the construction phase of development.	\$3.8 million	7/16/2021
NYCEEC Predevelopment Participation	In July 2021, NYGB provided an up to \$2.5 million participation in two predevelopment loans administered by NYCEEC to support the development of 310 units of affordable housing and a 200-bed homeless shelter. This transaction demonstrates NYGB's commitment to invest in disadvantaged communities in NYS and support projects that pursue high levels of energy performance.	\$2.5 million	8/3/2021
<b>Total</b>		<b>\$7.8 million</b>	

## 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 2](#) summarizes NYGB’s overall transaction status and Active Pipeline from inception through September 30, 2021.<sup>3</sup> At quarter end NYGB was managing an Active Pipeline of \$379.3 million.

Figure 2 Cumulative Pipeline Activity

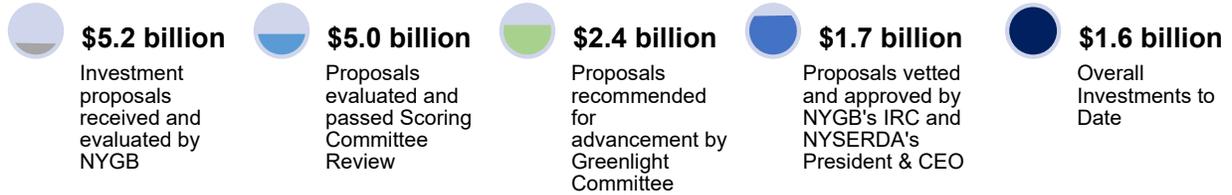


Figure 3 Distribution of Active Pipeline by Investment Stage

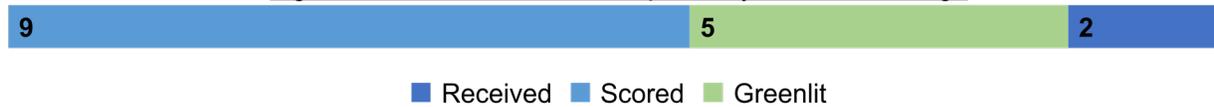


Figure 4 End-Use Segment of Active Pipeline (\$379.3 million)

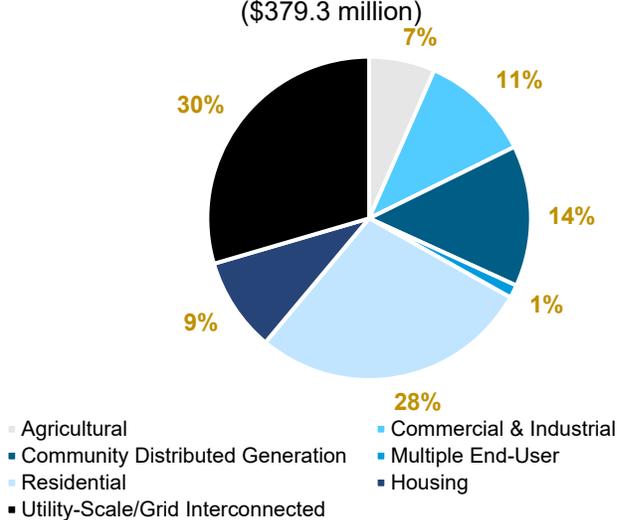


Figure 5 Geographic Distribution of Active Pipeline (\$379.3 million)

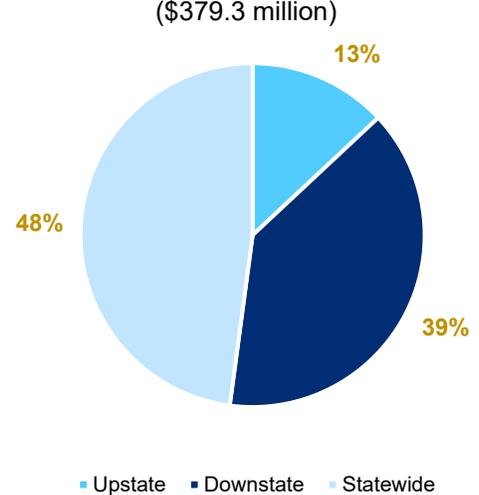
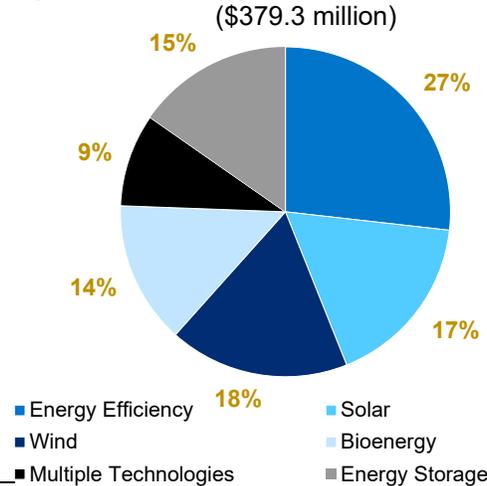


Figure 6 Technology Distribution of Active Pipeline (\$379.3 million)



<sup>3</sup> “IRC” takes the meaning Investment and Risk Committee

## 2.3 Additional Achievements and Activities

In the quarter ended September 30, 2021, 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:

NYGB hosted and participated in a variety of events this quarter, including:

