



NY Green Bank
A Division of NYSERDA

NY Green Bank

Financing Large-Scale Renewables

May 15, 2019 | Nicholas Whitcombe, Managing Director

New York, NY

Agenda

- I. NY Green Bank Overview
- II. Market Opportunity for LSR
- III. NY Green Bank LSR Financing Options
- IV. Working with NY Green Bank
- V. Q&A



NY Green Bank Overview



NY Green Bank
A Division of NYSERDA

Rochester, NY

NY Green Bank Overview

Mission:

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

- **What:** A \$1 billion State-sponsored investment fund that is a division of NYSERDA
- **Why:** To alleviate financing gaps in New York's clean energy markets and create a cleaner, more resilient and affordable energy system
- **How:** By mobilizing greater private sector activity to increase the availability of capital for clean energy projects

As of March 31, 2019, NYGB has made **\$737.6 million** in clean energy investments

Advancing NYS Clean Energy Goals

Reforming the Energy Vision (REV): Governor Andrew M. Cuomo's strategy to build a clean, resilient, and affordable energy system for all New Yorkers

CLEAN ENERGY ECONOMY

over 151,000 clean energy jobs

now

Governor's January 15, 2019
State of the State ambitious
new goals:

- > 6,000 MW of solar by 2025
- > 70% renewables by 2030
- > 9,000 MW of offshore wind by 2035
- > Carbon-free electricity by 2040

