TRANSACTION PROFILE

October 2018

Driving Standardization of Community Solar Financings in NYS
BlueRock Energy Solar, Inc.

*NY Green Bank ("**NYGB**") is providing a $775,000 term loan (the "**Term Loan**") to a subsidiary of BlueRock Energy Solar, Inc. ("**BlueRock**"), a NY-based solar developer and full-service energy solutions provider. The Term Loan will be used to finance the acquisition of community distributed generation ("**Community DG**") solar projects in NY State ("**NYS**") and for other corporate purposes. The Term Loan is secured by the Renovus Rock, LLC project, a 646.0 kW_{dc} Community DG project in Millport, NY.*

Transaction Description

BlueRock is developing and operating a portfolio of Community DG projects in NY, with a current pipeline of 20.0 MW_{dc}. In 2017, BlueRock partnered with Renovus Solar, Inc. to develop and build the Renovus Rock, LLC project, a 646.0 kW_{dc} project located in Millport, NY that has been operating since April 2017. BlueRock is now the sole owner of the project. NYGB has provided the Term Loan of $775,000, secured by the Renovus Rock, LLC project to support the development BlueRock's Community DG portfolio in NYS.

This transaction is estimated to support the deployment of Community DG projects in the State which will provide commercial and residential project subscribers access to reliable, clean, low-cost energy. As there is increasingly strong demand for Community DG throughout NYS, growth of this asset class through the deployment of projects offers and requires participation by capital providers. Products like the Term Loan are expected to ultimately be offered by private capital providers in future to finance Community DG portfolios-at scale.

This Transaction Profile is provided pursuant to the "NY Green Bank – Metrics, Reporting & Evaluation Plan, Version 3.0" (the "**Metrics Plan**") developed in collaboration with the NYS Department of Public Service and filed with the NYS Public Service Commission (the "**Commission**") on June 20, 2016.[1] This Transaction Profile contains specific information in connection with the BlueRock transaction entered into on August 31, 2018, as required by the Metrics Plan.[2]

Form of NYGB Investment

NYGB Product	Product Sub-Type	Committed Capital
Asset Loan & Investment	Term Loan	$775,000

Location(s) of Underlying Project

Southern Tier: Project is located in Chemung County.

[1] Case 13-M-0412.
[2] See Section 4.0, page 8 and Schedule 3.

Types of Client & Counterparty Organizations that are Transaction Participants

	Name	Participant Type
Clients	Renovus Rock, LLC	Project Company
Counterparty	BlueRock Energy Solar, Inc.	Energy Project Developer

Summary of Financing Market Objectives & Barriers Addressed

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

Technologies Involved

Technology	Measures
Renewable Energy	Solar photovoltaic ("**PV**") systems

Metrics & Evaluation Plan

Planned Energy & Environmental Metrics

NYGB's minimum investment criteria specifically require that "transactions will have the potential for energy savings and/or clean energy generation that will contribute to GHG reductions in support of New York's energy policies".[3] In addition, the Metrics Plan requires that the following energy and environmental measures, applicable to this transaction, be reported on:[4]

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

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

Energy/Environmental Impact	Lifetime Low Estimate	Lifetime High Estimate	First-Year Low Estimate	First-Year High Estimate
Estimated clean energy generated (MWh)	17,100	20,900	685	837
Estimated clean energy generation installed capacity (MW)[5]	0.65	0.65	Not Applicable	
Estimated GHG emissions reductions (metrics tons)	9,000	11,000	360	440

Planned Market Characterization Baseline & Market Transformation Potential

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

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

- Size (generation capacity and dollar value) of acquired projects;
- Average and aggregate dollar value of acquired projects;
- Number and type of acquired projects in development and completed; and
- Number and location of acquired projects (by zip code).

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

[3] Case 13-M-0412, "Order Establishing New York Green Bank and Providing Initial Capitalization" issued and effective December 19, 2013 of the Commission, Ordering Clause 6 at pages 24 - 25.
[4] See Metrics Plan, Section 2.0, pages 2 - 6.
[5] 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.

- Increased awareness in benefits amongst financing entities as a result of favorable technology performance data;
- Favorable financial performance data;
- Favorable technology performance data;
- Market volume of BlueRock projects increases;
- Investment risk/default rates become increasingly attractive to investors, as a result of positive financial performance data;
- Increased financial market volume for clean energy projects;
- Decreased project technology costs;
- Scale of clean energy investment increases, due to increased end-use market demand;
- Reduced time to execute clean energy financings; and
- Increased number of financial participants providing similar capital structures.

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

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

Market evaluation will address the outcome indicators identified above. Methods will include analysis of program data along with interviews and surveys of market participants (project subscribers, financial community) to track information including but not limited to: participation rates, project scale information, interest in solar financing (generally and with regard to Community DG specifically), and influence of NYGB's participation on financial markets. As noted, baseline data is being collected on most key indicators in 2018 and later follow-up studies will assess progress against baseline levels. The specific timing of these efforts may be revised based on experience or other factors as the investment evolves.

Impact evaluation will assess the performance of the project funded under the Term Loan to verify that the array is generating clean energy within the estimated range set forth in this Transaction Profile.

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