- i. Get to Know RFP 18 Webinar: On July 14, 2021, NYGB convened affordable housing and energy efficiency market participants virtually to provide an overview of RFP 18: Financing Arrangements for High-Performance Affordable Housing, providing an overview of what the solicitation offers, and how potential proposers can engage, followed by audience Q&A.
- ii. CELI Fellows Webinar: On July 21, 2021, NYGB participated in a webinar hosted by the Clean Energy Leadership Institute (CELI) to talk with a group of young professionals about NYGB’s role in advancing financing products to support sustainable infrastructure across NYS and opportunities for career growth in the clean energy financing industry.
- iii. Capital Raise Communications: On August 2, 2021, NYGB announced the closing of its recent capital raise (see more information in section (c) below) and conducted communications via a press release, social media posts and significant media coverage, including a dedicated piece in American Banker, which included an exclusive interview with NYGB’s President.
- iv. NY Fed Roundtable Series: On August 17 and 19, 2021, NYGB joined a group of other financing agencies and industry participants, moderated by the NY Fed, to discuss financing challenges and solutions related to affordable housing and social equity.
- v. Capital Pressroom Interview: On August 24, 2021, an interview with NYGB’s President aired on Capital Pressroom, a popular radio show based in Albany. In the interview, NYGB provided an overview of its goals and activities in the market.
- vi. Q2 Quarterly Metrics Report Webinar: On September 1, 2021, NYGB held its Q2 Quarterly Metrics Report webinar to showcase its Q2 investment performance and impact. Highlights included clean energy and overall investments committed to date; metric tons of greenhouse gas (“GHG”) reductions in NYS to date; and updates on NYGB’s portfolio and pipeline activity.
- vii. Toward 2030 – From Climate Policy to Climate Action Panel: On September 21, 2021, NYGB participated along NYSERDA leadership and a group of international climate leaders to discuss sustainable finance and other climate solutions in a panel hosted by the Danish Cleantech Hub as part of Climate Week NYC.
- viii. Upstate NYSFAFH Conference: On September 22, 2021, NYGB attended the annual upstate conference of the New York State Association for Affordable Housing (NYSFAFH) to meet with NYS affordable housing agency representatives, developers, and financiers, discuss NYGB’s role in the sector, and hear insights from industry leaders through presentations and tabling sessions.
- ix. NESEA Building Energy NYC: On September 29, 2021, NYGB attended the annual New York City conference of the Northeast Sustainable Energy Association (NESEA) focused on building decarbonization policy, technology, and market development.

### (b) Public Reporting & Metrics:

All NYGB Reporting and metrics are available at [www.greenbank.ny.gov/Resources/Public-Filings](http://www.greenbank.ny.gov/Resources/Public-Filings).

- i. Quarterly Report: On August 16, 2021, NYGB filed its Quarterly Report for the period ended June 30, 2021 (available at [www.greenbank.ny.gov/Resources/Public-Filings](http://www.greenbank.ny.gov/Resources/Public-Filings)).
- ii. Quarterly Webinar: NYGB will host its regular Quarterly Review Webinar for this Report in November 2021, including discussion of activities during the quarter ended September 30, 2021.

(c) Completing Initial Private Sector Capital Raise:

On August 2, 2021, NY Green Bank announced it had completed its first private capital raise and the largest ever completed by a green bank in the United States. The \$314 million transaction was completed with Bank of America and ensured NYGB would be able to continue to meet unprecedented demand for its capital. NYGB's ability to raise such a significant amount of private capital provides third party validation of the quality of its transaction portfolio and demonstrates the strong and growing appetite among private sector investors to gain more exposure to the types of opportunities NYGB has originated.

In addition, the transaction with Bank of America demonstrates lender confidence in the ability of sustainable infrastructure assets to generate attractive risk-adjusted returns. As a new means by which NYGB can mobilize private capital, this transaction creates precedent for more financial institutions to support clean energy projects.

### 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 Commission and the general public, to assess NYGB's achievement of its overall mission.

#### 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 and implement solutions that overcome market barriers with the goal to attract 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.

#### 3.3 Relationship to NYS Clean Energy Policy

NYGB contributes to the primary Clean Energy Fund (“**CEF**”) objectives of GHG emissions reductions, customer bill savings, energy efficiency, clean energy generation and mobilization of private sector capital.<sup>4</sup> 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

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<sup>4</sup> As set out in the CEF Order (Cases 14-M-0094 etc.) issued and effective on January 21, 2016, page 40.  
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goal of 70% energy generation from renewable sources by 2030 and 100% carbon-free electricity by 2040.<sup>5</sup> The CEF objectives also support the Climate Act,<sup>6</sup> which puts NYS on a road to economy-wide carbon neutrality, through a target of reducing GHG emissions from all anthropogenic sources 85% over 1990 levels by the year 2050, a plan to offset remaining emissions, and an interim mandate of 40% GHG emission reductions by 2030.<sup>7</sup> Additionally, the Climate Act required a Climate Action Council be formed and policy roadmap developed to ensure that at least 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.

## 4 Tables

### 4.1 Quarterly Metrics<sup>8</sup>

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 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).

Table 2 presents required metrics for the period July 1, 2021 through September 30, 2021 and the previous quarter ended June 30, 2021.

*Table 2 Quarterly Metrics*

Quarterly Metric	Quarter Ended June 30, 2021	Quarter Ended September 30, 2021
<b>Capital Position</b>		
▪ 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
<b>Operational Matters</b>		
▪ Cumulative Revenues (\$) <sup>9</sup>	\$129.9 million	\$133.2 million

<sup>5</sup> Announced by Governor Andrew M. Cuomo in the 2019 State of the State.