ENERGY EFFICIENCY

185 TBtu end-use savings
in buildings and industrial facilities

by 2025

RESILIENT and DISTRIBUTED GRID

1,500 MW of energy storage

RENEWABLE ENERGY/CLEAN ENERGY STANDARD

50% electricity from renewable energy
2,400 MW of offshore wind power

by 2030

GHG REDUCTION

40% reduction in greenhouse
gas emissions from 1990 levels

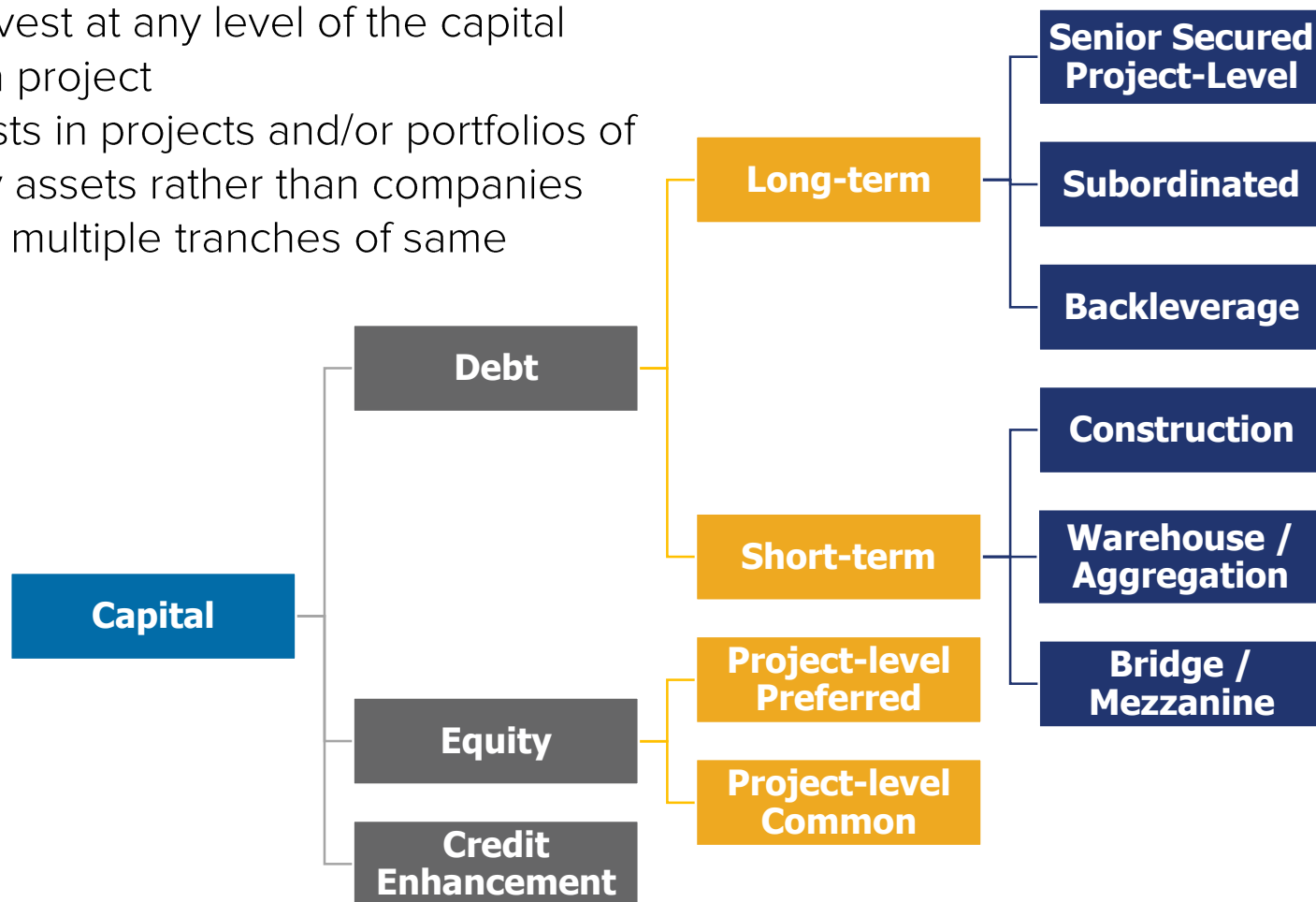
3,000 MW of energy storage

Role in Overcoming Financing Barriers

Financing Barrier		NY Green Bank Solution
Unfamiliarity with Asset Class	➔	Build upon experience financing clean energy projects and leverage expertise of NYSERDA colleagues
Perceived Uncertainty of Revenue Streams	➔	Consider all types of revenue contracts, merchant markets, and incentive payments
Small Transaction Size	➔	Participate in portfolios of small to mid-sized projects
Minimal Standardization	➔	Be solution oriented in finding credit worthy approaches to financing clean energy projects with limited transactional precedent
Limited Number of Financing Partners	➔	Be a first-mover to build market scale and standardization attracting private capital to the sector

Potential Roles in Project Finance Transactions

- NYGB can invest at any level of the capital structure of a project
- Directly invests in projects and/or portfolios of clean energy assets rather than companies
- Can invest in multiple tranches of same project



Market Opportunity for Large-Scale Renewables



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Buffalo, NY

Supporting LSR with NYSERDA RECs

NY Green Bank will support Large-Sale Renewable Projects that receive NYSERDA REC contracts

NYSERDA REC Solicitation

2017

- \$1.4 billion in total contract value
- 26 total projects

2018

- \$1.1 billion in total contract value
- 19 total projects

2019

- Expected to spur over \$1.0 billion in clean energy investments

Case Study – Delaware River Solar

- NYGB has committed a combined **\$82 million** to DRS through three loan facilities. These transactions finance the lifecycle of DRS' solar projects and:
 - 1) Allow for efficient use of sponsor equity and bridge the time period project sponsors need to finalize financing arrangements for projects
 - 2) Support the deployment of projects at scale
 - 3) Generate project performance data to draw in new investors

Interconnection Bridge Loan **\$7 MM**

- Funding for up to 90% of interconnection payments to utilities

Construction Facility **\$25 MM**

- To finance the building of 70 MW of solar projects

Term Loan Facility **\$55 MM**

- Back leverage supported by short term customer receivables

All Transaction Profiles are available online here: <https://greenbank.ny.gov/Investments/Portfolio>



NY Green Bank LSR Financing Options



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Niagara, NY

Interconnection Deposit Loan

Market Gap Filled: Utilities require substantial deposits to support transmission upgrades far in advance of project construction, tying up expensive equity capital. NYGB can provide a bridge loan to finance these interconnection deposits.

