

# NY Green Bank

2016 Business Plan

Case 13-M-0412

June 27, 2016

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# 1. Introduction

### 1.1 NY Green Bank Overview

The \$1.0 billion NY Green Bank ("**NYGB**") was established to attract private sector capital to accelerate clean energy deployment in New York State ("**NYS**"). To date, NYGB has participated in transactions by providing: construction and longer-term post-construction financing and investment, short-term financing to enable developers to aggregate smaller distributed assets into portfolios at scale, and credit enhancements.

NYGB works to increase the size, volume and breadth of clean energy investment activity throughout the State, expand the base of investors focused on NYS clean energy, and increase clean energy participants' access to capital. To do so, NYGB collaborates with the private sector to develop transaction structures and methodologies that overcome typical clean energy investment barriers, such as challenges evaluating risk and addressing the needs of distributed energy and efficiency projects where underwriting may be geared more towards larger and/or groups of somewhat homogeneous investment opportunities.

NYGB focuses on opportunities that create attractive precedents, standardized practices and roadmaps that capital providers can willingly replicate and scale. As funders "crowd in" to a particular area within the clean energy landscape, NYGB moves on to other areas that have attracted less investor interest.

To solve client problems in real-time, and address capital provider needs, NYGB operates comfortably within private sector time horizons and commercial norms. For more information on NYGB's growing portfolio, and how industry participants and funders can do business with NYGB, please see <u>www.greenbank.ny.gov</u>.

As a key component of New York's Clean Energy Fund ("**CEF**")<sup>1</sup>, NYGB is structured to be self-sustaining in that it must ultimately cover its own costs of operation. The CEF is a \$5.3 billion commitment, and part of Governor Andrew M. Cuomo's Reforming the Energy Vision ("**REV**") strategy, to advance clean energy growth and innovation and drive economic development across the State, while reducing ratepayer collections. For more information on the CEF and REV strategy, see <u>www.nyserda.ny.gov/About/Clean-Energy-Fund</u> and <u>www.ny.gov/programs/reforming-energy-vision-rev</u>.

Defined terms used, but not separately described, in the text of this document have the meanings respectively given to them in <u>Section 7</u>.

### 1.2 Business Plan Purpose

The purpose of this 2016 NYGB Business Plan (this "**Plan**") is to capture NYGB's performance over the prior year and lay out the roadmap NYGB will pursue to achieve its key objectives for the next year. As directed by the New York State Public Service Commission (the "**Commission**")<sup>2</sup>, this Plan also articulates the explicit steps NYGB expects to take to advance the 2015 State Energy Plan ("**SEP**") and pending Clean Energy Standard ("**CES**") objectives "through its ability to drive down costs associated with meeting those objectives".<sup>3</sup>

This Plan is a product of an annual strategy review and business planning process, implemented by NYGB since inception to address the Commission's requirement that NYGB file an annual business plan that describes in reasonable detail the activities it intends to undertake in the upcoming year.<sup>4</sup> NYGB's strategy review and business planning process previously resulted in its 2015 business plan (the "**2015 Business Plan**")<sup>5</sup> filed in June

<sup>&</sup>lt;sup>1</sup> Created pursuant to the "Order Authorizing the Clean Energy Fund Framework", issued and effective January 21, 2016, Cases 14-M-0094 *et al.* (the "**CEF Order**").

<sup>&</sup>lt;sup>2</sup> *Ibid*, at page 74.

<sup>&</sup>lt;sup>3</sup> Ibid.

<sup>&</sup>lt;sup>4</sup> Case 13-M-0412, "Order Establishing New York Green Bank and Providing Initial Capitalization", issued and effective December 19, 2013, see Ordering Clause 5, page 24.

<sup>&</sup>lt;sup>5</sup> NY Green Bank Business Plan, Case 13-M-0412, June 2015.

2015 and its initial business plan (the "**Initial Business Plan**")<sup>6</sup> filed in June 2014, both of which are available at <u>www.greenbank.ny.gov/About/Public-Filings</u>.

This Plan describes expected activities over the coming year and reports achievements over the past year. Background on NYGB, its mandate, establishment, and market can be found in the 2015 Business Plan and the Initial Business Plan.

<sup>&</sup>lt;sup>6</sup> NY Green Bank Business Plan, Case 13-M-0412, June 2014.

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# 2. NYGB Mission & Goals

NYGB's leadership, organization and activities have a singular focus on achieving NYGB's mission by pursuing a path delineated by its key investment criteria.

### 2.1 Mission

NYGB's mission is set out in Figure 1.

Figure 1: NYGB Mission Statement

To accelerate clean energy deployment in New York State by working in collaboration with the private sector to transform financing markets

The key elements of NYGB's mission are collaborating with private sector participants, implementing structures that overcome market barriers and address financing gaps in current clean energy financing markets, and transforming those markets by enabling greater scale, new and expanded asset classes and increased liquidity. These factors combine to motivate faster and more extensive implementation of clean energy investments within NYS, fostering greater energy choices, reduced environmental impacts and more green energy benefits per public dollar spent for all New Yorkers.

### 2.2 Key Investment Criteria

NYGB's key investment criteria, by which it evaluates all its potential transactions, are defined by the Commission in the Initial Capitalization Order<sup>7</sup> and are reproduced in <u>Figure 2</u>.

Figure 2: NYGB Key Investment Criteria

- Transactions will have expected financial returns such that the revenues of NYGB on a portfolio basis will be in excess of expected portfolio losses;
- Transactions will be expected to contribute to financial market transformation in terms of:
  - Scale;
  - Improved private sector participation;
  - Level of awareness and confidence in clean energy investments; and/or
  - Other aspects of market transformation; and
- Transactions will have the potential for energy savings and/or clean energy generation that will contribute to greenhouse gas ("GHG") emissions reductions in support of New York's clean energy policies.

### 2.3 Other Investment Considerations

Additionality is part of NYGB's consideration of proposed investments, including the following:

(a) The unique benefit NYGB brings to the proposed financing arrangement; and

<sup>&</sup>lt;sup>7</sup> Ordering Clause 6, pages 24 - 25.

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- (b) If any proposed project:
  - i. Would likely not occur given the current state of the private markets; or
  - ii. Might occur in the private markets but:
    - Would likely involve less favorable terms as to tenor, cost, fees and other key transaction attributes;
    - Would likely not happen at the market breadth needed to scale the sector;
    - Would likely not involve the same level of focus on the NYS market; or
    - Would not happen as quickly.

NYGB also assesses the following attributes of proposed transactions:

- (a) Contribution to financial market transformation through:
  - i. Mobilization of private capital as evidenced by a leverage ratio of private capital to NYGB investment and the introduction of capital providers to new sectors;
  - ii. An ability to scale or replicate (i.e., transaction receiving NYGB capital support shows potential to drive volume that can transform markets);
  - iii. Increasing awareness of, and confidence in, clean energy investments;
  - iv. Evolution of private sector institutional underwriting; and
  - v. Progress toward capital markets solution(s) for:
    - Contract standardization;
    - Aggregation; and
    - Data harvesting; and
- (b) Contribution to expected clean energy outcomes determined by:
  - i. Estimated energy savings, peak load reduction and/or clean energy generation;
  - ii. Other estimated GHG reduction benefits to the extent included in proposed project(s) (outside those achieved through direct energy savings and/or clean energy generation);
  - iii. The cost effectiveness of proposed project(s); and
  - iv. The strength of the plan pursuant to which a counterparty (or designated third-party) will track, record, and report performance data.

NYGB considers various transaction sizes and participation levels, but largely expects its participation in any investment opportunity (whether related to a single asset or project portfolio) to fall within the range of \$5.0 - \$50.0 million.

Details of the types of transactions which NYGB considers, including illustrative guidelines for eligible renewable energy and energy efficiency investments, are included in NYGB's open solicitation for proposals (the "**Investment RFP**").<sup>8</sup> The Investment RFP is included in <u>Schedule 3</u>.

### 2.4 Goals & Key Performance Indicators

The mission and key investment criteria drive NYGB's goals, which collectively shape the path NYGB pursues to accomplish its mission. NYGB's goals guide all stakeholders (such as employees, clients, counterparties, industry participants, investors, ratepayers and the public) as to where NYGB focuses its attention and activities.

To manage NYGB's performance against its goals, NYGB has identified a set of key performance indicators ("**KPIs**"), which it directly tracks and monitors to assess whether it is making progress toward achieving its goals at the anticipated pace and if there are any variances (positive or negative). The KPIs generally tie directly to

<sup>&</sup>lt;sup>8</sup> Clean Energy Financing Arrangements – Request for Proposals (RFP) No. 1, available at <u>www.greenbank.ny.gov/Working-with-Us/Propose-an-Investment</u>.

NYGB's metrics and periodic reporting pursuant to the Metrics, Reporting & Evaluation Plan (Version 3.0)<sup>9</sup> (the "**Metrics Plan**"). KPIs and metrics define the criteria stakeholders use to evaluate NYGB performance and provide transparency into, and accountability for, NYGB activities and are set out in <u>Table 1</u>.<sup>10</sup>

NYGB Goals	Key Performance Indicators	Metrics
Attract Private Sector Capital into Clean Energy Capital Markets in NYS	<ul> <li>Mobilizing private capital</li> <li>Portfolio driving material clean energy investments across NYS</li> <li>Growing portfolio</li> <li>Strong Active Pipeline<sup>12</sup></li> <li>Stimulating new clean energy proposals in NYS</li> </ul>	<ul> <li>Mobilization ratio<sup>11</sup> of total project costs to NYGB funds, reported quarterly</li> <li>Total project costs enabled by NYGB (cumulative) (\$)</li> <li>Total committed funds (cumulative) (\$)</li> <li>Active Pipeline (\$)</li> <li>Investment proposals received (cumulative) (\$)</li> </ul>
Be Self- Sustaining	<ul> <li>Revenue growth paving the way to self-sufficiency</li> </ul>	<ul> <li>Revenues (cumulative) (\$)</li> <li>Operating expenses (cumulative) (\$)</li> </ul>
Reduce GHG Emissions	<ul> <li>Contributing to CEF objectives and in turn REV &amp; the CES (by supporting increased deployment of renewable energy, distributed energy &amp; energy efficiency)</li> </ul>	<ul> <li>Current portfolio estimated gross lifetime GHG emissions reductions, reported quarterly (metric tons)</li> <li>Installed energy and environmental benefits, reported annually:         <ul> <li>Energy saved by fuel type from energy efficiency projects (MWh/MMBtu) and/or actual clean energy generated (MWh)</li> <li>Primary energy saved from CHP (Btu)</li> <li>Clean energy generation installed capacity (MW), if applicable</li> <li>GHG emissions reductions (metric tons)</li> </ul> </li> </ul>

<sup>&</sup>lt;sup>9</sup> Case 13-M-0412, filed with the Commission on June 20, 2016.

<sup>&</sup>lt;sup>10</sup> <u>Table 1</u> contains selected metrics that most directly tie to NYGB's goals and KPIs and is not intended to be a complete listing of all metrics on which NYGB reports. For these details, please see the Metrics Plan.

<sup>&</sup>lt;sup>11</sup> Note that mobilization ratio includes the effects of capital recycling. Central to achievement of NYGB's objectives is its ability to efficiently recycle funds. Unlike a pool of public funds that is dispensed once to qualifying projects as non-refundable grants or subsidies, funds entrusted to NYGB are disbursed under commercial arrangements generating investment income and requiring repayment in accordance with agreed terms for each product and counterparty. This means that as each dollar from NYGB cycles through successive investments, benefits will compound. The effective rate of accumulation of these benefits is directly tied to the weighted average expected holding periods of the financial products that NYGB provides to its clients. Further, as the commercial markets expand into and increasingly accommodate clean energy finance needs previously supported by NYGB, the multiplier effect on NYGB's activities and investments will continue.

<sup>&</sup>lt;sup>2</sup> "Active Pipeline" means, at any time and for any period, the sum (expressed in dollars) of the proposed NYGB investment amount in all NYGB active transactions in the Pipeline where, in relation to each transaction: (a) there is agreement in principle between the parties; (b) there is momentum in moving the transaction forward; (c) conditions to investment are expected to be met; and (d) NYGB is dynamically proceeding towards and through "greenlight" recommendation, Investment & Risk Committee ("IRC") approval and transaction execution. Unlike other metrics that are cumulative measures since NYGB Inception, Active Pipeline is a point in time measure. As momentum behind individual transactions fluctuates while advancing toward execution due to various factors, including many not under NYGB's control, transactions may move in and out of the Active Pipeline at any given time.

The KPIs and metrics described in <u>Table 1</u> are infused throughout all aspects of NYGB's business from investment and portfolio management through risk and compliance, operations and finance, and legal and regulatory, which serves to align the entirety of NYGB's activities against its goals.

NYGB files metrics reports on a quarterly basis that lay out its performance in a transparent manner for the Commission, ratepayers and other stakeholders. In addition, pursuant to the Metrics Plan, NYGB reports on installed energy and environmental performance across the investment portfolio on an annual basis and files an annual financial metrics report (focused largely on financial and risk metrics, including NYGB's Audited Financials). All metrics reports are available at <a href="https://www.greenbank.ny.gov/About/Public-Filings">www.greenbank.ny.gov/About/Public-Filings</a>.

Details of NYGB's performance against its KPIs in the year since the 2015 Business Plan filing through June 17, 2016 are set out in <u>Section 3</u>.

# 3. Year in Review

In this <u>Section 3</u>, NYGB provides details of its specific achievements in the plan year just ending – beyond business as usual activities.

Information is presented in <u>Section 3.1</u>, as an "at a glance" summary of performance as of June 17, 2016<sup>13</sup>, in the following key areas:

- Stimulating new clean energy proposals in the State;
- Strong, Active Pipeline;
- Portfolio driving material clean energy investments across NYS;
- Mobilizing private capital;
- Revenue growth paving the way to self-sufficiency; and
- Contributing to CEF objectives and in turn REV and the CES (by supporting increased deployment of renewable energy, distributed energy and energy efficiency).

Following <u>Section 3.1</u>, the balance of this <u>Section 3</u> provides more detail on specific achievements and aspects of NYGB's business in the 2015 – 2016 plan year.

<sup>&</sup>lt;sup>13</sup> Other than Revenue numbers which are of necessity tied to fiscal year periods and where the data included in <u>Section 3.1</u> relates to the quarter ending March 31, 2016.