See [www.governor.ny.gov/sites/governor.ny.gov/files/atoms/files/2019StateoftheStateBook.pdf](http://www.governor.ny.gov/sites/governor.ny.gov/files/atoms/files/2019StateoftheStateBook.pdf).

<sup>6</sup> Governor Cuomo signed Senate Bill S6599 into law on July 18, 2019. See [legislation.nysenate.gov/pdf/bills/2019/a8429](http://legislation.nysenate.gov/pdf/bills/2019/a8429).

<sup>7</sup> The Climate Act codified and expanded New York's Green New Deal and other nation-leading clean energy and climate targets for the State, including: (a) 9,000 MW of offshore wind by 2035; (b) 6,000 MW of distributed solar deployment by 2025; (c) 3,000 MW of energy storage deployment by 2030; (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.

<sup>8</sup> Regular reporting of energy and environmental benefits are inclusive of all transactions that receive NYGB funding, regardless of whether these transactions also receive support from ratepayer or other programs. In terms of assessing the extent of overlap and common benefits, NYSERDA will modify intake information received on incentive programs to determine whether NYGB capital is involved for incentive program customers. Evaluation sampling of NYGB clients will also seek to identify transactions that involve funding from both within and outside of NYGB, including other ratepayer-funded programs to the extent possible. These two sources of information will allow NYSERDA to estimate a reasonable overlap value for energy and environmental benefits so they are not double-counted when NYGB impacts are included in CEF or other NYS clean energy program results.

<sup>9</sup> 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.

Quarterly Metric	Quarter Ended June 30, 2021	Quarter Ended September 30, 2021
▪ <b>Cumulative Operating Expenses (\$)</b> <sup>10</sup>	\$63.5 million	\$66.3 million
▪ <b>Direct Operating Expenses (\$)</b>	\$39.5 million	\$41.6 million
▪ <b>Allocated Expenses (\$)</b>	\$24.0 million	\$24.7 million
<b>Investment Portfolio</b>		
▪ <b>Undrawn Committed Funds (\$)</b>	\$394.8 million	\$341.7 million
▪ <b>Deployed Funds (\$)</b> <sup>11</sup>	\$676.9 million	\$313.3 million
▪ <b>Current Portfolio (\$)</b> <sup>12,13</sup>	\$1,071.7 million	\$655.0 million
▪ <b>Overall Investments to Date (\$)</b>	\$1.6 billion	\$1.6 billion
▪ <b>Total Project Costs (Cumulative) (\$)</b> <sup>14</sup>	In the range of \$3.1 to \$3.9 billion	In the range of \$3.2 to \$4.0 billion
▪ <b>Mobilization Ratio</b>	Tracking at least 3.2:1 on average across portfolio	Tracking at least 3.2:1 on average across portfolio
▪ <b>Portfolio Concentrations (%)</b> <sup>15</sup>	55.2% Renewable Energy	55.2% Renewable Energy
	25.9% Energy Efficiency	26.0% Energy Efficiency
	18.9% Other	18.8% Other
▪ <b>Number &amp; Type of NYGB Investments</b>	63 – Renewable Energy	65 – Renewable Energy
	16 – Energy Efficiency	17 – Energy Efficiency
	15 – Other	15 – Other
▪ <b>Number &amp; General Type of NYGB Counterparties</b> <sup>16</sup>	88 – Financial Services, Industry or Other	88 – Financial Services, Industry or Other
<b>Direct Impact Benefits</b> <sup>17</sup>		
▪ <b>Estimated Gross Lifetime Energy Saved by Fuel Type from Energy Efficiency Projects (MWh/MMBtu) and/or Estimated Gross Lifetime Clean Energy Generated (MWh)</b> <sup>18</sup>	572,000 – 677,000 MWh; and 29.0–42.8 million MMBtu	572,000 – 677,000 MWh; and 29.6–43.7 million MMBtu
	31.1 – 46.9 million MWh	31.6 – 47.8 million MWh

10 Cumulative Operating Expenses currently include \$663,448.84 in evaluation expenses.

11 Deployed Funds as presented in *Table 2* are net of all capital repaid to the reporting date.

12 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.

13 The Current Portfolio no longer reflects loans sold through the initial portfolio monetization transaction described in 2.3.

14 Further to the definition of “**Total Project Costs (Cumulative)**” in the Metrics Plan (see page 15), Total Project Costs (Cumulative) may include fair market value (“**FMV**”) data for a subset of NYGB’s investments. FMV is an estimated market valuation of fully installed energy projects provided by NYGB’s counterparties and is often required for federal income tax purposes by institutional investors and for certain grant program purposes unconnected with NYGB. As projects progress and the cost of installed equipment and labor are known and reported to NYGB by its counterparties, NYGB seeks to adjust reported values and replace FMV in its aggregated data sets and periodic reporting with reported actual costs.

15 Based on executed transactions and reflecting dollar values invested by NYGB in renewable energy and energy efficiency transactions, each as a proportion of the Commitments to date.

16 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).

17 For Committed and Deployed Funds

18 NYGB does not, by filing this Report, make any claim to the environmental attributes associated with megawatt-hours expected to be generated by projects supported by investments in its portfolio. NYGB has relinquished all such rights and disavows any and all rights to any environmental claims or renewable energy.

