

Construction-to-Term Loan to Support the Deployment of NYS Fuel Cell Projects

Daroga Power

On December 23, 2020, NY Green Bank (“**NYGB**”) provided an up to \$26.5 million senior secured construction-to-term loan facility (the “**Facility**”) to DARE Management, LLC (“**Borrower**”), a subsidiary of Daroga Power LLC (“**Daroga**”). Loan proceeds will finance construction for community distributed generation (“**Community DG**” or “**CDG**”) fuel cell projects in New York City. The projects supported by this transaction are expected to provide New York State (“**NYS**”) residents and businesses with lower-cost clean energy.

Transaction Description

Daroga is developing a portfolio of CDG fuel cell projects in NYS and requested that NYGB provide an up to \$26.5 million construction-to-term loan facility to finance their construction costs.

This transaction supports up to 12.0 MW of fuel cells located in New York City, which are expected to: (i) provide commercial and residential project subscribers access to reliable low-cost energy; and (ii) reduce up to 16,000 metric tons of greenhouse gas (“**GHG**”) emissions annually in NYS. As there has been an increasingly strong demand for CDG throughout NYS, capital providers are recognizing, and will continue to recognize, the value in providing financing to enable the deployment of these projects. NYGB expects the Facility to serve as a template for private capital to replicate in future financings.

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 New York Public Service Commission (the “**Commission**”) on June 20, 2016.¹ This Transaction Profile contains specific information in connection with the Daroga transaction relating to the construction-to-term loan facility entered into in December 2020, as required by the Metrics Plan.²

Form of NYGB Investment

NYGB Product	Product Sub-Type	Committed Capital
Asset & Investment	Construction-to-Term	\$26.5 million

Locations of Underlying Projects

New York City. The projects will be located in Staten Island, NY.

Types of Client & Counterparty Organizations that are Transaction Participants

	Name	Participant Type
Client	Daroga Power	Energy Project Developer

¹ Case 13-M-0412.

² See Section 4.0, page 8 and Schedule 3.

Summary of Financing Market Objectives & Barriers Addressed

Beneficiary	Market Barrier	Financing Solution
Distributed Energy Project Developers	Project sponsors are often expected to pay for construction expenses with equity funds as they finalize term financing arrangements. This results in a relatively inefficient use of sponsor equity, which limits project deployment efforts and effectively restricts the amount of CDG being deployed in NYS, slowing the rate of deployment.	This transaction encourages a more efficient use of sponsor equity and supports project development efforts in NYS by providing construction and term financing to a project developer. NYGB's role helps to create an easier pathway forward for developers and enable greater deployment of community and other distributed generation assets throughout the State.
Capital Market Participants	As a relatively new form of clean energy offtake, CDG lacks financing precedents and has limited performance history in NYS. As such, it can be more difficult for private sector capital providers to assess and price the underlying risk exposures associated with CDG project investments.	Projects supported as a result of this transaction will generate project and customer performance data to draw new investors and financial institutions into the marketplace by demonstrating that competitive risk-return profiles can be achieved by CDG-enabled business models.
Community DG Subscribers	Due to project siting, property ownership and consumer preference issues, on-site clean energy installations may not be viable for a number of NYS homeowners, renters, and businesses. This limits the number of clean energy projects getting done to those with suitably sited homes or businesses.	This transaction supports the deployment of CDG fuel cell projects, which provide those who are not otherwise able to install clean energy generation systems on their property (e.g., businesses whose rooftops cannot support solar systems, renters and those who cannot afford stand-alone onsite generation systems), with voluntary access to clean, low-cost energy, regardless of where their home or business is located.

Technologies Involved

Technology	Measures
Fuel Cells	Solid Oxide Fuel Cell Servers

Metrics & Evaluation Plan

Planned Energy & Environmental Metrics

NYGB's minimum investment criteria require that NYGB-supported transactions have the potential for energy savings and/or clean energy generation that will contribute to greenhouse gas ("GHG") reductions in support of the State's energy policies. In addition, the Metrics Plan requires that the following energy and environmental measures, applicable to these transactions, be reported:

- Estimated gross lifetime and first-year energy generated from Fuel Cell (MWh);
- Estimated gross energy generation installed capacity (MW);
- Estimated gross lifetime and first-year fuel consumption (MMBtu); 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 Facility, are as follows:

Energy/Environmental Impact	Lifetime Low Estimate	Lifetime High Estimate	Annualized Low Estimate	Annualized High Estimate
Estimated energy generated (MWh)	893,520	946,080	89,352	94,608
Estimated fuel consumption (MMBtu) ³	5,960,010	8,041,283	596,001	804,128
Estimated energy generation installed capacity (MW) ⁴	12.0	12.0	N/A	
Estimated GHG emission reductions (metric tons) ⁵	19,921	156,766	1,992	15,677

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 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. 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 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 Facility;
- Aggregate expected energy generation for projects financed by the Facility; 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 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 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 impact this transaction has had on the clean energy finance markets and the energy/environmental benefits that 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., 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

³ Estimated fuel consumption will be included in the estimated energy savings (MMBtu) from CHP categories in NYGB consolidated reporting.

⁴ Estimated Energy generation installed capacity will be included in the estimated energy generation installed capacity from CHP category in NYGB consolidated reporting.

⁵ As of January 1, 2016, the New York State Energy Research and Development Authority ("NYSERDA") utilizes a 1,103 lbs./MWh conversion factor to estimate GHG emissions reductions for electric generation and energy efficiency savings across all components of the Clean Energy Fund. NYSERDA previously utilized a 625 lbs./MWh conversion factor.

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

In accordance with the Metrics Plan, NYGB will track Daroga projects that receive incentives or funding from other entities (e.g., utility, other NYSERDA program) 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.