



# New York Green Bank

---

Metrics, Reporting & Evaluation

Quarterly Report No. 1  
(Through September 30, 2014)

Case 13-M-0412  
November 14, 2014

Contents

1.0 Introduction..... 1

2.0 Operational & Risk Management Milestones..... 3

3.0 Metrics ..... 5

4.0 Subsequent Events ..... 6

5.0 Defined Terms & Glossary..... 8

Tables

*Table 1. Operational & Risk Management Milestones..... 1*

*Table 2. Metrics & Data Collection..... 2*

## 1.0 Introduction

This Quarterly Report (“Report”) is filed by NY Green Bank (“NYGB”) with the New York State Public Service Commission (the “Commission”) pursuant to the Metrics, Reporting & Evaluation Plan developed in consultation with the Department of Public Service (“DPS”) and filed with the Commission on June 19, 2014<sup>1</sup> (the “Metrics Plan”). The Metrics Plan reflects the requirements of the order issued by the Commission on December 19, 2013 in connection with the initial capitalization of NYGB (the “Initial Capitalization Order”)<sup>2</sup>. Both the Initial Capitalization Order and the Metrics Plan define “Quarterly Reports” as “a quarterly [NYGB] status report [filed] within 45 days of the end of each quarter that reports on its progress in carrying out the organization and business plans provided”<sup>3</sup> as required.

Quarterly Reports are required to address Operational & Risk Milestones as set out in Table 1 of the Metrics Plan (the “Milestones”) and the Metrics as set out in Table 2 of the Metrics Plan (the “Metrics”), both reproduced for ease of reference respectively as [Table 1](#) and [Table 2](#) of this Report.

Completion of each Milestone is required to be addressed in Quarterly Reports as set out in the Initial Capitalization Order<sup>4</sup>.

*Table 1. Operational & Risk Management Milestones*

Milestone Type	Milestone
Operational Milestones	<ul style="list-style-type: none"> <li>✓ Organizational structure established/plan filed</li> <li>✓ Establishment of Advisory Committee</li> <li>✓ Establishment of Investment &amp; Risk Committee</li> <li>✓ Leadership and staff of NYGB hired</li> <li>✓ Initial Business Plan filed</li> </ul>
Risk Management Milestones	<ul style="list-style-type: none"> <li>✓ Risk framework, mitigation principles and oversight in place</li> </ul>

The Metrics to be reported quarterly are set out in [Table 2](#), with the respective reporting obligations being triggered by the signing and closing of NYGB financing/investment agreements. Future Quarterly Reports will also include NYGB performance quarter-over-quarter against tracked Metrics for the immediately preceding quarter.

<sup>1</sup> “New York Green Bank - Metrics, Reporting & Evaluation Plan”, Case 13-M-0412 dated June 19, 2014.

<sup>2</sup> Case 13-M-0412, “Order Establishing New York Green Bank and Providing Initial Capitalization”, issued and effective December 19, 2013.

<sup>3</sup> *Ibid*, page 25. Metrics Plan, Section 4.1 (Reporting Plan, Content), pages 6 - 7. Also at page 25 of the Initial Capitalization Order, ordering clause 8.

<sup>4</sup> *Ibid*.

Table 2. Metrics & Data Collection<sup>5</sup>

Metric Type	Metric	Data Collection	Timing
Risk Management Metrics <sup>6</sup>	<ul style="list-style-type: none"> <li>Total Capital available</li> <li>Committed Funds</li> <li>Deployed Funds</li> <li>Overall portfolio size and concentrations<sup>7</sup></li> </ul>	NYGB records <sup>8</sup>	Reported quarterly (within 45 days after the end of each quarter) as NYGB financing agreements are signed and closed. First quarterly report will be filed within 45 days after the third quarter 2014
	<ul style="list-style-type: none"> <li>Portfolio Impairment (percent currently Impaired and projected recoveries)</li> </ul>	NYGB records	Reported annually, consistent with NYGB's fiscal year (April 1 - March 31). First annual report will be filed within 90 days after March 31, 2015 <sup>9</sup>
Financial & Market Metrics	<ul style="list-style-type: none"> <li>Number and type of NYGB-supported projects financed</li> <li>Number and general type of NYGB clients and partners</li> </ul>	NYGB records	Reported quarterly (within 45 days after the end of each quarter) as NYGB financing agreements are signed and closed. First quarterly report will be filed within 45 days after the third quarter 2014
	<ul style="list-style-type: none"> <li>Audited Financials</li> <li>Mobilization Ratio</li> <li>Return on Investment</li> <li>Capital Redeployment Cycle Time</li> </ul>	NYGB records	Reported annually, consistent with NYGB's fiscal year (April 1 - March 31). First annual report will be filed within 90 days after March 31, 2015 <sup>9</sup>
	<ul style="list-style-type: none"> <li>Level of awareness, knowledge and confidence of financial institutions and market intermediaries in clean energy investments<sup>10</sup></li> </ul>	Market evaluation <sup>11</sup>	Long-term outcome: Baseline and time series data to be reported as available from periodic evaluation