Quarterly Metric	Quarter Ended June 30, 2021	Quarter Ended September 30, 2021
▪ Estimated Gross First Year <sup>19</sup> Energy Saved by Fuel Type from Energy Efficiency Projects (MWh/MMBtu) and/or Estimated Gross First Year Clean Energy Generated (MWh)	39,400 – 46,300 MWh; and 1,832,000 – 2,662,000 MMBtu	39,400 – 46,300 MWh; and 1,844,000 – 2,680,000 MMBtu
	1,479,000 – 2,247,000 MWh	1,502,000 – 2,280,000 MWh
▪ Estimated Gross Lifetime Energy Saved from CHP (MWh)	2,040,000 – 2,170,000 MWh	2,040,000 – 2,170,000 MWh
▪ Estimated Gross First Year Energy Saved from CHP (MWh)	201,000 – 213,300 MWh	201,000 – 213,300 MWh
▪ Estimated Gross Lifetime Energy Savings from CHP (MMBtu) <sup>20</sup>	-23,400,000 - -48,500,000 MMBtu	-23,400,000 - -48,500,000 MMBtu
▪ Estimated Gross First Year Energy Savings from CHP (MMBtu)	-2,350,000 - -4,860,000 MMBtu	-2,350,000 - -4,860,000 MMBtu
▪ Estimated Gross Clean Energy Generation Installed Capacity from CHP (MW)	46.6 – 68.6 MW	46.6 – 68.6 MW
▪ Estimated Gross Clean Energy Generation Installed Capacity (MW)	1,048 – 1,500 MW	1,037 – 1,500 MW
▪ Estimated Gross Lifetime GHG Emission Reductions (metric tons) <sup>21</sup>	17.6 – 26.3 million metric tons	17.9 - 26.7 million metric tons
<b>Indirect Impact Benefits<sup>22</sup></b>		
▪ Estimated Lifetime Energy Saved (MWh)	-	-
▪ Estimated Lifetime Energy Saved (MMBtu)	-	-
▪ Estimated Lifetime Clean Energy Generation (MWh)	4.1 – 8.5 million MWh	4.1 – 8.5 million MWh
▪ Estimated Installed Capacity CHP (MW)	-	-
▪ Estimated Installed Capacity (MW)	61.2 – 129.7 MW	61.2 – 129.7 MW
▪ Estimated Lifetime GHG Emissions Reductions (Metric Tons)	2.2 – 4.5 million metric tons	2.2 – 4.5 million metric tons
<b>Investment Pipeline</b>		
▪ Active Pipeline (In the Quarter) (\$)	\$460.1 million	\$379.3 million
<b>Investment Process</b>		
▪ Proposals Received – Value (Cumulative) (\$)	\$5.2 billion	\$5.2 billion
▪ Approvals - Scoring Committee (Cumulative) (\$)	\$5.0 billion	\$5.0 billion
▪ Approvals - Greenlight Committee (Cumulative) (\$)	\$2.4 billion	\$2.4 billion
▪ Approvals - IRC (Cumulative) (\$)	\$1.6 billion	\$1.7 billion

19 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.

20 For CHP systems, energy savings in thermal unit form is computed as the difference between the natural gas displaced by the recovered thermal energy and natural gas consumption by the generator. See [www.nyserda.ny.gov/-/media/Files/Publications/PPSER/Program-Evaluation/2015ContractorReports/2015-Distributed-Generation-CHP-Impact-Evaluation-Final.pdf](http://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.

21 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.

22 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.

## 4.2 Direct and Indirect Metrics Benefits

NYGB's 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.<sup>23</sup>

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. Estimated indirect benefits are reflected in NYGB progress reporting, in general and toward meeting NYGB's 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 reduction 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 a 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 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 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 verify that new development activity has in fact happened, validating NYGB's estimated indirect impact benefits.

## 5 Progress Against Plan Deliverables

In its Annual Plan 2021 – 2022, filed on June 29, 2021, NYGB identified deliverables (the “Plan

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23 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 toward 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”.

**Deliverables**”) that collectively mark its progress toward key initiatives in the period April 1, 2021 through March 31, 2022.

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.

Table 3 summarizes NYGB’s performance against the Plan Deliverables for the quarter ended September 30, 2021.

