



NY Green Bank
A Division of NYSERDA

NY Green Bank

Metrics, Reporting & Evaluation
Quarterly Report No. 36
(Through June 30, 2023)

Case 13-M-0412

8/31/2023

TABLE OF CONTENTS, FIGURES, AND TABLES

1	HIGHLIGHTS	1
2	BUSINESS UPDATE	2
2.1	INVESTMENT PORTFOLIO ACTIVITY	2
2.2	PIPELINE ACTIVITY	2
2.3	ADDITIONAL ACHIEVEMENTS AND ACTIVITIES	4
3	REGULATORY FRAMEWORK	5
3.1	PURPOSE	5
3.2	NYGB MISSION AND OPERATING PRINCIPLES	5
3.3	RELATIONSHIP TO NYS CLEAN ENERGY POLICY	5
4	TABLES	6
4.1	QUARTERLY METRICS	6
4.2	KEY FIGURES AND TABLES (FIGURES 7 – 11 AND TABLE 3)	8
4.3	DIRECT AND INDIRECT METRICS BENEFITS	9
5	PROGRESS AGAINST PLAN DELIVERABLES	10
<i>Figure 1: Performance at a Glance</i>		1
<i>Figure 2: Cumulative Pipeline Activity</i>		3
<i>Figure 3: Distribution of Active Pipeline by Investment Stage</i>		3
<i>Figure 4: End-Use Segment Distribution of Active Pipeline</i>		3
<i>Figure 5: Geographic Distribution of Active Pipeline</i>		3
<i>Figure 6: Technology Distribution of Active Pipeline</i>		3
<i>Figure 7: Cumulative Investments, Current Portfolio & Current Deployed Funds (\$MM)</i>		8
<i>Figure 8: NYGB Pipeline of Proposals & Approvals (\$MM)</i>		8
<i>Figure 9: Cumulative Revenues vs. Expenses (\$MM)</i>		8
<i>Figure 10: Quarterly Revenues vs. Expenses (\$MM)</i>		8
<i>Figure 11: Portfolio Concentrations over Time (Committed Funds)</i>		8
<i>Table 1: New Investments</i>		2
<i>Table 2: Quarterly Metrics</i>		6
<i>Table 3: Number and Type of NYGB Investments Since Inception</i>		8
<i>Table 4: Estimated Energy & Environmental Benefits</i>		10
<i>Table 5: Plan Deliverables</i>		11

Schedule

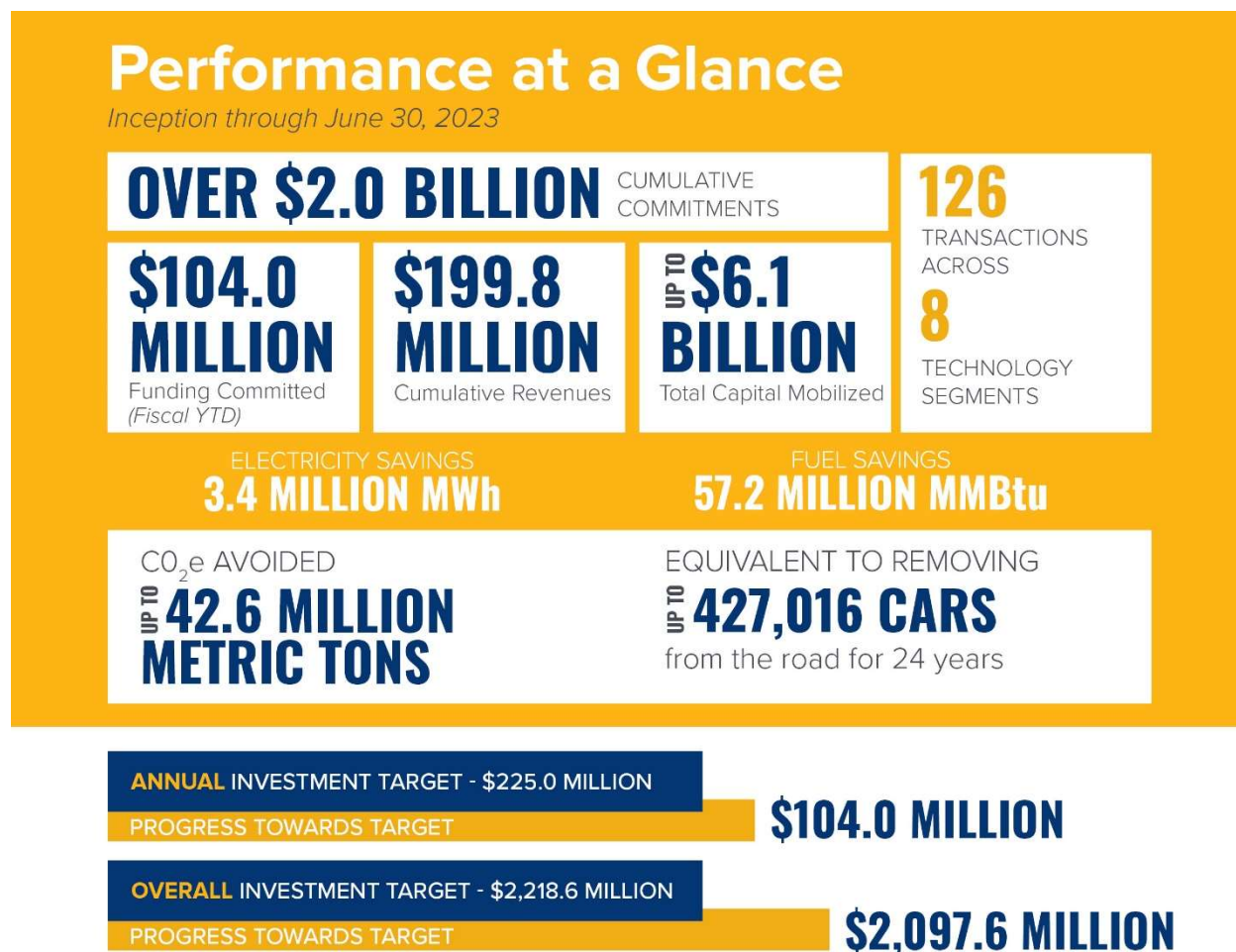
Transaction Profiles:

- Sunrun Safe Harbor Upsize (Residential; Solar)
- American Organic Energy (Utility / Grid-Interconnected; Bioenergy)
- RUDARPA Upsize (Transportation; Bioenergy)
- NineDot IX (Community Distributed Generation; Energy Storage)

1 Highlights¹

During the quarter ended June 30, 2023, NY Green Bank (“**NYGB**”) committed \$104.0 million across four investments.² Since its inception, NYGB has committed more than \$2 billion to clean energy and sustainable infrastructure projects in New York State (“**NYS**” or the “**State**”). During the quarter, NYGB generated \$21.4 million in revenue, bringing its cumulative total since inception to \$199.8 million. NYGB’s investments continue to mobilize capital in NYS; at quarter end its portfolio was expected to support up to \$6.1 billion in project costs for clean energy and sustainable infrastructure projects.

Figure 1: Performance at a Glance³



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, 2023 to March 31, 2024 is referred to as the Plan Year or Fiscal Year (“**FY**”) throughout this Report.