### 3.1 Performance at a Glance

Stimulating New Clean Energy Proposals in the State	NYGB received ~ <b>\$1.4 billion</b> in investment proposals through June 17, 2016, representing total proposed clean energy investment in New York State exceeding <b>\$4.0 billion</b> .		
Strong Active Pipeline	The Active Pipeline of potential investments proceeding towards closing was <b>~\$500.0 million</b> as of June 17, 2016. <sup>14</sup>		
Portfolio Driving Material Clean Energy Investments Across NYS	NYGB's investment portfolio continues to grow and generate hundreds of millions of dollars of clean energy investment. As of June 17, 2016, NYGB's investments supported clean energy projects with a total project cost of <b>\$518.3 million</b> in aggregate, based on an overall portfolio size of <b>\$121.0 million</b> .		
Mobilizing Private Capital	As of June 17, 2016 NYGB's portfolio of investments represents an expected leverage ratio of total project costs to NYGB funds of ~4:1, which will be realized as planned clean energy projects are successfully implemented by NYGB's clients and counterparties. Over a 10-year period, assuming periodic reinvestment in comparable transactions, the expected leverage ratio would be ~9:1.		
Revenue Growth Paving the Way to Self-Sufficiency	Continued revenue growth – over <b>\$2.9 million</b> in Revenues has been generated from inception through March 31, 2016.		
Contributing to CEF Objectives, REV and the CES	Current portfolio estimated gross lifetime GHG emissions reductions as of June 17, 2016 of up to <b>2.9 million metric tons</b> , equivalent to removing more than <b>37,000 cars</b> from the road for a period of <b>17 years</b> . <sup>15</sup>		

<sup>&</sup>lt;sup>14</sup> Note that at any time, the value of the Active Pipeline is separate from the value of the investment portfolio. So, for example, as of June 17, 2016, the ~\$500.0 million in Active Pipeline does not include the \$121.0 million in closed transactions that comprises NYGB's investment portfolio.

 <sup>&</sup>lt;sup>15</sup> For illustration purposes only, estimated gross lifetime GHG emissions reductions are translated into removal of a number of cars from the road for a period of years. The duration of such removal is calculated by using a weighted average of the estimated gross lifetime GHG emissions reductions per investment and the relevant project useful life (i.e., based on technology type).

### **3.2 Constructed Initial Portfolio**

### 3.2.1 <u>Highlights</u>

Over the twelve months ending June 17, 2016, NYGB closed nine transactions with \$120.5 million in total commitments, comprising NYGB's investment portfolio, mobilizing public and private investments to support \$518.3 million in total project costs for new clean energy deployment in New York State.

Each transaction contributes in some way to the primary CEF outcomes of GHG emissions reductions, customer bill savings, energy efficiency, clean energy generation and mobilization of private sector capital.<sup>16</sup> In turn, the CEF objectives support the CES goal of 50% energy generation from renewable sources, and the SEP goals of 23% reduction in building GHG emissions from 2012 levels, which together further the SEP goal of 40% reduction in GHG emissions from 1990 levels by 2030.

In the aggregate, NYGB's closed transactions are estimated to:

- Reduce up to 2.9 million metric tons of GHG emissions over the lives of the underlying projects;
- Save up to 1.0 million MWh from efficiency measures (electric);
- Save up to 10.0 million MMBtu from efficiency measures (fuel);
- Generate up to 3.2 million MWh of renewable energy over the lives of the underlying projects; and
- Increase renewable energy installed generation capacity by 128.0 MW.

These transactions are expected to enable more than 24,000 New York State homeowners to install rooftop solar and/or energy efficiency upgrades at their residences.<sup>17</sup> In addition, up to eight commercial and industrial end-users will benefit from ground-mounted solar installations and up to 160 distributed wind installations will help power agricultural, residential and commercial end-users.

Each transaction reflects a financing need identified via response to the Investment RFP. Collectively, the transactions demonstrate the effectiveness of NYGB's problem-solving approach, and full product suite, in overcoming financing barriers hindering clean energy deployment within New York State. By creating precedents, methodologies and roadmaps that the private sector can replicate and scale, NYGB has set in motion the process of capital market transformation.

In catalyzing increased private sector financing of clean energy deployment in the State (which reduces ratepayer, clean energy industry participant and end-user costs), these transactions support Governor Cuomo's REV strategy to achieve a cleaner, more resilient and affordable energy system.

### 3.2.2 Transaction Summaries

### Renew Financial (Residential Renewable Energy & Energy Efficiency Finance)

- Reduces up to 560,000 metric tons of GHG emissions over the life of the underlying projects
- Saves up to 420,000 MWh from efficiency measures (electric)
- Saves up to 6.0 million MMBtu from efficiency measures (fuel)
- Generates up to 30,000 MWh of renewable energy over the life of the underlying projects
- Increases renewable energy installed generation capacity by up to 2.2 MW

NYGB committed \$20.0 million in longer term subordinated capital that together with an aggregation credit facility provided by Citigroup will provide financing to Renew Financial to expand its consumer lending program to New

<sup>&</sup>lt;sup>16</sup> As set out in the CEF Order, page 40.

<sup>&</sup>lt;sup>17</sup> Based on self-reported data, and as described in the following press releases: (a) "Governor Cuomo Announces Four New NY Green Bank Transactions to Generate up to \$220 Million in Clean Energy Projects", dated May 12, 2016; and (b) "Governor Cuomo Announces Three NY Green Bank Transactions to Improve Access to Clean Energy and Reduce Greenhouse Gas Emissions", dated October 21, 2015, both available at www.greenbank.ny.gov/News/In-The-News.

York State for the first time. NYGB's commitment will support up to \$100.0 million of residential efficiency and solar installations in NYS. Renew Financial is a clean energy-focused specialty finance company that enables third-party contractors to provide financing to homeowners that seek to purchase energy efficiency and/or solar improvements with no money down. Since transaction close, Renew Financial has built a network of more than 100 contactors in 139 locations across the State to roll out its ReHome New York loan program. By offering an online application and instant in-home approvals, the program is poised to significantly increase home efficiency projects in New York State.

This transaction will result in the aggregation of a bundled pool of loans used to finance energy efficiency measures and rooftop systems that will then be refinanced on a long term basis by institutional securitization markets. NYGB's subordinated capital provides credit enhancement to Citi's senior warehouse credit facility enabling Citi to structure the refinancing of its capital to be investment grade rated by a major rating agency. Having an expectation of an investment grade rating was critical in Citi's willingness to provide its capital and broadens the market of refinance investors to include those requiring investment grade ratings. Also, the establishment of key ratings criteria for energy efficiency and solar loan portfolios provides a roadmap for future participants to follow in structuring investment grade transactions, which will drive down the cost of financing and therefore reduce interest rates to homeowners.

### Level Solar (Residential Solar Power Purchase Agreement ("PPA") Finance)

- Reduces up to 680,000 metric tons of GHG emissions over the life of the underlying projects
- Generates up to 1,292,000 MWh of renewable energy over the life of the underlying projects
- Increases renewable energy installed generation capacity by up to 40.0 MW

NYGB provided a \$25.0 million credit facility that together with tax equity provided by U.S. Bank will finance the deployment of residential rooftop solar systems. Level Solar, a New York-based solar provider, designs and installs systems for residential homes at no cost to the consumer where homeowners receive predictable power prices for 20 years or more. These funds will enable Level Solar to construct solar installations for up to 6,000 New York households resulting in total project deployment of up to \$140.0 million. Through its collaboration with NYGB, the company has installed solar on over 1,000 homes, created more than 100 clean energy jobs and expanded its business beyond Long Island.

The Level Solar transaction demonstrates NYGB's ability to enable developers to accelerate deployment, scale their operations and build the track records they need to attract long term private capital to finance portfolios of solar energy generation systems in the future. The approach also serves as a model that is broadly applicable to installers of portfolios of other distributed small-scale renewable energy systems and energy efficiency upgrades.

### United Wind (Residential, Commercial & Agricultural Wind Installation)

- Reduces up to 41,000 metric tons of GHG emissions over the life of the underlying projects
- Generates up to 78,000 MWh of renewable energy over the life of the underlying projects
- Increases renewable energy installed generation capacity by up to 1.7 MW

NYGB committed \$4.0 million in construction financing to support United Wind's installation of over 160 distributed wind energy projects for residential, commercial and agricultural customers throughout Central and Western New York. United Wind is a Brooklyn-based distributed wind developer utilizing a turnkey lease solution that enables customers to reduce electric bills with no upfront costs. Since NYGB's commitment, the company has raised three rounds of corporate and project equity in excess of \$200.0 million, and has begun construction on turbines in Wayne, Livingston, Genesee, Cayuga and Wyoming counties.

Together with U.S. Bank as tax equity provider for the portfolio, NYGB is establishing a precedent financing model for distributed wind and facilitating deployment to establish the scale required to attract future private sector finance providers. The transaction structure utilized is broadly applicable to other new and innovative distributed energy business models where there has been limited scale to date.

### Energy Improvement Corporation (EIC) (PACE)

- Reduces up to 820,000 metric tons of GHG emissions over the life of the underlying projects
- Saves up to 600,000 MWh from efficiency measures (electric)
- Saves up to 3.4 million MMBtu from efficiency measures (fuel)
- Generates up to 620,000 MWh of renewable energy over the life of the underlying projects
- Increases renewable energy installed generation capacity by up to 35.0 MW

In collaboration with Bank of America Merrill Lynch, First Niagara Bank and participating New York State municipalities, NYGB committed \$5.5 million in two letters of credit (the first commitment, for \$0.5 million, was made in 2014 - 2015) to this Westchester not-for-profit local development corporation. EIC helps property owners lower the upfront costs of renewable energy and energy efficiency upgrades that save money, reduce energy waste and improve the quality of their buildings via a program called Property Assessed Clean Energy ("**PACE**"). PACE enables property owners to borrow to finance energy improvements and repay this debt though additional finance charges included in property tax bills collected by participating municipalities. EIC is using the support provided by NYGB's participation to materially drive PACE growth, and make it accessible to more municipalities and end-users across the State.

By supporting growth of PACE performance history, standardization of transaction structures and documentation and economies of scale in transaction costs as volumes increase, NYGB contributes to PACE expansion and its growing interest to private capital providers.

### BQ Energy (Commercial Solar Installation)

- Reduces up to 23,000 metric tons of GHG emissions over the life of the underlying project (for the first of eight projects)
- Generates up to 44,000 MWh of renewable energy over the life of the underlying project (for the first of eight projects)
- Increases renewable energy installed generation capacity by up to 1.4 MW (for the first of eight projects)

NYGB made an initial commitment of \$1.5 million to BQ Energy to finance the installation of ground-mounted solar located at a landfill in Patterson, New York. NYGB's commitment is the first in a series of anticipated commitments that will fund construction of a portfolio of up to eight distinct solar installations at a total project cost of up to \$30.0 million. BQ Energy is a Poughkeepsie-based renewable energy project developer that specializes in solar development on landfills, which are often unsuitable for other types of development.

NYGB and BQ Energy have established a standardized approach to construction and post-construction finance that will broaden the availability of solar energy to commercial and industrial businesses seeking to purchase solar energy via long term contracts that have had limited access to financing due to lack of scale and/or a lack of public credit ratings. This transaction and the methodologies employed are broadly applicable across the fragmented commercial and industrial solar market.

### Guggenheim, DZ Bank & Solar Mosaic (Residential Solar Loan Finance)

- Reduces up to 144,000 metric tons of GHG emissions over the life of the underlying projects
- Generates up to 270,000 MWh of renewable energy over the life of the underlying projects
- Increases renewable energy installed generation capacity by up to 9.0 MW

NYGB committed \$10.0 million alongside DZ Bank of Germany in an up to \$200.0 million credit facility arranged by Guggenheim Securities that will provide financing to Solar Mosaic. NYGB's participation in the credit facility increased the amount of capital available to Solar Mosaic and will result in up to \$40.0 million to finance up to 1,200 residential rooftop systems in New York State. Solar Mosaic, a national specialty finance company, offers a no-money-down solar financing option for homeowners such that homeowners can directly own their rooftop solar energy generation system and receive full financing for the cost of such systems.

The transaction will result in the aggregation of a bundled pool of loans used to finance rooftop systems that will

then be refinanced on a long term basis by institutional securitization markets. To access the most efficiently priced sources of institutional capital requires substantial scale. Achieving portfolio scale requires large credit facilities such as this, providing aggregation capital. Given that the bank market for such credit facilities remains limited, NYGB's participation enables larger aggregation facilities than would otherwise be available, resulting in securitized market refinancings at a scale greater than might otherwise be achieved. Greater scale means greater investor interest, which will ultimately result in more attractive debt pricing that will benefit New Yorkers via more attractively priced loan options for homeowners seeking to purchase and finance rooftop solar energy generation systems.

### Sealed (Residential Software & Energy Efficiency Finance)

- Reduces up to 34,000 metric tons of GHG emissions over the life of the underlying projects
- Saves up to 4,400 MWh from efficiency measures (electric)
- Saves up to 0.48 million MMBtu from efficiency measures (fuel)

NYGB provided a \$5.0 million credit facility to Sealed Inc. that will support financing for up to \$7.5 million in energy efficiency upgrades for up to 400 homeowners in New York. Sealed, a New York City-based energy software and service company that provides home efficiency upgrades, offers a savings-based financing solution in funding residential upgrades such as new insulation, sealing air leaks, and new boilers and furnaces. The Sealed financing product gives an alternative to homeowners that prefer a savings-based approach rather than a loan approach.

NYGB's credit facility will help establish a track record for Sealed's financing approach and an opportunity to Sealed, and potential future investors, to determine the scalability of the market. Upon creation of an initial portfolio, private capital providers are expected to engage more readily in future financing discussions. The credit facility provided by NYGB is replicable for other participants in the clean energy market in New York State, specifically smaller developers with early marketplace success but limited scale to date.

### Sunrun (Construction & Post-Construction Residential Solar PPA Finance)

- Reduces up to 600,000 metric tons of GHG emissions over the life of the underlying projects
- Generates 1,100,000 MWh of renewable energy over the life of the underlying projects
- Increases renewable energy installed generation capacity by up to 39.0 MW

NYGB committed \$25.0 million as part of a \$245.0 million construction loan facility that will be used to fund construction costs for residential rooftop systems. In addition, NYGB committed \$25.0 million as portion of a separate \$340.0 million consortium which will scale up Sunrun's nationwide deployment. Together these commitments will allow Sunrun to expand operations in NYS by installing solar photovoltaic ("**PV**") systems at more than 5,000 homes in the State. Sunrun, the largest dedicated solar company in the United States, provides affordable clean energy for little to no upfront cost to homeowners by designing, installing, financing, insuring, monitoring and maintaining solar panels on their roofs in exchange for a predictable price specified in a long-term (i.e., 20 year or more) contract.

