



NY Green Bank
A Division of NYSERDA



NY Green Bank

Quarterly Metrics Report No. 11 (March 31, 2017)
Webinar | May 31, 2017

Note: All data included in this quarterly update is current as of March 31, 2017, unless otherwise indicated

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Performance

Performance at a Glance – As of March 31, 2017

Strong quarter, closing out very strong FY 2016 - 2017 of clean energy investment in New York State (NYS). NYGB closed **\$292.0 million** of investments in FY 2016 - 2017 – a five-fold increase over FY 2015 - 2016 – resulting in Overall Investments to Date of **\$346.1 million**.

Stimulating New Clean Energy Proposals in the State

Proposals received for **\$2.0 billion** in NYGB investment since inception

Strong Active Pipeline ⁽¹⁾

Active Pipeline of transactions moving towards closing is **\$591.7 million**

Driving Material Clean Energy Investments Across NYS

Investments support clean energy projects with total project costs between **\$1.0 and \$1.4 billion**, based on Overall Investments to Date of **\$346.1 million**

Mobilizing Capital

NYGB's investment portfolio as a whole represents expected mobilization ratio on track at or above **3:1**; over 10 years on track to meet or exceed **8:1**

Revenue Growth Paving the Way to Self-Sufficiency

\$12.9 million in cumulative revenues generated since inception

Contributing to REV, the CEF & CES Objectives

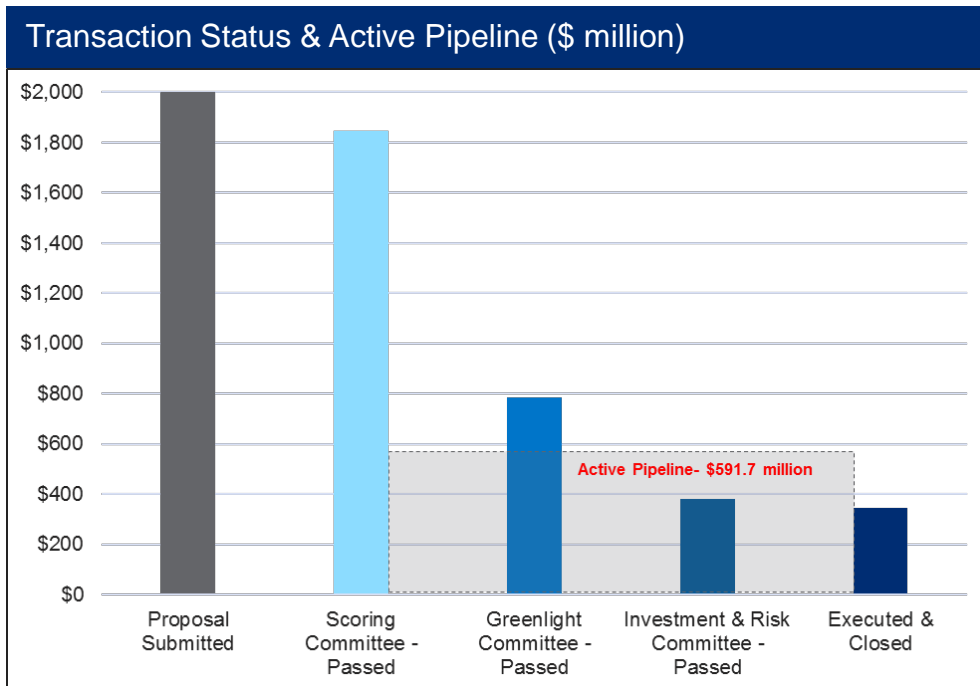
Estimated lifetime GHG reductions between **4.3 and 6.4 million metric tons**, equivalent to removing **50,000 - 70,000 cars** off the road for **20 years**

Q1 Metrics Report was filed May 15, 2017, pursuant to the Metrics, Reporting & Evaluation Plan v3.0 and is available at www.greenbank.ny.gov/About/Public-Filings

(1) "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, 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 towards 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.



Investment Activity

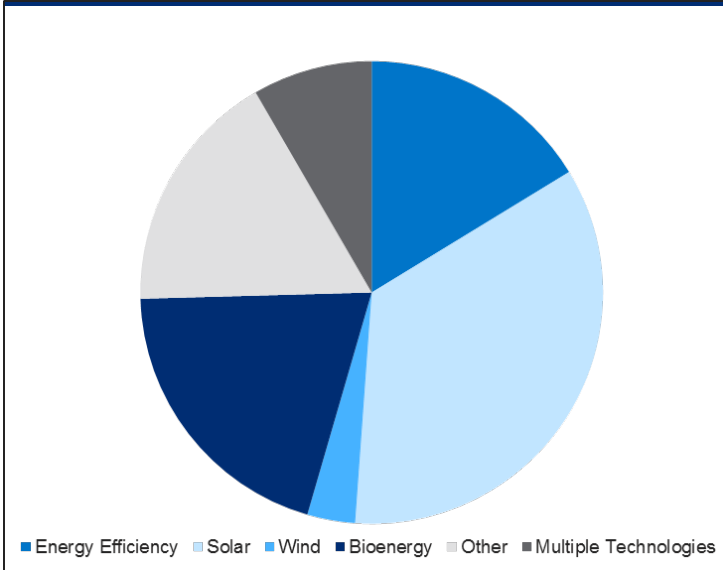


NYGB analysis; DealCloud data

Since inception through March 31, 2017:

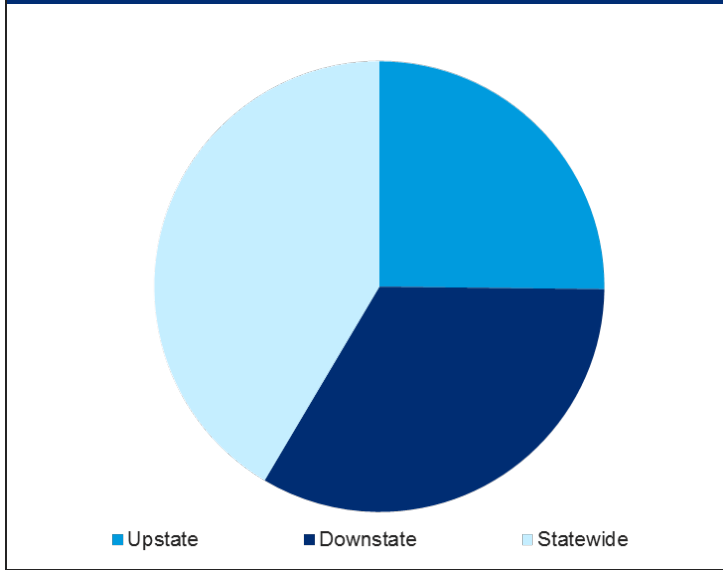
- **\$2.0 billion** of proposals received and evaluated by NYGB's Scoring Committee
- **\$1.8 billion** of proposals passed Scoring Committee evaluation – representing potential investments that meet NYGB's mandate and proposal evaluation criteria
- Active Pipeline currently **\$591.7 million**
- **\$783.6 million** of proposals received Greenlight Committee recommendation for advancement
- **\$382.5 million** of proposals vetted by the Investment & Risk Committee (IRC) and approved by NYSERDA's President & CEO
- **\$346.1 million** of transactions closed - comprising Overall Investments to Date - mobilizing public and private investments to support in the range of **\$1.0 to \$1.4 billion** in Total Project Costs (Cumulative) for new clean energy deployment in the State

Technology Distribution of Active Pipeline (\$591.7 million)



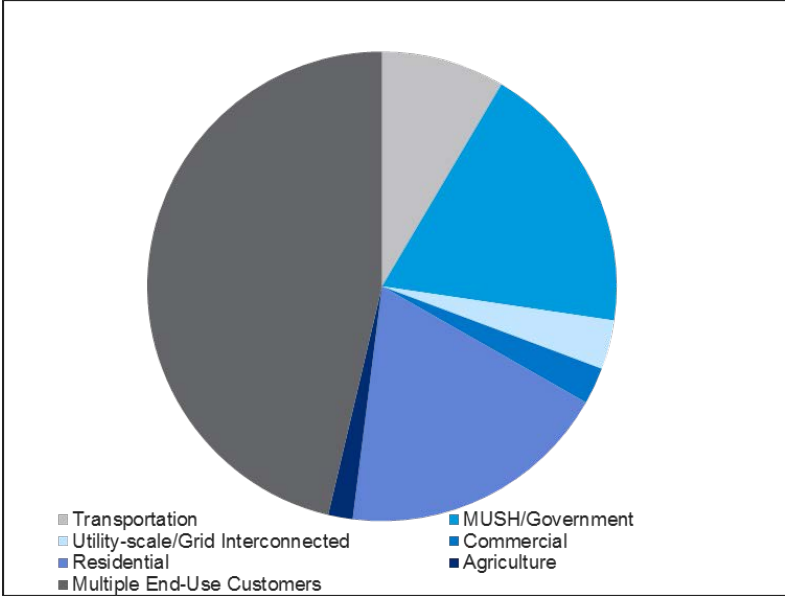
NYGB analysis; DealCloud data

Geographic Distribution of Active Pipeline (\$591.7 million)



NYGB analysis; DealCloud data

End-Use Customer Segment Distribution of Active Pipeline (\$591.7 million)



NYGB analysis; DealCloud data

In Q1 2017, **six new transactions** were closed, totaling a **\$40.6 million** addition to Overall Investments To Date.⁽¹⁾

Distributed Sun - Odyssey

- Long-term financing for four solar projects for Cornell University in and around Ithaca
- \$10.5 million in financing over 15 years provided by NYGB

Spruce Finance

- Financing for ~760 NYS residential solar installations – up to 5.87 MW – through 20 to 25-year PPAs
- \$6.0 million term loan provided by NYGB arranged by Investec

BQ Energy - Esopus

- Financing construction of a 0.87 MW solar project on remediated landfill in Esopus, Ulster County
- \$1.1 million construction and term loan facility provided by NYGB

In FY 2016 - 2017:

- NYGB closed **19 transactions**
- Committed **\$292.0 million** to clean energy

Distributed Sun - SUNEIGHT

- Financing project interconnection advance payments for up to 22.5 MW of CDG solar projects in NYSEG territory
- \$3.0 million bridge loan facility provided by NYGB (two separate transactions)

Vivint Solar

- Financing up to 2,100 residential solar systems in NYS through 20-year PPAs⁽²⁾
- \$20.0 million provided by NYGB as part of revolving back-leverage aggregation facility arranged by Bank of America Merrill Lynch

(1) Details of all NYGB investments can be found in Transaction Profiles available at www.greenbank.ny.gov/Investments/Transaction-Profiles. Press releases can be accessed at www.greenbank.ny.gov/News/In-The-News.

(2) PPA: Power Purchase Agreement

Objectives, Milestones & Deliverables

NYGB Goals	Key Performance Indicators	Metrics
Attract Private Sector Capital into Clean Energy Capital Markets in NYS	<ul style="list-style-type: none"> Mobilizing capital 	<ul style="list-style-type: none"> Mobilization ratio of total project costs to NYGB investment, reported quarterly
	<ul style="list-style-type: none"> Portfolio driving material clean energy investments across NYS 	<ul style="list-style-type: none"> Total Project Costs (Cumulative) (\$)
	<ul style="list-style-type: none"> Growing portfolio 	<ul style="list-style-type: none"> Overall Investments to Date (\$)
	<ul style="list-style-type: none"> Strong Active Pipeline 	<ul style="list-style-type: none"> Active Pipeline (\$)
	<ul style="list-style-type: none"> Stimulating new clean energy proposals in NYS 	<ul style="list-style-type: none"> Investment proposals received (cumulative) (\$)
Be Self-Sustaining	<ul style="list-style-type: none"> Revenue growth paving the way to self-sufficiency 	<ul style="list-style-type: none"> Revenues (cumulative) (\$)
		<ul style="list-style-type: none"> Expenses (cumulative) (\$)
Reduce GHG Emissions	<ul style="list-style-type: none"> Contributing to CEF objectives and in turn REV & the CES (by supporting increased deployment of renewable energy, distributed energy & energy efficiency) 	<ul style="list-style-type: none"> Current Portfolio estimated gross lifetime GHG emissions reductions, reported quarterly (metric tons)
		<ul style="list-style-type: none"> Installed energy and environmental benefits, reported annually: <ul style="list-style-type: none"> Energy saved by fuel type from energy efficiency projects (MWh/MMBtu) and/or actual clean energy generated (MWh) Primary energy saved from CHP (Btu) Clean energy generation installed capacity (MW), if applicable GHG emissions reductions (metric tons)