**Table 3 Annual Deliverables**

OBJECTIVE CATEGORY	DELIVERABLE	PROGRESS AS OF SEPTEMBER 30, 2021
<b>EFFECTIVELY MANAGE A STRONG AND GROWING PORTFOLIO</b>		
<b>Financing Solutions to Support Disadvantaged Communities</b>	Launch <i>RFP 18: Financing Arrangements for High-Performance Affordable Housing</i> , a purpose-built proposal and evaluation pathway for electrification/electrification-readiness projects in multifamily affordable housing, accompanied by custom scoring criteria and published selected indicative terms to align with industry practice.	<input checked="" type="checkbox"/> <b>Achieved for the Plan Year:</b> NYGB released RFP 18 in May 2021. The launch of RFP 18 aligns with NY Green Bank's target of committing \$150 million in affordable housing investments by December 2025.
	Host "Get to Know RFP 18" webinar in July 2021 to engage with potential proposers.	<input checked="" type="checkbox"/> <b>Achieved for the Plan Year:</b> In July 2021, NYGB convened affordable housing and energy efficiency market participants virtually to provide an overview of RFP 18, what the solicitation offers, and how potential proposers can engage, followed by audience Q&A.
	Launch preferred equity investment RFP targeting CDFIs, non-profits, and specialty finance companies investing in disadvantaged communities ("DACs").	<input checked="" type="checkbox"/> <b>Achieved for the Plan Year:</b> NYGB released RFP 19: Mandatorily Redeemable Preferred Equity for Disadvantaged Community Lenders on September 27, 2021.
	Expand impact measurement and reporting to reflect the broader benefits of DAC transactions.	<input checked="" type="checkbox"/> <b>Ongoing and On-track:</b> NYGB continues to follow updates from NYS's Climate Justice Working Group.
	Hire Managing Director to focus specifically on underwriting DAC transactions.	<input checked="" type="checkbox"/> <b>Achieved for the Plan Year:</b> In July 2021, NYGB brought a Managing Director onboard to lead its DAC investment strategy.
	Expand NYGB Advisory Committee targeting expertise in DAC transactions and access to advocacy community.	<input checked="" type="checkbox"/> <b>Achieved for the Plan Year:</b> As of this report filing, NYGB has welcomed two new members to its Advisory Committee. Their experience and expertise will help NYGB meet its commitment to DAC.
	Update NYGB mission statement to reflect recent changes to NYSERDA mission statement.	<input checked="" type="checkbox"/> <b>Ongoing and On-track:</b> NYGB has begun discussions and coordination within NYSERDA to develop an updated mission statement.
<b>Targeted Business Development</b>	Update and distribute marketing collateral to reflect NYGB's latest and most informed approaches to energy storage and clean transportation.	<input checked="" type="checkbox"/> <b>Ongoing and On-track:</b> NYGB has begun drafting updated materials for outreach in its target segments.
<b>Improve Existing Pathways for Market Engagement</b>	Launch redesigned website.	<input checked="" type="checkbox"/> <b>Ongoing and On-track:</b> NYGB has begun planning the content and process of its website re-design.
	Revise and re-launch RFP 1 to more clearly define what constitutes a substantially complete application, clarify information requests and provide more transparency around how NYGB evaluates applications, while implementing a scoring methodology that better differentiates between applications, including robust consideration of portfolio fit.	<input checked="" type="checkbox"/> <b>Achieved for the Plan Year:</b> In May 2021, NY Green Bank updated RFP No. 1 requirements and scoring processes to streamline its review of proposals. A summary overview of modifications can be found in the Summary of Revisions document.
OBJECTIVE CATEGORY	DELIVERABLE	PROGRESS AS OF SEPTEMBER 30, 2021
<b>Committed Funds</b>	Deliver at least \$225.0 million of incremental commitments in the Current Plan Year.	<input checked="" type="checkbox"/> <b>Achieved for the Plan Year:</b> As of quarter end, NYGB has committed \$311.8 million during the Current Plan Year, exceeding its annual target.
<b>Active Pipeline</b>	Maintain an Active Pipeline of at least \$450.0 million per quarter on average throughout the Current Plan Year.	<input checked="" type="checkbox"/> <b>Not achieved for the Quarter:</b> At quarter end, NYGB's Active Pipeline totaled \$379.3 million.
<b>MOBILIZE CAPITAL: STRENGTHEN NYGB'S CAPITAL POSITION</b>		
<b>Finalize Initial Portfolio Monetization</b>	Close initial portfolio monetization transaction.	<input checked="" type="checkbox"/> <b>Achieved for the Plan Year:</b> On July 28, 2021, NYGB raised \$314 million through a transaction with Bank of America.

<p><b>Mobilize Capital</b></p>	<p>Demonstrate capital mobilization by managing a Current Portfolio in excess of NYGB's \$1.0 billion initial capitalization.</p>	<p><input checked="" type="checkbox"/> <b>Achieved for the Plan Year:</b> At the end of the first quarter of the 2021 -22 fiscal year, NYGB was managing a Current Portfolio of over \$1.0 billion, signaling the need to execute its portfolio monetization strategy.</p>
<p><b>CONTINUOUSLY IMPROVE AND ENHANCE NYGB OPERATIONS AND PORTFOLIO MANAGEMENT</b></p>		
<p><b>ESG Monitoring and Reporting</b></p>	<p>Expand NYGB's risk evaluation processes by incorporating expanded ESG considerations for NYGB as a financing entity, as well as for its potential and existing borrowers.</p>	<p><input checked="" type="checkbox"/> <b>Ongoing and On-track:</b> An ESG project team at NYGB has been working to better understand the ESG factors that impact its investment portfolio. During the quarter, the project team focused on the relationship between ESG factors and traditional credit factors.</p>
<p><b>Process Standardization</b></p>	<p>Deploy FinTech solutions for enhanced efficiency and productivity.</p>	<p><input checked="" type="checkbox"/> <b>Achieved for the Plan Year:</b> During the quarter, rolled out multiple new FinTech platforms and integrated into regular NYGB operations.</p>
<p><b>Streamline Legal Documentation</b></p>	<p>Implement new legal documentation and processes to support relationship with third-party capital provider(s).</p>	<p><input checked="" type="checkbox"/> <b>Achieved for the Plan Year:</b> New legal documentation and processes are in place to support relationship with third-party capital provider.</p>
	<p>Develop suite of form legal documents to minimize transaction burden and cost when working with counterparties in the affordable housing sector.</p>	<p><input checked="" type="checkbox"/> <b>Achieved for the Plan Year:</b> NYGB along with its external counsel drafted a suite of legal documents to serve as templates for future transactions within NYS's affordable housing sector.</p>

*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.

