



NY Green Bank
A Division of NYSERDA

NY Green Bank Impact Report

For the year ended March 31, 2021

JUNE 2021

CONTENTS

- 01** President's Letter
- 03** Mission and Priorities
- 07** Impact at a Glance
- 09** Investments and Financial Performance
- 15** Market Transformation
- 18** Energy and Environmental Impact
- 22** Transaction Highlights
- 27** Case Studies
- 33** Impact for New Yorkers
- 39** Stakeholder Engagement
- 43** The Year Ahead



“With stronger policies being implemented at the state and federal level, and a heightened demand for accountability in investment opportunities and businesses alike, I am optimistic that we are entering a new era in which climate change and social justice will occupy center stage.”

PRESIDENT'S LETTER

Looking back at the past year, I am struck by how much has shifted globally in such a brief period, and how those shifts have driven significant changes both in New York State and at NY Green Bank. At the start of the fiscal year in March 2020, our team could not have imagined the extent of the human and economic loss that would ensue. However, despite the challenges of the past year, NY Green Bank saw stronger demand for its capital than ever before and successfully closed more transactions in support of the state's COVID-19 recovery and climate goals than in any previous year. NY Green Bank reached a milestone \$1.0 billion of committed capital only nine weeks into our fiscal year and by the end of what proved to be our strongest year ever, we had committed over \$1.3 billion of capital to new clean energy and sustainable infrastructure investments.

During the past year, NY Green Bank remained a steady partner providing our counterparties uninterrupted access to capital for their clean energy businesses and projects. We made several loans under the Paycheck Protection Program to smaller market participants whose businesses were disrupted by the COVID-19 crisis and we offered several loan modifications to existing counterparties to help them weather challenging economic conditions. Our loans supported technologies we hadn't previously financed and business models that lacked access to private capital.

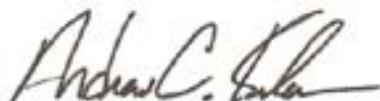
Despite everything we have accomplished since NY Green Bank was formed, we also took stock during the past year and identified areas where we need to make faster strides in achieving our goals. For example, we recognized that by increasing our support of projects benefiting historically marginalized communities, NY Green Bank could play a significant role in providing all New Yorkers equal access to clean energy and healthy communities.



As a result, on July 2020, we declared our intention to invest \$150 million in projects that will deliver improved energy performance in affordable housing – and backed up our commitment with dedicated internal resources, new channel partnerships and a new purpose-built financing proposal and evaluation pathway for multifamily affordable housing electrification and electrification-readiness.

As we emerge from the global pandemic and consider the unthinkable losses during this unprecedented year I am more grateful than ever for our team and for our broader community of support that has gotten us all through these trying times. With stronger policies being implemented at the state and federal level, and a heightened demand for accountability in investment opportunities and businesses alike, I am optimistic that we are entering a new era in which climate change and social justice will occupy center stage. NY Green Bank stands ready to support the just transition to decarbonization that will benefit all New Yorkers. We are delighted to issue this inaugural Impact Report to highlight NY Green Bank's work, draw attention to the team's impact, and provide stakeholders a preview of our strategic priorities for the coming year.

Sincerely,


Andrew Kessler, Acting President



Mission & Priorities

A race to net zero

Mission & Priorities

A race to net zero

WHO WE ARE AND WHAT WE DO

LARGEST

green bank
in the nation

2013

year established

\$1 BILLION

capitalization with
New York State
ratepayer funds

\$10–50 MILLION

typical investment size

We are a team of mission-driven, solutions-oriented investment professionals with deep credit, project finance, and technical experience, along with unique expertise in New York State energy and environmental policy.

OUR MISSION

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

NY Green Bank's role is to mobilize private capital in support of New York State's ambitious energy goals.

Through our investments, NY Green Bank leverages New York State ratepayer funds to increase the size, volume, and breadth of sustainable infrastructure investment activity throughout New York, expand the base of investors focused on New York State clean energy opportunities, and increase market participants' access to capital on commercial terms, while ultimately reducing the need for further public funding in the sector. We stimulate greater private sector participation in the deployment of clean energy and sustainable infrastructure by:

- Focusing on wholesale capital markets (that is, providing structured financial products to developers and specific projects that result in clean energy benefits for all New Yorkers at scale rather than financing clean energy products or services purchased by consumers/homeowners directly)
- Structuring financial products to foster replicable and standardized sustainable infrastructure investments that in time are complemented and scaled by more traditional private sector financiers and investors
- Pricing financial products consistently with commercial approaches based on credit quality and risk, thus earning a return on investment to preserve and grow our capital base
- Collaborating with, rather than competing against, market participants that can or already do engage financial markets but are constrained by a lack of available financing
- Recycling our capital into new clean energy projects when income is generated and, as investments mature or are realized, maximizing the impact of our capital across multiple deployments

We invest in financially and technically feasible projects with developers or project sponsors that lack access to appropriately priced capital. Specifically, NY Green Bank steps in to fill gaps in the market where financing might not be available from conventional lenders, potentially due to barriers such as limited precedent, small deal sizes, challenges in evaluating technology risk, asset structures and/or business models unfamiliar to banks and institutional investors, and/or deal structuring and underwriting complexities requiring specialized skillsets.

NY Green Bank collaborates with the private sector to develop transaction structures and methodologies that other capital providers can readily replicate and scale. For project and structured finance transactions, NY Green Bank applies approaches that isolate project assets, protect against downside risks to the greatest possible extent and monetize low-volatility, project-generated cash flows to achieve appropriate risk-adjusted returns. Where cash flows are subject to variable revenue structures, such as the value stack mechanism for

distributed and community solar and storage in New York State, NY Green Bank has developed approaches to isolate and treat the uncontracted cash flows with appropriate risk-adjusted haircuts based on ongoing market price forecasts. Additionally, NY Green Bank can support projects with “lumpy” cost and/or expense profiles by providing bridge financing against expected takeout, as well as other solutions such as preferred equity. Examples include interconnection bridge loans for large-scale renewable or storage projects that require upfront deposits to maintain queue positions, or investments that enable affordable housing developers to complete cost-intensive structural repairs before accessing subsidized housing finance agency capital needed to begin high-performance building retrofits.

Through structuring and deploying standardized and replicable financing products, NY Green Bank enables private capital providers to “crowd in” to areas within the sustainable infrastructure landscape, allowing NY Green Bank to move on to other areas where private sector interest and activity have yet to be spurred.

NEW YORK STATE'S AMBITIOUS ENERGY & CLIMATE GOALS

6,000 MW

of distributed solar
by 2025

70%

electricity from renewable
energy by 2030

3,000 MW

of energy storage by 2030

9,000 MW

of offshore wind by 2035

100%

zero-emission electricity
by 2040

85% REDUCTION

in greenhouse gas
emissions from 1990
levels by 2050

35% MINIMUM

with a goal of 40% of
benefits from clean
energy investments will
go to disadvantaged
communities

Mission & Priorities

A race to net zero

WHAT DO WE MEAN BY ADDITIONALITY?

Because of this investment, did something happen differently than it would have otherwise? Without NY Green Bank's involvement, would the clean energy project have been completed more slowly, at a smaller scale, or not at all?



Scan to learn more about NY Green Bank, or visit greenbank.ny.gov/Public-Filings

Primary Investment Criteria

To be a fit for NY Green Bank's mandate, a transaction must:

- Demonstrate potential for greenhouse gas (GHG) reductions in support of New York State clean energy policies
- Demonstrate how it contributes to market transformation in terms of
 - > Mobilization of private capital
 - > **Additionality** in proposed investments
- Be economically and technically feasible, and have expected financial returns such that revenues of NY Green Bank on a portfolio basis will exceed operating costs and expected portfolio losses

NY Green Bank's Goals for the Year Ended March 31, 2021

In the remainder of this Impact Report, we detail our progress against four goals that we established at the start of our 2020–21 fiscal year and against our mission more broadly.