The transaction will result in the aggregation of bundled pools of solar systems that will then be refinanced on a long-term basis by the institutional securitization markets. To access the most efficiently priced sources of institutional capital requires substantial scale. Achieving portfolio scale requires large credit facilities such as this providing aggregation capital. Given that the bank market for such credit facilities remains limited, NYGB's participation enables larger aggregation facilities than would otherwise be available, resulting in securitized market refinancings at a scale greater than might otherwise be achieved. Greater scale means greater investor interest, which will ultimately result in more attractive debt pricing that will benefit New Yorkers via more attractively priced contracts under which power is purchased.

### 3.3 Reinforced Risk Framework & Processes

To achieve its goal of self-sustainability by generating returns in excess of expenses, NYGB must effectively manage its risk as it grows its investment activity and contributes to the CEF, CES and SEP objectives. NYGB is

exposed to two types of risks, those that are inherent within its investment selection and portfolio management activities, and those driven by internal and external factors that impact its ability to perform as an enterprise.

Over the past year, NYGB continued to refine the various procedures it previously put in place to identify, assess and mitigate investment selection risk as it evaluates prospective transactions and transaction participants. As NYGB has established and is now building an investment portfolio, robust procedures of critical import are in place to monitor risk of individual transactions and the portfolio as a whole. When making an investment, NYGB establishes funding protocols, which specify conditions that must be satisfied prior to NYGB funding, and monitoring criteria consistent with NYGB's investment approval. Funding protocols also require multiple levels of signatures, from both investment and control functions.

NYGB has instituted thorough investment monitoring processes including monthly, quarterly and annual transaction reviews to assess performance; quarterly reviews that compare operating and financial results and investment value with expectations; and quarterly portfolio and pipeline reviews with the IRC. NYGB assesses and rates the risk associated with each transaction individually and monitors these risks on an individual and portfolio basis. NYGB evaluates the impact of prospective investments on the overall portfolio risk, maintaining overall risk of loss within defined limits.

Further information with respect to NYGB's risk management and oversight framework is included in Schedule 1.

### 3.4 Continued Outreach to Potential Proposers, Capital Providers & Stakeholders

NYGB staff continued to meet with and build awareness among various stakeholders across New York State through industry conferences, working groups and targeted outreach. Specific highlights of the past year include:

- (a) Conducted thousands of meetings and conversations with clean energy market participants;
- (b) Initiated and continued outreach to potential proposers across New York State, including a second annual Statewide Meeting Series at various locations around NYS with Empire State Development and New York State Energy Research and Development Authority ("NYSERDA") staff, along with Regional Economic Development Council members. These meetings are an opportunity to provide an update on NYGB activity, and for NYGB to better understand clean energy market barriers and financing gaps in New York's diverse regions;
- (c) Presented at ~60 clean energy industry conferences;
- (d) Ongoing engagement with New York Prize Round 1 winners to provide information on financing opportunities, including co-hosting a webinar with NY Prize to give insights as to what financial institutions generally like to see in terms of demonstrating the "bankability" of a project or product;
- (e) Involved in ongoing process and meetings focused on addressing financing gaps related to low and moderate income ("LMI") households and continued discussions with various Community Development Finance Institutions in an effort to identify potential collaborations with NYGB;
- (f) Commenced cross-agency collaboration in support of developing a Statewide approach to structuring, financing and implementing light-emitting diode street lighting, together with interested utilities and municipalities;
- (g) Co-hosted a meeting to examine opportunities for financing electric vehicle infrastructure;
- (h) Hosted a meeting with utilities and a consulting firm to examine various financing mechanisms for utilities seeking to utilize NYSERDA's On-Bill Recovery ("OBR")<sup>18</sup> mechanism for homeowners to finance energy efficiency or renewable energy generation measures; and

<sup>&</sup>lt;sup>18</sup> See more information at <u>www.nyserda.ny.gov/All-Programs/Programs/On-Bill-Recovery-Financing-Program</u>

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(i) Issued first periodic newsletter to interested parties, as part of more regular and structured outreach to stakeholders.

### 3.5 Built Robust Active Pipeline

Fueled by opportunities cultivated over the course of NYGB's prior business development activity, NYGB grew its Active Pipeline substantially. As shown in <u>Figure 3</u>, as of June 17, 2016, NYGB has an Active Pipeline of \$496.3 million. In addition, <u>Figure 3</u> shows NYGB's progress over the past 12 months in which transactions passing Scoring Committee increased by 120.0% and transactions presented to NYGB's Greenlight Committee and IRC increased by 126.0% and 195.0%, respectively, over the same period. NYGB's investment process is described in <u>Schedule 2</u>.

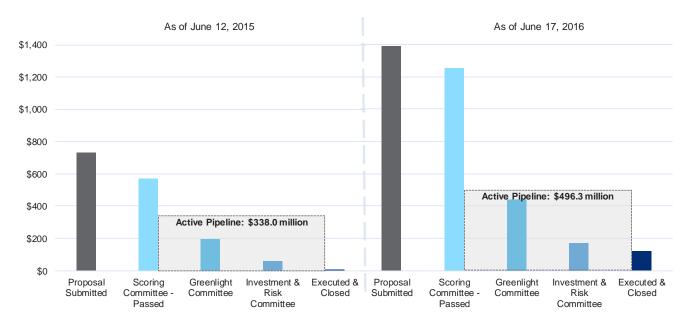


Figure 3: Transaction Status & Active Pipeline<sup>19</sup> (\$ Millions)

Differentials in the dollar amounts between each of the investment stages identified above represent attrition (e.g., between the proposals that NYGB receives and those that pass its Scoring Committee evaluation) and status at a particular moment in time. What is *not* captured is the fact that over time, groups of projects continue to move through the procedural steps and transaction milestones. This means that transactions in the Active Pipeline can be expected to move through Greenlight Committee, IRC and execution and closing milestones, with continuing growth in the aggregate dollar amounts of investments in those categories going forward.

In many cases, proposals must await the completion of certain tasks before they can proceed through NYGB's investment process. These tasks may include but are not limited to: engineering studies; engineering, procurement and construction contracts, with indemnities and guarantees/penalties to ensure on-time delivery and "on spec" performance; offtaker contracts such as PPAs or Energy Service Agreements; larger pipeline for aggregation facilities; satisfaction of regulatory issues such as licenses, permits, and interconnection agreements; and third party capital such as bank debt, tax equity and sponsor equity.

<sup>&</sup>lt;sup>19</sup> Unlike other references which are cumulative since NYGB inception, Active Pipeline is a point-in-time reference. As momentum behind individual transactions fluctuates while advancing towards execution and closing due to various factors, including many not under NYGB's control, these transactions may move in and out of the Active Pipeline at any given time. NYGB expects to manage an Active Pipeline of \$200.0 - \$450.0 million on average at any time.

### 3.6 Co-Founded International Green Bank Network

On December 7, 2015 in conjunction with the Paris COP21 Climate Talks, Governor Cuomo announced that NYGB was a leading founder of the first global green bank network (the "**Network**")<sup>20</sup> – a collaboration founded with five other green banks.<sup>21</sup> This Network enables NYGB and other participants to effectively leverage member experiences and precedents. This shared knowledge, in turn, promotes the ability to address financing market barriers and provide appropriate capital solutions in an expeditious and efficient manner, including by simplifying processes, aggregating data, and standardizing financial products, documentation and underwriting processes. The Network also provides a mechanism for NYGB to increase its impact and global visibility of the REV strategy.

### 3.7 Selected Two Critical Infrastructure Providers

NYGB requires robust and scalable infrastructure to support the growth of its business. Following separate RFP processes, in June 2016 NYGB commenced negotiations with its preferred providers of two core elements of fund infrastructure, Client Relationship Management ("**CRM**")/transaction pipeline and portfolio management and fund administration/loan servicing. In each RFP, NYGB indicated that it sought a robust, secure platform with industry leading technology, efficient and effective processes, the ability to customize systems and fields to meet NYGB's needs, as well as a highly competent implementation and support team that is dedicated to the NYGB account. Negotiations are currently ongoing and announcements are expected to be made when contractual discussions have successfully concluded.

### 3.7.1 <u>CRM/Transaction Pipeline & Portfolio Management</u>

In its RFP, NYGB indicated that it was seeking a third-party platform, built specifically for financial and investment businesses. Its purpose is to support NYGB in managing its growing customer relationship, Pipeline and portfolio management process, maintain a centralized contacts database, and address ongoing and ad-hoc reporting needs on NYGB's Pipeline and investment portfolio for both internal and external stakeholders.

### 3.7.2 Fund Administration, Loan/Investment Servicing

In its RFP, NYGB indicated that it was seeking fund administration and loan/investment servicing that will help to meet and manage NYGB's middle and back office needs consistent with industry best practices for comparable funds (in both the private and public sectors), while taking into account the unique aspects of NYGB. The fund administrator will be an integral component of NYGB's business monitoring, including through the preparation and distribution of fund accounts and reports, providing a treasury support function, portfolio and financial reporting, liaising with external auditors, etc.

### 3.8 Completed Metrics 3.0 Revision & Stakeholder Process

As required by the CEF Order, NYGB completed activities related to the revision of the Metrics Plan. In particular, the CEF Order provides that in consultation with DPS staff, NYGB and NYSERDA "shall review the [Metrics Plan] to determine if other revisions are needed to properly track and assess NYGB progress on an ongoing basis".<sup>22</sup>

To create maximum opportunity for interested parties to provide input into the revised Metrics Plan, NYGB organized and hosted a number of focus group sessions in Albany and New York City during April and May 2016. These sessions involved outreach to interested stakeholders, other interested parties and DPS staff. All comments and inputs were collated and reviewed by theme, and considered in preparing the revised Metrics Plan. The revised version of the Metrics Plan was filed on June 20, 2016. To provide transparency to all parties, NYGB prepared a separate document (the "**Stakeholder Comment & Disposition Document**"), filed

<sup>&</sup>lt;sup>20</sup> "Governor Cuomo Announces NY Green Bank as Leading Founder in First Global Green Bank Network", dated December 7, 2015 and available at <a href="http://www.greenbank.ny.gov/News/In-The-News">www.greenbank.ny.gov/News/In-The-News</a>.

<sup>&</sup>lt;sup>21</sup> Including the UK's Green Investment Bank, Australia's Clean Energy Finance Corporation, the Connecticut Green Bank, Japan's Green Fund, and the Malaysian Green Technology Corporation.

<sup>&</sup>lt;sup>22</sup> Case 14-M-0094 et al. Ordering Clause 36, page 112.

contemporaneously with the revised Metrics Plan. Both are available at <u>www.greenbank.ny.gov/About/Public-Filings</u>.

### 3.9 Fully Capitalized & Received Credit Facility Authority

During the past year, NYGB's full \$1.0 billion capital has been authorized by the Commission as the culmination of efforts that commenced with the September 2013 "Petition of the New York State Energy Research and Development Authority to Provide Initial Capitalization for the New York Green Bank".<sup>23</sup>

On July 16, 2015, the Commission considered the requests and proposals of NYSERDA and NYGB in connection with authorization of NYGB's 2015 capital installment, as set out in the "Petition of the New York State Energy Research and Development Authority to Complete Capitalization of the New York Green Bank" (the "**Petition to Complete Capitalization**")<sup>24</sup> and modified by the "Clean Energy Fund Information Supplement".<sup>25</sup> Pursuant to the "Order Approving Additional Capitalization with Modification for New York Green Bank" issued and effective July 17, 2015 (the "**2015 Capitalization Order**"),<sup>26</sup> the Commission authorized NYSERDA to reallocate uncommitted NYSERDA funds totaling \$150.0 million to support NYGB investments upon demonstration through a compliance filing that NYGB has committed \$150.0 million (representing approximately 75% of its total Authorized Capital of \$218.5 million, net of administration, cost recovery fee and evaluation) to closed investments (the "**Cash Receipt Trigger**"). The compliance filing is to provide information on the executed investment agreements, inclusive of client, a brief description of the transaction, funding commitment expressed in dollars, and date upon which commitment was made, that cumulatively achieve this milestone. NYGB intends to satisfy the Cash Receipt Trigger and make the corresponding compliance filing in the plan year 2016 - 2017.

On January 21, 2016 NYGB's full capitalization at \$1.0 billion was authorized by the Commission pursuant to the CEF Order. Among other things, the CEF Order:

- (a) Confirmed the annual allocation schedule of ratepayer collections (the "CEF NYGB Incremental Collections") to NYGB over the 10-year term of the CEF, including the Commission's acknowledgment that "[m]aintaining the momentum established to date is paramount to positioning NYGB for success"<sup>27</sup>;
- (b) Authorized establishing a NYGB credit facility, backed by the CEF NYGB Incremental Collections (the "Credit Facility"). The purpose of the Credit Facility is to ensure that NYGB has the requisite liquidity to remain fully able to meet and service market demand for its investment and participation in transactions. The Credit Facility is estimated to permit "an additional \$500 million of investment ... [during the period of the CEF], increasing NYGB's investment to \$1.9 billion and ... adding an additional \$1.5 billion in leveraged funds for a total estimated impact of \$5.7 billion".<sup>28</sup> Should the need arise, the Credit Facility will be put in place, consistent with the requirements of the CEF Order, including efforts to minimize associated fees and interest;
- (c) Prescribes a consistent approach across all CEF programs to eligibility criteria. Consistent with the CEF Order, NYGB will make clean energy investments that: (i) advance market transformation, deployment or technical innovation; and (ii) advance at least one of the goals laid out in the SEP (i.e., reduce GHG emissions; increase renewable energy capacity; or increase energy efficiency); and
- (d) Includes certain filing and other requirements of NYGB in connection with the Metrics Plan, Business Plan and Credit Facility.

Full capitalization of \$1.0 billion authorized by the CEF increases NYGB credibility and certainty in the clean

<sup>&</sup>lt;sup>23</sup> Case 13-M-0412, dated September 9, 2013.

<sup>&</sup>lt;sup>24</sup> Case 13-M-0412, dated October 30, 2014.

<sup>&</sup>lt;sup>25</sup> Case 14-M-0094, filed June 25, 2015.