<sup>5</sup> Capitalized terms used in Table 2 and not otherwise defined in this Report have the meanings given to them in the Metrics Plan.

<sup>6</sup> The Initial Capitalization Order defines risk management metrics as those that assist in defining acceptable capital deployment opportunities.

<sup>7</sup> NYGB's risk management protocols include portfolio construction principles, which in turn address diversification and concentration. In particular, these principles require NYGB to identify and monitor concentration risk and exposures including as to technologies, product offerings and clients and counterparties.

<sup>8</sup> NYGB records include information obtained from clients and partners consistent with usual and customary commercial practice, including with respect to confidentiality determined necessary on a deal-by-deal basis.

<sup>9</sup> Timing takes into account the period required for Audited Financials to be prepared and reviewed ahead of being available for public filing.

<sup>10</sup> Over time, as financing agreements are signed and closed, NYGB will give consideration to the development of specific barriers and market transformation indicators.

<sup>11</sup>As set out in Section 5.2 of the Metrics Plan (Market Evaluation) the reporting cycle for this Metric will be tied to the timing of the required evaluations.

Metric Type	Metric	Data Collection	Timing
Energy & Environmental Metrics	<ul style="list-style-type: none"> <li>▪ Lifetime energy saved by fuel type from efficiency projects (MWh/MMBtu)<sup>12</sup> and/or lifetime clean energy generated (MWh)<sup>13</sup></li> <li>▪ Lifetime primary energy saved from CHP (Btu)</li> <li>▪ Clean energy generation installed capacity (MW), if applicable</li> <li>▪ Lifetime greenhouse gas emission reductions (tons)</li> </ul>	NYGB records Impact evaluation	Long-term outcomes: Estimates reported quarterly (within 45 days after the end of each quarter) for Committed Funds and Deployed Funds as NYGB financing agreements are signed and closed, later verified by impact evaluation. First quarterly report will be filed within 45 days after the third quarter 2014

For this first Quarterly Report, information with respect to both Milestones and Metrics is being provided for the period from the date of the Initial Capitalization Order (i.e., December 19, 2013). Future Quarterly Reports will focus on results occurring within or otherwise related to the particular quarterly period being reported upon, together with any material subsequent events that occur in the period from the end of the relevant quarter until the filing date of the Quarterly Report for that period.

## 2.0 Operational & Risk Management Milestones

In the Initial Capitalization Order the Commission outlined certain requirements to be addressed and satisfied as part of NYGB’s establishment and ramping up of business operations, all of which have now been accomplished. In addition, since NYGB was opened for business in February 2014, key organizational elements have been created and put in place.

As reflected in the “Petition of the New York State Energy Research and Development Authority to Complete Capitalization of the New York Green Bank” dated October 30, 2014 (the “Petition to Complete NYGB Capitalization”)<sup>14</sup>, NYGB’s major milestone achievements to date include the following, addressing each of the items identified in Table 1, in addition to other key matters:

- (a) Open for Business and Investment Request for Proposals Issued: Officially opened for business on February 5, 2014, with the issuance of a broad market solicitation for investment proposals (the “RFP”)<sup>15</sup>. The RFP contains a clear specification of the types of proposals (in terms of technologies, counterparties and financing arrangements) that are eligible for NYGB investment, together with NYGB’s eligibility requirements, requisite proposal contents, evaluation criteria and general conditions;
- (b) Organization Filing Made and All Items Completed or In Progress: Prepared and submitted the “New York Green Bank Organization Plan Filing for the Public Service Commission” on February 18, 2014 (the “Organization Filing”); including detailed milestones to establish NYGB and the Advisory Committee Framework), as well as completing all items contemplated in Sections III (Key Milestones in the Establishment of NYGB), IV (Advisory Committee Framework) and V (Investment Committee Framework) of the Organization Filing;
- (c) Strategy & Business Planning Process and Filings Complete: Undertook an in-depth strategy and business planning process covering the period through June 2015 and reflected this in the initial