NYGB's 2016 Business Plan defined **three primary objectives**:

Put Ratepayer Money to Work

Committing at least \$200.0 million per year towards clean energy transactions driving greater deployment in NYS

Mobilize Capital

On a portfolio basis over a 10-year period, achieve an 8:1 ratio when looking at total project costs vs. NYGB capital

Drive Toward Self-Sufficiency

NYGB continues to work diligently towards achieving and maintaining self-sufficiency

These primary objectives are being accomplished by discrete activities & deliverables:

Focus Interest of Syndicates on NYS Clean Energy Development

Streamline Proposal Intake Process

Cultivate Opportunities Related to New State Programs & Initiatives

Build Upon & Capture Benefits of Prior Business Development Activities

Attract & Retain Quality Staff

Continuously Improve Business Practices

Product Development & Issuing Targeted Solicitations

Implement, Maintain & Optimize Critical Infrastructure & Platforms

Goal

Progress

Put ratepayer funds to work:

Commit \$200.0 million in new investments each year

NYGB has committed **\$292.0 million (146% of goal)** in FY 2016 - 2017 ending March 31, 2017 with new transactions moving towards close. Current Portfolio is **\$344.3 million (\$346.1 million Overall Investments to Date)**

Mobilize capital:

Achieve average mobilization ratio of 3:1, and 8:1 across portfolio by end of CEF in 2025

NYGB's current portfolio-wide mobilization ratio meets the required **3:1** and is on track to achieve an **8:1 mobilization ratio** by 2025, including through **recycling capital** for investment in new transactions

Drive towards self-sufficiency:

Continue to grow revenues and manage expenses to reach self-sufficiency by 2018

Over **\$12.9 million** in revenues has been generated since NYGB's inception

Strong Active Pipeline:

Maintain an Active Pipeline of at least \$300.0 million

Active Pipeline of potential investments proceeding to close is **\$591.7 million**

Reduce GHG Emissions:

Contribute to CEF objectives and in turn REV & the CES

Current Portfolio represents up to: **341.0 MW** of new clean energy installations in NYS, **9.71 million MWh** of clean energy generation, **1.23 million MWh** saved, **10.3 million MMBtus** saved, and estimated lifetime GHG reductions of between **4.3 and 6.37 million metric tons** over the life of underlying projects

Category	Deliverable	Status in Quarter Ending March 31, 2017 [End of 2016 – 2017 Plan Year]
Strong Active Pipeline		
<ul style="list-style-type: none"> Active Pipeline 	<ul style="list-style-type: none"> Maintain an Active Pipeline of at least \$300.0 million. 	<ul style="list-style-type: none"> ✓ Achieved for this Quarter: Active Pipeline of \$591.7 million. ✓ Achieved for the Plan Year: Average Active Pipeline \$588.1 million per quarter.
<ul style="list-style-type: none"> CRM, Transaction Pipeline & Portfolio Management Infrastructure 	<ul style="list-style-type: none"> Implementation of third-party platform, full “go-live”. 	<ul style="list-style-type: none"> ✓ Achieved for the Plan Year: In December 2016 NYGB and DealCloud launched this customized system and achieved “Go Live”. NYGB continues to fully optimize and customize the system to maximize effectiveness, efficiencies and user experience in line with NYGB’s growing business and evolving needs.
Portfolio Driving Material Clean Energy Investments Across NYS		
<ul style="list-style-type: none"> Committed Funds 	<ul style="list-style-type: none"> Commit \$200.0 million to NYGB investments per year, equating to an average of \$50.0 million in closed transactions per quarter. 	<ul style="list-style-type: none"> ✓ Achieved for this Quarter: \$40.6 million of closed transactions in the quarter, given an average of \$73.0 million across all four quarters of the Plan Year. ✓ Achieved for the Plan Year: In 2016 - 2017 NYGB committed \$292.0 million to new clean energy investments in the State – well in excess of the targeted \$200.0 million.
<ul style="list-style-type: none"> Financing Commercial Real Estate & Multi-Family Solar System &/or Energy Efficiency Purchases 	<ul style="list-style-type: none"> Publicly issue RFP. 	<ul style="list-style-type: none"> ✓ Achieved for the Plan Year: RFP publicly issued and launched in March 2017 and available on NYGB and NYSERDA websites.
<ul style="list-style-type: none"> Financing Ground-Mounted Solar Systems Targeting Corporate & Industrial End-Users 	<ul style="list-style-type: none"> Publicly issue RFP. 	<ul style="list-style-type: none"> ✓ Achieved for the Plan Year: RFP publicly issued and launched in March 2017 and available on NYGB and NYSERDA websites.