## Bridge Loan to Support the Deployment of Community Solar Projects

### Eden Renewables, LLC

On November 8, 2019, NY Green Bank (“**NYGB**”) provided a 24-month senior secured \$2.5 million bridge loan facility (the “**Bridge Loan**”) to Eden Devco Borrower LLC (“**Borrower**”), which is owned by Eden Devco LP (“**Sponsor**”), a limited partnership that is managed by Eden Renewables LLC (“**Eden**”). On March 31, 2020, NYGB increased the Bridge Loan size to \$4.3 million. On August 28, 2020, NYGB further increased the Bridge Loan size to \$6.3 million. On December 15, 2020, NYGB closed on a third upside to the facility, increasing the Bridge Loan size to \$7.7 million. On July 14, 2021, NYGB closed on a fourth upside to the facility, increasing the Bridge Loan size to \$9.2 million. Bridge Loan proceeds will finance project interconnection deposits to National Grid for community distributed generation (“**CDG**”) solar projects. This transaction is expected to provide New York State (“**NYS**”) residents and businesses with a greater variety of energy choices and, ultimately, lower-cost clean energy.

### Transaction Description

Eden is developing a portfolio of CDG solar projects in NYS. The NYGB loan proceeds finance interconnection deposits to National Grid for such projects, due under the New York State Public Service Commission (the “**Commission**”) Standardized Interconnection Requirements and Application Process.<sup>1</sup>

This transaction is expected to support up to 100 MW of solar assets in NYS and is expected to: (i) provide commercial and residential project subscribers access to reliable, clean, low-cost energy; and (ii) reduce up to 1,264,927 metric tons of greenhouse gas (“**GHG**”) emissions annually in NYS. As there has been an increasingly strong demand for CDG 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 as a template for private capital providers.

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 Commission on June 20, 2016.<sup>2</sup> This Transaction Profile contains specific information in connection with the Eden transaction relating to the senior secured loan entered into in November 2019, the increase of that Bridge Loan entered into in August 2020 and the latest upside to that facility entered into in July 2021, as required by the Metrics Plan.<sup>3</sup>

### Form of NYGB Investment

NYGB Product	Product Sub-Type	Committed Capital
Asset Loan & Investment	Bridge Loan	\$9.2 million

<sup>1</sup> 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. Interconnection applicants will then pay the remaining balance of the interconnection upgrade estimates within 120 business days from the date that the initial deposit was made.

<sup>2</sup> Case 13-M-0412.

<sup>3</sup> See Section 4.0, page 8 and Schedule 3.

## Location(s) of Underlying Project(s)

Statewide.<sup>4</sup> Projects will be located throughout NYS.

## Types of Client & Counterparty Organizations that are Transaction Participants

	Name	Participant Type
<b>Client</b>	Eden Renewables LLC	Energy Project Developer
<b>Counterparties (current)</b>	National Grid	Electric Utility

## Summary of Financing Market Objectives & Barriers Addressed

Beneficiary	Market Barrier	Financing Solution
<b>Solar Project Developers</b>	Interconnection and construction financing are inefficient uses of sponsor equity and limit project deployment efforts, which restricts the amount of distributed generation development in NYS.	These transactions encourage a more efficient use of sponsor equity and support project development efforts in NYS by providing interconnection and construction 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 NYS.
<b>Capital Market Participants</b>	It can be more difficult for private investors to assess and price the underlying risk exposures associated with distributed generation project investments at the development phase than the construction or operating phase of a project.	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.
<b>CDG Subscribers</b>	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 solar access 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 standalone systems), with increased access to clean, low-cost energy, regardless of where their home or business is located.

## Technologies Involved

Technology	Measures
<b>Renewable Energy</b>	Solar photovoltaic systems

<sup>4</sup> Defined as projects located in four or more regions of the State.

## Metrics & Evaluation Plan

### Planned Energy & Environmental Metrics

NYGB’s minimum investment criteria require that “transactions will have the potential for energy savings and/or clean energy generation that will contribute to GHG emission reductions in support of New York’s energy policies”.<sup>5</sup> In addition, the Metrics Plan requires that the following energy and environmental measures applicable to this transaction be reported:<sup>6</sup>

- 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)	1,304,802	2,528,706	52,192	101,148
Estimated clean energy generation installed capacity (MW) <sup>7</sup>	45.00	87.21	Not Applicable	
Estimated GHG emission reductions (metric tons)	652,697	1,264,927	26,108	50,597

### 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 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.<sup>8</sup> NYSERDA collected baseline data for the NYGB portfolio 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 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 Bridge Loan;
- Aggregate expected energy generation for projects financed by the Bridge 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

<sup>5</sup> 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.

<sup>6</sup> See Metrics Plan, Section 2.0, pages 2 - 6.

<sup>7</sup> Installed clean energy generation capacity at full deployment of funds is the same for first-year and lifetime duration.

<sup>8</sup> See Metrics Plan, Section 3.3 at page 7.

- Presence 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 it delivers.

**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 Bridge Loan raised construction financing and were completed, commissioned, and placed in service.

In accordance with the Metrics Plan, NYGB will track Eden projects that receive incentives or funding from other entities (e.g., utility, other NYSERDA programs) 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.

