DISTRIBUTED SUN – SUNX

Bridge loan to support the deployment of community solar projects in New York State



NY Green Bank's upsize will support additional projects in the SunX portfolio. Bridge loan proceeds will finance project interconnection advance payments to utilities for community distributed generation (CDG) solar projects.

Market Barriers and Solutions

Solar project developers are often expected to pay for interconnection expenses as they finalize construction financing arrangements, which limits project deployment. NY Green Bank bridges the period to finalize financing arrangements for projects which have completed the CESIR process — this creates an easier pathway forward for developers to enable greater distributed generation deployment.

Capital market participants face difficulties assessing and pricing the risk exposures from CDG projects, due to limited precedent. This transaction will generate performance data and demonstrate the ability of these projects to achieve competitive risk-return profiles.

On-site solar installations are often not viable due to project siting, property ownership, and consumer preference issues. This transaction supports the deployment of CDG solar projects, which provide **CDG subscribers** with increased access to clean, low-cost energy, regardless of where their home or business is located.

Transaction amount: **\$2.5 million** Counterparties: (Project Developer) DSUN (Electric Utilities) NYSEG and RG&E, subsidiaries of Avangrid, Inc. Product: Interconnection bridge loan Date closed: December 2021 Estimated lifetime metric tons CO₂e reduced: 1,159,635 Technology: Solar Location: Statewide End-use segment: Community distributed generation

 $\underbrace{\cdots}$

"NY Green Bank is an important partner. Beginning in 2016 we collaborated to create loan products for CDG in New York. Our projects, with the support of NY Green Bank capital, increased the generation of renewable energy in upstate New York, created quality jobs, and through full repayment, earned money on behalf of New York citizens. We are happy the continuation of our relationship and credit facility will extend that success story."

Distributed Sun



greenbank.ny.gov



TRANSACTION PROFILE

February 2022

Bridge Loan to Support the Deployment of Community Solar Projects

Distributed Sun – SunX

In May 2019, NY Green Bank ("NYGB") provided a 24-month senior secured \$1.0 million bridge loan facility (the "Bridge Loan") to SUN8 PDC, LLC ("SUN8"), which was jointly owned by Distributed Sun LLC ("DSUN") and EWT Americas Inc. ("EWTA"). DSUN has shifted its development activities from SUN8 to SunX, LLC ("SunX"), which is wholly owned by DSUN. In December 2021, NYGB increased its commitment to \$2.5 million to support additional projects in the SunX portfolio. Bridge Loan proceeds will finance project interconnection advance payments to New York State Electric & Gas Corporation ("NYSEG") and Rochester Gas and Electric Corporate ("RG&E") for community distributed generation ("CDG") solar projects. This transaction is expected to provide New York State ("NYS") residents and businesses with a greater variety of energy choices and, ultimately, lower-cost clean energy opportunities.

Transaction Description

DSUN is developing a portfolio of CDG solar projects in NYS and requested that NYGB provide a \$2.5 million Bridge Loan commitment to finance interconnection advance deposits¹ to NYSEG and RG&E for such projects, due under the New York State Public Service Commission (the "Commission") Standardized Interconnection Requirements and Application Process.

This Transaction Profile is provided pursuant to the "NY Green Bank – Metrics, Reporting & Evaluation Plan, Version 3.0" (the "Metrics Plan") developed in collaboration with the NYS Department of Public Service and filed with the Commission on June 20, 2016.² This Transaction Profile contains specific information in connection with the DSUN transaction entered into on December 30, 2021, as required by the Metrics Plan.

Form of NYGB Investment

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

Location(s) of Underlying Project(s)

Statewide. Projects will be located across New York State.

¹ Under the revised NYS Standardized Interconnection Requirements, within 60 business days of receiving the Coordinated Electric System Interconnection Review ("CESIR") results, interconnection applicants must pay the applicable utility 25.0% of the interconnection upgrade estimates.

² Case 13-M-0412.