Category	Deliverable	Status in Quarter Ending March 31, 2017 [End of 2016 – 2017 Plan Year]
Portfolio Driving Material Clean Energy Investments Across NYS (cont.)		
<ul style="list-style-type: none"> ▪ Fund Administration & Loan/Investment Servicing Infrastructure 	<ul style="list-style-type: none"> ▪ Implementation of third-party platform, full “go-live”. 	<ul style="list-style-type: none"> ✓ Achieved for the Plan Year: In January 2017 NYGB and SS&C completed detailed system design and implementation to accommodate all NYGB processes and procedures – as well as reflect all historic data and transactions since inception, including achieving “Go Live”. SS&C now represents NYGB’s source for fund administration and loan/investment servicing, consistent with industry best practice among comparable public and private funds and financing entities. NYGB is already realizing material efficiencies from implementation of this platform and the creation of more end-to-end processes and reduction of duplicative and/or highly manual activities.
<ul style="list-style-type: none"> ▪ Available Capital 	<ul style="list-style-type: none"> ▪ Satisfy the Cash Release Trigger pursuant to the 2015 Capitalization Order through achieving a portfolio size of \$150.0 million. 	<ul style="list-style-type: none"> ✓ Achieved for the Plan Year: In Summer 2016, the \$150.0 million threshold was met and a further capital installment funded to NYGB pursuant to Commission Order.
Mobilizing Capital		
<ul style="list-style-type: none"> ▪ Mobilization Ratio 	<ul style="list-style-type: none"> ▪ 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. 	<ul style="list-style-type: none"> ✓ Achieved for this Quarter: Current quarter Mobilization Ratio on track at at least 3:1 on average across NYGB’s portfolio. ✓ Achieved for the Plan Year: Mobilization Ratio across all quarters of the Plan Year consistent with maintaining at least a 3:1 ratio on average across NYGB’s portfolio.

Quarterly Metrics

Quarterly Metrics are set out below, without footnotes. For complete Metrics and narrative, please see the full Report filed on May 15, 2017 available at www.greenbank.ny.gov/About/Public-Filings

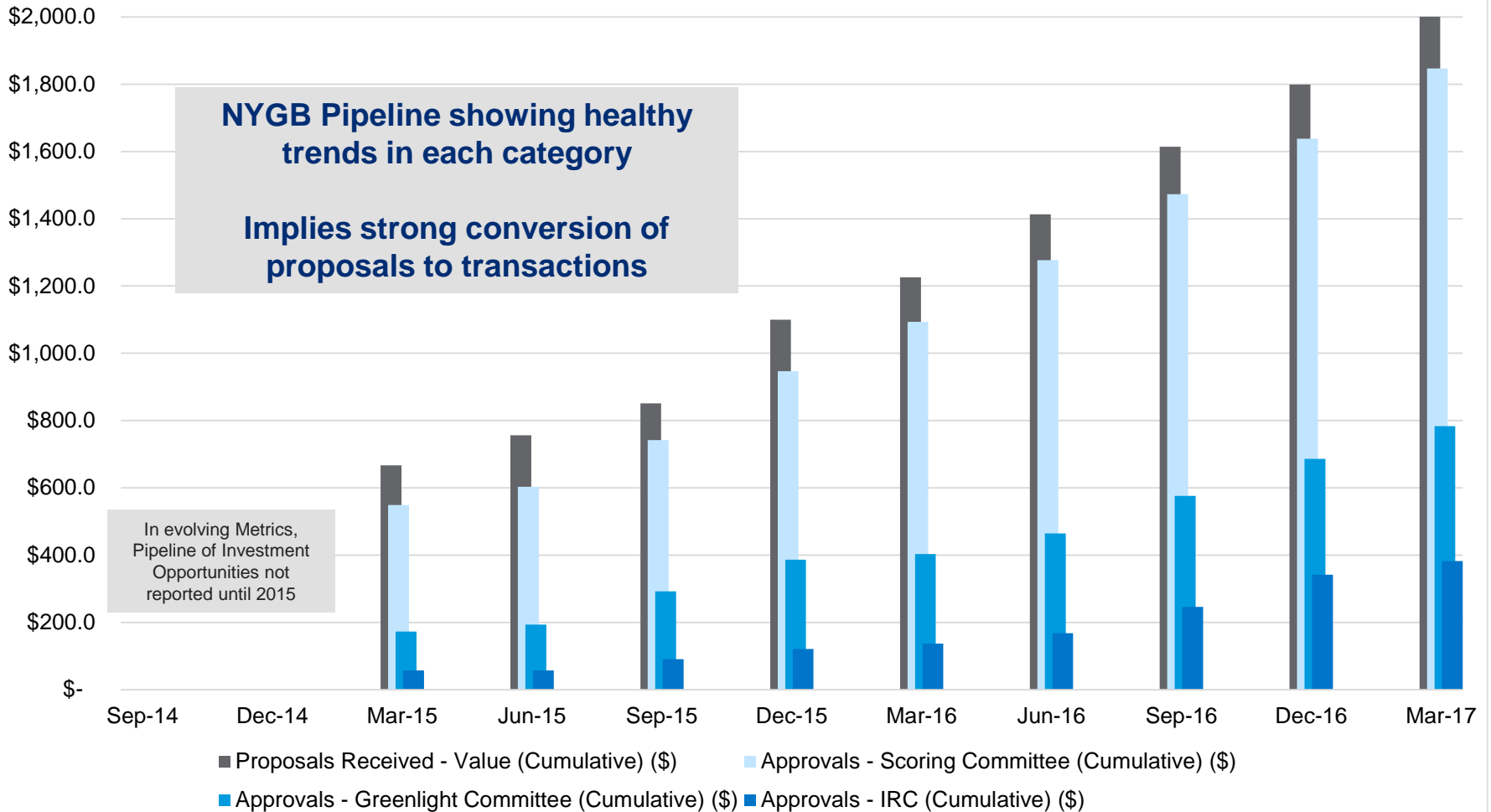
Quarterly Metric	Prior Quarter	Current Quarter
Capital Position		
▪ Authorized Capital (\$)	\$1.0 billion	\$1.0 billion
▪ Authorized Administrative Expenses (\$)	\$17.5 million	\$17.5 million
▪ Authorized Evaluation Expenses (\$)	\$4.0 million	\$4.0 million
▪ Available Capital (\$)	\$127.7 million	\$106.2 million
Operational Matters		
▪ Cumulative Revenues (\$)	\$9.6 million	\$12.9 million
▪ Cumulative Operating Expenses (\$)	\$14.7 million	\$16.7 million
▪ Direct Operating Expenses (\$)	\$8.3 million	\$9.5 million
▪ Allocated Expenses (\$)	\$6.4 million	\$7.2 million
▪ Credit Facility (if in place)		
▪ Credit Facility Amount (\$)	Not Applicable	Not Applicable
▪ Credit Facility Drawn Amount (\$)	Not Applicable	Not Applicable
▪ Credit Facility Fees & Interest (Cumulative) (\$)	Not Applicable	Not Applicable
Investment Portfolio		
▪ Committed Funds (Cumulative) (\$)	\$68.4 million	\$85.8 million
▪ Deployed Funds (Cumulative) (\$)	\$235.7 million	\$258.5 million
▪ Current Portfolio (\$)	\$304.1 million	\$344.3 million
▪ Overall Investments to Date (\$)	\$304.7 million	\$346.1 million
▪ Total Project Costs (Cumulative) (\$)	Up to ~\$1.3 billion	In the range of \$1.0 - \$1.43 billion
▪ Mobilization Ratio	At least 3:1	Tracking at least 3:1 on average across portfolio
▪ Commitment Ratio (%)	82.5%	99.2%
▪ Portfolio Concentrations (%)	72.0% Renewable Energy	75.0% Renewable Energy
	17.0% Energy Efficiency	15.0% Energy Efficiency
	12.0% Other	11.0% Other