<sup>&</sup>lt;sup>26</sup> Case 13-M-0412 and Case 14-M-0094.

<sup>&</sup>lt;sup>27</sup> Case 14-M-0094 *et al.*, at page 74.

 $<sup>^{\</sup>rm 28}$  Ibid, at page 77.

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energy financing marketplace in which NYGB operates<sup>29</sup> by increasing market confidence in NYGB's ability to support its substantial and growing transaction Pipeline with available capital. Such confidence encourages the further engagement of private sector clients and capital providers with NYGB, directly supporting and maximizing NYGB's ability to drive clean energy financial market transformation.

<sup>&</sup>lt;sup>29</sup> As described in the Petition to Complete Capitalization, together with the "Reply Comments – Petition to Complete Capitalization" filed by NYSERDA in Case 13-M-0412 on February 2, 2015 (the "**Reply Comments**"). See, for example, the Petition to Complete Capitalization at Section 6.0, pages 23 – 25 and the Reply Comments at Section 2.1, pages 2 - 6.

# 4. 2016 - 2017 Objectives

Over the past two years, NYGB built an organization from the ground up and methodically put in place the building blocks of a robust platform to support its overarching goals of self-sustaining growth, financial market transformation and GHG emissions reduction. NYGB has built momentum and is now poised to deliver accelerated growth to augment clean energy deployment, environmental benefits and energy choices available to all New Yorkers.

In 2016 - 2017, NYGB will continue to make substantial progress against its goals. Its 2016 - 2017 objectives are to put additional ratepayer money to work, mobilize private capital and drive toward self-sustainability in a prudent manner mindful of NYGB's role as a steward of public funds. The achievement of these objectives will be demonstrated by three key deliverables set out in Figure 4. (For the complete set of supporting deliverables, see <u>Section 6</u>.)

Figure 4: NYGB Objectives & Key Deliverables for 2016 - 2017

- Put ratepayer money to work, prudently: Commit \$200.0 million to NYGB investments over the next year, equating to an average of \$50.0 million in closed transactions per quarter.
- Mobilize private capital: Achieve an average, portfolio-wide mobilization ratio of at least 3:1, driving towards a ratio of 8:1 across all NYGB investments by the end of the CEF term in 2025.
- Drive toward self-sustainability: Continue to grow revenues and manage costs to reach self-sufficiency in 2018.

# 5. Plan to Achieve 2016 - 2017 Objectives

NYGB is focused on capitalizing on its momentum to achieve its 2016 - 2017 objectives, as described in <u>Section</u> <u>4</u>. NYGB is executing on a series of current initiatives specifically designed to capture the advantages of its increasing scale and experience, in addition to managing ongoing business as usual. NYGB's ongoing activities are described in detail in its quarterly metrics reports and annual financial metrics reports, which are available at <u>www.greenbank.ny.gov/About/Public-Filings</u>. The following Sections describe NYGB's current and priority initiatives.

### 5.1 Continuously Improve Business-as-Usual Practices

### 5.1.1. <u>Continue Quality Pipeline Development</u>

The quality, depth and breadth of NYGB's Pipeline are fundamental drivers producing transactions that are transformative for the clean energy financing markets in New York State. Accordingly, NYGB's 2016 – 2017 priorities are anchored in its development and maintenance of a meaningful pipeline, achieved through ongoing outreach to a wide variety of potential proposers, together with NYGB's responsiveness and creativity in collaborating with clients. This effort is ongoing and constant.

### 5.1.2. Continue Rigorous Investment Evaluation & Portfolio Management

As transaction volumes increase and drive efficiencies of scale, NYGB will remain prudent and adhere to the Commission's key investment criteria. For additional details on NYGB's investment criteria, see <u>Section 2.2</u>. Rigor in the diligence process, oversight of each commitment and active portfolio management will be emphasized on an ongoing basis. In addition, NYGB will continue seeking out and applying any advances in best practice investment evaluation procedures and policies.

### 5.1.3. Continue Best-Practice Risk Management

NYGB's risk management efforts ultimately result in higher return on investments, which advances NYGB's goal of self-sustainability and helps ensure that NYGB stewards ratepayer funds with prudence. NYGB will continue to undertake continuous efforts to ensure excellence in its risk and compliance tools and frameworks, and internal operations and procedures. As its portfolio grows, NYGB will continue reviews on a monthly, quarterly and annual quarterly basis to manage performance and identify risks and issues.

### 5.1.4. <u>Continued Focus on Revenues & Expenses</u>

As NYGB further transitions from its start-up and establishment period to a full operating investment entity with an expanding portfolio, NYGB is focused on growing revenues and managing expenses to achieve self-sufficiency as expeditiously as possible, while continuing to deliver upon its mission and mandate, including spurring market transformation.

NYGB's 2015 – 2016 total revenues and expenses, based on the Audited Financials, together with the corresponding targets for the 2016 – 2017 financial year ending March 31, 2017 are set out in <u>Table 2</u>.

### Table 2. Revenue & Expenses

	FY 2015 - 2016	FY 2016 - 2017 <sup>30</sup>	Forecast % Change
Total Revenues	\$1.91 million	\$4.46 Million	134.0%
Total Expenses	\$5.54 million	\$7.75 Million	40.0%
Net	(\$3.63 million)	(\$3.29 million)	

### 5.1.5. Continue Efforts to Standardize & Promote Best Practices

As NYGB's portfolio grows, there are ongoing opportunities for NYGB to reduce transaction costs by standardizing documents and procedures, and to reduce capital costs by gathering and making data available on project and investment performance (subject to commercial confidentiality practices and the protection of competitive information). Standardizing contracts and procedures plays an important role in developing capital markets for clean energy assets. As part of its investment process, NYGB will continue to develop business-level and legal term sheets and legal documentation that it expects to provide increased transaction efficiencies over time, demonstrate best practices and contribute to standardization. Tracking and reporting energy project performance data, financing/loan payment and performance data enhances transparency where increased transparency can support private sector understanding of new asset classes and ideally encourage more willingness to invest. Greater understanding should also lead to more efficient pricing of clean energy project financing, effectively reducing the levelized cost of energy for eligible technologies. Together these efforts will help reduce obstacles to private capital providers in scaling up their investment activity.

### 5.1.6. <u>Continue External Reporting</u>

NYGB will continue to provide extensive information to the public, including via required filings such as annual business plans, quarterly and annual financial metrics reports, and detailed transaction profiles for all closed transactions. This information will continue to be available respectively at <a href="https://www.greenbank.ny.gov/About/Public-Filings">www.greenbank.ny.gov/About/Public-Filings</a> and <a href="https://www.greenbank.ny.gov/About/Public-Filings">www.greenbank.ny.gov/About/Public

### 5.2 Build Upon & Capture Benefits of Prior Business Development Activities

Over the last two years, NYGB has methodically built awareness of its existence and role within the New York State clean energy landscape via thousands of in-person meetings and communications with potential proposers and stakeholders throughout the State. The benefits of these relationship, awareness and engagement-building efforts only become apparent over time, when they result in referrals and high-quality proposals that enter NYGB's Pipeline. In 2016 - 2017, NYGB's business development efforts are expected to benefit from elevated baseline awareness of NYGB's capabilities and its growing track record. NYGB staff will continue to publicize its work, progress and ongoing opportunities for collaboration through traditional forums – conferences, working groups and individual meetings. In parallel, NYGB will continue to identify areas of the clean energy marketplace that can be developed and expanded at scale and to work collaboratively with all relevant parties to develop innovative capital solutions to address financing issues in those areas.

### 5.3 Cultivate Opportunities Related to New State Programs & Initiatives

NYGB will continue to take leadership roles in establishing financing approaches and solutions for demand that is developing, or is expected to be developed, as a result of new State policies, programs or initiatives.

<sup>&</sup>lt;sup>30</sup> The 2016 – 2017 projected revenue and cost figures represent NYGB management's best estimates at the date of this Plan. While due care has been used in the preparation of forecast and estimated information, actual results may vary in a materially positive or negative manner. Forecasts and estimates are subject to uncertainty and contingencies outside NYGB's control.

#### 5.3.1 NY Prize

NYSERDA's NY Prize<sup>31</sup> is a first-in-the nation competition to help communities create microgrids, i.e., standalone energy systems that can operate independently in the event of a power outage. Community microgrids are at a nascent stage of development because they involve many users, and are much more complex than traditional microgrids that serve one user. NY Prize offers support for microgrid feasibility studies (Stage 1), audit-grade engineering design and business planning (Stage 2), and project build-out and post-operational monitoring (Stage 3). Eighty-three Stage 1 winners were announced in July 2015. Stage 2 proposals are due October 12, 2016, and Stage 3 proposals are anticipated to be due in April, 2018. NYGB will continue its conversations with NY Prize awardees as their projects mature to a level where they are potentially financeable.

#### 5.3.2 Community Solar

Community solar refers to solar-electric systems that provide power and/or financial benefit to, or are owned by, multiple community members.<sup>32</sup> It provides those who are not otherwise able to put solar energy generation systems on their property (e.g., homeowners whose rooftops cannot support solar systems, renters and those who cannot afford solar systems), with voluntary access to solar electric power. Providing all ratepayers with access to solar electric power if they choose is a State-level priority. On July 17, 2015, the Commission established a program called "Community DG"33 to provide opportunities to share renewables. Although these efforts are at an early stage, NYGB is in dialog with NYSERDA and multiple organizations that seek to spur and participate in community solar initiatives.

#### 5.3.3 Municipal Energy-Efficient Street Lights

Street lighting consumes substantial portions of New York State municipal budgets that could otherwise be directed toward other municipal priorities. As a result, it is a priority at the State and municipal levels to reduce street lighting costs. NYGB is engaged in discussions with utilities that own street lights regarding potential opportunities to fund conversion of conventional street lights into more energy-efficient street lights configured with "smart" control systems. In addition, NYGB looks forward to proactively engaging municipalities interested in owning their own light fixtures and/or financing the conversions themselves.

#### 5.3.4 LMI Communities

Although multiple New York State programs already address traditionally underserved LMI communities, NYGB seeks to identify opportunities to serve LMI communities that fall within the boundaries of its three investment criteria (see Section 2.2). In 2016 - 2017, NYGB will continue working closely with NYSERDA, and will proactively initiate efforts that assist foundations, financial institutions and any others that work with LMI communities in formulating investable opportunities. In addition, NYGB intends to use its convening power in an attempt to accelerate the formation of investment opportunities aligned with its key investment criteria.

### 5.4 Product Development & Issuing Targeted Solicitations

In addition to catalyzing private capital inflows into New York State's clean energy markets, RFPs targeted towards specific investment types are also expected to foster Pipeline growth to a size that supports NYGB's steady state commitment level. Concurrently, they are designed to drive efficiencies by increasing standardization and the proportion of opportunities likely to close, as well as decreasing the time and cost required to evaluate each opportunity.

Based on the responses to the Investment RFP, and NYGB's work to evaluate all proposed investments received to date, NYGB has identified two potential opportunities to accelerate market transformation via the creation and introduction of targeted financial products. In both cases, the market is potentially large, but currently suffers from

 <sup>&</sup>lt;sup>31</sup> See <u>www.nyserda.ny.gov/All-Programs/Programs/NY-Prize</u>.
 <sup>32</sup> See, for example, U.S. Department of Energy, "A Guide to Community Solar", available at <u>www.nrel.gov/docs/fy11osti/49930.pdf</u>.

<sup>&</sup>lt;sup>33</sup> Case 15-E-0082, "Order Establishing a Community Distributed Generation Program and Making Other Findings", issued and effective July 17, 2015.

fragmentation, lack of standardization and lack of scale. To determine the most effective specifications for potential new products, NYGB issued two Requests for Information ("**RFI**") in June 2016, which directly solicit input from, and invite engagement with, industry participants, capital providers and potential customers. After evaluating and incorporating the input it receives, NYGB will issue RFPs including standard term sheets that will be offered to proposers that meet specified conditions. The two new proposed product offerings are detailed in the balance of this <u>Section 5.4</u>.

### 5.4.1 <u>Financing Commercial Real Estate & Multi-Family Solar &/or Energy Efficiency System</u> <u>Purchases</u>

The first solicitation is aimed at enabling commercial real estate and multi-family property owners to finance the installation of solar PV systems and/or energy efficiency improvements where they seek to directly own such improvements rather than entering into an arrangement with a third-party owner of the assets. Property owners and market participants (such as developers, energy service companies and other contractors) serving such market are fragmented and do not benefit from a standardized, efficient financing approach that can be incorporated with or without a senior mortgage being in place. NYGB seeks to accelerate financeability and deployment in this market by providing the terms under which NYGB would be prepared to consider offering financing. By signaling to private sector participants that installations meeting NYGB's standard terms and conditions will have access to NYGB's product, the RFP is expected to increase transaction volumes resulting in a standardized portfolio of financings at scale, which will attract further private sector investment.

### 5.4.2 Financing Ground-Mounted Solar Systems Targeting Corporate & Industrial End-Users

The second solicitation aims to enhance access to affordable finance by providers of electricity produced by small ground-mounted solar PV installations where the power is sold to corporate and industrial off-takers that do not benefit from a public credit rating. Although many unrated corporate and industrial customers seek access to clean solar power, the market is constrained by fragmentation, lack of standardized documentation and lack of efficient and standardized power off-taker credit underwriting methodologies. NYGB seeks to accelerate financeability and deployment in this market by providing the terms under which NYGB would be prepared to consider offering financing. By signaling to the private sector that developers meeting NYGB's standard terms and conditions will have access to NYGB's product, the RFP is expected to increase transaction volumes resulting in a standardized portfolio of financings at scale, which will in turn attract further private sector investment.

### 5.5 Focus Interest of Syndicates on New York State Clean Energy Deployment

NYGB seeks to leverage the high-visibility transactions it completed with premier global-scale capital providers in the last year (for additional details, see <u>Section 3.2</u>), and its location and relationships at the nexus of global financial activity. Participating in financing syndicates is an effective mechanism to attract large investment pools and national clean energy providers that might not ordinarily focus upon or prioritize development in New York State. By drawing clean energy actors that operate at scale into the State, NYGB facilitates accelerated realization of CEF, CES and SEP objectives. In 2016 - 2017, NYGB will systematically engage a prioritized set of target entities as part of its core business development efforts.