³ Energy and emission values in *Figure 1* are presented as the sum of the lifetime benefits expected to be realized during the operating lives of all the projects supported by NYGB investments.

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 Activity⁴

NYGB's Investment Portfolio was \$946.3 million at quarter end. 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 June 30, 2023. 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.

Table 1: New Investments

New Transactions	Description	NYGB Commitment	Closing Date
Sunrun Safe Harbor Upsize	NYGB increased its existing commitment to Sunrun by \$19MM to enable Sunrun to develop further into marginal markets and territories in New York State.	\$19.0 million	5/17/2023
American Organic Energy	NYGB committed \$55MM in a syndicated construction-to-term facility to finance the construction of a commercial food waste-to-renewable natural gas project for the New York City metro area.	\$55.0 million	5/25/2023
RUDARPA Upsize	NYGB increased its existing construction-to-term facility by \$5MM to enable RUDARPA to continue to scale its growing portfolio of landfill gas to renewable natural gas projects in New York State.	\$5.0 million	6/23/2023
NineDot IX	NYGB committed \$25MM to fund interconnection expenses and other associated fees in the development of a portfolio of distributed energy storage projects, representing NYGB's first purely energy storage transaction.	\$25.0 million	6/30/2023
Total		\$104.0 million	

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 June 30, 2023.⁵ At quarter end NYGB was managing an Active Pipeline of \$664.3 million.

⁴ Investment Portfolio, means, at any time, collectively, the investment transactions that NYGB has executed with its counterparties that have not yet matured or otherwise expired in accordance with their respective terms.

⁵ "IRC" takes the meaning Investment and Risk Committee.

Figure 2: Cumulative Pipeline Activity



Figure 3: Distribution of Active Pipeline by Investment Stage



Figure 4: End-Use Segment Distribution of Active Pipeline (\$664.3 million)

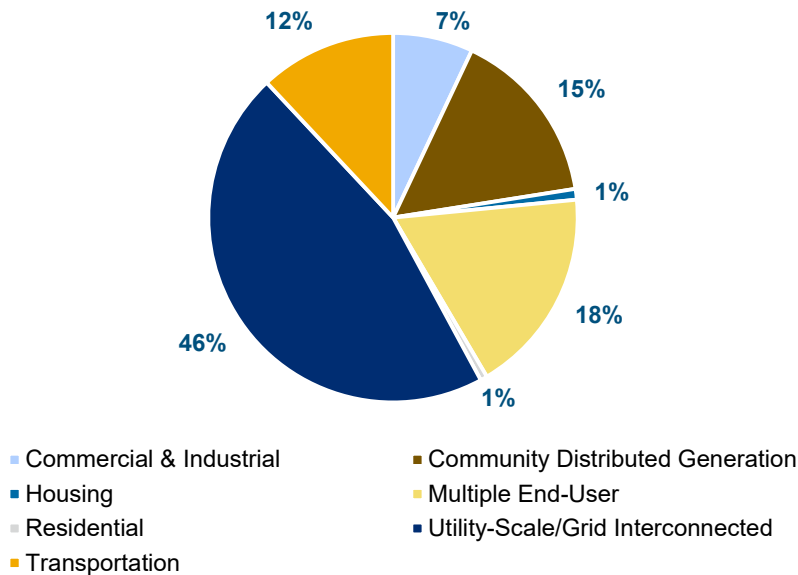


Figure 5: Geographic Distribution of Active Pipeline (\$664.3 million)

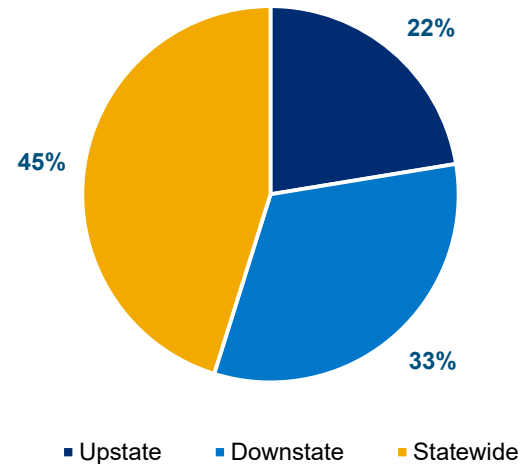
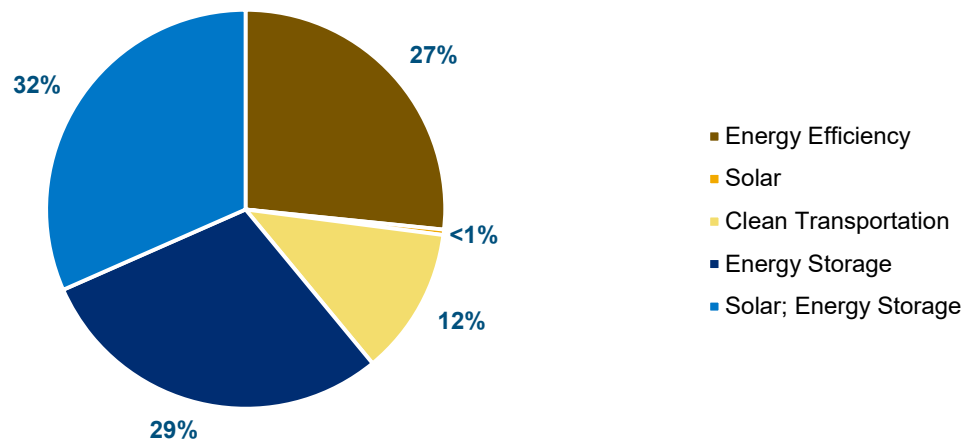


Figure 6: Technology Distribution of Active Pipeline (\$664.3 million)



2.3 Additional Achievements and Activities

In the quarter ended June 30, 2023, 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 and Communications:

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

April	<ul style="list-style-type: none"> i. Presented at the NY Energy Summit for panels on “Financing NY’s Energy Transition” and “Promoting & Financing Energy Equity”. ii. Participated in a panel discussing tools to make EVs more affordable and using fintech to leverage public and private capital to catalyze decarbonization.
May	<ul style="list-style-type: none"> iii. Spoke at ACT Expo which brought together industry experts, including 12,000+ commercial transportation stakeholders and 2,700+ leading fleet operators. iv. Attended the Green Hydrogen Business Summit in New York City. v. Hosted a webinar to discuss the launch of the new Community Decarbonization Fund. vi. Presented at the NY Battery and Energy Storage (BEST) “Capture the Energy 2023” conference.
June	<ul style="list-style-type: none"> vii. Presented on a panel at the 3rd Annual Green Hydrogen US 2023 conference. viii. Participated on a panel at the PACENation Summit 2023 to discuss challenges financial institutions face in entering the C-PACE marketplace. ix. Met with NYSERDA’s Regional Clean Energy Hub leadership team to discuss opportunities for collaboration on the Community Decarbonization Fund. x. Presented at Reuter’s Global Energy Transition 2023 conference. xi. Spoke about centering equitable investing strategies at the ACORE Finance Forum. xii. Participated on a panel at the Emerging Leaders and Markets Conference 2023. xiii. Presented at the NEEP Summit 2023 about green banks and other financing programs for building efficiency and decarbonization. xiv. Presented at the 2023 NYC Solar + Storage Summit. xv. Presented at the Northeast Clean Energy Council (NECEC) Climate Finance Summit on a panel titled, “Aligning Funding Opportunities with Emissions Goals”. xvi. Presented at GreenBiz’s GreenFin 23 conference on a panel titled, “Green Banks: Catalyzing Investments in Climate Solutions”.