Quarterly Metric	Prior Quarter	Current Quarter
<ul style="list-style-type: none"> Number & Type of NYGB Investments 	10 – Renewable Energy 6 – Energy Efficiency 2 – Other	16 – Renewable Energy 6 – Energy Efficiency 2 – Other
<ul style="list-style-type: none"> Number & General Type of NYGB Counterparties 	41 – Local Development Corporation; Global Corporate & Investment Banks; Commercial/Regional Banks; Specialty Finance Company; Energy Project Developers; Municipal, University, Schools & Hospitals; Energy Technology Provider & Vendors; Government Authority	45 – Local Development Corporation; Global Corporate & Investment Banks; Commercial/Regional Banks; Specialty Finance Company; Energy Project Developers; Municipal, University, Schools & Hospitals; Energy Technology Provider & Vendors; Government Authority; Insurance Companies
<ul style="list-style-type: none"> Estimated Gross Lifetime Energy Saved by Fuel Type from Energy Efficiency Projects (MWh/MMBtu) and/or Estimated Gross Lifetime Clean Energy Generated (MWh) for Committed Funds & Deployed Funds 	Estimated Gross Lifetime Energy Saved by Fuel Type (Energy Efficiency): 1.1 – 1.2 million MWh; and 9.4 – 10.3 million MMBtu Estimated Gross Lifetime Clean Energy Generated: 4.7 – 7.9 million MWh	Estimated Gross Lifetime Energy Saved by Fuel Type (Energy Efficiency): 1.12 – 1.23 million MWh; and 9.43 – 10.3 million MMBtu Estimated Gross Lifetime Clean Energy Generated: 5.89 – 9.71 million MWh
<ul style="list-style-type: none"> Estimated Gross First Year Energy Saved by Fuel Type from Energy Efficiency Projects (MWh/MMBtu) and/or Estimated Gross First Year Clean Energy Generated (MWh) for Committed Funds & Deployed Funds 	Estimated Gross First Year Energy Saved by Fuel Type (Energy Efficiency): 90,000 – 97,000 MWh; and 800,000 – 870,000 MMBtu Estimated Gross First Year Clean Energy Generated: 210,000 – 340,000 MWh	Estimated Gross First Year Energy Saved by Fuel Type (Energy Efficiency): 89,400 – 97,500 MWh; and 801,000 – 873,000 MMBtu Estimated Gross First Year Clean Energy Generated: 256,000 – 413,000 MWh
<ul style="list-style-type: none"> Estimated Gross Lifetime Energy Saved from CHP (MWh) for Committed Funds & Deployed Funds 	Estimated Gross Lifetime Energy Saved from CHP: 7,100 – 8,600 MWh	Estimated Gross Lifetime Energy Saved from CHP: 7,070 – 8,640 MWh
<ul style="list-style-type: none"> Estimated Gross First Year Energy Saved from CHP (MWh) for Committed Funds & Deployed Funds 	Estimated Gross First Year Energy Saved from CHP: 290 - 360 MWh	Estimated Gross First Year Energy Saved from CHP: 293 - 358 MWh