<sup>12</sup> Energy impacts will generally be based on full savings compared against the baseline of the existing condition and will be reported quarterly based on NYGB results. As these metrics are verified through impact evaluation, those results will be included in Quarterly Reports following completion of corresponding evaluations.

<sup>13</sup> This Metric category will include energy impacts from on-site fuel cells and bio-heat applications.

<sup>14</sup> Case 13-M-0412, see Section 3.0 (Major Milestones & Ongoing Execution to Plan), pages 5 - 6.

<sup>15</sup> Clean Energy Financing Arrangements - Request for Proposals (RFP) No. 1, available at [www.greenbank.ny.gov](http://www.greenbank.ny.gov).

Business Plan filing (the “Initial Business Plan Filing”) which was completed and submitted to the Commission on June 19, 2014, pursuant to the Initial Capitalization Order<sup>16</sup>;

- (d) Metrics Plan Developed and Finalized: Developed, in consultation with DPS, the specific and detailed Metrics Plan including soliciting public review and input, all of which was completed with a filing with the Commission on June 19, 2014;
- (e) Requisite “Pre-Deal” Certifications Made: Developed, formed and implemented the following aspects of NYGB’s business, including delivering a certification providing confirmation of the same to the Commission<sup>17</sup> as required by the Initial Capitalization Order<sup>18</sup>:
  - i. Investment proposal evaluation and selection criteria and procedures;
  - ii. Investment criteria, including the minimum investment criteria prescribed by the Commission in the Initial Capitalization Order;
  - iii. Investment analysis and approval methodologies and procedures;
  - iv. Risk management protocols; and
  - v. Establishment of the IRC;
- (f) Required Staffing Levels Reached: Hired senior leadership with deep experience in banking, energy finance and project development and continue to build out the team with critical transaction and support personnel;
- (g) Advisory Committee Established: Identified, appointed and engaged with a well-qualified external Advisory Committee to provide insights, guidance and advice on pertinent matters to NYGB as it executes upon its mission consistent with commercial best practices;
- (h) Established NYGB Information Resources: Revised and continually enhancing all external affairs materials (including the website) to ensure coherence and clarity in communicating NYGB’s mission, activities and terms of engagement to actual and potential clients and partners, colleagues, collaborators and all other stakeholders, so that all understand the nature of the opportunity, what NYGB is designed to achieve and how to engage with NYGB;
- (i) Legal & Technical Advisor Engagement: Engaged with qualified legal and technical advisors based on competitive procurement processes to support NYGB’s investment structuring, diligence, negotiation and execution in a timely and efficient manner;
- (j) Implemented Processes to Deal With All Incoming Proposals: Receiving, reviewing, evaluating and responding in a timely manner to investment proposals on an ongoing basis pursuant to standardized procedures to ensure that all interested parties have the opportunity to present their proposals to NYGB;
- (k) Building Robust Pipeline of Transactions: Originated a number of deals in NYGB’s pipeline and undertaking significant progress towards closing, including as publicly announced on October 22, 2014<sup>19</sup>;
- (l) Continuing Origination Efforts: Ongoing origination meetings with existing and potential clients and partners in connection with projects that meet NYGB’s mission and investment requirements to maintain the flow of market feedback to inform NYGB’s deployment of funds in the most effective ways;

---

<sup>16</sup> New York Green Bank Business Plan, Case 13-M-0412, June 2014.

<sup>17</sup> Letter from Alfred Griffin, President of NYGB, to the Hon. Kathleen H. Burgess, Secretary to the Commission, filed on July 24, 2014.

<sup>18</sup> At page 24, ordering clause 4.

<sup>19</sup> “Governor Cuomo Announces First New York Green Bank Transactions”, press release dated October 22, 2014, available at <http://greenbank.ny.gov/News/NYGB-News/2014-10-22-Governor-Cuomo-Announces-First-NYGB-Transactions.aspx>.