(b) Public Reporting and Metrics:

All NYGB Reporting and metrics are available at www.greenbank.ny.gov/Resources/Public-Filings.

- i. Q1 Quarterly Report: On May 31, 2023, NYGB filed its Quarterly Report for the period ended March 31, 2023.
- ii. Q2 Quarterly Webinar: NYGB will host its regular Quarterly Review Webinar for this Report in September 2023, including discussion of activities during the quarter ended June 30, 2023.

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 public, to assess NYGB's achievement of its overall mission.

3.2 NYGB Mission and Operating Principles

NYGB's mission is to work in collaboration with the private sector to transform financing markets in ways that accelerate clean energy investments to combat climate change and deliver benefits equitably to all.

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 and scalable sustainable infrastructure investments;
- (c) Pricing financial products consistently with commercial approaches to credit quality and risk;
- (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 sustainable infrastructure investments, thereby maximizing the impact of its capital through 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.⁶ 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% energy generation from renewable sources by 2030 and 100% carbon-free electricity by 2040.⁷ The CEF objectives also support the Climate Leadership and Community Protection Act of 2019 (the “**Climate Act**”),⁸ 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 2030.⁹ Additionally, the Climate Act required a Climate Action Council be formed and policy roadmap developed

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

⁷ Announced in the 2019 State of the State.

See www.governor.ny.gov/sites/governor.ny.gov/files/atoms/files/2019StateoftheStateBook.pdf.

⁸ Senate Bill S6599 was signed into law on July 18, 2019. See legislation.nysenate.gov/pdf/bills/2019/a8429.

⁹ 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. In 2022, Governor Hochul proposed to double the 2030 energy storage target, which would increase the deployment total from 3,000 MW to 6,000 MW. Additionally, Governor Hochul increased the distributed solar target by 4,000 MW, moving the target from 6,000 MW to 10,000 MW, while extending the achievement year from 2025 to 2030.

to ensure that at least 35%, with a target of 40%, 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 Metrics¹⁰

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 April 1, 2023 through June 30, 2023 and the previous quarter ended March 31, 2023.

Table 2: Quarterly Metrics

Quarterly Metric	Quarter Ended March 31, 2023	Quarter Ended June 30, 2023
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 (\$) ¹¹	\$178.4 million	\$199.8 million
Cumulative Operating Expenses (\$) ¹²	\$89.5 million	\$93.4 million
Direct Operating Expenses (\$)	\$56.3 million	\$58.2 million
Allocated Expenses (\$)	\$33.2 million	\$35.1 million
Investment Portfolio		
Undrawn Committed Funds (\$)	\$176.2 million	\$224.6 million
Deployed Funds (\$) ¹³	\$681.4 million	\$721.8 million
Current Portfolio (\$) ¹⁴	\$857.5 million	\$946.3 million

¹⁰ 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, NYSEERDA 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 NYSEERDA 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.

¹¹ 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. Cumulative Revenues for Quarter Ended March 31, 2023 has been revised to reflect adjustments made since the filing of the previous Quarterly Report. This figure was adjusted to include factors such as benefits and realized losses from BOA receivables, as well as provision for losses.

¹² Cumulative Operating Expenses currently include \$1,089,613 in evaluation expenses.

¹³ Deployed Funds as presented in *Table 2* are net of all capital repaid to the reporting date.

¹⁴ Current Portfolio, means, at any time, the sum of Committed Funds and Deployed Funds and represents the dollar value of the Investment Portfolio. 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

Quarterly Metric	Quarter Ended March 31, 2023	Quarter Ended June 30, 2023
Investment Pipeline		
Active Pipeline (In the Quarter) (\$)	\$405.3 million	\$664.3 million
Investment Process		
Proposals and Approvals		
Proposals Received – Value (Cumulative) (\$)	\$6.4 billion	\$6.9 billion
Approvals - Scoring Committee (Cumulative) (\$)	\$5.7 billion	\$6.2 billion
Approvals - Greenlight Committee (Cumulative) (\$)	\$2.8 billion	\$3.0 billion
Approvals - IRC (Cumulative) (\$)	\$2.1 billion	\$2.2 billion
Investment Characteristics		
Overall Investments to Date (\$)	\$1.9 billion	\$2.1 billion
Total Project Costs (Cumulative) (\$)¹⁵	In the range of \$4.4 billion to \$5.5 billion	In the range of \$4.8 billion to \$6.1 billion
Mobilization Ratio	Tracking at least 4.4:1 on average across portfolio	Tracking at least 4.8:1 on average across portfolio
Portfolio Concentrations (%)¹⁶	See Figure 11	See Figure 11
Number & Type of NYGB Investments	See Table 3	See Table 3
Number & General Type of NYGB Counterparties¹⁷	83 – Financial Services, Industry or Other	84 – Financial Services, Industry, or Other
Public Commitments		
Percentage of Commitments Benefitting Disadvantaged Communities (%)¹⁸	22%	20%
\$200 million toward energy storage-related investments (%)	27%	40%
\$150 million for clean energy improvements in affordable housing properties (%)	39%	39%
\$100 million in financing to help clean transportation businesses locate or expand in New York (%)	10%	10%
Up to \$100 million in support of port infrastructure projects (%)	0%	0%

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.

¹⁵ Further to the definition of “**Total Project Costs (Cumulative)**” in the Metrics Plan, 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.

¹⁶ Based on executed transactions and reflecting dollar values invested by NYGB in renewable energy and energy efficiency transactions, each as a proportion of the Current Portfolio, the sum of Committed Funds and Deployed Funds and represents the dollar value of the Investment Portfolio.

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

¹⁸ NYGB’s goal is to commit at least 35% of capital to projects benefitting DACs from January 1, 2020 to the end of the CEF period.

4.2 Key Figures and Tables - Metrics, Reporting & Evaluation Quarterly Report No. 36 (Through June 30, 2023)

Figure 7: Cumulative Investments, Current Portfolio & Current Deployed Funds (\$MM)

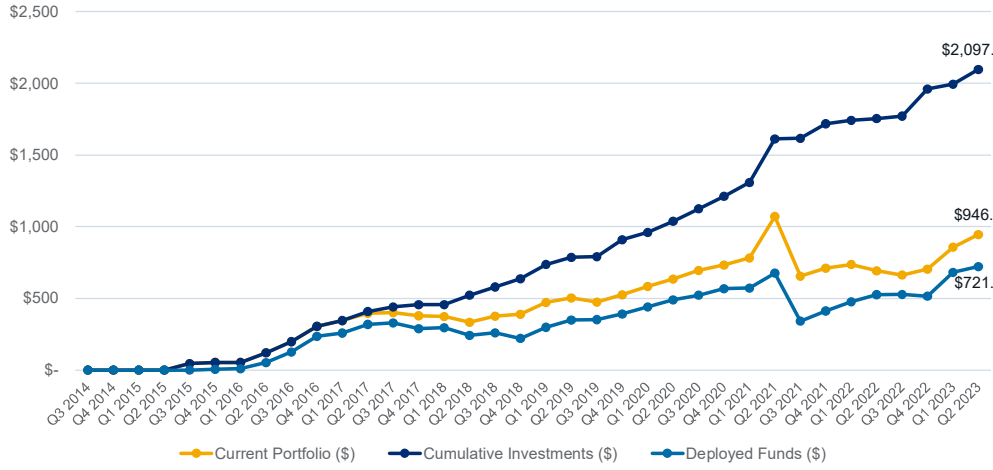


Figure 9: Cumulative Revenues vs. Expenses (\$MM)