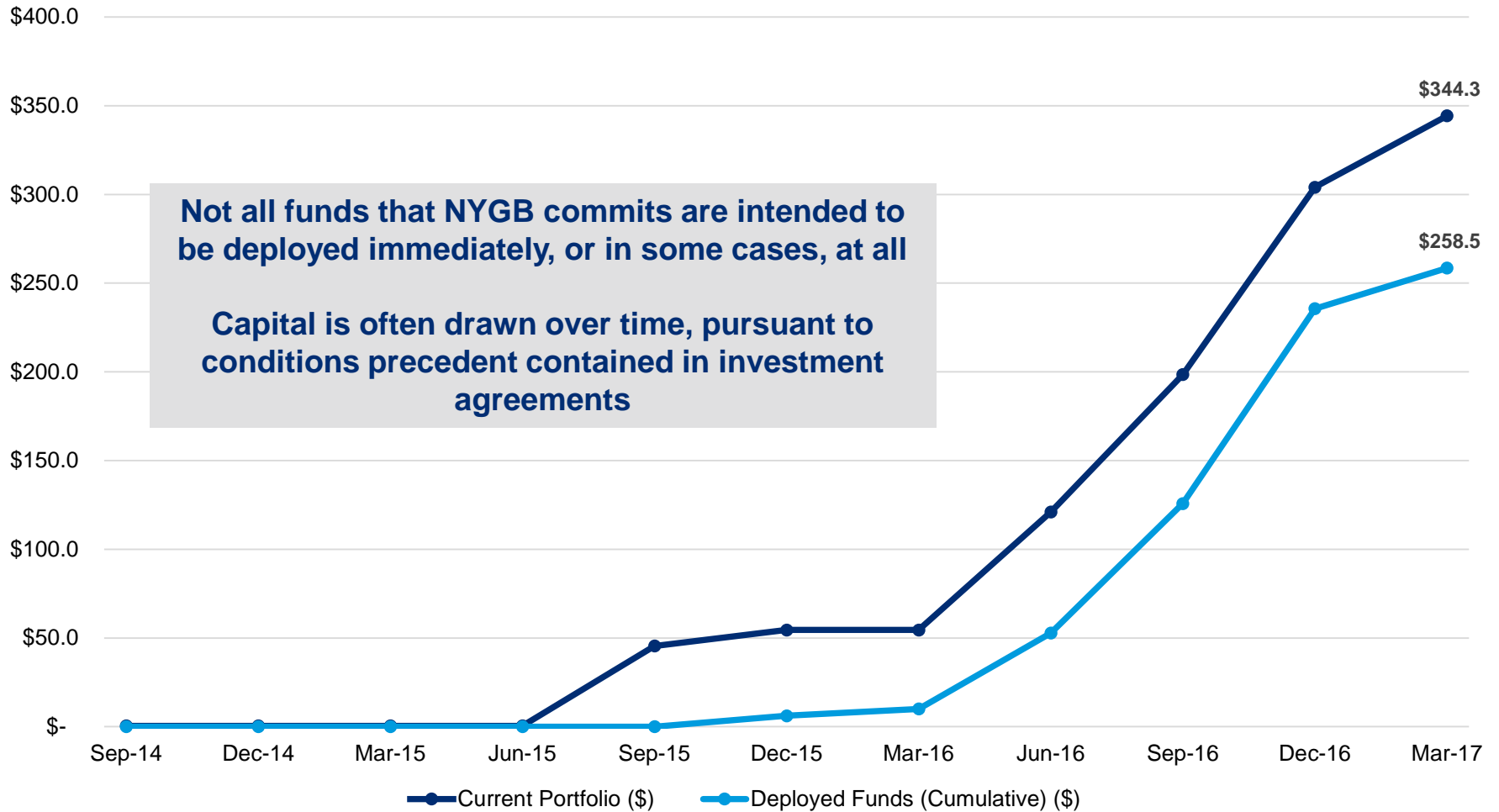
Quarterly Metric	Prior Quarter	Current Quarter
▪ Estimated Gross Lifetime Energy Savings from CHP (MMBtu) for Committed Funds & Deployed Funds	Estimated Gross Lifetime Energy Savings from CHP: -(41,000 – 50,000) MMBtu	Estimated Gross Lifetime Energy Savings from CHP: -(41,000 – 50,100) MMBtu
▪ Estimated Gross First Year Energy Savings from CHP (MMBtu) for Committed Funds & Deployed Funds	Estimated Gross First Year Energy Savings from CHP: -(1,700 – 2,100) MMBtu	Estimated Gross First Year Energy Savings from CHP: -(1,700 – 2,070) MMBtu
▪ Estimated Gross Clean Energy Generation Installed Capacity from CHP (MW), if applicable, for Committed Funds & Deployed Funds	1.6 MW	1.6 MW
▪ Estimated Gross Clean Energy Generation Installed Capacity (MW), if applicable, for Committed Funds & Deployed Funds	173.2 – 279.2 MW	217.0 – 341.0 MW
▪ Estimated Gross Lifetime GHG Emission Reductions (metric tons) for Committed Funds & Deployed Funds	3.5 – 5.4 million metric tons	4.26 – 6.37 million metric tons
Investment Pipeline		
▪ Active Pipeline (In the Quarter) (\$)	\$597.7 million	\$591.7 million
Investment Process		
▪ Proposals Received – Value (Cumulative) (\$)	\$1.8 billion	\$2.0 billion
▪ Approvals - Scoring Committee (Cumulative) (\$)	\$1.6 billion	\$1.8 billion
▪ Approvals - Greenlight Committee (Cumulative) (\$)	\$686.1 million	\$783.6 million
▪ Approvals - IRC (Cumulative) (\$)	\$342.1 million	\$382.5 million

Trends

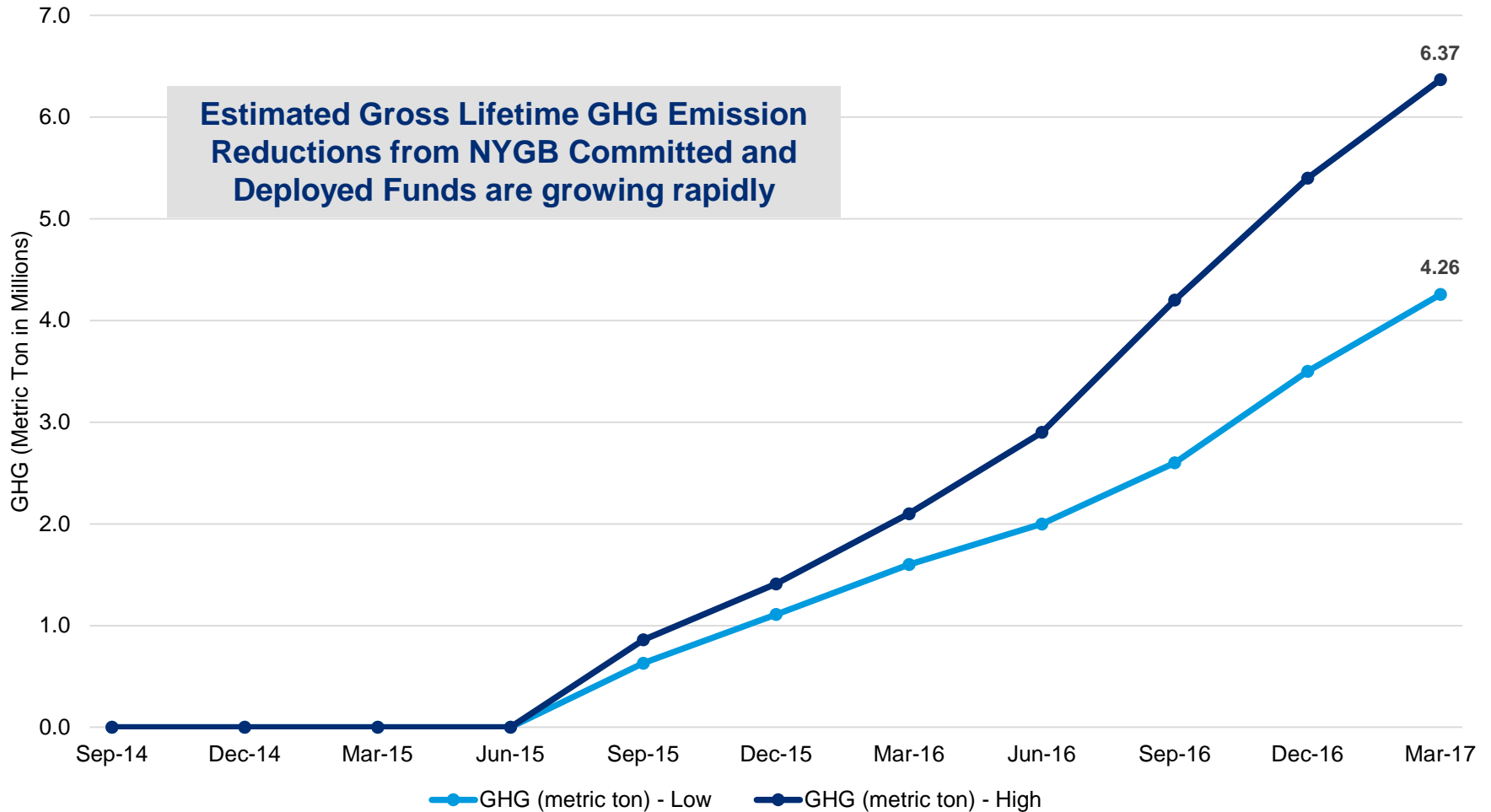
NYGB Pipeline of Proposals and Approvals (\$ million)