- (m) Continuing NYGB Communications to Stakeholders: Ongoing informational and other meetings and interactions with stakeholders, including industry groups, regulators, RGGI and others so that all parties remain updated on NYGB activities, opportunities and outcomes; and
- (n) In Process to Complete Capitalization: Filed the Petition to Complete NYGB Capitalization with the Commission on October 30, 2014.

In summary, NYGB is on track and executing to plan in all respects, with all matters contemplated in Table 1 having now been addressed and completed.

### 3.0 Metrics

Required metrics for the period December 19, 2013 through September 30, 2014, during which no NYGB financing/investment agreements have been signed and closed, but subject to the Subsequent Events described in Section 4.0, are as set out below:

Metric	Status
Total Capital <sup>20</sup> Available	\$217.7 million <sup>21</sup>
Committed Funds <sup>22</sup>	\$500,000
Deployed Funds <sup>23</sup>	\$0
Overall Portfolio Size & Concentrations	\$500,000 <sup>24</sup>
Number & Type of NYGB-Supported Projects Financed	1 - Energy Efficiency
Number & General Type of NYGB Clients & Partners	2 - C-PACE Developer, International Bank
Estimated Lifetime Energy Saved by Fuel Type from Energy Efficiency Projects (MWh/MMBtu) and/or Lifetime Clean Energy Generated (MWh) for Committed Funds & Deployed Funds	Not Yet Available <sup>25</sup>
Estimated Lifetime Primary Energy Saved from CHP (Btu) for Committed Funds & Deployed Funds	Not Applicable
Estimated Clean Energy Generation Installed Capacity (MW), if applicable, for Committed Funds & Deployed Funds	Not Applicable
Estimated Lifetime Greenhouse Gas Emission Reductions (metric tons) for Committed Funds & Deployed Funds	Not Yet Available <sup>25</sup>

NYGB is participating in a \$75 million agreement with Bank of America Merrill Lynch (“BofA Merrill”) and the Energy Improvement Corporation (“EIC”) in an energy efficiency and renewable program currently effective throughout the State. EIC’s Energize NY Property Assessed Clean Energy (“PACE”) Finance Program represents one of the first PACE program financing arrangements in which a leading global financial

<sup>20</sup> Where “Capital” means the aggregate capital allocated to NYGB from all public sources at the relevant time, including time-weighted adjustments to account for changes in NYGB’s capitalization, expressed in dollars. See Metrics Plan, page 5.

<sup>21</sup> This amount reflects the sum of all capital contributions received by NYGB, investment income (derived from investment of cash on hand), in future fees and interest on Committed Funds and Deployed Funds, less operating expenses and less any losses on Deployed Funds. In addition to NYGB’s initial capitalization (made up of \$165.6 million pursuant to the Initial Capitalization Order and \$52.927 million in RGGI funding) this amount includes \$500,000 transferred to NYGB by NYSERDA in May 2014 of U.S. Department of Energy (“DOE”) funds. These DOE funds are specifically designated for providing loan loss reserve facilities to support commercial property-assessed clean energy (“C-PACE”) projects, which are a fit within the broader NYGB portfolio. The DOE funds, together with all repayments and related fees over time, must remain segregated and available only for the particular purposes originally intended.

<sup>22</sup> Where “Committed Funds” means, in any period, the aggregate funds to be provided by NYGB pursuant to fully negotiated client and partner financing agreements executed in that period, without such funds having yet been Deployed, expressed in dollars. “Committed” has a corresponding meaning. See Metrics Plan, page 5.

<sup>23</sup> Where “Deployed Funds” means, in any period, the aggregate funds that have been advanced by NYGB subject to the terms of fully negotiated client and partner financing agreements executed in that period, expressed in dollars. “Deployed” has a corresponding meaning. See Metrics Plan, page 6.

<sup>24</sup> As the number of reported underlying (signed and closed) NYGB transactions grows, future Quarterly Reports will address concentration risks across those transactions/the portfolio. For the purposes of this Report, with only one transaction in respect of which capital is committed, a discussion of concentration risk is not included.