### 5.6 Streamline Proposal Intake Processes

NYGB aims to simplify and streamline its proposal submission process, especially in connection with the Investment RFP. In particular, NYGB plans to implement greater use of web-based and interactive forms to facilitate easier submission for all potential counterparties and more direct and accurate data collection. Additionally, NYGB expects to modify its Investment RFP to further enhance ease of use.

### 5.7 Implement CRM/Transaction Pipeline & Portfolio Management Platform

When implemented, the scalable platform described in <u>Section 3.7</u> is expected to assist NYGB in managing increased volumes of activity, and driving efficiencies, throughout NYGB's business development, Pipeline,

investment and portfolio management processes. By providing greater visibility into and tools to manage Pipeline and portfolio progress and performance, it will also serve to support NYGB's risk management processes and procedures.

Onboarding, detailed system design and implementation will commence upon completion and execution of a contract with the preferred provider. To ensure performance and mitigate potential disruption, the platform will be launched in beta test mode and run in parallel with NYGB's existing systems prior to full cutover in the months ahead.

### 5.8 Implement Fund Administration, Loan/Investment Servicing

When implemented, the fund administration system discussed in <u>Section 3.7</u> is anticipated to address the large increase in labor-intensive mid and back office activity required to support NYGB's expanding Pipeline and portfolio and do so in an efficient and controlled manner. The system will assist NYGB in focusing its limited resources on its core business development, investment evaluation, portfolio and risk management activities, while providing NYGB with access to industry best practices and systems.

Onboarding, detailed system design and implementation will commence upon completion and execution of a contract with the preferred provider. To ensure performance and mitigate potential disruption, the platform will be launched in beta test mode and run in parallel with NYGB's existing systems for a reasonable duration prior to full cutover in the latter part of the year.

### 5.9 Attract & Retain Qualified Staff

Securing and maintaining adequate staffing is the most fundamental prerequisite to NYGB's ability to fully and properly execute on this Plan in 2016 - 2017. As with other investment organizations and green banks, NYGB requires appropriate staffing levels to achieve its mission and goals by supporting all aspects of ongoing growth in the business. NYGB anticipates needing to fill positions in the near-term to deliver its anticipated 2016 - 2017 growth.

Attracting certain additional staff and developing and retaining staff in general are critical areas of focus for 2016 - 2017. Recruiting efforts emphasize individuals who bring rich experience in their fields from having worked in other private, public and/or not-for-profit institutions focused on energy and/or financing.

Each member of the NYGB team is highly-motivated and dedicated to serving the public by advancing the REV strategy. Recruiting candidates away from other opportunities including in the private sector, and retaining staff, requires that NYGB maintain a stimulating environment where employees believe they can have impact and gain critical transaction and portfolio management experience, while working in an environment and organization that operates in a manner broadly consistent with private sector norms.

# 6. Plan Deliverables

NYGB expects to achieve the key 2016 - 2017 objectives described in <u>Section 4</u> by executing the initiatives described in <u>Section 5</u> in addition to diligently and prudently conducting business as usual.

NYGB has identified specific deliverables that collectively mark progress in implementing the key initiatives, as well as the supporting activities required to achieve them, over the course of the 2016 - 2017 Plan year. These deliverables are set out in <u>Table 3</u> (collectively, the "**Plan Deliverables**").

Progress against the Plan Deliverables will be reported in NYGB's quarterly metrics reports, filed pursuant to the Metrics Plan, together with a brief narrative (as appropriate) of status and an explanation of any material variances relative to expectations.

Table 3: Plan Deliverables	(2016 – 2017)
----------------------------	---------------

Category	Deliverable		
Strong Active Pipeline			
Active Pipeline	<ul> <li>Maintain an Active Pipeline of at least \$300.0 million.</li> </ul>		
<ul> <li>CRM, Transaction Pipeline &amp; Portfolio Management Infrastructure</li> </ul>	<ul> <li>Implementation of third-party platform, full "go-live".</li> </ul>		
Portfolio Driving Material Clean Ene			
<ul> <li>Committed Funds</li> </ul>	<ul> <li>Commit \$200.0 million to NYGB investments per year, equating to an average of \$50.0 million in closed transactions per quarter.</li> </ul>		
<ul> <li>Financing Commercial Real Estate &amp; Multi-Family Solar System &amp;/or Energy Efficiency Purchases</li> </ul>	<ul> <li>Publicly issue RFP.</li> </ul>		
<ul> <li>Financing Ground-Mounted Solar Systems Targeting Corporate &amp; Industrial End- Users</li> </ul>	<ul> <li>Publicly issue RFP.</li> </ul>		
<ul> <li>Fund Administration &amp; Loan/Investment Servicing Infrastructure</li> </ul>	<ul> <li>Implementation of third-party platform, full "go-live".</li> </ul>		
Available Capital	<ul> <li>Satisfy the Cash Release Trigger pursuant to the 2015 Capitalization Order through achieving a portfolio size of \$150.0 million.</li> </ul>		
Mahilizing Private Capital			
Mobilizing Private Capital			
<ul> <li>Mobilization Ratio</li> </ul>	<ul> <li>Achieve an average, portfolio-wide mobilization ratio of at least 3:1, driving towards a ratio of 8:1 across all NYGB investments by the end of the CEF term in 2025.</li> </ul>		

# 7. Glossary & Definitions

"2015 Business Plan" has the meaning given to that term in Section 1.2.

"2015 Capitalization Order" has the meaning given to that term in Section 3.9.

# Α

"Active Pipeline" has the meaning given to that term in footnote 12.

"Audited Financials" means annual audited financial statements prepared in accordance with applicable accounting standards by a reputable, experienced and independent accounting firm, in consultation with NYGB and NYSERDA staff.

# С

"Cash Receipt Trigger" has the meaning given to that term in Section 3.9.

"CEF" has the meaning given to that term in Section 1.1.

"CEF NYGB Incremental Collections" has the meaning given to that term in Section 3.9.

"CEF Order" has the meaning given to that term in footnote 1.

"CES" has the meaning given to that term in <u>Section 1.2</u>.

"Commission" has the meaning given to that term in <u>Section 1.2</u>.

"**Committed Funds**" means, in any period, the aggregate funds to be provided by NYGB pursuant to executed investment and financing agreements which remain in force during that period, without such funds having been Deployed, expressed in dollars. "Committed" has a corresponding meaning.<sup>34</sup>

"Credit Facility" has the meaning given to that term in Section 3.9.

"CRM" has the meaning given to that term in Section 3.7.

# D

"**Deployed Funds**" means, in any period, the aggregate funds that have been advanced by NYGB pursuant to the terms of executed investment and financing agreements which remain in force during that period, expressed in dollars. "Deployed" has a corresponding meaning.<sup>35</sup>

# G

"GHG" has the meaning given to that term in Section 2.2.

<sup>&</sup>lt;sup>34</sup> Many NYGB investments involve product types where funds are Committed to support NYGB's contingent obligations to clean energy projects and which, by their nature, are not intended to be drawn upon other than in specifically identified circumstances. Thus, not every dollar of Committed Funds will be Deployed.

<sup>&</sup>lt;sup>35</sup> Deployed Funds reflect only funds actually advanced. Many transactions involve provision of credit enhancements by NYGB that, by their nature, are contingent obligations not generally intended to be fully drawn against or funded. In addition, many NYGB investments are "delayed draw" in that funds are not Deployed until project sponsors meet certain development milestones over a time period necessary to originate, develop and construct a large number of smaller, distributed, clean energy projects.

"Greenlight Committee" means the committee of that name in NYGB's investment process.

"Initial Business Plan" has the meaning given to that term in Section 1.2.

"Investment RFP" has the meaning given to that term in Section 2.3.

"IRC" means the Investment & Risk Committee of NYGB.

# Κ

"KPIs" has the meaning given to that term in Section 2.4.

# L

"LMI" has the meaning given to that term in Section 3.4.

# Μ

"Metrics Plan" has the meaning given to that term in Section 2.4.

# Ν

"Network" has the meaning given to that term in Section 3.6.

"NYGB" means NY Green Bank.

"NYS" means New York State.

"NYSERDA" means the New York State Energy Research and Development Authority.

# 0

"OBR" has the meaning given to that term in Section 3.4.

# Ρ

"PACE" has the meaning given to that term in Section 3.2.

"Petition to Complete Capitalization" has the meaning given to that term in Section 3.9.

"**Pipeline**" means, at any time, collectively, the investment transactions that are under development and negotiation between NYGB and its prospective counterparties but not yet closed, following NYGB's receipt of an investment proposal that meets the requirements of its process (including, without limitation, the terms of any applicable investment solicitation issued by NYGB and in effect from time to time).

"Plan" has the meaning given to that term in <u>Section 1.2</u>.

"Plan Deliverables" has the meaning given to that term in <u>Section 6</u>.

"PPA" has the meaning given to that term in Section 3.2.

"PV" has the meaning given to that term in Section 3.2.

# R

"Reply Comments" has the meaning given to that term in footnote 29.

"**REV**" has the meaning given to that term in <u>Section 1.1</u>.

"**Revenue**" means, in any period, NYGB revenue from all sources, including without limitation all fees, interest, penalties, dividends and other receivables related to Committed Funds and Deployed Funds (inclusive of such amounts as may be capitalized, accrued or paid-in-kind) due to NYGB during that period as remuneration for providing financial facilities in transactions and also includes interest received on cash held by NYGB<sup>36</sup>, all expressed in dollars. "Revenue" excludes fair market value adjustments (either increases or decreases) relating to available capital held in U.S. Treasury securities from time to time for the purposes of quarterly metrics reports, but these adjustments are included in Revenue calculations in Audited Financials and annual financial metrics reports.

"RFI" has the meaning given to that term in Section 5.4.

"**RFP**" means Request for Proposal.

# S

"Scoring Committee" means the committee of that name in NYGB's investment process.

"**securitization**" means the process through which an issuer creates a <u>financial instrument</u> by combining other financial assets and then marketing different tiers of the repackaged instruments to investors. The process can encompass any type of <u>financial asset</u> and promotes <u>liquidity</u> in the marketplace. "Securitize" has a corresponding meaning.<sup>37</sup>

"SEP" has the meaning given to that term in Section 1.2.

"Stakeholder Comment & Disposition Document" has the meaning given to that term in Section 3.8.

"syndicate" means a group of lenders who work together to provide funds for a single borrower.

<sup>&</sup>lt;sup>36</sup> It is NYGB's practice to invest cash balances in low risk instruments.

<sup>&</sup>lt;sup>37</sup> See <u>www.investopedia.com/terms/s/securitization.asp.</u>

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### **Risk Management & Oversight Framework**

### 1. Introduction

Effective management of NYGB risk is a cornerstone of NYGB's ability to be self-sustaining, meet its mission of generating returns in excess of expenses and other uses of cash, and being a responsible steward of the public funds with which it is entrusted. While realizing NYGB's market-responsive mission requires it to retain flexibility in its decision-making, investments and operations, NYGB is acutely aware that such flexibility must be subject to rigorous processes and accountabilities.

Risk-taking is an intrinsic part of all investment businesses, including NYGB. At NYGB, risk management is not only important in minimizing and controlling loss, it also plays a role in strategic planning, portfolio construction, investment management processes and operations.

Risk management is the process for identifying, assessing and controlling both enterprise and portfolio risks to minimize unanticipated losses and uncompensated risks and optimize the reward/risk ratio. <sup>38</sup> At NYGB, risk management principles are applied at the enterprise and investment portfolio levels and are both quantitative and qualitative in nature. This means that risk management is viewed not just as the duty of one individual or department but as the responsibility of all NYGB personnel as a fundamental part of organizational culture.

This <u>Schedule 1</u> outlines the key risks in NYGB's business, risk management policies, mitigants and risk management oversight.

### 2. Risk Framework & Identification

At NYGB, all risks arising in the business are classified into two main categories: investment risks and enterprise risks. Investment risks refer to all the risks involved in investment selection and asset management; enterprise risks reflect the balance of largely operational risks related to NYGB's business. Investment risks are further segmented into investment selection and portfolio management, reflecting that the nature of risks that arise in connection with the commitment and deployment of funds differs depending on whether NYGB is making a particular investment or managing its overall portfolio. <u>Table 4</u> sets out the key business risks to be managed by NYGB.

<sup>&</sup>lt;sup>38</sup>"Risk Principles for Asset Managers", February 2008, prepared by the Buy Side Risk Managers Forum and Capital Market Risk Advisors. See also "Risk Principles for Asset Managers", September 2015, prepared by The GARP Buy Side Risk Managers Forum.

### Table 4. NYGB Key Business Risks

Investment Risks			Enterprise Risks	
Technology Risk	Investment Selection The risk that the technology employed in a potential investment will not function as and when intended, including to expected and necessary performance levels	Capitalization Risk	Risk that NYGB does not receive the funds allocated to it on the expected schedule, which could negatively impact NYGB's concentration risk and result in a portfolio that is overweight in individual transaction types versus plan.	
Operating Risk	Operational risks related to potential investments, including construction, fuel/renewable resource, input prices, servicing, maintenance and billing/collections arrangements, management, performance of other debt, equity and project participants	Liquidity/ Balance Sheet Risk	Risk that counterparties are unable to refinance NYGB's position when expected and/or NYGB is unable to sell-down assets (at times and/or on terms acceptable to NYGB), tying up capital and slowing the capital recycle rate	
Legal & Capital Structure Risk	Risks of inadequate contractual terms and documentation to properly structure the relevant project and protect NYGB's interests; risks inherent in proposed capital structure and contractual risk allocations between capital providers	Capital Deployment Risk	Risk that capital is not deployed at a sufficient rate to generate the revenues necessary for self-sufficiency, or the benefits expected to the clean energy sector in New York and to the leveraging of public funds	
Counterparty & Credit Risk	Risk of default by a project and/or direct NYGB counterparty in a proposed investment	Execution Risk	Risk of not having the right skills, in the needed amounts available to execute on NYGB business as intended (applies to internal capabilities and external collaborations)	
Refinancing Risk	Risk of market development and conditions such that investment either cannot be refinanced where applicable, except in part or at a loss to NYGB, or on terms which might reasonably result in default	Operational Risk	Risks affecting NYGB's "license to operate" potentially arising in these areas: Legal Legislative and regulatory Environmental Intra-Agency integration (e.g., NYSERDA) Inter-Agency integration (e.g., DPS) State Comptroller/NYSERDA audit deficiency Inadequate systems, processes or controls	
Market/Price Risk	Risk that energy prices do not sustain the investment/project as modeled and proposed over its expected life	Political Risk	Risks relating to NYGB, as a State-sponsored specialty finance entity, being perceived as a target to provide special treatment to particular constituencies or suffering from changed political priorities with respect to clean energy within New York	
Portfolio Management				
Non-Performance	Risk that during the course of an investment it begins to under-perform and/or becomes non- performing		Risks that can arise in every aspect of NYGB's business and operations that an event occurs relating	
Concentration Exposures	Risks posed by lack of sufficient diversification among portfolio investments, such that non- performance in a particular transaction type has a substantial impact on overall portfolio performance Risk of investment servicing and	Reputation Risk	to a transaction, counterparty or business practice which detrimentally impacts NYGB and therefore the regard in which it is held in the marketplace and among all stakeholders. Diminished reputation can materially undercut NYGB's ability to operate and achieve success	
Investment Servicing & Administration	administration (including all related monitoring and reporting) lacking in scope, accuracy, or timeliness, impacting the ability to optimally manage NYGB investments and portfolio			

### 3. Risk Mitigation Principles

Addressing the risks that arise across NYGB's business occurs through the application of key risk management principles in combination with a system of specific risk mitigation measures. NYGB's investment risks are identified, managed and monitored through application of the practices outlined in the balance of this <u>Section 3</u> in the context of investment analysis and review, portfolio construction, ongoing portfolio monitoring and management, and organizational risk culture. NYGB's risk management reflects the principles set out below.