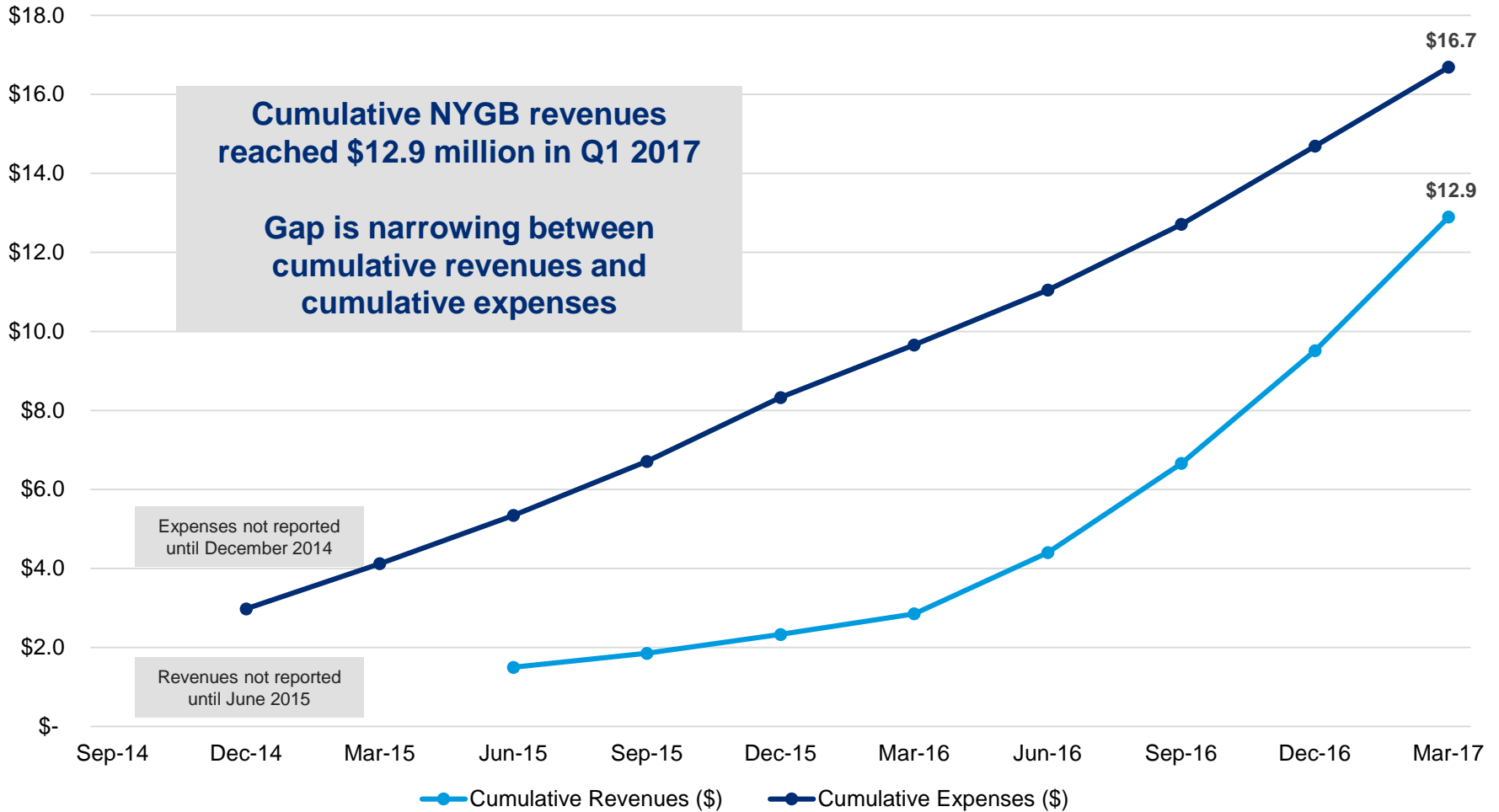
NYGB Current Portfolio vs. Deployed Funds (\$ million)