1

Support New York State's clean energy market in its recovery from the economic disruption stemming from the COVID-19 crisis

2

Manage a strong and growing portfolio of clean energy and sustainable infrastructure investments – including those that could benefit the state's historically marginalized communities – across a number of targeted market segments. We targeted making at least \$225 million of incremental investments to achieve cumulative commitments of at least \$1.2 billion in total

3

Mobilize additional private capital into clean energy projects in New York State

4

Maintain NY Green Bank's financial position by strengthening operations, increasing revenues and managing expenses to maintain self-sufficiency and generate net income

Impact at a Glance

Overall Impact of NY Green Bank Portfolio

Inception through March 31, 2021

**\$1.3
BILLION**

Funding Committed

**\$116.6
MILLION**

Cumulative Revenues

**UP TO \$3.6
BILLION**

Total Capital Mobilized

88 TRANSACTIONS ACROSS

8 TECHNOLOGY SEGMENTS

CLEAN ENERGY GENERATION
AND ELECTRICITY SAVINGS

44.5 MILLION MWh

FUEL SAVINGS

42.8 MILLION MMBtu

CO₂e AVOIDED

**UP TO 29.3 MILLION
METRIC TONS**

EQUIVALENT TO REMOVING

UP TO 306,000 CARS
from the road for 24 years



Investments and Financial Performance

NY Green Bank investments span a wide range of climate change-mitigating technologies, from building efficiency to grid-scale energy storage to clean transportation

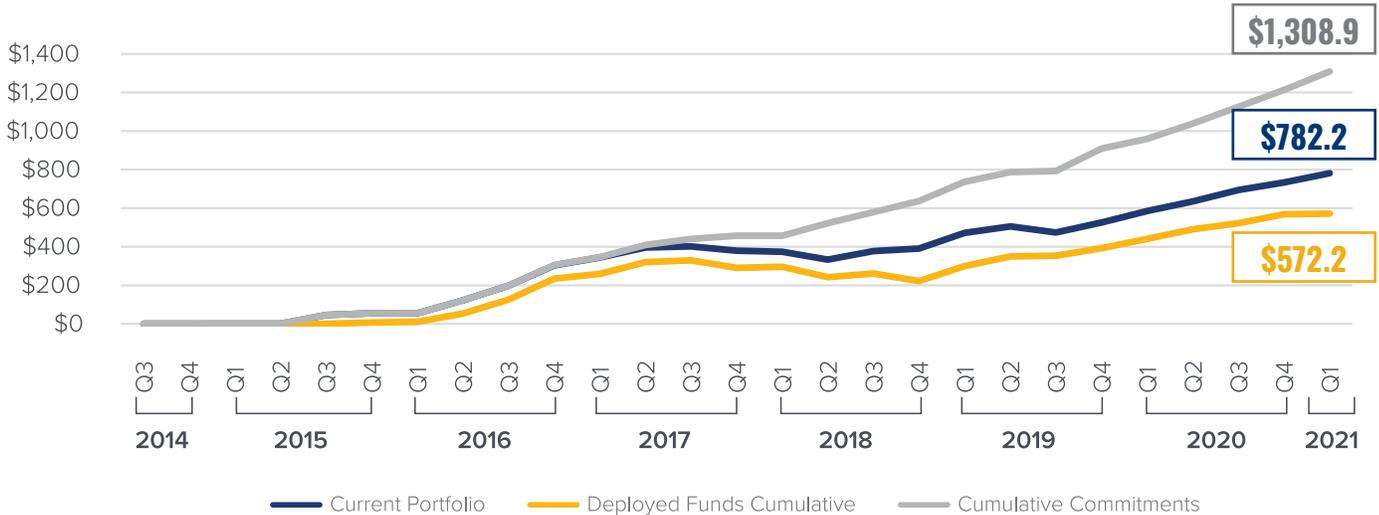
Investments and Financial Performance

Leveraging public funds to mobilize private investment in New York's economy and net zero future

PROVIDING FINANCING SOLUTIONS

By providing financing solutions to NY Green Bank borrowers, our investments support projects that provide benefits to renters and homeowners, small businesses, schools, industrial operations, and healthcare facilities, and they are being put to work across all regions of the State.

Capital Commitments and Deployments (\$MM)



The Chart Explained

Some of our transactions have relatively short maturities and have already been repaid by borrowers. When we receive capital repayments, we are able to redeploy those funds and make loans to additional projects – which explains how NY Green Bank has been able to make over \$1.3 billion of cumulative investments to date with our initial capitalization of \$1.0 billion of ratepayer capital.

When we make a loan, we may require our borrowers to meet certain milestones before they can access all of the capital we have committed. For this reason, our current portfolio (which represents capital we have committed to loans that have not yet been repaid) exceeds our deployed funds. The chart above shows our cumulative investments, current portfolio and deployed funds since inception.

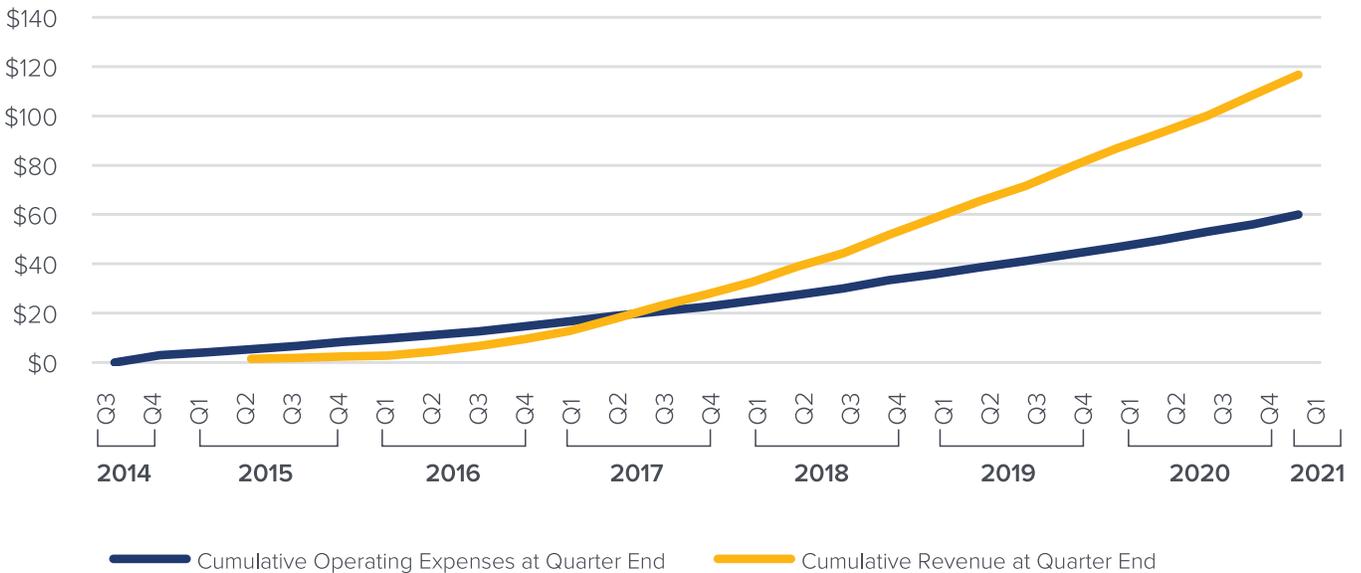
GENERATING POSITIVE NET REVENUE

\$29.6 MILLION

total operating revenue generated

in fiscal year 2020-21

Cumulative Revenues vs. Operating Expenses (\$MM)