<sup>25</sup> Estimates of the energy and environmental benefits associated with early committed funds (derived from the DOE) are under development and will be included in future Quarterly Reports.

institution has participated. Subject to mortgage holder consent where applicable, Energize NY offers tax lien secured financings to commercial property owners investing in energy improvements that meet eligibility requirements for ownership, value of property and energy improvement type. This transaction, including NYGB's credit support, materially contributes to the commercial development and expansion of the PACE program in the State, bringing commercial property owners in all participating counties a step closer to being able to access and benefit from energy efficiency retrofits, including energy savings.

#### 4.0 Subsequent Events

As announced on October 22, 2014<sup>26</sup>, NYGB has agreed in principle to complete its first seven transactions with certain global and statewide financial services institutions and developers - representing a diverse group of established and experienced financial and energy market participants<sup>27</sup>. The initial set of NYGB transactions involve NYGB funding of approximately \$200 million. These transactions are progressing toward signing and closing of financing/investment agreements and will be reflected as required in future Quarterly Reports once these triggers have occurred, along with other transactions meeting those reporting thresholds.

Information regarding NYGB's recently announced transactions is included below.

- (a) Expanding Commercial and Industrial ("C&I") Energy Efficiency & Distributed Generation. Ameresco is a leading independent provider of comprehensive energy services, energy efficiency, infrastructure upgrades, asset sustainability and renewable energy solutions for facilities throughout North America. Ameresco would use proceeds from a NYGB credit facility to make investments in C&I clean energy projects in new markets to further their commitment in New York State. The capital provided by NYGB would be used in partnership with third party project lenders to finance projects utilizing energy savings, power purchase and/or lease agreements, providing scale in the C&I market and filling gaps of financing for longer tenors than are currently available.
- (b) Energy Equipment Financing. A co-investment relationship between BofA Merrill and NYGB seeks to expand and enhance BofA Merrill's current capabilities to finance public and private sector clean energy projects, including renewable energy, energy efficiency and combined heat and power ("CHP"). NYGB will co-invest long-term capital that will be designed to enhance and potentially broaden BofA Merrill's current suite of energy efficiency financing products and capabilities. This additional capital will be applied to achieving deeper energy efficiency retrofits and greater savings for property owners across the State.
- (c) Using Energy Service Agreements ("ESAs") to Grow Commercial Property Efficiency Markets. NYGB is working to provide a senior debt facility to Deutsche Bank ("DB") to support its initiatives in energy efficiency projects under ESA structures, offering many potential benefits to building owners. When completed, this credit facility will support the execution of ESA-based retrofit projects with a range of real estate asset types, including commercial real estate properties - a segment that has largely not had access to financing for efficiency upgrades - thereby allowing for the more widespread adoption of ESA-based retrofits throughout the State.
- (d) Template for Mid-Sized Commercial Solar Projects with New Sources of Capital. First Niagara Bank and M&T Bank are in advanced negotiations, working towards providing financing for BQ Energy's SteelSun ("Steel Sun") 4 megawatt ("MW") ground-mounted solar photovoltaic energy project on the former Bethlehem Steel Mill Site - a New York State Brownfields Cleanup site in Lackawanna. NYGB plans to provide certain guarantees to the bank lenders for construction and tax equity financing. These guarantees will help transform financing markets for smaller-scale commercial solar by demonstrating to the commercial markets that financings of this size are an attractive investment for

---

<sup>26</sup> "Governor Cuomo Announces First New York Green Bank Transactions", press release dated October 22, 2014, available at <http://greenbank.ny.gov/News/NYGB-News/2014-10-22-Governor-Cuomo-Announces-First-NYGB-Transactions.aspx>.

<sup>27</sup> Ameresco, Bank of America Merrill Lynch, BQ Energy, Citi, Deutsche Bank, First Eastern Investment Group, First Niagara Bank, GreenCity Power, M&T Bank, Renewable Funding, Sustainable Development Capital, and Tulum Management.

institutions such as regional and community banks and can be replicated easily to potentially build larger aggregated and marketable portfolios.