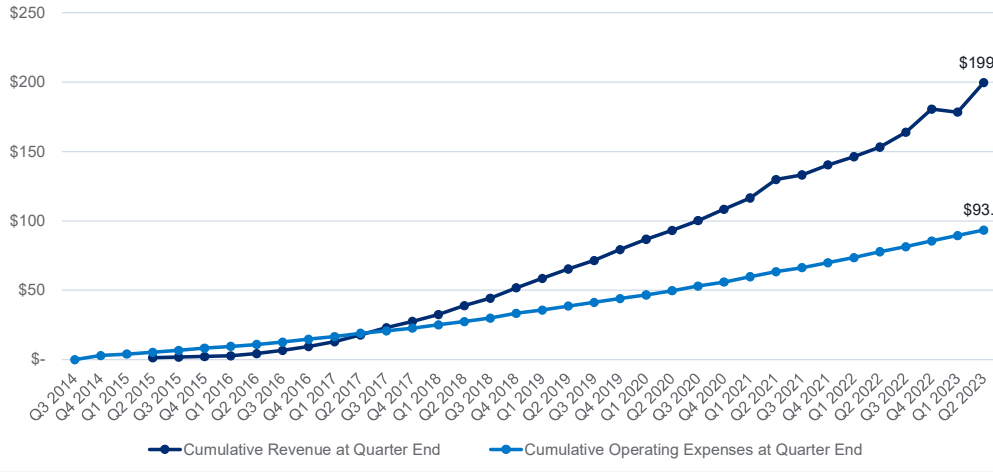


Figure 11: Portfolio Concentrations over Time (Committed Funds)

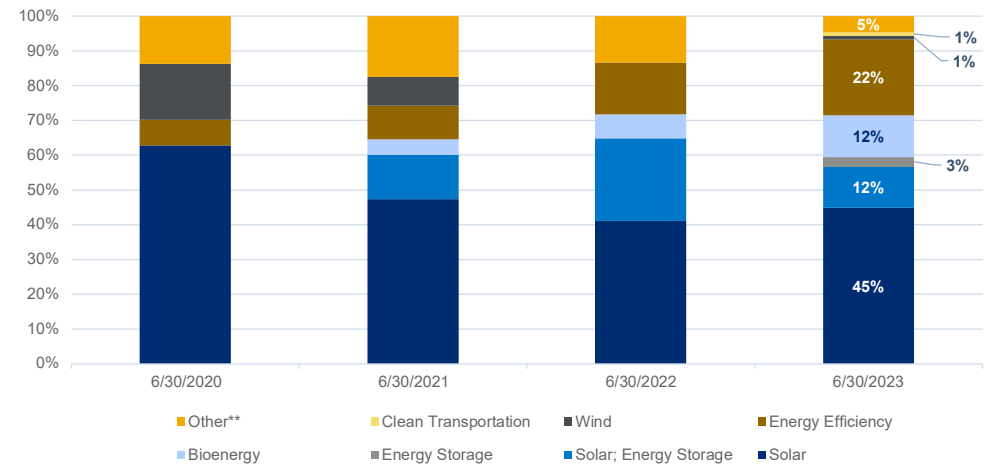


Figure 8: NYGB Pipeline of Proposals & Approvals (\$MM)

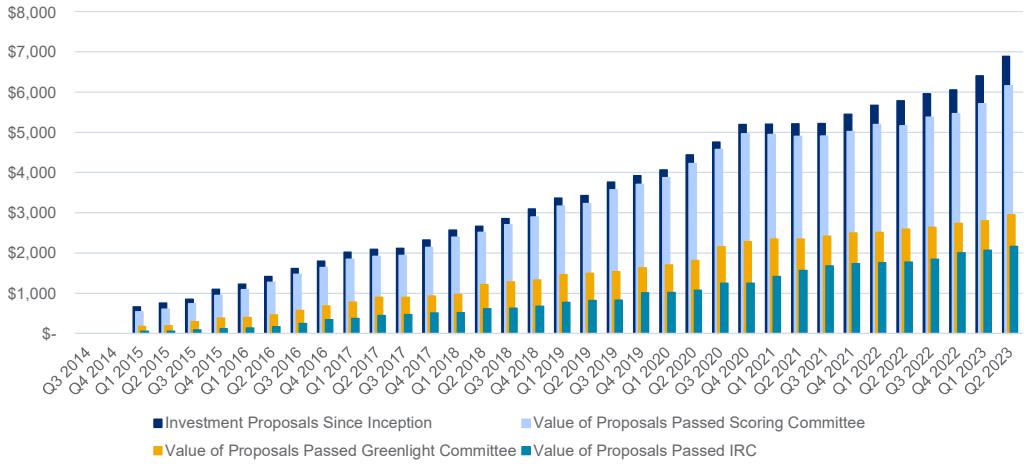


Figure 10: Quarterly Revenues vs. Expenses (\$MM)

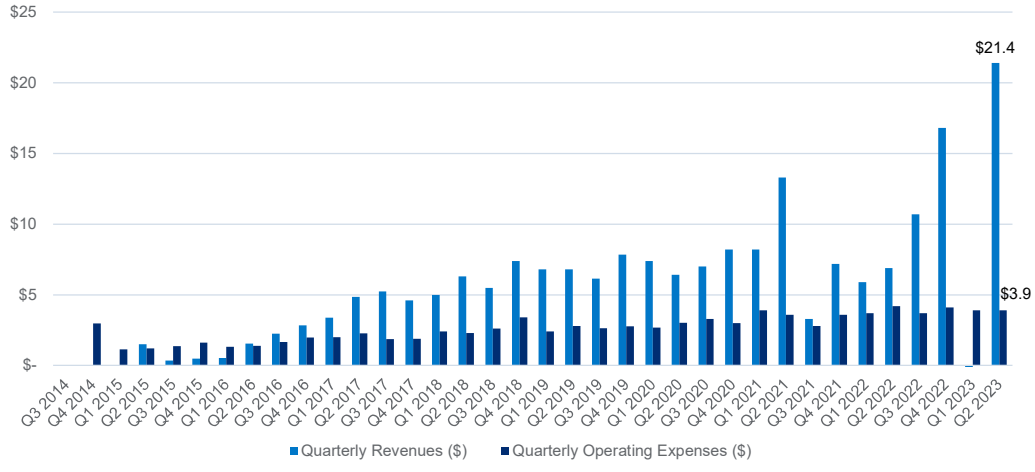


Table 3: Number and Type of NYGB Investments Since Inception

Technology	Count	Percentage
Bioenergy	6	5%
Clean Transportation	3	3%
Energy Efficiency	29	13%
Solar	64	51%
Solar; Energy Storage	4	8%
Energy Storage	1	1%
Wind	5	5%
Other**	14	13%

**Other includes Fuel Cell and Sustainable Agriculture.

4.3 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.¹⁹

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, MWhs, 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.