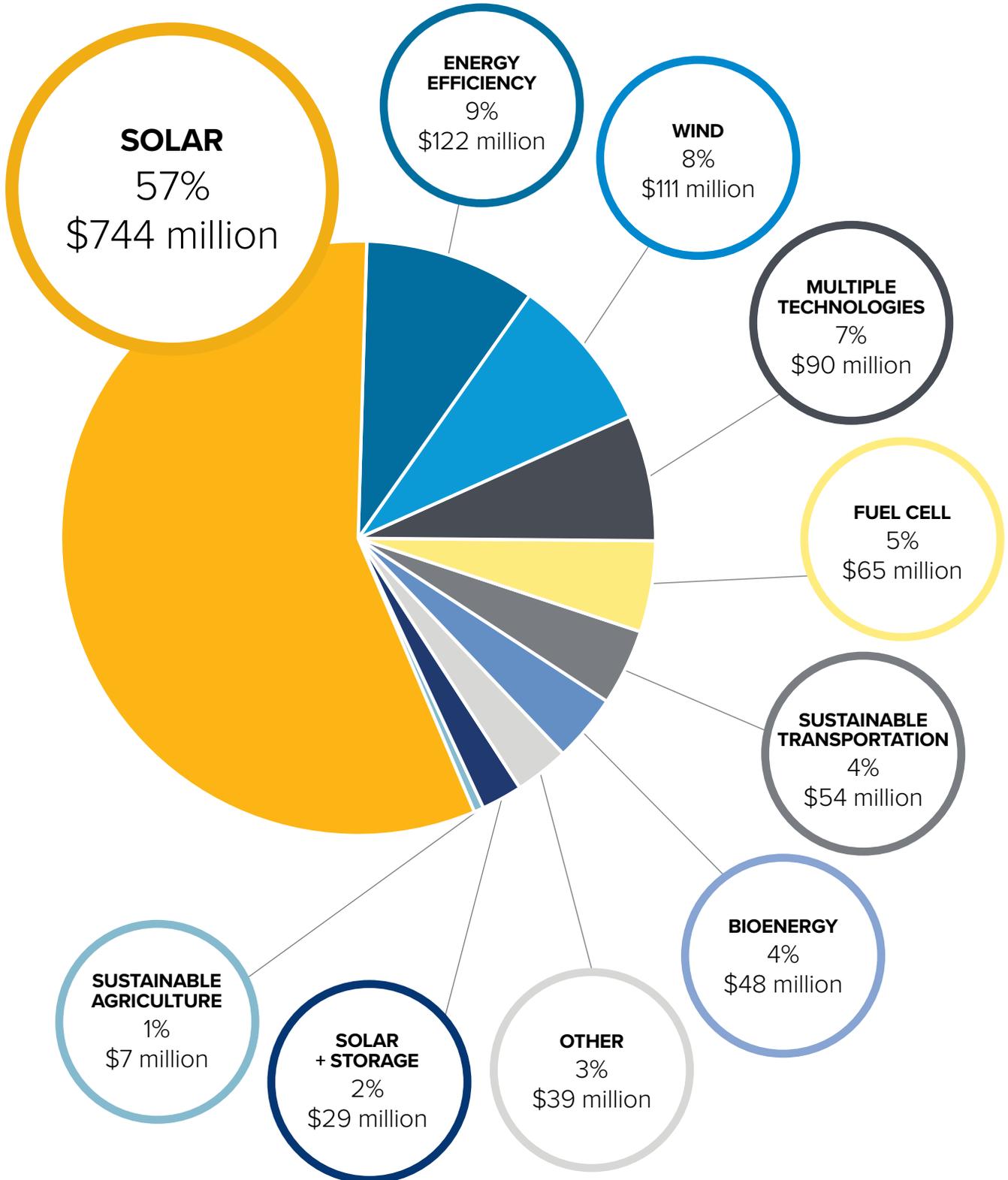
Scan for more information about NY Green Bank's financial performance as of March 31, 2021, or visit greenbank.ny.gov/Public-Filings

Investments and Financial Performance

Leveraging public funds to mobilize private investment in New York's economy and net zero future

Portfolio Distribution By Technology

Inception through March 31, 2021

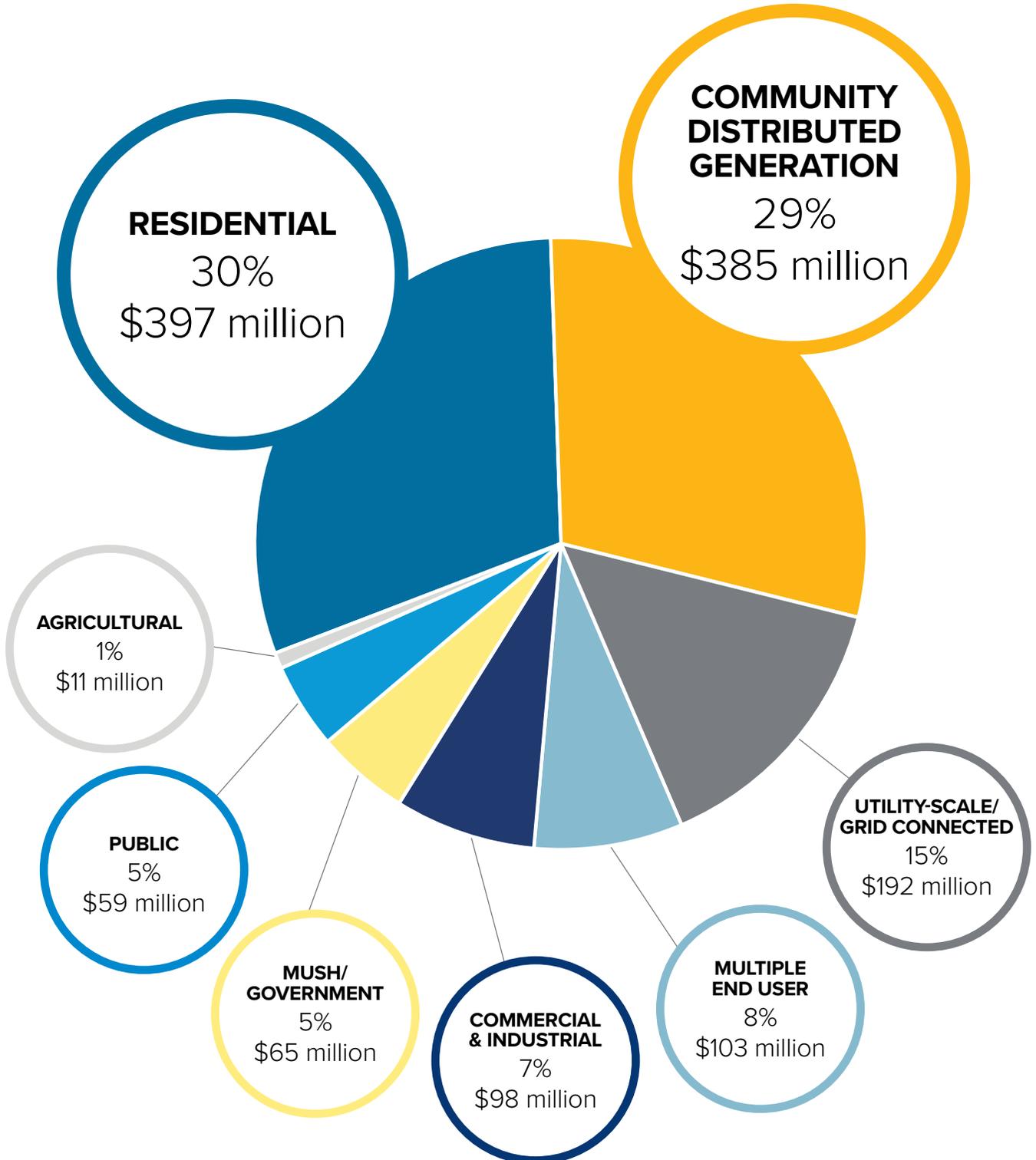


Investments and Financial Performance

Leveraging public funds to mobilize private investment in New York's economy and net zero future

Portfolio Distribution By End-User

Inception through March 31, 2021



Investments and Financial Performance

Leveraging public funds to mobilize private investment in New York's economy and net zero future

IN FISCAL YEAR 2020-21

30

transactions executed

11

co-lenders

\$349 MILLION

capital committed

\$65.6 MILLION

capital committed to support projects in disadvantaged communities*

\$1 BILLION

total investment expected to be mobilized



Scan to see NY Green Bank's Q2-Q4 2020 and Q1 2021 Quarterly Reports providing more detail on the fiscal year 2020-21 performance highlighted here or visit greenbank.ny.gov/Public-Filings

A RECORD-BREAKING YEAR IN REVIEW

In the year ended March 31, 2021, NY Green Bank committed more capital and executed more transactions than in any prior year and had its strongest second and third quarters since inception.

The businesses and investors leading the State's clean energy transition did not stop working during the COVID-19 pandemic and neither did NY Green Bank.

Our dedicated team adapted to a remote working environment quickly and seamlessly continued to offer innovative financing solutions to new and existing counterparties, remaining a reliable and trusted lender and market catalyst even in times of uncertainty.

Provided

- 4 revolvers/aggregation facilities
- 2 construction-to-term loans
- 20 term loans
- 1 preferred equity investment
- 3 Paycheck Protection Program loans
- 15 COVID-related loan modifications

* For more detail about NYSERDA's interim definition of Disadvantaged Communities, see Community Impact on page 36.

Market Transformation

*Mobilizing capital into
New York's clean energy market*

Market Transformation

Mobilizing capital into New York's clean energy market

OUR APPROACH

NY Green Bank targets areas of the New York State's clean energy and sustainable infrastructure markets where project deployment is constrained by a lack of readily available capital.

NY Green Bank was designed to address financing gaps and barriers by working with developers and other sustainable infrastructure market participants to ensure that any technically and economically feasible project can access appropriately priced capital.

We consider financing opportunities that may be too small, too bespoke

or too complex to be of interest to institutional capital providers.

We work to make investments that bridge these financing gaps in the short term and eliminate them in the long term. Our capital does not just enable the execution of specific projects that otherwise may not have had a path forward, but also creates attractive precedents and builds standardized, replicable investment

structures and practices that draw private and institutional lenders and investors into asset classes and project types where they had not previously been active.

Once this has been accomplished in a market segment, we move on to the next frontier where our innovative financing structures can again be utilized to drive greater liquidity.