- (e) Scaling up Residential Energy Efficiency. Renewable Funding (“RF”) together with Citigroup (“Citi”), seeks to bring RF’s Warehouse for Energy Efficiency Loans (“WHEEL”) program to New York State, providing large-scale capital for residential energy efficiency loans. NYGB will provide a credit facility to be used in conjunction with Citi and RF’s warehouse facility, and a \$100 million Medium Term Note financing program. NYGB participation will expand the availability of loans to homeowners in the State and promote the creation of a marketplace for the securitization of residential energy efficiency loans.
- (f) Building Marketable Portfolios of Energy Efficiency and Distributed Generation Assets for C&I and Public Buildings. Sustainable Development Capital, LLC (“SDCL”) has launched a new investment vehicle to invest in energy efficiency and distributed energy generation projects for commercial, industrial, and municipal buildings and other assets utilizing ESAs with property and infrastructure owners in the State. Upon closing, NYGB’s credit facility will provide senior loans to SDCL’s investment vehicle, capitalized by First Eastern Investment Group and other investors and managed by the dedicated energy efficiency investment arm of SDCL located in New York. This investment vehicle will finance various energy efficiency and distributed generation projects with the goal of building portfolios of broadly standardized assets that are of sufficient size to attract new, direct investors.
- (g) Expanding Capital Availability for Small-Scale Commercial Cogeneration Projects. NYGB is working towards funding construction and permanent debt as the senior lender to GreenCity Power, LLC (“GCP”), a business which designs, builds, owns, and operates small-scale cogeneration projects in New York City’s largest commercial buildings (hospitals, hotels, office buildings, etc.). GCP’s projects will deploy high efficiency natural-gas-fired reciprocating engines to generate electricity, heating and cooling. NYGB will co-invest, along with Tulum Management, in GCP’s first five projects. Once a target portfolio of operating projects has been developed, institutional investors are expected to provide permanent funding.

The initial investments described above involve an estimated annual reduction of approximately 575,000 tons<sup>28</sup> of carbon dioxide - equivalent to the amount emitted by the average-sized coal power plant operating in New York today (the average-sized coal power plant is responsible for approximately 2% of total carbon emissions from in-State electricity generators), or 12,285,523 MMBtu in annual energy savings, or to removing 120,000 cars from the road each year, or planting 15 million trees per year.

---

<sup>28</sup> All tonnages are metric.

## 5.0 Defined Terms & Glossary

“Advisory Committee” means the advisory committee of NYGB.

“BofA Merrill” means Bank of America Merrill Lynch.

“Btu” means British thermal unit, a measure of heat energy in fuels.

“C&I” means the commercial and industrial sector.

“C-PACE” means Commercial Property Assessed Clean Energy.

“CHP” means combined heat and power.

“Citi” means Citigroup.

“Commission” means the New York State Public Service Commission.

“DB” means Deutsche Bank.

“DOE” means the United States Department of Energy.

“DPS” means the New York State Department of Public Service.

“EIC” means Energy Improvement Corporation.

“ESA” means Energy Service Agreement.

“GCP” means GreenCity Power LLC.

“Initial Business Plan Filing” has the meaning given to that term in [Section 2.0](#).

“Initial Capitalization Order” has the meaning given to that term in [Section 1.0](#).

“Investment & Risk Committee” or “IRC” means NYGB’s investment and risk committee.

“Metrics” has the meaning given to that term in [Section 1.0](#).

“Metrics Plan” has the meaning given to that term in [Section 1.0](#).

“Milestones” has the meaning given to that term in [Section 1.0](#).

“MMBtu” means million Btus.

“MW” means megawatt, a measure of installed energy generation capacity.

“MWh” means megawatt-hour, a measure of energy production.

“NYGB” means the New York Green Bank.

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

“Organization Filing” has the meaning given to that term in [Section 2.0](#).

“PACE” means Property Assessed Clean Energy.

“Petition to Complete NYGB Capitalization” has the meaning given to that term in Section 2.0.

“Quarterly Reports” means the quarterly reports to be filed by NYGB with the Commission as contemplated in both the Initial Capitalization Order and the Metrics Plan.

“Report” means this “Metrics, Reporting & Evaluation - Quarterly Report No. 1 (Through September 2014), Case 13-M-0412, November 2014”.

“RF” means Renewable Funding, LLC.

“RFP” has the meaning given to that term in Section 2.0.

“RGGI” means the Regional Greenhouse Gas Initiative.

“SDCL” means Sustainable Development Capital, LLC.

“Steel Sun” has the meaning given to that term in Section 4.0.

“WHEEL” means Warehouse for Energy Efficiency Loans.