¹⁹ 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".

Table 4: Estimated Energy & Environmental Benefits

Quarterly Metric	Quarter Ended March 31, 2023	Quarter Ended June 30, 2023
Direct Impact Benefits²⁰		
Lifetime		
Total Energy Savings (MMBtu equivalent)	Up to 37,196,000 MMBtu	Up to 48,570,000 MMBtu
Electricity Savings (MWh)	3,089,000 - 3,363,000 MWh	3,089,000 - 3,363,000 MWh
Natural Gas Fuel Savings (MMBtu)	31.0 - 45.9 million MMBtu	41.4 - 57.2 million MMBtu
Other Fuel Savings (MMBtu)	0 MMBtu	0 MMBtu
Distributed Solar Capacity (Renewable MW)	1,117 - 1,460 MW	1,154 - 1,480 MW
Annual		
Total Energy Savings (MMBtu equivalent)	Up to 1,791,000 MMBtu	Up to 2,359,000 MMBtu
Electricity Savings (MWh)	291,000 - 315,000 MWh	291,000 - 315,000 MWh
Natural Gas Fuel Savings (MMBtu)	1,880,000 - 2,726,000 MMBtu	2,400,000 - 3,295,000 MMBtu
Other Fuel Savings (MMBtu)	0 MMBtu	0 MMBtu
Indirect Impact Benefits²¹		
Lifetime		
Total Energy Savings (MMBtu equivalent)	0 MMBtu	0 MMBtu
Electricity Savings (MWh)	0 MWh	0 MWh
Natural Gas Fuel Savings (MMBtu)	0 MMBtu	0 MMBtu
Other Fuel Savings (MMBtu)	0 MMBtu	0 MMBtu
Distributed Solar Capacity (Renewable MW)	9 - 26 MW	9 - 26 MW
Annual		
Total Energy Savings (MMBtu equivalent)	0 MMBtu	0 MMBtu
Electricity Savings (MWh)	0 MWh	0 MWh
Natural Gas Fuel Savings (MMBtu)	0 MMBtu	0 MMBtu
Other Fuel Savings (MMBtu)	0 MMBtu	0 MMBtu
Lifetime Emission Reductions		
Direct (metric tons CO_{2e})	29.5 - 37.0 million metric tons	30.8 - 38.1 million metric tons
Indirect (metric tons CO_{2e})	2.2 - 4.5 million metric tons	2.2 - 4.5 million metric tons

5 Progress Against Plan Deliverables

In its Annual Plan 2023 – 2024, filed on June 28, 2023, NYGB identified deliverables (the “**Plan Deliverables**”) that collectively mark its progress toward key initiatives in the period April 1, 2023 through March 31, 2024.

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 5 summarizes NYGB’s performance against the Plan Deliverables as of June 30, 2023.

²⁰ For Committed and Deployed Funds.

²¹ 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.

Table 5: Plan Deliverables

OBJECTIVE CATEGORY	DELIVERABLE	PROGRESS
IDENTIFY AND CLOSE FUNDING GAPS IN ALIGNMENT WITH STATE POLICIES AND PUBLIC COMMITMENTS		
Committed Funds	Deliver at least \$225 million of incremental commitments	☑ In Process: As of June 30, NYGB has committed \$104MM toward the annual goal of \$225MM.
Committed Funds - DAC Specific	Execute three loans under the Community Decarbonization Fund	☑ In Process: As of June 30, NYGB has not made any commitments toward this goal, but has received two proposals during the quarter, representing a total CDF pipeline of \$35MM.
Committed Funds - Sector Specific	Execute \$30MM of affordable housing transactions	☑ In Process: As of June 30, NYGB has not made any commitments toward this \$30MM goal, but is working on \$41MM of affordable housing transactions in the active pipeline.
	Execute \$20MM of building decarbonization transactions that benefit disadvantaged communities	☑ In Process: As of June 30, NYGB has not made any commitments toward this \$20MM goal, but is working on \$88M of building decarbonization transactions that benefit disadvantaged communities in the active pipeline.
	Execute \$30MM of clean transportation transactions	☑ In Process: As of June 30, NYGB has not made any commitments toward this \$30MM goal, but is working on \$67MM of clean transportation transactions in the active pipeline.
	Execute \$50MM of energy storage transactions	☑ In Process: As of June 30, NYGB has made \$25MM of commitments toward this \$50MM goal, and is working on \$272MM of energy storage transactions in the active pipeline.
MOBILIZE CAPITAL: STRENGTHEN NYGB'S CAPITAL POSITION		
Federal Funding	<p>Apply for federal dollars under relevant programs</p> <p><u>Interim Deliverable:</u> Apply for the NYS allocation under the DOE's Energy Efficiency Revolving Loan Fund</p>	<p>☑ In Process: During the quarter, NYGB continued to monitor the US Environmental Protection Agency's ("EPA") \$27B Greenhouse Gas Reduction Fund ("GGRF") and the three funding pathways under this program. NYGB reviewed the Notice of Funding Opportunity ("NOFO") for the \$7B Solar for All program, which was released on June 28, 2023 and had ongoing discussions with lead applicants to the \$14B National Clean Investment Fund and \$6B Clean Communities Investment Accelerator competitions.</p> <p><u>Interim Deliverable:</u> ☑ Achieved for the Plan Year: During the quarter, NYGB and NYSERDA applied for the \$4MM NYS allocation under the Department of Energy's ("DOE") Energy Efficiency Revolving Loan Fund ("EE RLF").</p>
CONTINUOUSLY IMPROVE AND ENHANCE NYGB OPERATIONS AND PORTFOLIO MANAGEMENT		
Process Enhancement	Add features to existing portfolio management tools	☑ In Process: During the quarter, NYGB worked with existing portfolio management tool providers to advance efforts to optimize the product to help NYGB be more efficient and minimize administrative burden.
	Launch a new solicitation for a CRM platform	☑ Not Started: NYGB will kick off this process later in the year, closer to when the current contract expires in March 2024.
Professional Development	Enhance training and industry relationship building opportunities for team members	☑ In Process: During the quarter, NYGB offered a new training course to team members on financial analysis, and rolled out new orientation structure and training with summer interns.
Risk Management	Retain a third-party to complete a resiliency assessment of assets financed by NYGB	<p>☑ In Process: NYGB is working to develop the scope of work for a third-party, with input from NYSERDA and other experts.</p> <p><u>Interim Deliverable:</u> ☑ In Process: During the quarter, NYGB met with the NYSERDA Contracts team to understand the RFP process for a scope of work of this type.</p>
	<u>Interim Deliverable:</u> Complete scope of work for resiliency assessment	