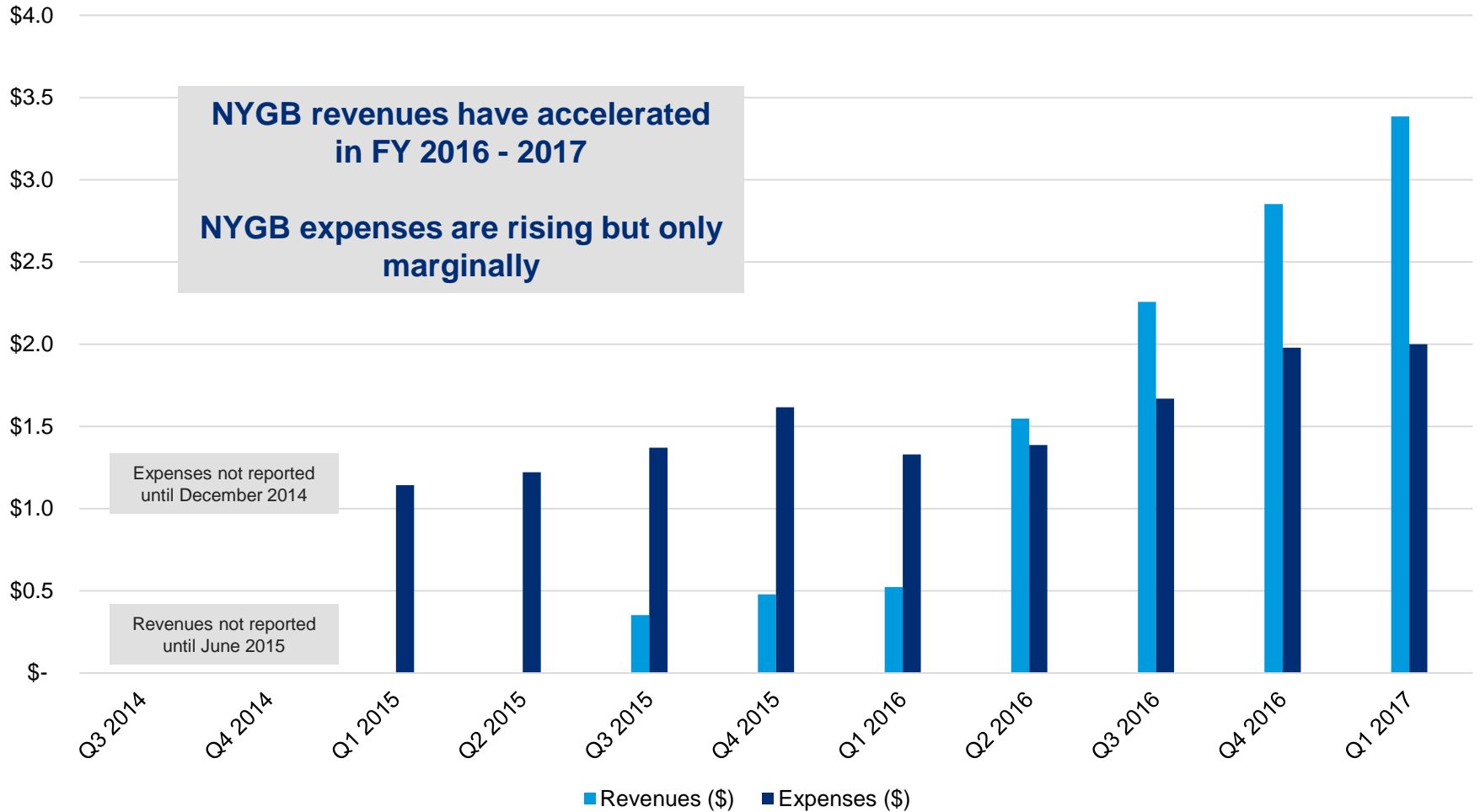
Estimated Gross Lifetime GHG Emission Reductions for Committed Funds & Deployed Funds (Metric Ton in millions)



Cumulative Revenues vs. Cumulative Expenses (\$ million)



Quarterly Revenues vs. Expenses (\$ million)



What's Coming Next?

- **Annual Business Planning Process**
 - Well underway – will culminate in filing of NYGB's Annual Business Plan for FY 2017-18 with the PSC on **June 19, 2017**

- **Annual Financial Metrics Report**
 - To be filed with the PSC on **June 29, 2017**

- **Annual Audited Financial Statements**
 - Currently being prepared and finalized. Will be incorporated in the Annual Financial Metrics Report and separately published on NYGB's website

- **Next Quarterly Report**
 - For the quarter ending June 30, 2017. Will be filed with the PSC on **August 14, 2017**

Stay In Touch with NY Green Bank

All information available on the website: www.greenbank.ny.gov

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Transaction Profiles
As NY Green Bank signs and closes documents will be made available (both on this page and in Transaction Profiles provide key data in connect Bank investments demonstrating a particular tra well as estimated energy and environmental ben approaches. Part I of each Transaction Profile p posted on NY Green Bank's website within a few investment agreements. Part II of each Transact and will be added on to each new Transaction P Quarterly Reports will include full Transaction P Transaction Profiles for each of NY Green Bank

- [Sunrun](#) (PDF)
- [Vivint Solar](#) (PDF)

Public Filings
Organizational Documents

- August 6, 2016 - [Capital Corpora](#)
- June 27, 2016 - [NY Green Bank 2](#)
- January 21, 2016 - [Public Service Including Fuel \\$1 Billion Capitaliza](#)
- July 16, 2015 - [Public Service Cor Modification for NY Green Bank](#)
- June 25, 2015 - [Clean Energy Fur](#)

In The News
2017

- [4-27-2017: NY Green Bank](#)
- *New York S change, ank are expecte efficiency pr*

Publications & Events

- 05-18-2017: [NY Green Bank Spring 2017 Newsletter](#)
- 03-07-2017: [NY Green Bank Webinar: Quarterly Report Review Q4 2016](#) (PDF)
- 11-29-2016: [NY Green Bank Webinar: Quarterly Report Review Q3 2016](#) (PDF)
- 11-16-2016: [NY Green Bank Fall 2016 Newsletter](#)
- 03-01-2016: [NY Green Bank Spring 2016 Newsletter](#)

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Advancing New York's clean energy investment opportunities

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Questions