

Supporting the Deployment of Solar Projects in New York State

BQ Energy Development, LLC

In December 2019, NY Green Bank (“NYGB”) has committed \$10.0 million to finance the deployment of solar photovoltaic (“PV”) projects in the development pipeline to BQ Energy Development, LLC (“BQ”). In June 2021, NYGB committed an additional \$20.0 million to increase the size of the credit facility. This is an expansion of NYGB’s investment in solar development capital as part of its ongoing efforts to participate in sustainable infrastructure investments in support of Clean Energy Fund objectives. The \$30.0 million financing facility is expected to support the deployment of up to 29 megawatts (“MW”) of photovoltaic (“PV”) solar in NYS, providing residents and businesses with a greater variety of energy choices and, ultimately, lower-cost clean energy options.

Transaction Description

BQ is a Wappingers Falls, New York-based solar energy project developer specializing in landfill and brownfield site redevelopment. NYGB committed \$10.0 and \$20.0 million to a multi-draw term loan investment (the “**Investment**”) to finance the costs of BQ’s project development efforts. The Investment establishes a structure that can be replicated for other qualified developers to create incremental renewable energy generation and greenhouse gas (“**GHG**”) mitigation benefits. It contributes to accelerated development of solar facilities in NY on brownfield/landfill sites, with offtake arrangements targeted to the municipalities, universities, schools and hospitals (“**MUSH**”) and community distributed generation (“**CDG**”) markets.

This Transaction Profile is provided pursuant to the updated “NY Green Bank – Metrics, Reporting & Evaluation Plan, Version 3.0” (the “**Metrics Plan**”) developed in collaboration with the NYS Department of Public Service and filed with the NYS Public Service Commission (the “**Commission**”) on June 20, 2016.¹ This Transaction Profile contains specific information in connection with the BQ Energy Development, LLC transaction entered into in December 2019 and upsized in June 2021 as required by the Metrics Plan.²

Form of NYGB Investment

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

Location(s) of Underlying Project(s)

Statewide.³ BQ’s solar projects are in regions across NYS.

¹ Case 13-M-0412.

² See Section 4.0, page 8 and Schedule 3.

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

Types of Client & Counterparty Organizations that are Transaction Participants

	Name	Participant Type
Client	BQ Energy Development LLC	Energy Project Developer

Summary of Financing Market Objectives & Barriers Addressed

Beneficiary	Market Barrier	Financing Solution
Solar Project Developers	Project developers are often expected to pay for all development expenses with equity funds as they finalize construction financing arrangements. This results in a relatively inefficient use of sponsor equity, limiting project deployment efforts and effectively restricting the number of solar projects being deployed in NYS.	This transaction encourages a more efficient use of sponsor equity and greater potential project development in NYS by providing leverage against certain development expenses that would increase the value of those projects. NYGB's participation creates an easier pathway forward for developers and enables greater deployment of distributed solar assets throughout the State.
Capital Market Participants	As a relatively new form of clean energy distribution, clean energy financiers have offered few senior secured debt products to support project development. As such, it is difficult for private sector capital providers to assess and price the underlying risk exposures associated with this kind of investments.	This transaction will generate project development and developer's performance data, which will help draw new investors and financial institutions into the marketplace by demonstrating that competitive risk-return profiles can be achieved by this investment product.
NYS Ratepayers	Due to project siting, property ownership, and consumer preference issues, on-site solar project installations may not be viable for a number NYS homeowners, renters, and businesses. This currently limits the number of solar projects with the potential of getting done to those with perfectly sited homes or businesses.	This transaction supports the deployment of solar projects, which provide those who are not otherwise able to install solar energy generation systems on their property (e.g., homeowners whose rooftops cannot support solar systems, renters and those who cannot afford solar systems, etc.), with voluntary access to clean, low-cost energy, regardless of their home or business location.

Technologies Involved

Technology	Measures
Renewable Energy	Solar photovoltaic systems

Metrics & Evaluation Plan

Planned Energy & Environmental Metrics

NYGB's minimum investment criteria specifically require that "transactions will have the potential for energy savings and/or clean energy generation that will contribute to greenhouse gas reductions in support of New York's energy policies".⁴ In addition, the Metrics Plan requires that the following energy and environmental measures, applicable to this transaction, be reported on:⁵

- Estimated gross lifetime and first-year electricity savings (MWh);

⁴ Case 13-M-0412, "Order Establishing New York Green Bank and Providing Initial Capitalization" issued and effective December 19, 2013 of the Commission, Ordering Clause 6 at pages 24 - 25.

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

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

The estimated lifetime and first-year 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	First-Year Low Estimate	First-Year High Estimate
Estimated clean energy generated (MWh)	414,637	849,571	16,585	33,983
Estimated clean energy generation installed capacity (MW) ⁶	14.3	29.3	Not Applicable	
Estimated GHG emission reductions (metric tons)	207,413	424,978	8,297	16,999

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.⁷ NYSERDA collected baseline data for the solar sector in 2019 and will update the data to include indicators specific to this transaction. NYSERDA will use baseline data collected for indicators as a comparison point against which to assess market progress in the later studies. Progress indicators are defined below for the short, medium and long terms.

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

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

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

- Increased market volume of PV projects;
- Increased general understanding of renewable energy benefits by financial community;
- Increased awareness and use of PV 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 PV 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, etc.) 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

⁶ Installed clean energy generation capacity at full deployment of funds is the same for first-year and lifetime duration.

⁷ See Metrics Plan, Section 3.3 at page 7.

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