OBJECTIVE CATEGORY	DELIVERABLE	PROGRESS
Stakeholder Engagement	Launch Website 2.0 to improve infrastructure and align with NYSERDA's updated website	☑ In Process: In May 2023, NYGB launched an improved version of Website 1.0, which enhanced content (e.g., improved NY Green Bank Team and Portfolio pages), simplified and reduced the number of pages, and published new pages that highlight NYGB's 10-year anniversary, the launch of the Community Decarbonization Fund, and NYGB's commitments to climate equity. This effort was to patch up the website and make sure it reflected the most current information. Web 2.0 efforts to commence later in the summer once Web 1.0 is updated with additional 10-year anniversary campaign information (e.g., sector highlights).
	Track and measure metrics to assess effectiveness of NYGB communications and marketing activities	☑ In Process: In June 2023, NYGB turned on new features on its LinkedIn and website to gather more data about how users interact with posts and content. NYGB worked with NYSERDA and a third-party consultant to design the reporting on these metrics. NYGB will track and measure throughout the 2023 - 24 Plan Year to assess effectiveness of communication and marketing activities. NYSERDA is expected to share first report after 1-2 months of paid search launching.
	Publish sector highlights as part of the 10-year anniversary campaign to demonstrate NYGB's impact since inception	☑ In Process: During the quarter, NYGB developed content for four sector highlights energy storage, clean transportation, building decarbonization, and community distributed generation and determined the cadence for releasing them with the NYSERDA Marketing and Communications team. NYGB released the first sector highlight on Clean Transportation in July 2023, and the remainder of the sectors will continue to be released throughout the year.
	Engage with stakeholders in every region of NYS to give information about NYGB's available programs and seek feedback <u>Interim Deliverable:</u> Complete meetings in half of the regions of NYS	☑ In Process: NYGB has identified four possible NYGB hosted events for fall 2023. NYGB will also be working with the Regional Economic Development Councils and Regional Clean Energy Hubs to attend public meetings and possibly co-host events. <u>Interim Deliverable:</u> ☑ In Process: NYGB has identified events in five regions that we will participate in by the end of the calendar year.
Program Coordination	Increase integration with NYSERDA through program design, implementation, and evaluation	☑ In Process: NYGB has been in ongoing discussions with NYSERDA's evaluation team to ensure alignment on calculating progress towards its DAC goal.

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

Revised August 2023

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

SUNRUN INC.

On May 17, 2023, NY Green Bank (“NYGB”) closed a \$19.0 million upside to a revolving loan to Sunrun Inc. (“Sunrun”), bringing NYGB’s cumulative commitment to Sunrun to \$159.0 million. NYGB has entered into five transactions with Sunrun to accelerate the deployment of more than 14,500 solar projects at homes across New York State (“NYS”). Sunrun is a national solar provider that markets and develops residential solar energy systems. The five transactions complement each other – three provide financing to fund the purchase of materials and installation of the solar projects and two provide post-construction financing. One of the post-construction financings was arranged by Investec Bank PLC (“Investec”), an international specialty bank and asset manager, and the second post-construction financing was arranged by SunTrust Robinson Humphrey Inc. (“SunTrust”) and ING Capital LLC (“ING”). The equipment financing facility was jointly arranged by KeyBank N.A. (“Key”) and ING, respectively.

Transaction Description

Sunrun first approached NY Green Bank in 2015 seeking support to grow their presence in the New York residential solar market. Over the years, NY Green Bank’s capital has supported many aspects of Sunrun’s operations, including construction, warehousing of equipment, and securitization of performing projects.

In May 2023, NY Green Bank increased its commitment to Sunrun by \$19.0 million, bringing total committed funds to the Sponsor to \$159.0 million. NY Green Bank’s participation in these facilities alongside other lenders supports the continued growth of Sunrun’s distributed energy projects for residential customers across New York State.

Construction Loan Facility

On June 16, 2016, NYGB committed \$25.0 million which, along with financing from other lenders, allows Sunrun to increase its existing revolver from \$205.0 million to \$250.0 million. The revolver (“**Construction Loan Facility**” or “**CLF**”) will be used by Sunrun to fund customer acquisition, purchase of materials, and construction and installation of the systems, and will ultimately be refinanced through Credit Facilities (such as described below) and tax equity commitments arranged by Sunrun. On February 23, 2018, NYGB and the lender group consented to extend the maturity of the CLF by two years in support of Sunrun’s consistent and growing deployment rate in NYS and nationally. Sunrun then refinanced the \$250.0 million CLF with a new \$600.0 million facility. On March 8, 2022, NYGB committed an additional \$15.0 million to this new facility, for a total commitment of \$40.0 million. NYGB’s continued participation in this consortium of capital providers broadens the availability of construction financing for distributed energy projects for homeowners across NYS.

Investec Credit Facilities

On May 13, 2016, NYGB closed a \$25.0 million commitment to participate in a transaction consisting of two credit facilities – a loan aggregation revolving facility and a term loan (together the “NYGB Loan Products”), which are expected to accelerate the deployment of over 5,000 solar projects at homes across NYS. The transaction was part of a broader \$340.0 million financing (the “Post-Construction Aggregation Facilities”) arranged by Investec that provides Sunrun with a larger financing to expand its business in NYS and elsewhere. The \$340.0 million Post-Construction Aggregation Facilities (which include the NYGB Loan Products) represent one of the largest aggregation financings for a residential solar developer at the time of closing. On March 27, 2018, NYGB and the lender group consented to extend the deployment period and the maturity of the Post-Construction Aggregation Facilities by over two years based on Sunrun’s

demonstrated ability to continually deploy solar PV projects in NYS and nationally. On April 20, 2018, NYGB and the lender group consented to expand the Post-Construction Aggregation Facilities up to \$595.0 million to further support Sunrun's continued growth. NYGB's share of this increase is \$10.0 million, bringing NYGB's overall commitment to the Post-Construction Aggregation Facilities to \$35.0 million.

SunTrust/ING Credit Facilities

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

Equipment Financing / Safe Harbor Facility

On February 5, 2020, NYGB closed a \$10.0 million commitment to participate in a transaction facilitating the purchase of and directly secured by solar materials (panels and inverters). This transaction was part an \$84.0 million financing arrangement by Key and ING (the "**Safe Harbor Facility**" or "**SHF**"). This facility allows Sunrun to take advantage of the IRS's safe harbor program with respect to the 2019 commercial investment tax credit ("**ITC**"), and ultimately, supports Sunrun's continued growth in NYS and nationally and its continued ability to deliver attractive economics to residential homeowners. On December 19, 2022, NYGB upsized this commitment by \$21.0 million on December 19, 2022 and by \$19.0 million on May 17, 2023.

Overall Context

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

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

This Transaction Profile is provided pursuant to the updated NY Green Bank – Metrics, Reporting & Evaluation Plan, Version 3.1 (the "**Metrics Plan**") developed in collaboration with the NYS Department of Public Service and filed with the NYS Public Service Commission (the "**Commission**") on May 2, 2022.¹ This Transaction Profile contains specific information in connection with the Sunrun Inc. transaction entered into in May 2023, as required by the Metrics Plan.²

¹ Case 13-M-0412.

² See Section 4.0 at page 8 - 9 and Schedule 3.

Form of NYGB Investment

NYGB Product	Product Sub-Type	Committed Capital
Warehousing/Aggregation	Senior Secured Revolver and Subordinated Term Loan	\$35.0 million
Warehousing/Aggregation	Senior Secured Aggregation-to-Term Loan	\$15.0 million
Asset Loan & Investment	Construction Financing Revolver	\$25.0 million
Warehousing/Aggregation	Equipment-Backed Revolver	\$10.0 million
Asset Loan & Investment	Construction Financing Revolver	\$15.0 million
Warehousing/Aggregation	Equipment-Backed Revolver	\$21.0 million
Warehousing/Aggregation	Equipment-Backed Revolver	\$19.0 million

Location(s) of Underlying Project(s)

Statewide. Projects will be across New York State.