## Continued Support of Distributed Generation in New York State

### OYA Solar Inc.

*In September 2020, NY Green Bank (“NYGB”) committed to an up to \$35.0 MM construction and interconnection facility to finance the development of up to 13 community distributed generation (“CDG”) solar projects in New York State (“NYS” or the “State”). In July 2021, NYGB authorized a \$3.8 million upside to the facility, which allowed OYA Solar (“OYA”) to support more projects entering the construction phase of development. 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

OYA Solar is a privately held, Toronto-based solar developer. OYA was founded in 2009 and operates in NYS through subsidiaries OYA Solar NY, L.P. and OYA Solar US G.P. (the “Sponsor” or “OYA”). OYA provides an in-house development and execution platform to manage the complete project lifecycle from origination to project commissioning.

With its commitment, NYGB expects to support the deployment of up to 109.9 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. By driving solar deployment activity in the State, NYGB’s commitment 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 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 Commission on June 20, 2016. This Transaction Profile contains specific information in connection with the initial OYA investment entered into in September 2020 and the upside authorized in July 2021, as required by the Metrics Plan.

### Form of NYGB Investment

NYGB Product	Product Sub-Type	Committed Capital
Asset Loan & Investment	Construction Loan with Interconnection Bridge	\$38.8 million

### Location(s) of Underlying Project(s)

Statewide.<sup>1</sup> Projects will be located throughout NYS.

<sup>1</sup> Defined as projects located in four or more regions of the State.

## Types of Client & Counterparty Organizations that are Transaction Participants

	Name	Participant Type
<b>Sponsor</b>	OYA Solar NY, L.P. and OYA Solar US G.P.	Energy Project Developer

## Summary of Financing Market Objectives & Barriers Addressed

Beneficiary	Market Barrier	Financing Solution
Solar Project Developers	Interconnection and construction financing are inefficient uses of sponsor equity and limit project deployment efforts, which restricts the amount of distributed generation development in NYS.	These transactions encourage a more efficient use of sponsor equity and support project development efforts in NYS by providing interconnection and construction 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 NYS.
Capital Markets Participants	It can be more difficult for private investors to assess and price the underlying risk exposures associated with distributed generation project investments at the development and construction phases of a project than the operating phase.	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 solar access 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
<b>Renewable Energy</b>	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.<sup>2</sup> In addition, the Metrics Plan requires that the following energy and environmental measures, applicable to these transactions, be reported:<sup>3</sup>

- Estimated gross lifetime and first-year clean energy generated (MWh);
- Estimated gross clean energy generation installed capacity (MW); and

<sup>2</sup> 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.

<sup>3</sup> See Metrics Plan, Section 2.0, pages 2 - 6.

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

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

Energy/Environmental Impact	Lifetime Low Estimate	Lifetime High Estimate	Annualized Low Estimate	Annualized High Estimate
Estimated clean energy generated (MWh)	874,594	3,186,822	34,983	127,472
Estimated clean energy generation installed capacity (MW) <sup>4</sup>	31.2	109.9	N/A	
Estimated GHG emission reductions (metric tons)	437,495	1,594,133	17,499	23,765

## Planned Market Characterization Baseline & Market Transformation Potential

The Metrics Plan requires that market evaluation occur when a critical mass of NYGB financing and investment arrangements are 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.<sup>5</sup> 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 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 Facility;
- Aggregate expected energy generation for projects financed by the Facility; 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 Facility will have on the clean energy finance markets and the energy/environmental benefits delivered by these loans.

**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

<sup>4</sup> Installed clean energy generation capacity at full deployment of funds is the same for first-year and lifetime duration.

<sup>5</sup> See Metrics Plan, Section 3.3 at page 7.

further develops and evolves.

**Impact evaluation** will assess which of the projects funded under the construction and interconnection loans once the projects receiving financing are completed, commissioned, and placed in service.

In accordance with the Metrics Plan, NYGB will track OYA 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.

## Accelerating Affordable Housing Development in New York City with Clean Energy Investment in Brooklyn, New York

### NYCEEC, Hudson Companies, St. Nick's, Project Renewal

*In August 2021, NY Green Bank (“NYGB”) entered into an agreement with the New York City Energy Efficiency Corporation (“NYCEEC”) and Maspeth Manager LLC, a subsidiary of The Hudson Companies Incorporated (“Hudson Companies”), the St. Nick’s Alliance Corporation (“St. Nick’s”) and GPH Shelter Manager LLC, a subsidiary of Hudson Companies, St. Nick’s, and Project Renewal Inc (“Project Renewal”), together with Hudson Companies and St. Nick’s (the “Sponsors”) and Calvert Impact Capital (“Calvert”) to provide an up to \$6.9 million participation in two predevelopment loans administered by NYCEEC. Loan proceeds will be used for predevelopment expenses for services such as architecture, engineering, and land surveys so the Sponsors can secure construction financing to develop a vacant portion of Brooklyn, New York’s Greenpoint Hospital site into a Passive House certified 310-unit affordable housing residential housing development (the “Affordable Housing Development”) and a 200-bed shelter for people experiencing homelessness (the “Shelter”).*

### Transaction Description

In August 2021, NYGB entered into an agreement with NYCEEC, Hudson Companies, Calvert, and St. Nick’s to provide an up to \$6.9 million participation in two predevelopment loans administered by NYCEEC that support the development of 310 units of affordable housing (“**Project A**”) and a 200-bed homeless shelter (“**Project B**”) at the Greenpoint Hospital campus. The Sponsors were awarded the opportunity to redevelop the Greenpoint Hospital campus under a Request for Expressions of Interest (“**RFEI**”) by New York City.