### 3.1 Investment Analysis & Review Principles

- (a) Structured and comprehensive due diligence for all potential investments, addressing all identified transaction risk categories consistent with usual and customary commercial approaches;
- (b) Conducting "know your customer" background checks on potential counterparties, with a process in place that can be tailored to address the spectrum of smaller private ventures through larger companies;
- (c) Creating the most appropriate transaction structure, including financial terms (e.g., covenants, ratios, leverage, reporting requirements, etc.) for the particular asset class;
- (d) Implementing a comprehensive set of contractual risk mitigants (e.g., representations, warranties and covenants, indemnities, defaults, penalties, etc.);
- (e) Adhering to internal procedures for investment decision-making, including Scoring Committee, Greenlight Committee and IRC reviews, input and respective approval processes; and
- (f) Leveraging internal and external expertise as required by a particular opportunity, including technical and legal.

### 3.2 **Portfolio Construction Principles**

- (a) Apply prudent diversification principles to the extent possible taking into account NYGB's market-responsive approach, including with respect to:
  - i. Each transaction and how it fits within NYGB's portfolio;
  - ii. Particular clean energy sub-sectors (e.g., solar, wind, storage, efficiency, etc.);
  - iii. Types of projects (e.g., by technology etc.);
  - iv. Target segment representation (including end-use type commercial and industrial, residential, agricultural etc.);
  - v. Particular clients and counterparties;
  - vi. Types of product offerings; and
  - vii. Geographic distribution;
- (b) Identify and monitor concentration risk and exposures (e.g., companies, technologies, asset classes, products etc.), also taking into account NYGB's market-responsive approach;
- (c) In the context of NYGB's demand-driven approach, evaluate and revise as needed minimum and maximum indicative single investment amounts;
- (d) Use recognized commercial benchmarks for comparable asset classes to assess NYGB relative performance once the portfolio has reached sufficient size; and
- (e) Manage returns from individual investments as well as across the entire portfolio, ensuring such returns generally exceed minimum hurdle rates.

### 3.3 Ongoing Portfolio Monitoring & Management Principles

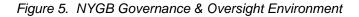
- (a) Regular and periodic evaluation of each investment against its investment case;
- (b) Identify early signs of potential/actual under-performance and/or non-performance;
- (c) Proactive management of recoveries and maximization of recovery in line with sound commercial principles; and
- (d) Regular reporting to the IRC.

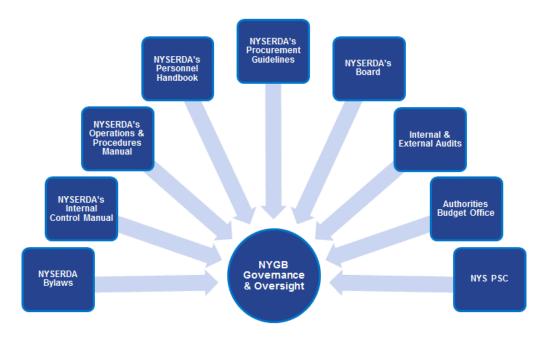
### 3.4 Organizational Risk Culture Principles

- (a) NYGB has adopted and strives to maintain an organizational culture in which understanding and managing risk is everyone's responsibility. Risk mitigation and management is not just about policing and enforcing limits. NYGB personnel at all levels must be cognizant of risks and willing to do their part to make sure that those risks within their sphere of responsibility are managed in a manner consistent with NYGB's policies and disclosures to clients, counterparties and broader stakeholders. Implementation and compliance with NYGB risk parameters, principles, policies and procedures forms part of personnel performance assessments;
- (b) Ongoing NYGB emphasis on communications, transparency and consistent updates in connection with existing investments, investment opportunities, clients, counterparties and key stakeholders;
- (c) Organizational checks and balances are being established and maintained, including appropriate segregation of front/mid-back office functions. Risk function is housed in an independent control group with a single point of responsibility (i.e., the Managing Director, Risk & Compliance) and having access to NYGB's President and the IRC;
- (d) NYGB organizational structure in which risk management roles and responsibilities are clearly defined, including written policies and other procedures identifying the specific people within the organization who are authorized to approve various actions, etc.;
- (e) Senior management and the IRC are responsible to fully understand NYGB risks, define risk tolerances and set the risk management and ethical tone throughout the organization. This is critical to NYGB achieving its mission and protecting its reputation in the marketplace;
- (f) NYGB acquires and maintains technology to support risk functions, including appropriate software platforms and other tools for portfolio management, performance analysis and monitoring;
- (g) NYGB has implemented and seeks to maintain effective record keeping and management of all documents and records pursuant to commercial and appropriate protocols;
- (h) NYGB works with information technology personnel at NYSERDA to ensure adequate backup and disaster recovery support;
- (i) NYGB works with information technology personnel at NYSERDA to ensure the existence of an effective system of security to protect the interests of NYGB employees, clients and counterparties;
- (j) Financial statements are prepared quarterly (unaudited) and annually (audited) in accordance with all applicable accounting standards;
- (k) An experienced and credible accounting firm is retained to audit NYGB financial statements annually; and
- (I) NYGB, as a division of NYSERDA, remains subject to NYSERDA internal controls, policies and procedures and internal audits, as applicable.

### 3.5 Risk Management Oversight

As a division of NYSERDA, NYGB is subject to the full range of operational, reporting, and ethical requirements that NYSERDA requires across its operations, and provides quarterly briefings to the full NYSERDA Board. NYGB must comply with NYSERDA's Bylaws, Internal Control Manual, Operations and Procedures Manual, Personnel Handbook, Procurement Guidelines and Board requirements. NYGB is also subject to internal and external audits. Through their oversight of NYSERDA, the Authorities Budget Office and the Commission provide another layer of NYGB oversight. NYGB's governance and oversight environment is represented in Figure 5.





In addition to NYGB's external governance and oversight environment, NYGB has dedicated Risk & Compliance and Legal & Regulatory Affairs functions, as well as a number of key committees providing oversight of and/or inputs to various aspects of NYGB's business, including the IRC, NYGB senior management, the Scoring Committee, the Greenlight Committee and the Advisory Committee.

### 3.5.1 <u>IRC</u>

The IRC ultimately provides risk management oversight at NYGB, with respect to both investment and enterprise risks. The IRC is made up of senior NYSERDA officers who each possess financial and investment capabilities and experience, as well as senior NYGB personnel. The IRC currently comprises:

- (a) President & CEO of NYSERDA;
- (b) Treasurer of NYSERDA;
- (c) President of NYGB; and

### (d) NYGB Managing Directors. 39

The IRC meets regularly to consider, review, and provide recommendations for consideration by NYSERDA's President & CEO in connection with the following items as needed, taking into account NYGB's mission, operations, asset allocation, exposures and all NYGB risk parameters and policies:

- (a) NYGB strategy and business plans;
- (b) Overall capital deployment plans and strategies;
- (c) Risk management practices and framework;
- (d) Financial and economic performance metrics and reporting;
- (e) Key NYGB procedures;
- (f) The Metrics Plan;
- (g) Any other material documents required to be filed with the Commission or other State agency (including periodic reporting);
- (h) Transaction Approval Memoranda;
- (i) Quarterly investment reports;
- (j) Proposed material waivers, amendments, restructurings and/or dispositions of existing NYGB investments; and
- (k) Quarterly management reports.

In addition to reviewing/overseeing all financing and investment agreements, the IRC meets regularly to review NYGB's overall business, positions, portfolio construction and performance, including flagging any actual or potential issues with NYGB investment assets or portfolio. No commitment of NYGB capital is made without vetting by the IRC.

The President & CEO of NYSERDA, upon consideration of the input of IRC members, is the final decision-maker with respect to matters before the IRC.

### 3.5.2 Senior Management Portfolio Review

Senior management portfolio review is dedicated to ongoing risk assessment and comprises senior NYGB personnel who meet monthly to review the risk of each transaction within the investment portfolio and potential new transactions within the Pipeline. This process is designed to consistently review the entirety of NYGB risk exposure, and to filter transactions and distill issues for subsequent review by the IRC.

3.5.3 <u>Scoring Committee</u>

When NYGB receives proposals in response to the Investment RFP or any other similar RFP that may exist from time to time, those proposals are reviewed by the Scoring Committee, the members of which are all NYGB employees, designated by NYGB's President. The purpose of the Scoring Committee is to review and evaluate all competitive proposals received by NYGB for completeness and against evaluation and selection criteria

<sup>&</sup>lt;sup>39</sup> Provided that no Managing Director who is responsible for the execution of a transaction being considered by the IRC will participate as a member of the IRC with respect to that transaction. In addition, any actual or potential conflicts of interest that exist or may arise for any IRC member will be reviewed by legal counsel and such member may be recused from participation if, and to the extent, warranted.

described in the relevant RFP. This process is designed to ensure efficiency and standardization in NYGB's approach to evaluating, and responding to, investment opportunities.

#### 3.5.4 <u>Greenlight Committee</u>

No potential investment proceeds to full-scale diligence and negotiation of terms without vetting by the Greenlight Committee. All IRC members are eligible to participate in the Greenlight Committee, which is made up of at least three IRC members, including both NYSERDA and NYGB personnel (but excluding NYGB personnel directly involved in execution of the subject transaction). This committee reviews and makes recommendations (including the requirement of certain contingencies or conditions) to NYSERDA's President & CEO with respect to a proposed transaction. Before any potential transaction is submitted to the IRC for review, prior issues raised by the Greenlight Committee must be addressed. The "greenlighting" requirement adds another check and balance on potential investments in NYGB's pipeline to ensure that individual transactions meet credit quality standards and all other applicable investment criteria, are consistent with NYGB's mission and are appropriate from a risk perspective.

#### 3.5.5 Advisory Committee

The Advisory Committee is a group of senior professionals, prominent in their fields, which delivers guidance on an ongoing basis to the NYGB President and management team regarding matters pertinent to NYGB's business. Advisory Committee members are appointed on the recommendation of NYGB's President, with the approval of NYSERDA's President & CEO. These members represent a range of backgrounds that may include energy and environmental issues (preferably focused on the clean energy sector), project development and finance, banking, capital/financial markets, portfolio management, new venture management/business development, utility and related infrastructure, engineering/technology and real estate. Advisory Committee member expertise includes deep knowledge of project financing structures; portfolio management, renewable energy investment, regulatory and operational expertise; and active investor experience in clean energy. The Advisory Committee meets at least twice a year and details regarding its members, purpose, objectives and terms of engagement are available at <u>www.greenbank.ny.gov/About/Advisory-Committee</u>.

## **Investment Process**

Since inception, NYGB actively and consistently works on a large volume of potential transactions within a clear investment framework. As the steward of significant public funds, NYGB has established and adheres to certain investment and business practices – consistent with prudent practice in comparable industries and institutions. These practices are reflected in all aspects of NYGB's business including originating, reviewing, evaluating, diligencing, credit underwriting, risk and mitigant assessments, structuring, negotiating, documenting and closing transactions, as well as ongoing risk and compliance and portfolio management principles.

NYGB employs various review committees in the origination, evaluation and response to investment opportunities. In addition to NYGB bringing to bear the experience of its staff and management, input and review are required at prescribed points in the investment cycle from internal committees that evaluate and "greenlight" proposals, as well as from the IRC.

The principal steps involved in the advancement of any investment proposal received by NYGB are represented in <u>Figure 6</u>. As shown in the figure, each transaction goes through a number of critical steps – each in turn involving detailed review, input and other work of the NYGB transaction team, its advisors, committees and clients and counterparties (including their respective advisors) in an iterative and ongoing process until milestones are reached, culminating in the execution of transaction documentation.

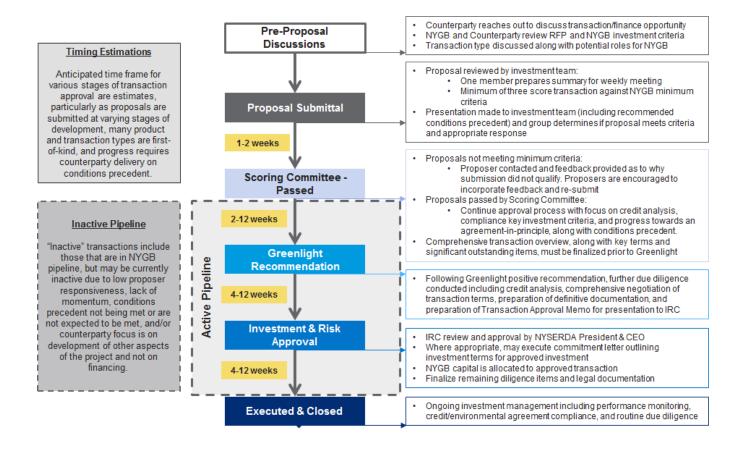


Figure 6. NYGB Typical Transaction Process

#### **SCHEDULE 3**

# **Investment RFP**

[See Attached]



# New York Green Bank

Clean Energy Financing Arrangements Request for Proposals

(Ongoing Solicitation)

Version 2.0 - July 2014

# 1.0 Introduction

## 1.1 Overview of this Solicitation

New York Green Bank ("NYGB") invites private sector capital providers and clean energy industry participants to propose transactions involving partnership with NYGB that facilitate the financing of clean energy projects in New York State, consistent with NYGB's objectives and operating principles in addressing financing market gaps and barriers.