Types of Organizations that are Transaction Participants

Name	Participant Type
Counterparty Sunrun Inc.	Project Sponsor
Sunrun Safe Harbor Opco LLC	Project Borrower

Summary of Financing Market Objectives & Barriers Addressed

Beneficiary	Market Barrier	Financing Solution
Solar project developers	Solar project developers face difficulties securing sufficient financing to meet customer demand, hampering their ability to achieve economies of scale.	NY Green Bank's participation enables Sunrun to better meet residential demand in New York State. This type of financing can be replicated with other developers seeking to secure similar capital access.
Homeowners	Some homeowners do not perceive "going solar" as practical or affordable.	NY Green Bank's participation enables homeowners to contract for solar and realize immediate reductions on their energy bill. Greater scale and broader financing markets will lead to more compelling offerings for homeowners and ultimately accelerate the widespread adoption of solar energy as a viable and accessible option for residential properties.

Technologies Involved

Technology	Measures
Solar	Solar photovoltaic (" PV ") systems

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 greenhouse gas ("GHG") emission 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:⁴

- Estimated distributed solar capacity (MW)
- Estimated gross lifetime and annual GHG emission reductions (metric tons).

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

Energy/Environmental	Lifetime	Lifetime	Annualized	Annualized
Impact	Low Estimate	High Estimate	Low Estimate	High Estimate
Estimated distributed solar capacity (MW) ⁵	176	195	N/A	
Estimated gross GHG emission reductions (metric tons)	2,062,011	2,289,483	82,481	91,579

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.⁶ NYSEDA collected baseline data for the NYGB portfolio in 2019 and will update the data to include indicators specific to this transaction. NYSEDA 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:

- Number and location of projects (by zip code);
- Size (generation capacity and dollar value) of projects;
- Market volume of projects increases; and
- Favorable financial and technology performance data.

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

- Increased awareness of clean energy benefits amongst financing entities as a result of favorable technology performance data;
- Investment risk/default rates become increasingly attractive to investors, as a result of positive financial performance data;
- Increased number of financial participants providing similar capital structures;
- Replication of finance model by other developers;
- Decreased project technology costs;
- Increased number of clean energy financings;

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 at pages 2 - 6.

⁵ Built 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 - 8.

- Emergence of secondary markets for clean energy asset classes; and
- Reduced time to execute clean energy financing.

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., 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 – 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 investment raised construction financing and were completed, commissioned, and placed in service.

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

TRANSACTION PROFILE

August 2023

\$55 million construction-to-term loan to finance an organic waste processing facility on Long Island, NY

AMERICAN ORGANIC ENERGY

On May 25, 2023, NY Green Bank (“NYGB”) closed a \$55.0 million construction-to-term loan to American Organic Energy (“AOE”). NYGB’s participation in the construction-to-term loan will support AOE in the construction of an organic waste processing facility for the production of clean energy and organic fertilizer on Long Island, NY.

Transaction Description

The project will be the largest anaerobic digester to process food waste sourced from the New York City metropolitan region, Pennsylvania, as well as other states in the Northeast. This loan will finance the construction and operation of an anaerobic digester that is expected to process 180,000 tons of food waste and 30,000 tons of fats, oils, and grease that would have otherwise been transported to landfills more than 150 miles away.

The project is expected to result in significant benefits to the local area by producing renewable natural gas and organic fertilizer for commercial use, and reducing greenhouse gases produced by the current practice of transporting waste to distant landfills — therefore indirectly reducing landfill emissions.

In addition to anaerobic digesters and the necessary processing equipment to produce renewable natural gas from food waste, this project is comprised of: (1) an associated treatment plant to process ammonia for the creation of a liquid fertilizer; (2) a process to convert solids produced into an organic fertilizer product; and (3) a combined heat and power unit to provide heat and power to the project.

This Transaction Profile is provided pursuant to the updated NY Green Bank – Metrics, Reporting & Evaluation Plan, Version 3.1 (the “**Metrics Plan**”) developed in collaboration with the NYS Department of Public Service and filed with the NYS Public Service Commission (the “**Commission**”) on May 2, 2022.¹ This Transaction Profile contains specific information in connection with the AOE Holdings, LCC transaction entered into in May 2023, as required by the Metrics Plan.²

Form of NYGB Investment

NYGB Product	Product Sub-Type	Committed Capital
Asset Loan & Investment	Construction-to-Term Loan	\$55.0 million

Location(s) of Underlying Project(s)

Downstate. Project will be located in Long Island, NY.

¹ Case 13-M-0412.

² See Section 4.0 at page 8 - 9 and Schedule 3.

Types of Organizations that are Transaction Participants

	Name	Participant Type
Counterparty	AOE Holdings, LLC	Sponsor
	Viridi Energy Operating LCC Vigliotti Holdings, LLC	Joint Owners of AOE Holdings, LLC
	Pathward National Association JP Morgan Chase & Co.	Co-Lenders

Summary of Financing Market Objectives & Barriers Addressed

Beneficiary	Market Barrier	Financing Solution
Anaerobic digester developers	Anaerobic digester developers often lack access to sufficient financing, which limits project development and restricts the production of renewable natural gas and efficient processing of waste in New York.	This transaction supports project development by providing construction and term financing.
Food waste haulers	Food waste haulers face a shortage of sustainable, cost-effective sites to dispose of food waste. In Long Island, haulers drive up to 300 miles into Pennsylvania to dispose of food waste at landfills.	This transaction assists in the development of a food waste facility in close proximity to food waste generators. Waste haulers will be able to dispose of this food waste at the AOE facility at competitive disposal rates. At the same time, the food waste is converted into renewable natural gas to be injected into the local energy distribution system.

Technologies Involved

Technology	Measures
Bioenergy	Biomass; Biogas

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 greenhouse gas ("GHG") emission 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:⁴

- Estimated total energy savings (MMBtu equivalent)
- Estimated GHG emission reductions (metric tons)

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

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 at pages 2 - 6.

Energy/Environmental	Lifetime	Lifetime	First - Year	First - Year
Impact	Low Estimate	High Estimate	Low Estimate	High Estimate
Estimated total energy savings (MMBtu equivalent)	10,400,000	11,374,304	520,000	568,715
Estimated GHG emission reductions (metric tons)	863,496	944,391	43,175	47,220

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 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.⁵ 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 and location of projects financed by the investment;
- 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 general understanding of anaerobic digester projects by the financial community;
- Increased awareness and use of loan performance data by financing entities;
- Increased awareness and use of project/technology performance data by financing entities;
- Decreased costs of anaerobic digester projects; and
- 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., 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 – 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 investment raised construction financing and were completed, commissioned, and placed in service.

In accordance with the Metrics Plan, NYGB will track AOE 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

⁵ See Metrics Plan, Section 3.3 at page 7 - 8.

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

Revised August 2023

Catalyzing the Development of Renewable Natural Gas Projects in New York

RUDARPA INC.