Spotlight on Community Solar

When New York State established its community solar policy in 2015, the market was faced with an unfamiliar business model, nuanced policy framework, and complex revenue streams. Investors did not know how to evaluate risk or determine the market value of projects.

Our unique policy, regulatory and technical expertise allowed NY Green Bank to play a central role in establishing a knowledge base, best practices, and precedents for financing in the nascent community solar industry. Our work served to flatten the learning curve for other investors.

JAN
2017

First community solar transaction closed

\$1 MM, Distributed Sun

AUG
2017

Second transaction - development loan

\$11 MM, Cypress Creek Renewables

JUL
2018

Closed largest deal as of 3/31/21

\$55 MM, Delaware River Solar (term loan)



community solar investment
over \$300 million
since inception

We have played a pivotal role in transforming the community solar financing market from the time of our first community solar transaction in 2017 – a \$1 million loan that required months of the team's dedication to develop new transaction structures and documentation – to today, with total NY Green Bank community solar investment reaching over \$300 million and transactions in the segment becoming routine for many commercial lenders.

The December 2020 participation of Greenbacker Capital alongside NY Green Bank in a \$13 million community solar development facility to OYA Solar marked a significant milestone as the first time a private sector investor acted as a co-lender in a NY Green Bank community solar development loan.

Community solar is increasingly seen as an attractive component in a high-performing clean energy investment portfolio.

13
counterparties

CAPACITY SUPPORTED IN PORTFOLIO
→ **over 240 MW**
completed
→ **over 700 MW**
in development

\$14.2 million
average size
of transaction

16
additional products
upsized or offered
Average of 2.2 transactions
per counterparty

DEC
2018

First construction loan
\$25 MM, Delaware River Solar
(revolver)

DEC
2019

Equipment financing
amendment
Cypress Creek Renewables

DEC
2020

First time private investor
acted as a co-lender in
a development facility
\$13 MM, Greenbacker/OYA

Energy and Environmental Impact

The reason we invest

At its core, NY Green Bank exists to fight the climate crisis. We are financing the decarbonized economy that will be needed in New York State – and globally – if we are to avert the worst impacts of climate change and adapt to those that are already underway.

EXPECTED IMPACT OF PROJECTS SUPPORTED:

SINCE INCEPTION

CLEAN ENERGY CAPACITY

**UP TO 1,390
MEGAWATTS**

LIFETIME CLEAN ENERGY
GENERATION

**UP TO 44.4
MEGAWATT-
HOURS**

TOTAL REDUCTION OF CO₂e

**29.3 MILLION
METRIC TONS**

FISCAL YEAR 2020-21

CLEAN ENERGY CAPACITY

**180
MEGAWATTS**

LIFETIME CLEAN ENERGY
GENERATION

**16.1
MEGAWATT-
HOURS**

TOTAL REDUCTION OF CO₂e

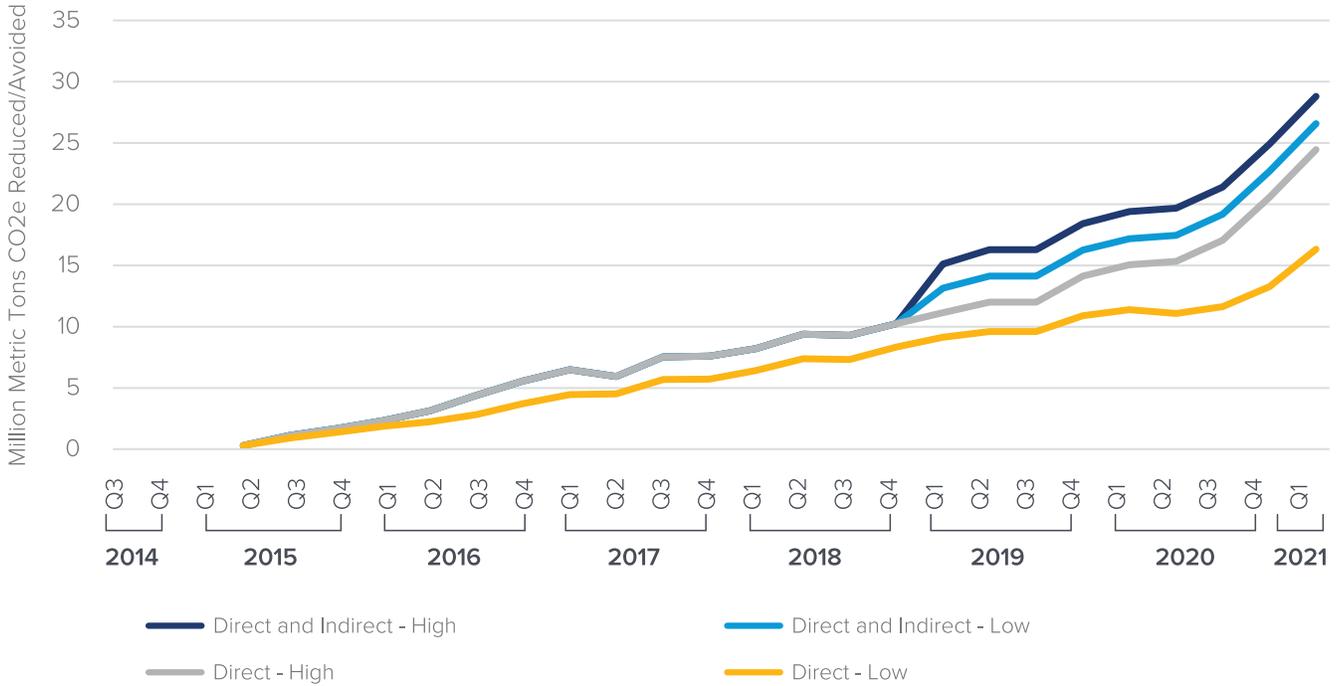
**UP TO 9.7 MILLION
METRIC TONS**

NY Green Bank invests exclusively in projects that have the potential to reduce greenhouse gas emissions in New York State. This includes generating clean electricity and enabling its utilization, electrifying primary energy uses, reducing energy consumption, and innovating industrial and agricultural processes to reduce materials, fossil fuel consumption, and land-use emissions.

Energy and Environmental Impact

The reason we invest

Estimated Cumulative Emission Reductions (Million Metric Tons)



The Chart Explained

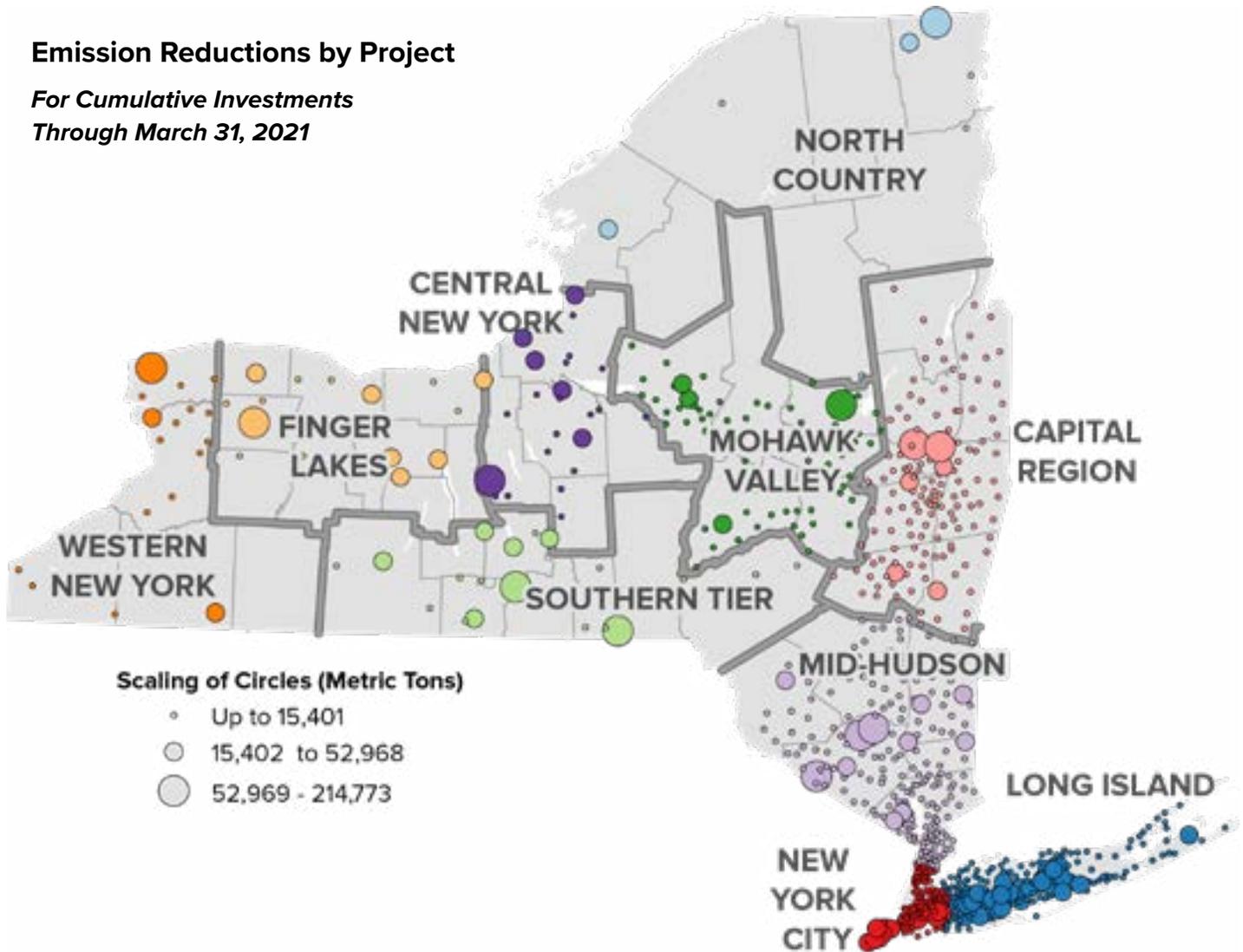
Direct Impact Metrics quantify the estimated impact of a counterparty’s project development or business-building activity (i.e., the benefits from NY Green Bank’s investment into incremental/new clean energy projects and measures). Direct Impacts typically result from investments with terms that limit or incentivize the use of NY Green Bank investment proceeds to new or incremental project development in New York State.