Types of Counterparty Organizations that are Transaction Participants

	Name	Participant Type
Counterparty	DSUN	Energy Project Developer
Counterparty	NYSEG and RG&E, subsidiaries of Avangrid, Inc.	Electric Utilities

Summary of Financing Market Objectives & Barriers Addressed

Beneficiary	Market Barrier	Financing Solution
Solar Project Developers	Solar project developers are often expected to pay for interconnection expenses as they finalize construction financing arrangements, which limits project deployment.	NY Green Bank bridges the period to finalize financing arrangements for projects which have completed the CESIR process — this creates an easier pathway forward for developers to enable greater distributed generation deployment.
Capital Market Participants	Capital market participants face difficulties assessing and pricing the risk exposures from CDG projects, due to limited precedent.	This transaction will generate performance data and demonstrate the ability of these projects to achieve competitive risk-return profiles.
CDG Subscribers	On-site solar installations are often not viable due to project siting, property ownership, and consumer preference issues	This transaction supports the deployment of CDG solar projects, which provide CDG subscribers with increased access to clean, low-cost energy, regardless of where their home or business is located.

Technologies Involved

Technology	Measures	
Renewable Energy	Solar photovoltaic systems	

Metrics & Evaluation Plan

Planned Energy & Environmental Metrics

NYGB's minimum investment criteria specifically require that "transactions will have the potential for energy savings and/or clean energy generation that will contribute to greenhouse [('**GHG**')] reductions in support of New York's energy policies".³ In addition, the Metrics Plan requires that the following energy and environmental measures, applicable to this transaction, be reported on⁴:

- Estimated gross lifetime and first-year 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 Bridge Loan 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, pages 2 - 6.

Energy/Environmental Impact	Lifetime Low Estimate	Lifetime High Estimate	First-Year Low Estimate	First-Year High Estimate
Estimated clean energy generated (MWh)	662,000	1,320,000	26,500	53,000
Estimated clean energy generation installed capacity (MW)	22.5	45.0	Not Applicable	
Estimated GHG emission reductions (metric tons)	348,000	697,000	13,940	27,900

Planned Market Characterization Baseline & Market Transformation Potential

The Metrics Plan requires that market evaluation occurs when a critical mass of NYGB financing and investment arrangements are put in place, approximately three to five years following initial NYGB capital deployments. Market evaluation activities commenced in 2018 on sectors that have been supported by NYGB since its inception, and the data set will be updated going forward to include indicators specific to this and other transactions. Baseline data will be used as a comparison point against which to assess market progress in the later studies. Progress indicators are defined below for the short, mid and long-terms.

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

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

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

- Market volume of DSUN projects increases;
- General understanding of renewable energy benefits by financial community increases;
- Increased awareness and use of CDG subscriber performance data by financing entities;
- Increased awareness and use of project/technology performance data by financing entities;
- Demonstration of competitive risk-return profiles for CDG solar investment;
- Decreased project costs;
- Volume of secondary market financing of CDG solar assets; and
- Number of new lending participants.

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

NYSERDA will evaluate the direct and indirect impacts that this transaction has on the clean energy finance markets and the energy/environmental benefits delivered by this transaction.

Market evaluation will address the short, mid and long-term indicators identified above. Methods will include analysis of program data along with interviews and surveys of market participants (project subscribers, financial community) to track information including but not limited to: participation rates, project scale information, interest in solar financing (generally and with regard to Community DG specifically), and influence of NYGB's participation on financial markets. As noted, baseline data was collected on key indicators in the first phase evaluation during 2018 – 2019. Later follow-up studies will assess progress against baseline levels for other market segments as those evolve. The specific timing of these efforts may be revised based on experience or other factors as NYGB's investment portfolio further develops and evolves.

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

As with all NYGB investments, DSUN projects that receive an incentive or funding from other entities (e.g., utility, other NYSERDA program) will, in accordance with the Metrics Plan, be tracked 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.