In February 2021, NY Green Bank ("NYGB") entered into an agreement with Rudarpa North Country, LLC ("RNC"), an indirect subsidiary wholly owned by Rudarpa, Inc. ("Rudarpa"), to provide a \$29.5 million construction-to-term loan ("Investment") for the first Landfill Gas ("LFG") to Renewable Natural Gas ("RNG") project in Rudarpa's to-be-built portfolio of LFG-to-RNG projects. In September 2022, NYGB increased its investment by \$3.5 million. On June 23, 2023, NYGB closed a \$5.0 million upsize to an existing construction-to-term facility to Rudarpa Inc., bringing NYGB's cumulative commitment to the sponsor to \$38.0 million. NYGB's participation in this transaction will enable RUDARPA to continue to scale its growing portfolio of landfill gas to renewable natural gas projects in New York State.

Transaction Description

On February 4, 2021, NY Green Bank closed a \$29.5 million multi-draw, construction-to-term loan to finance the construction of an LFG-to-RNG project. On August 26, 2022, NY Green Bank upsized the Facility by \$3.5 million to a new total commitment amount of \$33.0 million. The most recent upsize on June 23, 2023 brings NY Green Bank's total commitment to the project to \$38.0 million.

NY Green Bank's upsized facility will support the first LFG-to-RNG facility in Rudarpa's portfolio of projects. This facility will support cleaner energy generation by adding RNG to and displacing fossil-based natural gas from the grid.

This Transaction Profile is provided pursuant to the updated NY Green Bank – Metrics, Reporting & Evaluation Plan, Version 3.1 (the "**Metrics Plan**") developed in collaboration with the NYS Department of Public Service and filed with the NYS Public Service Commission (the "**Commission**") on May 2, 2022.¹ This Transaction Profile contains specific information in connection with the Rudarpa Inc. transaction entered into in June 2023, as required by the Metrics Plan.²

Form of NYGB Investment

NYGB Product	Product Sub-Type	Committed Capital
Asset Loan & Investment	Construction-to-Term Loan	\$5.0 million (\$38.0 million aggregate)

Location(s) of Underlying Project(s)

Upstate.

¹ Case 13-M-0412.

² See Section 4.0 at page 8 - 9 and Schedule 3.

Types of Organizations that are Transaction Participants

	Name	Participant Type
Counterparty	Rudarpa, Inc.	Project Sponsor
	Rudarpa North Country, LLC	Project Borrower

Summary of Financing Market Objectives & Barriers Addressed

Beneficiary	Market Barrier	Financing Solution
LFG-to-RNG Developers	For LFG-to-RNG Developers , post-financing construction can be an inefficient use of sponsor equity that limits new project deployment efforts in New York State.	This transaction encourages an efficient use of construction-to-term financing to support project deployment.
Landfill Owners	Landfill Owners may lack the capital or expertise to operate an RNG facility.	This transaction provides capital to RNG developers and operators to enable landfills to use LFG more efficiently and comply with environmental regulations while maximizing the reduction of GHG emissions.

Technologies Involved

Technology	Measures
Bioenergy	LFG-to-RNG Technology

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 greenhouse gas ("**GHG**") emission 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:⁴

- Estimated lifetime and annual total energy savings (MMBtu)
- Estimated lifetime and annual natural gas fuel savings (MMBtu equivalent)

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

Energy/Environmental Impact	Lifetime Low Estimate	Lifetime High Estimate	Annual Low Estimate	Annual High Estimate
Estimated total energy savings (MMBtu equivalent)	9,510,900	17,088,343	634,060	1,139,223
Estimated natural gas fuel savings (MMBtu)	Same as above			
GHG emission reductions (metric tons)	494,565	888,591	32,971	59,239

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 at pages 2 - 6.

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 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.⁵ 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 and location of projects financed by the investment;
- 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:

- Increased general understanding of environmental benefits of LFG-to-RNG projects by financial community;
- Increased awareness and use of loan performance data by financing entities;
- Increased awareness and use of project/technology performance data by financing entities;
- Decreased costs of future LFG-to-RNG projects; and
- 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., 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 – 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 investment raised construction financing and were completed, commissioned, and placed in service.

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

⁵ See Metrics Plan, Section 3.3 at page 7 - 8.

TRANSACTION PROFILE

August 2023

\$25 million revolving credit facility to finance the interconnection of energy storage projects in New York

NINEDOT ENERGY, LLC

On June 30, 2023, NY Green Bank (“**NYGB**”) closed a \$25.0 million interconnection loan to NineDot Energy LLC (“**NineDot**”). NYGB’s facility will support NineDot in funding interconnection deposits for the development of a portfolio of distributed energy storage projects.

Transaction Description

This facility is a \$25 million senior-secured revolving credit facility to fund interconnection deposits for the development of a portfolio of distributed energy storage projects. This will be NY Green Bank’s first purely energy storage transaction, contributing to its goal of investing \$200.0 million toward energy-storage related projects. This transaction will also contribute to New York State’s goal to deploy 3 GW of energy storage by 2030.

This Transaction Profile is provided pursuant to the updated NY Green Bank – Metrics, Reporting & Evaluation Plan, Version 3.1 (the “**Metrics Plan**”) developed in collaboration with the NYS Department of Public Service and filed with the NYS Public Service Commission (the “**Commission**”) on May 2, 2022.¹ This Transaction Profile contains specific information in connection with the NineDot Energy, LLC transaction entered into in June 2023, as required by the Metrics Plan.²

Form of NYGB Investment

NYGB Product	Product Sub-Type	Committed Capital
Asset Loan & Investment	Interconnection Loan	\$25.0 million

Location(s) of Underlying Project(s)

Downstate. Projects will be located in New York City.

Types of Organizations that are Transaction Participants

	Name	Participant Type
Counterparty	NineDot Energy, LLC	Project Sponsor
	NineDot IX Borrower, LLC	Project Borrower

¹ Case 13-M-0412.

² See Section 4.0 at page 8 - 9 and Schedule 3.

Summary of Financing Market Objectives & Barriers Addressed

Beneficiary	Market Barrier	Financing Solution
Commercial lenders/Project Developers	The market for energy storage interconnection financing remains nascent among commercial lenders . There are few options for financing at this stage of the development process. Private credit institutions may provide such financing, but at pricing untenable to project developers .	This facility fills this gap in the market by providing much-needed capital for the interconnection process for standalone energy storage assets, which may in turn spur investment from other lenders in the market.

Technologies Involved

Technology	Measures
Energy Storage	Battery Storage

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 greenhouse gas ("**GHG**") emission 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:⁴

- Estimated gross lifetime and annual GHG emission reductions (metric tons)

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

Energy/Environmental	Lifetime	Lifetime	Annualized	Annualized
Impact	Low Estimate	High Estimate	Low Estimate	High Estimate
Estimated Storage Capacity (MW)	31	55	N/A	
Estimated GHG emission reductions (metric tons)	5,645	9,869	282	493

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 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.⁵ 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.

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 at pages 2 - 6.

⁵ See Metrics Plan, Section 3.3 at page 7 - 8.

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

- Size and location of projects financed by the investment;
- 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:

- Increased market volume of standalone storage projects;
- Increased general understanding of storage benefits by financial community;
- Increased awareness and use of project/technology performance data by financing entities;
- Demonstration of competitive risk-return profiles for storage investments;
- Decreased project costs;
- Increased volume of secondary market financing of storage assets; and
- 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., 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 – 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 investment raised construction financing and were completed, commissioned, and placed in service.

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