Indirect Impact Metrics seek to measure the effect of NY Green Bank’s investment for projects, pipelines or other counterparty structures that wholly or in part catalyze further developments in the clean energy and sustainable infrastructure market beyond those in which NY Green Bank directly invests, spurring follow-on market activity that can subsequently be verified. While some NY Green Bank investments might not exclusively fund project development or acquisition in New York State, they may be expected to result in greater project deployment in the State in the future.

OUR INVESTMENTS TO DATE HAVE SUPPORTED CLEAN ENERGY IN **EVERY REGION** OF THE STATE

Emission Reductions by Project

For Cumulative Investments
Through March 31, 2021



Transaction Highlights

Financing in action

The transactions featured highlight a range of technologies, investment products, end user segments, and clean energy financing gaps and barriers addressed during the year ended March 31, 2021.

WORKFORCE HOUSING

Financing the installation of solar panels on affordable housing building rooftops.



Workforce Housing Group (WFHG), a New York-based affordable housing developer, will use our loan to install rooftop solar on 18 affordable multifamily housing buildings in Brooklyn, NY with no upfront cost. NY Green Bank sculpted the loan payments to be offset by WFHG's expected utility bill savings to avoid placing any burden on the buildings' operating budget. By getting involved at the point of portfolio rehabilitation and refinancing, we were able to work with WFHG's senior lenders, including the New York State Housing Finance Agency, to structure a loan that is complementary to the subsidized capital structure. This model can help unlock the market for solar power on regulated affordable housing properties and offer a pathway for more residents to receive the benefits of clean, low-cost energy.

Closed: March 2021

Transaction Size: \$500,000

Product: Construction-to-Term Loan



“This is a real convergence moment – solar that pays for itself. It was a no-brainer for us. NY Green Bank has created a structure that should allow all affordable housing developers to make solar a regular feature on their buildings.”

*John A. Crotty, co-owner,
Workforce Housing Group*

Transaction Highlights

Financing in action

SUNRUN MARS

Stimulate 5 MW of incremental installed solar capacity in New York State.



NY Green Bank participated in a \$265 million senior secured credit facility to refinance a pool of Sunrun’s seasoned residential solar assets, providing the developer with liquidity needed to continue deploying residential solar in New York State. Through forward-looking, in-state development requirements set by NY Green Bank, Sunrun committed to deploy 5 MW of incremental solar capacity in New York State. As one of eight lenders in the syndicate, and with a relatively small participation in the total facility, NY Green Bank is proud to work alongside a diverse group of private sector lenders to provide liquidity to Sunrun by leveraging an existing pool of operating distributed solar assets in New York State.

Closed: August 2020

Transaction Size: \$19 M

Product: Term Loan



“NY Green Bank has been a key partner as we continue to grow our operations in New York State. This facility demonstrates private lender involvement in the residential solar sector at a scale that we weren’t seeing a few years ago.”

Tom vonReichbauer, CFO, Sunrun

TRUE GREEN CAPITAL

Private capital taking the leading role.



NY Green Bank worked with the CIT-led lender syndicate to upsize our participation in the first New York State-only community solar portfolio financing arranged by a commercial bank. The original transaction, closed in December 2019, provided a multi-draw, back-levered credit facility of up to \$42 million to True Green Capital to support its initial portfolio of 10 community solar projects. The upsize supports the addition of six new assets, enabling a portfolio expansion from 70 MW to 120 MW, and leverages operational efficiencies expected to result from utility consolidated billing for community solar in New York State.

Closed: March 2021

Transaction Size: \$14.8 M

Product: Term Loan



“With NY Green Bank’s partnership, we have grown our New York community solar portfolio and built financing relationships that will support further expansion.”

Chris Kirkman, Managing Director and Head of Project Finance, True Green Capital

Transaction Highlights

Financing in action

RED-ROCHESTER

Liquidity to support industrial energy efficiency in upstate New York.



NY Green Bank's participation in this syndicated loan facility will enable \$25 million of energy efficiency improvements for the industrial park, located in a NYS Opportunity Zone, where RED-Rochester's district energy system provides utility services to over 100 C&I customers. This transaction marks NY Green Bank's first district energy system investment. By participating alongside National Bank of Canada and East West Bank, we are mobilizing private investment in New York State and demonstrating to commercial lenders the viability of financing large-scale energy efficiency improvements.

Closed: December 2020

Transaction Size: \$25 M

Product: Term Loan



“NY Green Bank’s support and expertise were critical to getting this transaction over the finish line and allow RED-Rochester to continue to invest in efficient, reliable, and sustainable energy projects that make Eastman Business Park a more competitive and attractive home for industrials to locate and expand their businesses.”

*Christopher Fanella,
Chief Financial Officer,
RED-Rochester LLC.*



Scan to see NY Green Bank's detailed Transaction Profiles or visit greenbank.ny.gov/Portfolio

Case Studies

“Amidst the ongoing COVID-19 pandemic, NY Green Bank has remained committed to its mission. We have provided liquidity to the market through challenging times to ensure that the momentum of clean energy deployment in New York State holds strong.”

Greg Randolph, Managing Director, Investment & Portfolio Management

Case Studies

Supporting clean energy through COVID-19

SUPPORTING CLEAN ENERGY THROUGH COVID-19

The COVID-19 crisis brought project development to a halt for many solar, wind and storage developers, and upended the demand and supply environments in which building owners, manufacturers, and service providers operate.