This transaction demonstrates NYGB’s commitment to invest in energy efficient affordable housing and support projects that pursue high levels of energy performance. High performance buildings will help reduce greenhouse gas (“**GHG**”) emissions in New York State (“**NYS**”) and the teams developing these projects plan to pursue Passive House certification, install energy efficiency measures, and utilize solar power in the completed projects. NYGB’s investment of up to \$2.5 million will demonstrate to the affordable housing market that developers can prioritize environmental performance in multifamily properties without limiting the chances of successful project development.

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 New York Public Service Commission (the “**Commission**”) on June 20, 2016.<sup>1</sup> This Transaction Profile contains specific information in connection with the August 2021 NYCEEC transaction as required by the Metrics Plan.

### Form of NYGB Investment

NYGB Product	Product Sub-Type	Committed Capital
Asset Loan & Investment	Predevelopment Loan	\$2.5 million

<sup>1</sup> Case 13-M-0412.

## Location(s) of Underlying Project(s)

New York City. The project is located in Brooklyn, NY.

## Types of Client & Counterparty Organizations that are Transaction Participants

	Name	Participant Type
Counterparty	Hudson GPH LLC, St Nicks Alliance	Project A Sponsors
Counterparty	Maspeth Manager LLC	Project A Borrower
Counterparty	Hudson GPH LLC, St Nicks Alliance, Project Renewal	Project B Sponsors
Counterparty	GPH Shelter Manager LLC	Project B Borrower
Counterparty	St Nicks Alliance, Hudson Companies and Individuals	Guarantors
Counterparty	Calvert Impact Capital Inc.	Co-Lender
Counterparty	NYCEEC	Admin Agent and Co-Lender

## Summary of Financing Market Objectives & Barriers Addressed

Beneficiary	Market Barrier	Financing Solution
<b>Impact-Oriented Capital Providers</b>	At times, impact-oriented lenders and investors capable of assessing the risks inherent to markets underserved by traditional capital providers lack the liquidity to scale or deploy specialized financing products.	This transaction supports a mission-oriented capital provider with the liquidity necessary to scale a replicable financing structure that other capital providers can use to (i) provide development capital to innovative projects; and (ii) develop a track record for impact-oriented institutional investment in such projects.
<b>Underserved Market Segments</b>	There is a limited supply of patient capital available to affordable housing developers. Developers rely on cost-effective financing to plan and design high performance buildings.	By providing liquidity to capital providers active in these market segments, NYGB will support increased access to affordable high energy performance housing and shelter for traditionally underserved communities, advancing the environmental justice initiatives outlined in the Climate Leadership and Community Protection Act.
<b>Low- and Moderate-Income New Yorkers</b>	There is a shortage of housing units and shelter beds for low- and moderate-income earning New Yorkers. The scarcity of capital and high demand for housing and shelter accommodations make it difficult for developers and policy makers to risk project success by prioritizing high-performance building development.	By lending capital at the predevelopment phase of a project to an experienced development team and lender, NYGB is providing a group of experts capable of delivering a high energy performance building the capital that they need to plan and design an innovative project that can achieve the State's ambitious energy and equity goals.

## Technologies Involved

Technology	Measures
Energy Efficiency	Passive House certification; high performance building envelope, lighting, HVAC system and hot water system

## Metrics & Evaluation Plan

### Planned Energy & Environmental Metrics

NYGB’s minimum investment criteria require that “transactions have the potential for energy savings and/or clean energy generation that will contribute to GHG emission reductions in support of New York’s energy policies.”<sup>2</sup> In addition, the Metrics Plan requires that the following energy and environmental measures, applicable to this transaction, be reported:<sup>3</sup>

- Estimated gross lifetime and annual fuel savings (MMBtu); and
- Estimated gross lifetime and annual GHG emission reductions (metric tons).

NYGB calculated expected energy usage by applying energy intensity estimates from [Urban Green Council](#) for a multifamily building in New York City to the square footage of the proposed development.

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

Energy/Environmental Impact	Lifetime Low Estimate	Lifetime High Estimate	Annual Low Estimate	Annual High Estimate
Estimated fuel savings (MMBtu)	558,000	812,115	12,400	18,047
Estimated GHG emission reductions (metric tons)	29,610	43,110	658	958

### 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 have been 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.<sup>4</sup> 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 (including expected dollar value) and location of projects financed by the investment; and
- Aggregate expected energy savings for projects financed by the investment.

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

- Increase in market volume of energy efficient properties;
- Increase in general understanding of energy efficient properties by the financial community;
- Increase in general understanding of real estate predevelopment financing by the financial community;
- Increased awareness and use of energy efficiency investment performance data by financing entities;

<sup>2</sup> 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.

<sup>3</sup> See Metrics Plan, Section 2.0, pages 2 - 6.

<sup>4</sup> See Metrics Plan, Section 3.3 at page 7.

- Demonstration of competitive risk-return profiles for energy efficient properties;
- Decreased operating costs of energy efficient properties; and
- Increased 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 sustainable infrastructure 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., financial community) to track information including but not limited to: project scale information and influence of NYGB's participation on financial markets. As noted, NYSERDA collected baseline data on key indicators in its first phase evaluation during 2018 - 2019. Follow-up studies will assess progress against baseline levels for other market segments as those evolve. The specific timing of these efforts may be revised based on experience or other factors as NYGB's investment portfolio further develops and evolves.

**Impact evaluation** will assess the projects funded under the investment that will have raised construction financing and will have been completed, commissioned, and placed in service.

As with all NYGB investments, projects developed by the Sponsors that receive an incentive or funding from other entities (e.g., utility, other NYSERDA programs) 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.