Electronic submission of responses (each, a "**Proposal**") to this Request for Proposals ("**RFP**") is required. Instructions for submitting Proposals are attached as <u>Attachment C</u> to this RFP. This RFP will remain open, and Proposals will be evaluated on a rolling basis, as received. The purpose of an ongoing RFP process is to ensure that all potential NYGB clients and partners have an opportunity to propose transactions and financing arrangements, including as market needs develop and change over time.

Direct communication and engagement between NYGB and potential clients and partners is permitted, both before and after the submission of a Proposal. If you have questions or seek further engagement, please contact <u>info@greenbank.ny.gov</u>. If you have concerns regarding the Securities and Exchange Commission Municipal Advisor Rules, please see <u>Section 5.2 (General Conditions – Municipal Advisor Rules)</u>.

Failure to respond to this RFP in a complete manner by addressing all the matters described in <u>Section</u> 2.0 (Eligibility Requirements), <u>Section 3.0 (Proposal Contents)</u> and <u>Section 4.0 (Proposal Evaluation)</u> renders NYGB unable to take further action on a Proposal.

As an ongoing solicitation, proposers have the opportunity to resubmit Proposals if circumstances change, or if the initial Proposal does not address this RFP in a complete manner. Any commonly used formats in commercial submissions are welcome. Proposers can expect a timely preliminary response from NYGB, similar to what can be expected from a commercial finance institution.

## 1.2 NYGB Background

NYGB is a state-sponsored specialized financial entity created and designed to address gaps in clean energy financing markets and to transform those markets as part of an integrated strategic energy plan in New York State. In 2013, Governor Andrew M. Cuomo called for the establishment of the \$1 billion NYGB to mobilize private sector capital to finance the transition to a more cost-effective, resilient, and clean energy system.

NYGB's primary objectives are to:

- (a) Leverage private sector capital to support and expand the development of sustainable clean energy financing markets;
- (b) Animate and grow capital markets for the clean energy sector, so as to ultimately reduce the cost of capital and the need for government support; and
- (c) Motivate faster and more extensive deployment of clean energy assets within New York State, contributing to economic development, greater energy choices, reduced environmental impacts and more green energy advantages for every public dollar spent for the benefit of all New Yorkers.

Market barriers vary across different technologies and market participants although a number of financing issues generally constrain growth in the clean energy sector, including lack of transaction standardization, deficient scale and volume, less understood or familiar project sponsors and counterparty credits, policy uncertainty, insufficient data on underlying loan and technology performance, and underdeveloped or nonexistent publicly-traded capital markets for clean energy. These barriers limit private sector capital flows, for both equity and debt, into otherwise attractive renewable energy and energy efficiency projects, resulting in gaps in the clean energy finance market.

NYGB partners with private sector participants to alleviate market barriers, mobilizing the flow of private capital to fill the existing clean energy finance market gaps.

In order to address existing barriers, NYGB follows several important operating principles:

- (a) NYGB enhances private sector market participation by providing financial products (e.g., credit support and/or aggregation mechanisms) designed to scale markets for renewable energy and energy efficiency projects;
- (b) NYGB partners, rather than competes, with market participants that are already making progress in, or can demonstrate an ability to engage, the market but where that progress is constrained by the lack of available financing;
- (c) NYGB collaborates with its clients and partners to leverage their capital and institutional capabilities operating exclusively in the wholesale markets;
- (d) NYGB is not in the grant or subsidy business. Rather, NYGB prices its financial products consistent with commercial approaches to credit quality and risk, earning a return on investment to preserve and grow its capital base; and
- (e) NYGB recycles its capital into new clean energy projects when income is generated and as investments mature or are realized, maximizing the impact of its capital deployments.

NYGB's long-term objective is to provide a bridge to a sustainable, growing and efficient private sector clean energy financing market, across all types and sizes of projects. It seeks to operate in areas where there is market interest but limited access to capital.

Throughout all of its activities, NYGB attempts to collect and disseminate project and investment performance data (on an aggregated and anonymized basis), to facilitate improving investor confidence, in addition to promoting standardization wherever possible to help drive down transaction costs.

More information about NYGB can be found at <u>www.greenbank.ny.gov</u>.

# 2.0 Eligibility Requirements

This <u>Section 2.0</u> describes the minimum eligibility requirements that proposed transactions must meet in order to be considered by NYGB.

## 2.1 Eligible Investments

NYGB participation in financing arrangements supports clean energy projects using proven technologies. NYGB generally targets projects using the same technologies that drive carbon reduction and other public benefits contemplated under existing New York State clean energy policies. In constructing its portfolio, NYGB also includes consideration of scalable, mature renewable energy and energy efficiency technologies that are yet to be broadly deployed in commercial markets. In terms of potential energy efficiency measures, NYGB seeks to finance projects that result in a comprehensive improvement to a facility's overall energy consumption, although it does consider compelling single-measure efficiency projects. <u>Attachment B (Illustrative Guidelines for Eligible Investments)</u> includes a non-exhaustive, illustrative list of technologies. NYGB may consider supporting and/or participating in financing arrangements that include projects using technologies beyond the scope of <u>Attachment B</u> so long as proposers demonstrate a potential for increased deployment of clean energy and/or a potential for greenhouse gas reductions in New York State<sup>1</sup>.

NYGB does not provide capital directly to companies to fund their general business operations (e.g., working capital) or project (pre-construction phase) development capital.

<sup>&</sup>lt;sup>1</sup>Subject to laws, regulations and administrative actions (e.g., PSC orders) describing and/or related to the parameters for deployment of NYGB funds.

## 2.2 Eligible Financing Arrangements

NYGB seeks proposals for transactions that are consistent with its objectives and operating principles. Eligible financing arrangements include, but are not limited to, NYGB participating in transactions such as: credit enhancement provider (e.g., a reserve account or a junior interest), lender (e.g., senior, mezzanine or subordinated), or warehouse provider with the likelihood of being taken out by private sector third parties within prescribed time periods and upon certain events (e.g., the aggregation of an agreed upon amount of assets fitting certain credit and other parameters). Project-related financing arrangements include transactions in which NYGB provides support related to specific project(s) or to an entity that is funding loans, leases or other structures related to a portfolio of projects.

As a prerequisite to any NYGB investment, transactions must be at the wholesale level and include financial participation and investment by one or more private sector financial parties. Participation and investment by a private sector financial entity could be structured in various ways, including as debt and/or equity financing at transaction close or as the takeout of a NYGB-sponsored warehouse facility at an agreed upon aggregation level. Proposals should provide clarity as to proposed capitalization amounts and be specific as to the respective roles for, and relationship between, NYGB and the proposed other capital providers.

NYGB considers various transaction sizes and NYGB participation levels. Proposers should use the evaluation and selection criteria described in <u>Section 4.0 (Proposal Evaluation)</u> as guidance for NYGB financial participation, in particular:

- (a) Credit, financial and risk/return considerations for the proposed transaction;
- (b) The contribution to financial market transformation e.g. multiples of private capital mobilized and potential to drive the type of volume (including scalability and replicability) that can materially and sustainably expand markets; and
- (c) The expected clean energy outcomes, including greenhouse gas reduction benefits.

#### 2.3 Eligible Proposers

NYGB is seeking proposals from:

- (a) Private sector financial institutions or other third-party capital providers that are financing, or intending to finance, clean energy investments in New York State; and/or
- (b) Industry participants including developers, ESCOs, owner/operators, equipment manufacturers, or others that provide equipment, materials and/or services related to eligible investments (see <u>Section</u> <u>2.1</u>).

Proposers can apply on a standalone basis or as part of a team (a "Proposal Team"). A Proposal Team, for example, could consist of a developer/sponsor, lead equipment provider, and/or lead debt provider. Proposers should note that the identification of required Proposal Team constituents, such as non-NYGB capital providers, is necessary for consideration of Proposals. Proposal Teams should designate a lead organization.

Proposers must have directly relevant experience in the transaction/project type being submitted, and the relevant technologies consistent with <u>Section 2.1 (Eligible Investments)</u>.

2.4 Acceptable Terms

NYGB operates as a self-sustaining entity, pricing investments to cover its operating expenses and portfolio default risk, and to preserve its capital base. In so doing, NYGB intends to serve as both a prudent custodian of ratepayer funds and an agent for greater private investment in the clean energy sector in New York State. Pricing for NYGB investments in any Proposal should reflect market pricing for transactions comparable to that being submitted by the proposer, including reflecting relative credit quality, risk and position in the capital structure. NYGB investment terms will be determined by credit risk and exposure assumed by NYGB and other investment participants. For NYGB products, upfront and ongoing fees generally apply. Although

NYGB must be appropriately compensated for the underlying credit risk in all transactions, NYGB will in certain circumstances consider receiving a lower than market liquidity premium if its involvement is expected to provide material benefits to market expansion and future liquidity.

NYGB works in collaboration with its private sector clients and partners to remove financing barriers and its mandate gives it flexibility to adapt and respond to changing markets. NYGB can offer various financing products across a broad range of commercial technologies. Further, NYGB can develop products that can be offered to many industry participants, or it can work on a proprietary basis with a single party. While it could pursue individual negotiated transactions as a result of this solicitation, proposers should again note that the ability to scale or replicate transactions is critical to achieving NYGB's mandate to broaden the scope and extent of clean energy financing markets in New York State. This element will be evaluated as part of the criteria detailed in <u>Section 4.0 (Proposal Evaluation)</u> and proposers should describe the ways in which suggested structures and/or projects are likely to occur again in the future.

# 3.0 Proposal Contents

Each Proposal should address <u>all</u> aspects of the categories described in the sub-sections below in a clear and concise manner, even if certain items may appear self-evident. NYGB employs a rigorous evaluation process to determine completeness of all Proposals against the requirements of this RFP, eligibility and a proposer's ability to articulate the fit of the proposed transaction and NYGB investment within NYGB's mandate. On <u>Attachment A (Proposal Checklist)</u>, proposers must provide page numbers where responses to each of the following sub-sections can be found.

## 3.1 Cover Letter

Please include a cover letter executed by an authorized officer on behalf of the proposer or Proposal Team. If a submission represents a Proposal Team, please clearly designate the lead organization and include signatures of an authorized officer of each party to the Proposal.

## 3.2 Brief Description

Provide a summary of the financing arrangement proposed including the parties involved, the role of each party including the desired NYGB role, the clean energy market segment of focus, the type(s) of project(s) to be financed, and the impact on the development of the private sector clean energy markets.

## 3.3 Additionality in NYGB Role

Describe the market barrier that would be overcome or managed more effectively through NYGB's participation in the financing for the project(s). Describe how NYGB participation will help facilitate the transaction being done at all, more quickly, or with additional clean energy outcomes that would not otherwise occur without NYGB support. Describe how the financing solutions being proposed will contribute to achievement of market scale in the applicable clean energy sector.

## 3.4 Financing Structure & NYGB Financing Support

Provide a description of the overall financing structure and describe the NYGB financing support (or alternative forms of NYGB participation) being requested and proposed terms. Include a transaction schematic along with a description of key risks and mitigants relating to the proposed NYGB exposure. For all transactions, specific return expectations, including yield and interest rates, should be provided for NYGB and other market participants, in addition to base case return on investment ("ROI") and internal rate of return ("IRR") at the project level. Where a Proposal seeks NYGB warehouse financing, provide the key underwriting criteria and methods that will be used to identify and evaluate the projects expected to form part of the pipeline of investments for the warehouse or aggregation facility. Also, describe the existing pipeline of projects and further origination and marketing plans to achieve aggregation thresholds and market scale.

If proposers are presenting a single project investment opportunity to NYGB, a project model, including sources and uses of funds, key assumptions, and financial projections should be provided of a duration at least equal to the requested term of NYGB's participation. Additionally, proposers should clearly outline the status and elements of the contracts and arrangements materially affecting the valuation and risk of the project (e.g., power purchase agreement ("PPA")/lease and/or other revenue agreements, royalty or other similar arrangements, Operation and Maintenance ("O&M") contracts, technology warranties or other performance guarantees, engineering, procurement and construction ("EPC") contract(s), shared facilities and/or other key infrastructure, site control, key permits, etc.). If proposers are presenting a future flow-type transaction structure, include a representative model that details projected cash flows for a typical single asset to be generated under the arrangement, including key assumptions.

## 3.5 Comparable Transactions

Include relevant previous market transactions that are directly or indirectly comparable. If there are not specific comparable transactions, provide a description of applicable precedents in other financial sectors where the underlying counterparty credit and/or project risks have been previously underwritten (directly or indirectly) by the private market on a commercial basis<sup>2</sup>.

3.6 Technical Considerations

Provide a description of the eligible proven technologies involved in the proposed transaction. Include information about previous applications of the technologies. In addition, describe technical aspects of the proposed project(s). Identify the parties responsible for the key aspects of project design and installation/construction. Describe the plan or contractual arrangements for O&M, quality control, and warranties. Identify the parties that will bear technology performance risk and briefly describe the key terms of that risk assumption.

3.7 Expected Clean Energy Outcomes & Ongoing Tracking/Reporting Capability

Provide a summary description of expected energy outcomes including: number of projects to be financed, expected MWh or MMBtu of energy savings and/or MW of clean energy generation over an identified time period, along with the planned methodology and inputs used to quantify these expectations. Additionally, provide a description of the methodology that the proposer (or designated third party) plans to employ to track, record, and monitor energy-related impacts (e.g., actual savings and/or generation), greenhouse gas impacts, customers served, financial products offered (e.g., PPAs, leases, loans, etc.) and clean energy measures supported.

## 3.8 Qualifications & Experience, Officers & Staffing

Briefly summarize the proposer's institutional (or the Proposal Team's) qualifications and experience to undertake the project(s) or financing of the project(s), ideally including summary deal lists. Specify the proposer's strategy for engaging target participants, when applicable, such as generating demand if a financing structure is designed to fund future yet-to-be-identified projects (e.g., warehousing and aggregation facilities). Also as relevant, provide a summary of loss rates and loss experience on the proposer's (or Proposal Team's) prior comparable projects.

<sup>&</sup>lt;sup>2</sup> NYGB expects to receive proposals for innovative transaction structures; however, NYGB does not seek to underwrite underlying credit risks for which there is no direct or indirect private market precedent.