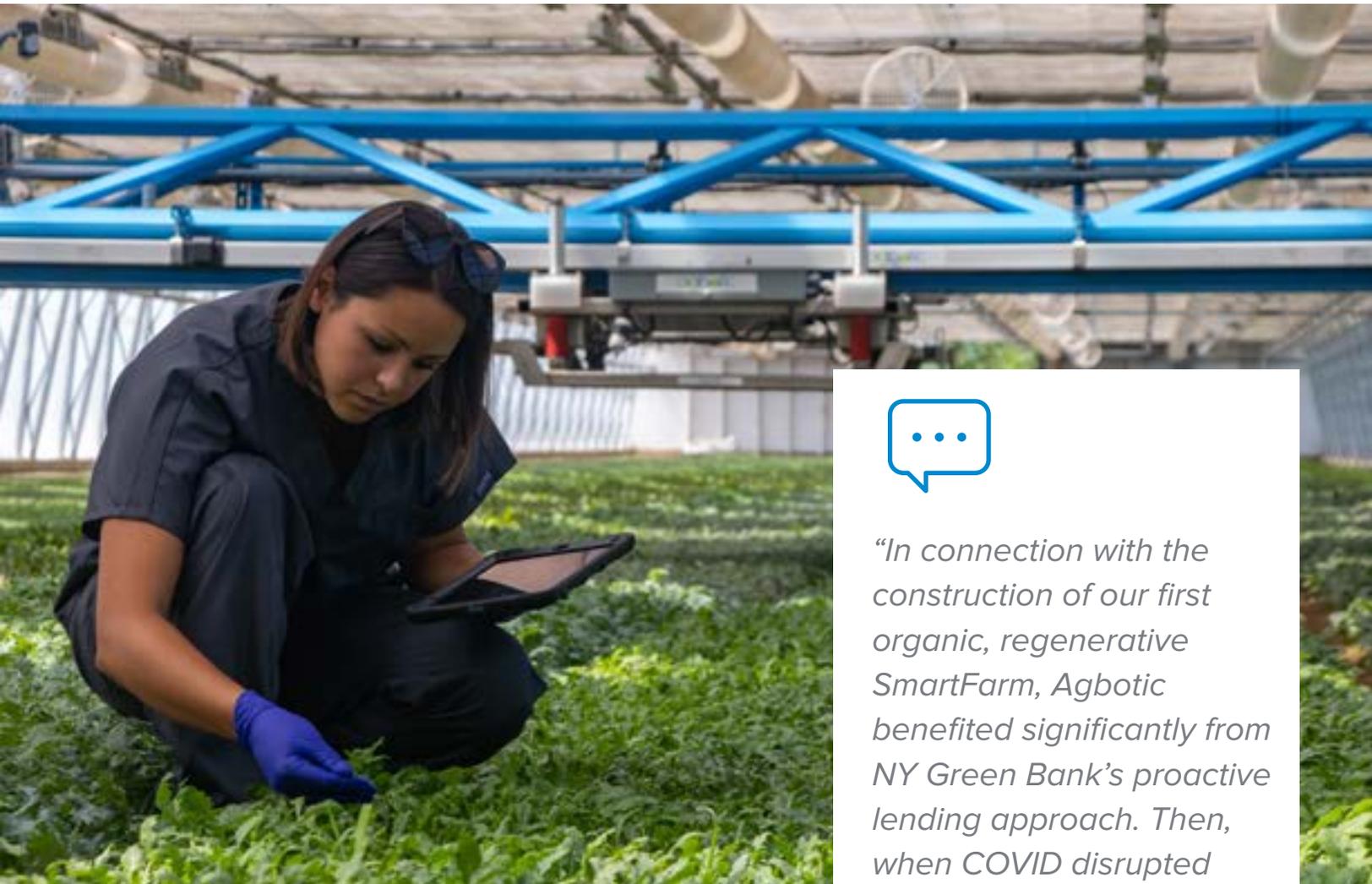
“Because of NY Green Bank’s work, White Oak Power has survived and is growing, working with NYSERDA on air quality and energy efficiency projects, as well as some other promising energy efficiency ventures.”

Robert Reuther, PPP Loan Recipient and Owner of White Oak Power, a Veteran-Owned Business

In April 2020, we reached out to participants in the New York State clean energy market to understand what they were experiencing in terms of ability to advance their respective sustainable infrastructure projects or services, and to better understand their most pressing, unforeseen financing gaps resulting from the COVID-19 pandemic.

After hearing what our counterparties and other market participants needed, NY Green Bank took action by:

- Allowing borrowers in good standing that demonstrated hardship related to COVID-19 to defer loan repayments and use the added liquidity for payroll purposes
- Financing interconnection deposits to eligible large-scale renewables and community distributed generation developers with corporate guarantees and/or a pledge of assets as collateral
- Restructuring financing to enable borrowers to secure federal or state stimulus funding
- Becoming an approved lender under the U.S. Small Business Administration’s Paycheck Protection Program and issuing three loans to small businesses that reduce greenhouse gas emissions in New York State



Agbotic

In 2019, NY Green Bank loaned \$6 million to Agbotic to support construction and operation of energy efficient robotic greenhouses to be used for organic regenerative farming. Agbotic’s distribution model initially centered around sales to restaurants, universities and metropolitan markets through distribution partners, and was disrupted by the COVID-19 crisis. In response, Agbotic pivoted to sales to statewide retailers and grocers, while also alleviating food insecurity in its local community by supplying over 20,000 pounds of fresh organic produce to food pantries in the North Country region of New York State. NY Green Bank supported Agbotic’s business shift by upsizing our loan to Agbotic by \$1 million. As a result, Agbotic was able to keep its staff fully employed throughout the pandemic and is currently selling fresh, organic produce to over 400 locations in New York. The company expects significant growth in the food and beverage sectors with the re-opening of its pre-COVID customers and distribution channels.



“In connection with the construction of our first organic, regenerative SmartFarm, Agbotic benefited significantly from NY Green Bank’s proactive lending approach. Then, when COVID disrupted our market and we had to rapidly pursue different customers with new products, we were able to access additional capital. This flexibility came at a pivotal moment. NY Green Bank’s commitment enabled us to keep our business up and running, and now thriving. Thank you, NY Green Bank.”

John Gaus, co-founder & CEO, Agbotic

Case Studies

Supporting energy storage deployment in New York State

ON THE PATH TO REACHING A NET ZERO EMISSIONS ELECTRICITY SECTOR BY 2040, NEW YORK STATE HAS SET VITAL TARGETS OF DEPLOYING

**1,500 MW
of Energy Storage**
by 2025

**3,000 MW
of Energy Storage**
by 2030

NY GREEN BANK AIMS TO SUPPORT NEW YORK STATE'S AMBITIOUS ENERGY STORAGE DEPLOYMENT TARGETS BY INVESTING

**AT LEAST
\$200
MILLION**

in storage-related projects

ENERGY STORAGE

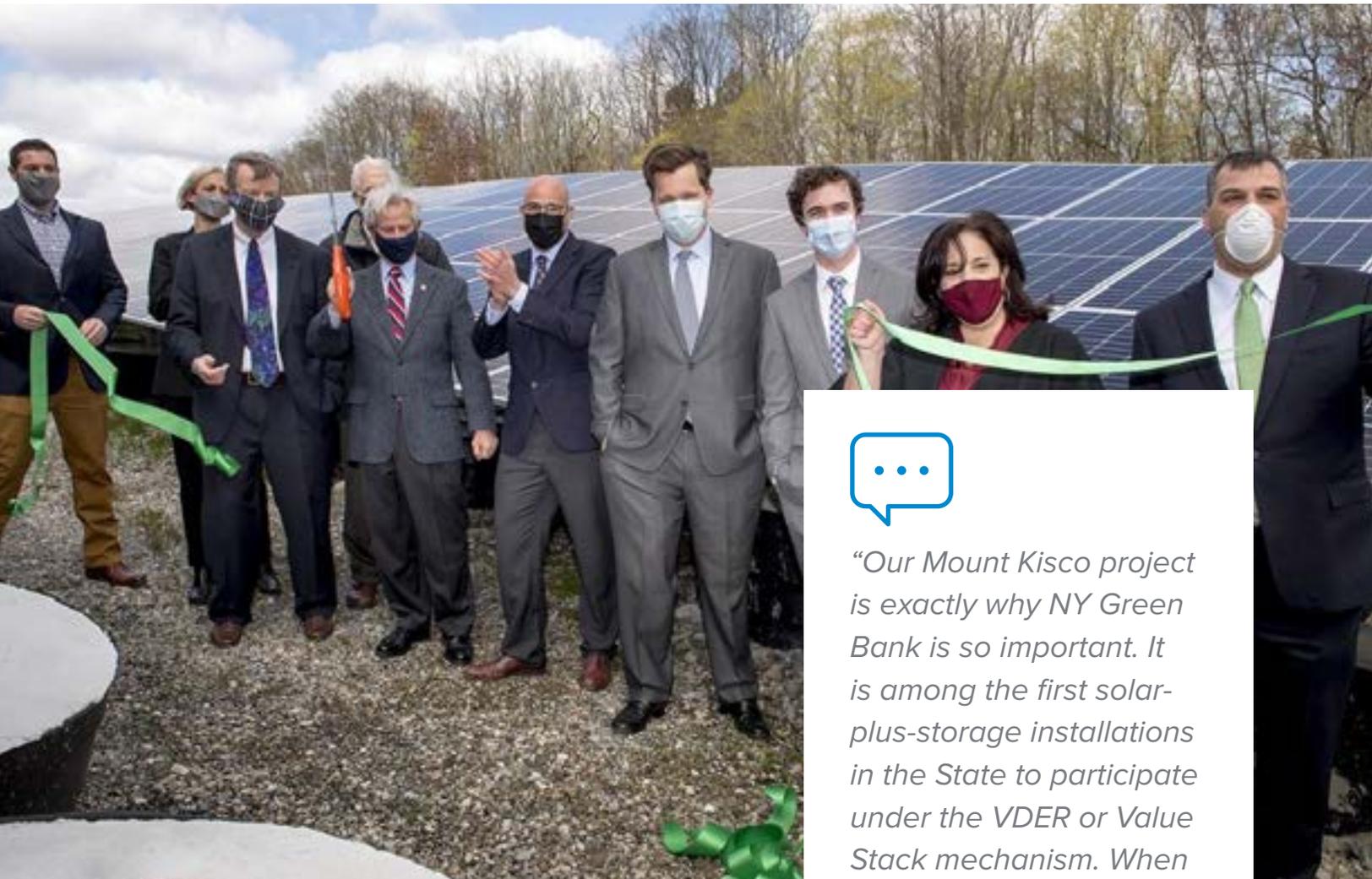
Across all scenarios in which we achieve a decarbonized, renewable-powered grid, energy storage is the common thread.

