

Expanding Urban Bike Sharing Program in New York City

Motivate International Inc.

In May 2017, NY Green Bank (“NYGB”) provided a \$43.3 million term loan (the “Term Loan”) and a \$5.0 million seasonal variable funding note (the “SVFN”, collectively with the Term Loan, the “Credit Facilities”) to NYC Bike Share, LLC (“NYCBS”). NYCBS is the exclusive operator of the NYC bike share system (“Citi Bike”) which is comprised of 12,000 bikes and 750 stations and is the largest bike share system in North America. Proceeds from the original Credit Facilities primarily supported the addition of 2,000 bikes primarily in low-to-moderate income (“LMI”) neighborhoods in Harlem, Queens, and Brooklyn and enabled NYCBS to address the seasonal nature of its business when there is lower ridership in winter months. In May 2018, due to favorable transaction performance within this new asset class, NYGB increased the Term Loan amount outstanding by \$6.0 million.

Transaction Description

Motivate International Inc. (“**Motivate**”), NYCBS’s parent company, is the leading bike share operator in North America and operates eight bike share systems in the US through its subsidiaries. NYCBS operates the Citi Bike system under an exclusive license from the NYC Department of Transportation (“**NYCDOT**”). The Citi Bike system is comprised of 12,000 bikes and over 750 stations in NYC. Citi Bike is partially integrated with the Jersey City bike share system (“**Jersey City Bike Share, LLC**”), which is comprised of 500 bikes and 50 stations located in Jersey City. Citibank, N.A. (“**Citi**”) is the title sponsor of both programs. NYGB’s participation helped fund the completion of NYCBS’s Phase II expansion, which increased the Citi Bike system by 2,000 bikes primarily located in LMI neighborhoods in Harlem, Queens, and Brooklyn.

NYCBS generates revenue through the sale of annual, three-day, or daily memberships and through the sale of corporate sponsorships. As the title sponsor, Citi’s support has also helped expand and maintain the program. Despite robust cash flows and growing membership, NYCBS has encountered challenges accessing private capital that is structured and priced to reflect the strength of its business model largely due to the nascent nature of the bike share asset class and limited comparable transactions.

Proceeds from the Credit Facilities expanded the Citi Bike system to LMI neighborhoods and restructured NYCBS’s financing to better position the company for future growth. This innovative securitization structure for the sustainable and clean energy asset class will provide a template for other asset-centric companies with predictable cash flows in similar sectors.

These transactions have the potential to offset the equivalent of approximately 29,700 - 32,500 metric tons of greenhouse gas (“**GHG**”) emissions over the seven-year term of the transaction, by converting up to 200 million miles of public commuting from emissions-based transport to the bike-share system. NYGB’s participation will finance the expansion of the Citi Bike system into LMI neighborhoods in Harlem, Queens, and Brooklyn – communities that are ideally suited to benefit from bike sharing due to long commute times, high levels of pollution, and strong community interest. NYGB’s increased commitment to NYCBS will further support the program as it grows its ridership community in NYC, which in turn is expected to result in the GHG emissions reductions stated above.

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, 2016.² This Transaction Profile contains specific

¹ Refer to the Summary of Changes document for details of updates, available at www.greenbank.ny.gov/Investments/Portfolio.

² Case 13-M-0412.

information in connection with the Credit Facilities (entered into on May 18, 2017) and the increase to the Term Loan amount (entered into on May 8, 2018), as required by the Metrics Plan.³

Form of NYGB Investment

NYGB Product	Product Sub-Type	Committed Capital
Asset Loan & Investment	Term Loan	\$49.3 million
Asset Loan & Investment	Seasonal Variable Funding Note	\$5.0 million

Location(s) of Underlying Project(s)

New York City: Project to be primarily located in Harlem, Queens, and Brooklyn.

Types of Client & Counterparty Organizations that are Transaction Participants

	Name	Participant Type
Clients	NYC Bike Share, LLC	Project Developer, Sponsor
	Jersey City Bike Share, LLC	Project Developer, Sponsor

Summary of Financing Market Objectives & Barriers Addressed

Beneficiary	Market Barrier	Financing Solution
Sustainable Infrastructure Owner/Operators	Owners and operators of sustainable infrastructure assets have encountered financing challenges due to limited comparable transactions and the nascent nature of the asset class.	NYGB's participation will help NYCBS grow and develop the operating track record needed to attract further private capital in the future. The Credit Facilities are structured to position NYCBS to raise capital in the future from private sector capital providers as efficiently as possible, including pricing to better reflect the strength of the borrower's business model and results.
Capital Market Participants	Private capital providers are relatively unfamiliar with the bike share asset class due to a limited performance history.	With these transactions, NYGB will demonstrate that sustainable infrastructure provides a reliable return on investment, familiarizing lenders with the underlying asset type and increasing confidence for financing in this market.
	Commercial banks have rigid underwriting guidelines for small businesses with limited operating histories, resulting in higher cost of funds, and restricting the access of private capital into the market.	The whole business securitization structure creates a template for other financial institutions to replicate with other sustainable infrastructure assets. Capital providers can benefit from the familiar, standardized structure of asset-backed transactions like this.

Technologies Involved

Technology	Measures
Sustainable Transportation	Bicycles and bicycle stations

³ See Section 4.0, page 8 and Schedule 3.

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".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 GHG emission reductions (metric tons).

The estimated gross lifetime and first-year GHG emissions reductions 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 GHG emission reductions (metric tons) ⁶	29,700	32,500	4,250	4,650

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 of a similar type are in place. This market evaluation will be conducted on sectors that NYGB has supported and will occur approximately three to five years following initial NYGB capital deployments.⁷ Baseline data will be collected in 2018 – 19 for most indicators as a comparison point against which to assess market progress in the later studies. Progress indicators for this transaction are defined below for the short, mid and long-terms.

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

- Phase II completion;
- Ridership uptake (e.g., subscription rates, retention rates);
- Technology updates completed; and
- Increased LMI participation.

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:

- Increased and sustained demand for technology;
- Additional one-off or small portfolios receive long-term financing;
- General understanding of asset class by financial community increases;
- Increased awareness and use of project/technology performance data by financing entities;
- Demonstration of competitive risk-return profiles for nascent and esoteric asset classes;
- Decreased project costs; and
- Number of secondary capital market participants.

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

NYSERDA will evaluate the impact these transactions have on the finance markets and the environmental benefits delivered.

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.

⁶ The methodology to calculate GHG Emissions Reductions used takes into account the proportion of subscribers that switch from both personal transport and public transport. It assumes a carbon footprint per passenger mile travelled using those modes of transport, and how a passenger offset their contribution by switching. This methodology does not assume those modes of transport will cease to operate as a result of these transactions and the GHG Emissions Reductions calculation does not take into account continued emissions from public modes of transport. For more information on the applicable methodologies, see [February 2017 Monthly Report](#) page 4, and <http://web.mta.info/sustainability/pdf/2012Report.pdf>.

⁷ See Metrics Plan, Section 3.3 at page 7.

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 (developers, subscribers, financial community) to track information including but not limited to: ridership rates, project scale information, interest in financing and influence of NYGB's participation on financial markets. As noted, baseline data will be collected on most key indicators in 2018 – 19 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 use actual system performance data to understand environmental outcomes. Impact evaluation is expected to include quarterly review and analysis of actual system data collected by NYCBS. Actual system performance will be monitored and documented against expected performance. Impact evaluation will help provide verification of performance, in turn aiding the finance community in better understanding risk in this technology area and asset class.

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