3.9 Other Financial Support or Incentives & Sponsor Capital

Describe any federal, NYSERDA, state, utility-based or other incentive(s) that are expected to be included in the proposed financing structure. Also, clearly identify the amount of sponsor capital that is at risk (i.e., excluding identified grants and other private capital).

# 4.0 Proposal Evaluation

Proposals that meet minimum eligibility requirements (see <u>Section 2.0</u>) and include all Proposal contents (set out in <u>Section 3.0</u>) will be evaluated by NYGB against the criteria set out in this <u>Section 4.0</u>. Proposals should address the matters outlined in each of the following sub-sections in reasonable detail.

- 4.1 Transaction Credit, Financial and Risk/Return Considerations
- (a) Creditworthiness (counterparties, underlying technologies, EPC provider(s), O&M, servicer, etc. as applicable) of the project(s), and the terms of the financing support expected to be provided by NYGB:
  - With respect to warehouse/portfolio aggregation proposals, the proposed credit criteria that would be applied for individual transactions to be accepted into the warehouse;
- (b) Pricing competiveness on a risk-adjusted basis, including projected ROI and IRR at the project level and specific return expectations for NYGB and other transaction participants;
- (c) Direct or indirect private market comparables (including pricing) as relates to counterparty credit and/or project risks;
- (d) Level of financial commitment of the proposer(s) and any other parties included in the proposed project;
- (e) Qualifications and experience of Proposal Team and participants:
  - Relevant experience and specific track record of all participants (including lenders) in the project(s); and
  - Ability to deliver the volume necessary to aggregate target portfolios in warehouse/portfolio aggregation proposals, within a reasonable period of time; and
- (f) Consistency with the principle that transactions yield expected financial returns such that the revenues of NYGB on a portfolio basis will be in excess of expected portfolio losses and operating expenses.
  - 4.2 Contribution to Financial Market Transformation
- (a) Mobilization of Private Capital:
  - Leverage ratio of private capital to NYGB investment;
- (b) Market Transformation:
  - Ability to scale or replicate transaction receiving NYGB capital support shows potential to drive volume that can transform markets;
  - Increasing the level of awareness of, and confidence in, clean energy investments;
  - Evolution of private sector institutional underwriting;
  - Progress toward capital markets solution(s):
    - Contract standardization;
    - o Aggregation;
    - Data harvesting; and
- (c) Demonstrated Additionality:
  - NYGB brings unique benefit to proposed financing arrangement.
  - 4.3 Expected Clean Energy Outcomes
- (a) Magnitude of estimated energy savings and/or clean energy generation:
  - Other greenhouse gas reduction benefits (outside of those achieved via direct energy savings and/or clean energy generation), to the extent included in proposed project(s); and

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(b) Strength of plan with which the proposer (or designated third-party) will track, record, and report performance data to NYGB.

## 4.4 Other Considerations

(a) Fit as it relates to NYGB's portfolio, including, without limitation, contribution to aggregate financial risks and returns, technological diversity and geographic distribution.

## 5.0 General Conditions

5.1 Proposal Checklist

A completed Proposal Checklist (see <u>Attachment A</u>) must be included with your Proposal.

## 5.2 Municipal Advisor Rules

NYGB is aware of the amendments to Section 15B of the Securities Exchange Act of 1934 effectuated by Section 975 of Title IX of the Dodd-Frank Act, as well as SEC Release No. 34-70462 (September 20, 2013). In this regard, please note that NYGB considers discussions with potential proposers, and the review of Proposals, to be arms-length negotiations. NYGB recognizes that proposers have financial and other interests that differ from NYGB; as such, NYGB does not consider a fiduciary relationship to arise in this context. NYGB has engaged an independent registered municipal advisor ("IRMA") with the intent of relying (i.e., taking into careful consideration, along with any other information deemed relevant or appropriate) on that IRMA for advice related to any potential transactions (but not bound to follow that advice), and consequently allowing proposers to qualify for the exemption provided by 17 CFR §240.15Ba1-1(d)(3)(vi) (the "IRMA exemption"). The name and contact information of the IRMA is listed on the NYGB website at www.greenbank.ny.gov/IRMA, and the IRMA is available to respond to any questions an entity preparing to submit a Proposal may have with respect to the IRMA's independence.

## 5.3 Proprietary Information

Among NYGB's goals is the promotion of standardization of material contract terms and structures, and the collection of project performance data across NYGB transactions. NYGB is keenly aware that commercial markets and their incumbents value non-disclosure extremely highly in protecting confidential transaction terms and other competitive information and NYGB remains highly sensitized to usual and customary confidentiality practices. Nevertheless, as a division of NYSERDA, certain state laws specifically apply to NYGB and it is recommended that careful consideration be given before confidential information is submitted to NYGB as part of any Proposal. Review should include whether it is critical for evaluating a Proposal, and whether general, non-confidential information may be adequate for review purposes.

New York's Freedom of Information Law, Public Officers Law, Article 6, provides for public access to information NYSERDA and its divisions possess. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause <u>substantial injury to the competitive position</u> of the subject enterprise." Information submitted to NYGB that the proposer wishes to have treated as proprietary and confidential trade secret information, should be identified and labeled "<u>Confidential</u>" or "<u>Proprietary</u>" on each page at the time of disclosure. This information should include a written request to except it from disclosure, including a written statement of the reasons why the information should be excepted. See Public Officers Law, Section 89(5) and the procedures set out in 21 NYCRR Part 501. The confidentiality of any information submitted cannot be guaranteed.

## 5.4 Limitation

This solicitation does not commit NYGB to agree to participate in any transaction, proceed to negotiate any terms or definitive documentation, pay any costs incurred in preparing a Proposal, or to procure or contract

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for services or supplies. NYGB reserves the right to accept or reject any or all Proposals received, to negotiate with all qualified parties, or to cancel in part or in its entirety this solicitation when it is in NYGB's best interest.

#### 5.5 Disclosure Requirement

The proposer shall disclose, for any team member, any indictment for alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States, and shall describe the relevant circumstances. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similar governing body. If an indictment or conviction comes to the attention of NYGB or NYSERDA after NYGB has indicated its interest to, or has agreed to enter into or participate in, any transaction NYGB may terminate the agreement and the proposer may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if any team members have ever been disbarred or suspended by any agency of the United States Government or the New York State Department of Labor.

## 6.0 Attachments

- Attachment A Proposal Checklist (Mandatory)
- Attachment B Illustrative Guidelines for Eligible Investments
- Attachment C Instructions for Submitting Proposals



# RFP No. 1 - ATTACHMENT A PROPOSAL CHECKLIST (MANDATORY)

Proposal Title		Date	
Proposer		Title	
Company		Phone	Fax
		E-mail	
Address	City	State or Province	Zip
Secondary Contact		Title	
Company		Phone	Fax
		E-mail	
Address	City	State or Province	Zip
THE PROPOSER <u>MUST</u> ANSWER THE FOLLOWING QUESTIONS: Do you wish to have any information submitted in your proposal package treated as proprietary or confidential trade secret information? If yes, you must identify and label on each applicable page "confidential" or "proprietary". (For additional information regarding this, please refer to <u>Section 5.3</u> (Proprietary Information) in the RFP). YesNo Has the proposer or any team member, or any of their principals, officers, partners, directors or members, been indicted/convicted of a felony within the past five years, or been disbarred or suspended by any agency of the United States Government or the New York State Department of Labor? If yes, explain on separate page. (For additional information regarding this, please refer to <u>Section 5.5</u> (Disclosure Requirement) in the RFP). YesNo			
Please indicate the page number of your response on which the following required information can be found:			
Cover Letter			je(s)
Brief Description		-	je(s)
Additionality in NYGB Role			ge(s)
Financing Structure & NYGB Financing Support		Pag	je(s)
Comparable Transactions		Pag	je(s)
Technical Considerations		Pag	je(s)
Expected Clean Energy Outcomes & Ongoing Tracking/Reporting Capability			ge(s)
Qualifications & Experience, Officers & Staffing		Pag	ge(s)
Other Financial Support or Incentives & Sponsor Capital		Pag	ge(s)



# RFP No. 1 - ATTACHMENT B Illustrative Guidelines for Eligible Investments

This is an *illustrative*, *non-prescriptive* and *non-exhaustive* list of technologies that could be included in proposed project(s). NYGB may consider supporting and/or participating in financing arrangements that include projects using technologies beyond the scope of this <u>Attachment B</u> so long as proposers demonstrate a potential for increased deployment of clean energy and/or a potential for greenhouse gas reductions in New York State<sup>1</sup>.

## Renewable Energy Resources<sup>2</sup>

- Solar photovoltaics (no minimum/maximum capacity)
- Solar thermal (no minimum/maximum capacity)
- On/offshore wind (no minimum/maximum capacity)
- Fuel cells (continuous duty) natural gas fuel or hydrogen
- Hydroelectric
  - Upgrades and/or repowering
  - o New low-impact run-of-facility (30 MW or less with no new storage impoundment)
  - Biomass (from eligible biomass feedstock<sup>3</sup>)
  - Biomass direct combustion
    - o Combined heat and power
    - o Co-fire with existing fossil fuel (only biomass feedstock portion is eligible)
- Biothermal energy
- Biogas
  - Landfill gas (methane)
  - o Sewage gas (methane)
  - o Manure digestion
  - o Anaerobic digestion
  - o Biomass thermo-chemical gasification (syngas from municipal solid waste)
  - o Biogas (from eligible biomass feedstock) combined heat and power
  - o Biogas (from eligible biomass feedstock) co-fired with existing fossil fuel combustion
  - Liquid biofuels ethanol, biodiesel, methanol, bio-oil, and eligible biomass feedstock
- Tidal/ocean power

## **Energy Efficiency Resources**

- Commercial & industrial Comprehensive efficiency improvements to new and existing facilities that save energy, including:
  - Industrial process efficiency improvements, including without limitation: data center, information technology, communications, water/wastewater, pipeline, mining/extraction, and similar enduse processes, facilities, buildings, and infrastructure
  - o Lighting and control systems
  - Heating, ventilation and air conditioning systems
  - o Building envelope
  - o Energy management and/or control systems, including continuous commissioning
  - Occupant plug load management systems
- Load Reduction

<sup>&</sup>lt;sup>1</sup>Subject to laws, regulations and administrative actions (e.g., PSC orders) describing and/or related to the parameters for deployment of NYGB funds.

<sup>&</sup>lt;sup>2</sup>This list specifically excludes nuclear, municipal solid waste combustion, and adulterated biomass or biofuels.

<sup>&</sup>lt;sup>3</sup> General categories include agricultural residue, harvested wood, mill residue, pallet waste, construction and demolition debris, silvicultural waste wood, woody or herbaceous crops and urban waste wood.

- Thermal and electric energy storage
- o Demand response programs
- Residential Comprehensive energy efficiency improvement projects in existing residential buildings, including:
  - Primary heating and cooling systems: Furnaces, boilers, duct sealing, pipe insulation, central air conditioners, heat pumps (including air-source and geothermal) water heaters, and programmable thermostats
  - o Building envelope: Insulation, air sealing, windows and doors
  - o Other required health and safety measures and related accessories
- Multifamily housing Comprehensive improvement projects to multifamily housing facilities, including systems that affect the entire building, the common area, and/or the resident spaces and the following potential measures:
  - Lighting and control systems, including exterior, security, and safety lighting systems
  - Heating, ventilation and air conditioning systems, including boilers (hydronic and steam), furnaces, chillers, room air conditioners, supporting pumps, fans, motors and other auxiliary systems
  - o Building envelope, including air sealing, weather-stripping, and insulation
  - Energy management and/or control systems, including continuous commissioning
  - Resident plug load management systems, including home energy monitors and smart strips
  - Appliances, including common area laundry, refrigerators, and dishwashers, both commercial and residential sizes
  - o Advanced metering systems to support conversion of master-metered buildings to sub-metering
  - o Domestic hot water systems, including generation and distribution
  - Fuel conversion projects that include upgrades to system energy efficiency
  - Water conservation improvements

## **Other Clean Energy Projects**

- Natural gas-fired CHP
- Electric vehicle infrastructure (including charging stations)
- Fuel cells
- Anaerobic digester gas systems (farm and non-farm)
- Offshore wind



# RFP No. 1 - ATTACHMENT C Instructions for Submitting Proposals

Please read the following instructions before submitting a proposal.

- 1. Go to <u>www.greenbank.ny.gov</u>.
- 2. In the page titles along the top of the home page, click on "Partnering with Us" and then click on "Propose an Investment" in the drop-down menu.
- 3. Under the section entitled "Submitting Proposals" click the "Submit Proposal Online" button.
- 4. Enter your e-mail address and click the "Validate Email" button.
- 5. You will receive an automatic email containing a link to validate your email address. Click the link to be taken to a page entitled "RFP 1 Clean Energy Financing Arrangements" to begin the online submission process.
- 6. Upload as many files as needed, one at a time. The electronic file names should include the proposing entity's name in the title of the document.
- 7. After clicking the "Upload File" button, a list of successfully uploaded files will appear on the page. This list can be modified as needed before final submission of your proposal.
- 8. After all necessary files have been uploaded, review the list of documents to ensure that your proposal is complete and accurate.
- 9. Click the "Submit Proposal" button.
- 10. You will then be brought to a confirmation page listing the files received. Please save the confirmation page.
- 11. An auto-generated confirmation e-mail will be sent to the e-mail address you entered. Please save this e-mail.
- 12. The proposal review notification letter will be sent to the e-mail address used to submit the proposal.

#### Important reminders:

- Submit only one proposal for each session.
- You may submit Word, Excel, PowerPoint, Zip, or PDF files. PDF files must be searchable and therefore should be converted directly from an electronic document to PDF, rather than scanned.
- E-mail, facsimile or hard copy submittals will not be accepted.

#### If you make an error:

If after you click "Submit Proposal" you discover that the document(s) you submitted are incomplete or inaccurate, follow these instructions:

- 1. Start the process over again and **resubmit the entire proposal**. You will receive another confirmation e-mail.
- Immediately forward both confirmation e-mails (original and resubmission) to proposals@nyserda.ny.gov with the subject line of "Resubmittal" and the RFP number/title (e.g., "RFP 1 Clean Energy Financing Arrangements").
- 3. NYGB will accept the second submission as your proposal. The first submission will be disregarded.

#### If you need help:

If you need help with this electronic proposal submission process, please contact Roseanne Viscusi at <u>roseanne.viscusi@nyserda.ny.gov</u> or 518-862-1090 ext. 3418.