Significant private investment will be needed to achieve these goals. Since 2018, NY Green Bank has been working to identify and address financing barriers to private capital mobilization into the energy storage sector. One major financing barrier we confirmed through extensive market sounding conducted throughout 2018 and beyond relates to the variability of revenue streams that would typically be used to support debt service on project loans. Building on our experience financing against community solar revenue streams, we have worked closely with our colleagues at NYSERDA to become a leading expert in the contracted and uncontracted components of energy storage value stacks in the New York State bulk and retail markets and solidify our approach to evaluating project risk and underwriting anticipated cash flows.

In parallel, we have worked to build our network and investment pipeline through engagement with storage market participants, specifically: developers and operators, including renewables operators/developers interested in adding storage to existing assets, and national actors

potentially seeking to expand in New York State; equipment manufacturers looking to finance the sale of their storage products; and financial intermediaries, including lenders and equity sponsors, to identify co-investment opportunities or obtain referrals. From 2018 to 2019, the number of storage-related investment proposals submitted to NY Green Bank nearly doubled. In our fiscal year ending March 31, 2020, we issued RFP 13, a specific proposal and evaluation pathway for energy storage projects, and hosted four events and five webinars for storage market participants.

Reflecting the considerable investment we have made to understand the market and develop relevant financing structures for the sector, we closed our first transactions supporting energy storage assets in the year ending March 31, 2021, positioning ourselves to catalyze financing market transformation for solar-plus-storage projects. Meanwhile, we continued to engage with new segments of the market and move opportunities through our pipeline of storage opportunities (over \$65 million at year-end) at increasing velocity.



\$2.3 MILLION

construction-to-term loan

BQ Mt. Kisco

In April 2020, NY Green Bank supported the construction of Westchester County’s first community solar-plus-storage project on a reclaimed landfill. NY Green Bank’s official entry into the battery storage market, this \$2.3 million construction-to-term loan leverages the value of the flexibility that storage provides to the grid and supports the expansion of BQ Energy, a New York-based developer traditionally focused on standalone solar, into storage development.



“Our Mount Kisco project is exactly why NY Green Bank is so important. It is among the first solar-plus-storage installations in the State to participate under the VDER or Value Stack mechanism. When commercial banks hear “first,” they get nervous. NY Green Bank exists to get past that concern and provide market-based financing to innovative projects like ours that can then be replicated to meet State policy goals. NY Green Bank was an essential partner on this important project.”

*Paul Curran, Managing Director,
BQ Energy Development*

Case Studies

Supporting energy storage deployment in New York State



\$25 MILLION

commitment to \$420 million term loan

Nexamp

NY Green Bank's \$25 million commitment to this \$420 million term loan facility, closed in February 2021, represents our first participation alongside private lenders in the financing of energy storage assets. With seven commercial investors playing leading roles in the transaction, this is an exciting demonstration of increased private sector interest and capital deployment in the clean energy market. The facility supports 140+ MW of community solar and 50+ MWh of battery storage capacity in New York State, including a solar-plus-storage project located in a disadvantaged community, and provides incremental leverage to Nexamp, an experienced developer active in the New York State market.



“Solar and energy storage are critical, proven resources that are central to New York’s exemplary decarbonization efforts. NY Green Bank’s commitment to the market has helped attract competitive investment and secure stability in the distributed generation market, and Nexamp is a proud partner of theirs in advancing renewable energy deployment across New York State.”

Kyle Gietzen, Vice President of Capital Markets, Nexamp

Impact for New Yorkers

STEWARDSHIP OF RATEPAYER CAPITAL

NY Green Bank has undertaken a range of actions aimed at ensuring we remain good stewards of the public funds with which we have been entrusted.

A single ratepayer dollar invested by NY Green Bank has the potential to support multiple projects, businesses, communities, and energy transition milestones across the State.

Recycling capital to do more per ratepayer dollar

As borrowers repay their loans, NY Green Bank reinvests the capital into additional clean energy opportunities in New York State. Thus, a single ratepayer dollar invested by NY Green Bank has the potential to support multiple projects, businesses, communities, and energy transition milestones across the State. As each dollar cycles through successive investments, benefits – such as capital mobilization and greenhouse gas emission reductions – compound.

Rigorous investment management to control downside risk

Risk-taking is an intrinsic element of any financing product and through our investment activity we lend at market rates to opportunities with attractive risk-adjusted return profiles. However, we are acutely aware at NY Green Bank that we are ultimately accountable to New York

State ratepayers for the performance of our investments. Consequently, we have embedded robust risk management practices into our organizational DNA. We view the management of risk not only as the duty of an individual department, but as the responsibility of all personnel and a fundamental part of our organizational culture. At NY Green Bank, we identify, assess and control both investment and operational risks, implementing best practices to ensure that returns are generated in excess of expenses and expected losses.

All transactions undergo standardized investment decision-making procedures, including a multi-step approval process and structured, comprehensive due diligence. We utilize both internal expertise and external advisers, including attorneys, engineers and market experts, to consider all nuances of an investment opportunity, understand performance stress cases and their implications, and vet and negotiate appropriate

financial terms and contractual risk mitigants. Additionally, NY Green Bank conducts “know your customer” background checks on all potential counterparties prior to close, with a process in place that can be tailored across a spectrum of counterparty types from smaller private ventures to larger companies.

NY Green Bank conducts ongoing risk analysis and mitigation over the life of each transaction in our portfolio. We begin every weekly all-hands meeting with updates on any investment or counterparty risk factors we are tracking in the portfolio. We conduct monthly and quarterly portfolio reviews in which the performance, compliance, and current status of each loan in our portfolio is discussed and, on a quarterly basis, is documented comprehensively.

Strong investment administration to maximize operational efficiency

As our portfolio has grown, so has the volume and complexity of the activity required to manage it. Over the past three fiscal years, we have experienced over 190% growth in the number of fundings conducted annually. During the 2020-21 fiscal year, our team conducted 101 loan modifications and took over management of 58 new control accounts, far surpassing the level of activity we’ve seen previously in those functions. In order to accomplish this increased volume of activity while maintaining a high level of precision, and to do so without significantly increasing the expense or person-hours required, we have specifically focused on streamlining our processes for advancing funds, receiving loan payments and collecting counterparty reporting. In the year ending March 31, 2021, we consolidated our transaction

NY Green Bank conducts ongoing risk analysis and mitigation over the life of each transaction in our portfolio.

management into a new Investment Administration & Portfolio Support (IAPS) function dedicated to process innovation, the realization of new efficiencies, and continuous improvement. By holding ourselves to the highest operational standards, we are able to deliver even more comprehensive benefits to New Yorkers

***What do we mean by
Disadvantaged Communities?***

The definition of a Disadvantaged Community under the Climate Leadership and Community Protection Act is expected from the Climate Justice Working Group in mid-2021. Until that time, NY Green Bank applies the NYSERDA and NYS Department of Environmental Conservation interim definition to qualify and track its investing activities.

As of March 2021, this interim definition includes:

- Projects located within census block groups that meet the HUD 50% AMI threshold;
- Projects located within the DEC Potential Environmental Justice Areas; or
- Projects located within NYS Opportunity Zones.

NY Green Bank will synchronize with the emerging final definition, including recharacterizing previously executed transactions as appropriate.

COMMUNITY IMPACT

NY Green Bank is expanding its investment approach to prioritize New York’s historically underserved communities, with beneficial impact to disadvantaged community residents weighed as a driving factor in our origination strategy and a key consideration in our capital allocation decision-making process.

Recognizing that building decarbonization is critical to the State meeting its climate goals and has the potential to deliver public health, environmental, and socioeconomic benefits to building residents and users, NY Green Bank is adopting a strong initial focus on investment in affordable housing and building electrification.

In 2020, we made a commitment to invest \$150 million in affordable housing and \$100 million in energy efficiency and buildings electrification in disadvantaged communities, including in non-residential buildings by 2025.

