

## Supporting the Deployment of Solar Projects in New York State

### Distributed Sun - SunX

NY Green Bank (“**NYGB**”) has committed \$3.8 million to finance the deployment of solar photovoltaic (“**PV**”) projects in the development pipeline of SunX, LLC (“**SunX**”), which is wholly owned by Distributed Sun LLC (“**DSun**”). 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 New York State’s (“**NYS**”) Clean Energy Fund objectives. The \$3.8 million financing facility is expected to support the deployment of up to 39.8 megawatts (“**MW**”) of solar PV in NYS, providing residents and businesses with a greater variety of energy choices and, ultimately, lower-cost clean energy options.

### Transaction Description

DSun is a Washington, D.C. based solar energy project developer that develops, finances, operates and provides advisory services for renewable energy projects. DSun has expertise in designing and developing utility-scale, community distributed generation (“**CDG**”) and commercial and industrial solar PV projects. NYGB’s \$3.8 million multi-draw term loan investment (the “**Investment**”) finances the costs of SunX’s CDG 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 NYS, with offtake arrangements targeted to the CDG market.

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.<sup>1</sup> This Transaction Profile contains specific information about the DSun SunX transaction entered into on June 23, 2020, as required by the Metrics Plan.<sup>2</sup>

### Form of NYGB Investment

NYGB Product	Product Sub-Type	Committed Capital
Asset Investment	Term Loan	\$3.8 million

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

Finger Lakes and Western New York Region. The projects supported by this loan will be located in Livingston and Allegany counties in NYS.

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

	Name	Participant Type
<b>Client</b>	Distributed Sun LLC	Energy Project Developer

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

<sup>2</sup> See Section 4.0, page 8 and Schedule 3.

## Summary of Financing Market Objectives & Barriers Addressed

Beneficiary	Market Barrier	Financing Solution
<b>Solar Project Developers</b>	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 deployment of solar PV projects in NYS.	This transaction encourages a more efficient use of sponsor equity and greater project development in NYS. By providing leverage against certain development expenses NYGB incentivizes developers to achieve development milestones; developers gain access to more capital; and the value of NYGB's collateral increases as development milestones are met. NYGB's participation creates an easier pathway forward for developers and enables greater deployment of distributed solar assets throughout NYS.
<b>Capital Market Participants</b>	As a relatively new form of clean energy project, CDG lacks financing precedent, especially in the development capital market. As such, it is difficult for private sector capital providers to assess and price the underlying risk exposures associated with this kind of investment.	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.
<b>NYS Ratepayers</b>	Due to project siting, property ownership, and consumer preference issues, on-site solar project installations may not be viable for all NYS homeowners, renters, and businesses, which limits ratepayer access to clean energy.	This transaction supports the deployment of CDG solar projects, which provide those who are not otherwise able to install solar energy generation systems on their property (e.g., homeowners whose rooftops cannot support solar systems, renters and those who cannot afford solar 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".<sup>3</sup> In addition, the Metrics Plan requires NYGB to report on the following energy and environmental measures, as applicable to this transaction:<sup>4</sup>

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

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

Energy/Environmental Impact	Lifetime Low Estimate	Lifetime High Estimate	Annual Low Estimate	Annual High Estimate
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<sup>3</sup> Case 13-M-0412, "Order Establishing New York Green Bank and Providing Initial Capitalization" issued and effective December 19, 2013 of the Commission, Ordering Clause 6 at pages 24 - 25.

<sup>4</sup> See Metrics Plan, Section 2.0, pages 2 - 6.

Estimated clean energy generated (MWh)	794,951	993,689	31,798	39,748
Estimated clean energy generation installed capacity (MW) <sup>5</sup>	27.4	34.3	Not Applicable	
Estimated GHG emission reductions (metric tons)	397,656	497,070	15,906	19,883

## 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 that NYGB has supported since inception, consistent with the requirement for such assessments approximately three to five years following initial NYGB capital deployments.<sup>6</sup> Baseline data was collected for the solar sector in 2019 and will be updated going forward 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, medium 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 Investment;
- Aggregate expected energy generation for projects financed by the Investment; and
- The number of projects that finalize construction financing arrangements.

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

- Increased market volume of CDG projects;
- Increased general understanding of renewable energy benefits by financial community;
- Increased awareness and use of CDG subscriber performance data by financing entities;
- Increased awareness and use of project/technology performance data by financing entities;
- Demonstration of competitive risk-return profiles for CDG investments;
- Decreased project costs;
- Increased volume of secondary market financing of CDG assets; and
- Presence and number of new lending participants.

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

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

**Market evaluation** will address the short, medium and long-term indicators identified above. Methods will include analysis of program data along with interviews and surveys of market participants (e.g., project subscribers, financial community) to track information including but not limited to: participation rates, project scale information, interest in solar financing (generally and with regard to CDG specifically), and influence of NYGB's participation on financial markets. As noted, NYSERDA collected baseline data on key indicators in its first phase evaluation during 2018 – 19. Later follow-up studies will assess progress against baseline levels for other market segments as those evolve. The specific timing of these efforts may be revised based on experience or other factors as NYGB's investment portfolio further develops and evolves.

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

<sup>5</sup> Installed clean energy generation capacity at full deployment of funds is the same for first-year and lifetime duration.

<sup>6</sup> See Metrics Plan, Section 3.3 at page 7.

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 to minimize any double-counting activity on a consolidated basis. As set out in the Metrics Plan, evaluation sampling approaches will also be used as a mechanism to estimate overlap and minimize double counting. Attempts will be made to coordinate market and impact evaluation activities for projects that receive support from multiple sources to maximize the efficiency of data collection and avoid participant survey fatigue.