NY Green Bank aims to provide gap-filling and market transformative investment solutions to address financing barriers that currently prevent affordable housing and other building stock from being built or retrofitted to high levels of energy performance.

We are positioned to make investments that deliver tangible benefits to underserved New Yorkers while also demonstrating to public and private lenders the feasibility of underwriting to greater expected energy savings for buildings within disadvantaged communities.

In line with New York State’s 2019 Climate Leadership and Community Protection Act, NY Green Bank will commit at least 35% of its capital to projects that create benefits for disadvantaged communities on a cumulative basis from January 1, 2020 through the end of 2025. Between January 1, 2020 and March 31, 2021, 21% of NY Green Bank’s investments were in disadvantaged communities as defined under NYSERDA’s interim definition.

Spotlight on Affordable Housing

During the year ending March 31, 2021, we engaged with more than 25 stakeholders and experts in the affordable housing sector, including developers, lenders, housing authorities, housing finance agencies, advocacy groups and industry organizations to understand the challenges of implementing ambitious clean energy and energy efficiency measures in affordable housing.

Financing of affordable housing is complex and relies heavily on subsidized capital from housing financing agencies that have historically prioritized unit production over aggressive energy performance. Through a market sounding facilitated by Enterprise Community Partners, we determined that innovative financing products from NY Green Bank could potentially stimulate deep energy efficiency, with improved environmental, resident health and thermal comfort outcomes in New York's affordable housing sector.

NY Green Bank's initial suite of products for affordable housing properties aims to finance building electrification or electrification-readiness measures, and includes:

- **Electrification/Energy Efficiency Improvement Loans.** Project finance loans to support the purchase/lease and installation of specific equipment related to electrification, clean energy generation, efficiency/building envelope improvements, smart building technologies, etc.
- **Predevelopment Lending.** Flexible capital to support the cost-intensive repair, design, planning, and analysis stage required prior to construction.
- **Construction/Construction-to-Perm Loans.** Competitively priced gap financing to support a Project's construction or retrofit/installation phase. NYGB is willing to consider forward rate locks in some cases.
- **Permanent Debt.** Competitively priced gap financing/mortgage participation, including at refinancing, underwritten to greater projected energy savings than is typical of other permanent debt lenders.



We are offering these products to affordable housing properties via RFP 18: Financing Arrangements for High-Performance Affordable Housing, a purpose-built solicitation pathway that includes published selected indicative terms.



Scan to learn more about RFP 18 or visit greenbank.ny.gov/RFP-18



Stakeholder Engagement



“NY Green Bank not only transacts with counterparties directly, but also participates in syndicated clean energy financing transactions with institutional capital providers like Investec. We consider NY Green Bank a key participant in syndicated deals because of the team’s transactional expertise, depth of clean energy market knowledge, and willingness to tackle structures that other institutional investors may not be willing to take on. The team is easy to work with and one of our preferred partners when it comes to financing clean energy opportunities.”

Ralph Cho, co-Head of Power & Infrastructure Finance, Investec USA Holdings Corp.

MOVING FORWARD TOGETHER

Much of our learning about financing gaps and barriers in clean energy and sustainable infrastructure markets comes from thoughtful engagement with a range of stakeholders.

We conduct regular updates with our colleagues at NYSERDA who develop and implement New York State’s clean energy policies; collaborate with other green bank entities through our membership in industry associations; and participate in individual meetings with potential counterparties seeking financing for their sustainable infrastructure projects. NY Green Bank team members are sought-after participants on industry panels and as conference keynote speakers, which provides us the opportunity to share our expertise and perspectives. We regularly host webinars and events to communicate our financing approaches as well as our impact and progress toward our goals.

We believe that our ability to deliver the benefits of our work to all New Yorkers starts with an engaged workforce that values a diversity of experience and perspectives. We have nurtured a strong organizational culture through training programs, organization-wide social events, and regular all-hands meetings at which our colleagues across NY Green Bank have an opportunity to contribute. We value public service and participate in a range of initiatives aimed at fostering inclusiveness within NYSERDA and securing climate equity for New York’s historically marginalized communities.

The table on the following page summarizes stakeholder engagement over the past year, an unprecedented time during which nearly all of our activities were “virtual” as a result of the ongoing COVID-19 pandemic.

Stakeholder	Typical Activities	Selected 2020-21 Fiscal Year Examples
Borrowers	<ul style="list-style-type: none"> Introductory one-to-one meetings Milestone events (ribbon cutting, groundbreaking, etc.) Press releases and social media Surveys 	<ul style="list-style-type: none"> Issued program opportunity notice to inform market participants of opportunity to apply to NY Green Bank for Paycheck Protection Program loans to cover payroll costs and certain other expenses. Executed three transactions under the program Held a webinar to inform qualified developers under the NYC Housing Authority PACT program about NY Green Bank's affordable housing finance offerings
Financial Institutions and Lender Syndicates	<ul style="list-style-type: none"> Informational webinars One-on-one meetings to discuss NY Green Bank investment approach 	<ul style="list-style-type: none"> In collaboration with the NYSERDA Energy Storage Program, hosted a webinar highlighting energy storage investment opportunities for tax equity providers Participated in seven multi-lender syndicated transactions Engaged with financial advisor and capital providers in conjunction with exploration of capital raise against NY Green Bank's portfolio of investments
Industry Associations, Advocacy Groups and NGOs	<ul style="list-style-type: none"> Industry association membership and committee participation Collaboration with NGOs on relevant issues Conferences and convenings 	<ul style="list-style-type: none"> Conducted COVID-19 Impact Survey and held webinar to communicate findings from responses by over 140 clean energy market participants; shared aggregated survey response data with several New York State government agencies and industry associations As co-chair of the U.S. Climate Alliance Finance Working Group, developed a series of webinars to present various climate financing solutions to members across three areas of interest: Financing Clean Transportation, The National Climate Bank, and Climate Finance for Climate Justice Collaborated with other international green bank entities through regular quarterly meetings and topic driven discussions
New York State Government	<ul style="list-style-type: none"> Group calls and meetings to discuss financial performance and impact quarterly and bi-annually Quarterly and annual regulatory filings 	<ul style="list-style-type: none"> Met regularly with New York State Department of Public Service senior staff to report on progress of strategic initiative to expand access to NY Green Bank capital by projects benefiting disadvantaged communities Participated in Task Force on Climate-Related Financial Disclosure Implementation meetings
Employees and Interns	<ul style="list-style-type: none"> Regular pipeline and risk management meetings Training programs Performance assessments Recruiting events 	<ul style="list-style-type: none"> Contributed NY Green Bank perspective as member of NYSERDA Energy Equity Stewardship Network Participated in NYSERDA DE&I Strategic Planning Committee Hosted "Clean Energy Finance 101" training series targeted to student organizations at HBCUs and to diversity affinity groups at colleges and business schools in effort to expand the pool of qualified internship applicants Secured 100% staff participation in Implicit Bias Learning Session



The Year Ahead

Strategic Outlook 2021-22

NY Green Bank starts every new fiscal year with new goals that build upon our progress to date. We have identified three core objectives for fiscal year 2021-22 and planned specific activities and measurable deliverables by which we will achieve them.

GOALS FOR THE YEAR ENDING MARCH 31, 2022



Scan to learn more about our objectives and plans for the 2021-22 fiscal year or visit greenbank.ny.gov/Public-Filings

Effectively manage a strong and growing portfolio of clean energy and sustainable infrastructure investments across a number of targeted market segments, including those that can benefit Disadvantaged Communities.

- Create new purpose-built pathways for the affordable housing sector to access NY Green Bank capital
- Increase the capacity of lenders who have long been active in serving New York's historically disadvantaged communities and already have deep expertise, networks, and project pipelines to leverage
- Partner with affordable housing agencies to implement new financing solutions in their portfolios
- Expand relationships and origination activities in target technology segments, specifically building electrification, clean transportation, and energy storage
- Streamline existing pathways for engagement with NY Green Bank

Continue to mobilize private capital, including through the expansion of NY Green Bank's capital base to enable further investment into clean energy and sustainable infrastructure in the state without additional NYS or ratepayer support.

- Explore opportunities for portfolio monetization
- Drive liquidity in the clean energy market
- Demonstrate to the financial sector the ability of sustainable infrastructure investments to achieve attractive risk-adjusted returns

Continuously improve and enhance NY Green Bank risk management, operations and portfolio management.

- Adopt an ESG framework and develop plan for implementation across NY Green Bank activities
- Implement new software solutions and process innovations to optimize management of a growing and increasingly diverse portfolio

FOR EXAMPLE

Plan to adopt a system for counterparty financial reporting that is expected to save over \$150,000 and 1,400 person-hours per year.



STAY CONNECTED



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