Loan Product Considerations:

- Senior secured against project assets for up to 90% of the deposit
- NYGB will place increasing emphasis on the value of the asset as the amount of the deposit increases
- Requires REC contract, CESIR, and site control
- May require reserves in the event the utility has the right to spend a portion of the deposit
- Loan repaid if project is cancelled (through the utility refund), sold, or refinanced at or prior to NTP

Executed Transactions:

- **Delaware River Solar** – \$7.0 MM
- **Cypress Creek** – \$45.0 MM
- **Distributed Sun** – \$3.0 MM

Interconnection Deposit Loan

Transaction Steps:

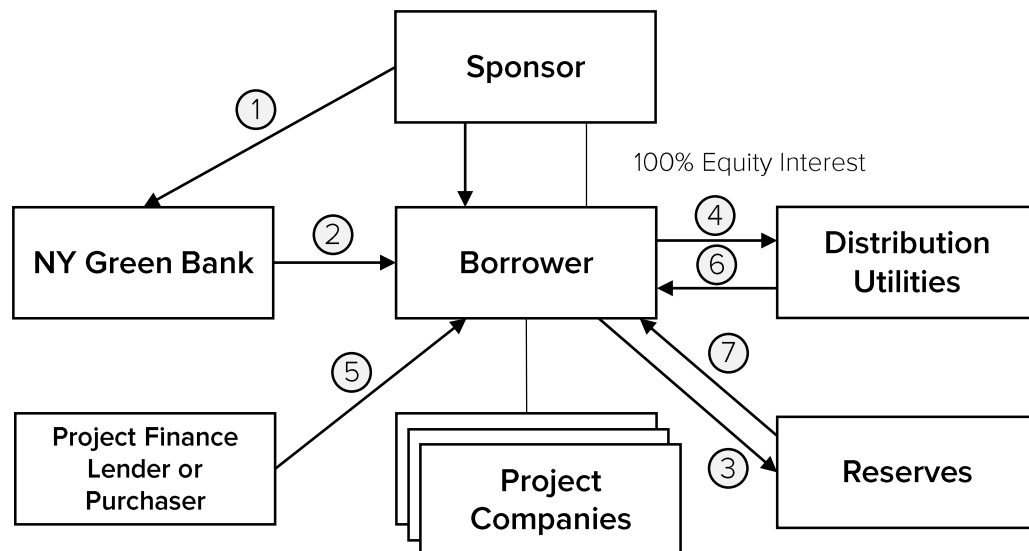
1. Collateral is pledged to Lender
2. Lender makes loan advances to Borrower to finance interconnection deposits
3. Borrower funds Reserve Accounts
4. Borrower makes interconnection deposits to the Utility

EITHER

5. The Loan is repaid from equity sale or project financing

OR

6. If a project is withdrawn from NYISO queue or is sold to another party, the Utility returns the deposit to the Borrower, and that portion of the loan is repaid
7. The loans for each project are repaid first from reserves and then from other sources – the Borrower makes interest payment on the amount advance from the refunded project as required



Equipment Loan

Market Gap Filled: Sponsor equity typically is required for down payment/deposit on equipment orders for turbines, panels, inverters, etc. that can be far in advance of delivery to a project prior to construction. NYGB can provide financing to fund the deposits or equipment purchases.

Loan Product Considerations:

- Manufacturer's ability to perform
- Security against collateral, if available
- Advance rate tied to the equipment and the liquidation value
- NYGB may require additional collateral or sponsor guarantees
- Loan repaid upon equipment delivery / construction or long-term financing arrangements in place

Construction Loan

Market Gap Filled: Despite increasing demand for construction financing, many lenders are not willing to take on construction risk for clean energy projects. For smaller projects, NYGB can act as the sole lender. For larger projects, NYGB can participate in a lender syndicate.

Loan Product Considerations:

- Senior secured against all project assets (single assets or portfolios)
- Up to 90% of construction costs
- Variables:
 - Variable or fixed/turnkey EPC Contract; BOP Contract
 - Project contingency
 - Project complexity
 - Number of projects in the portfolio
 - Certainty of takeout financing

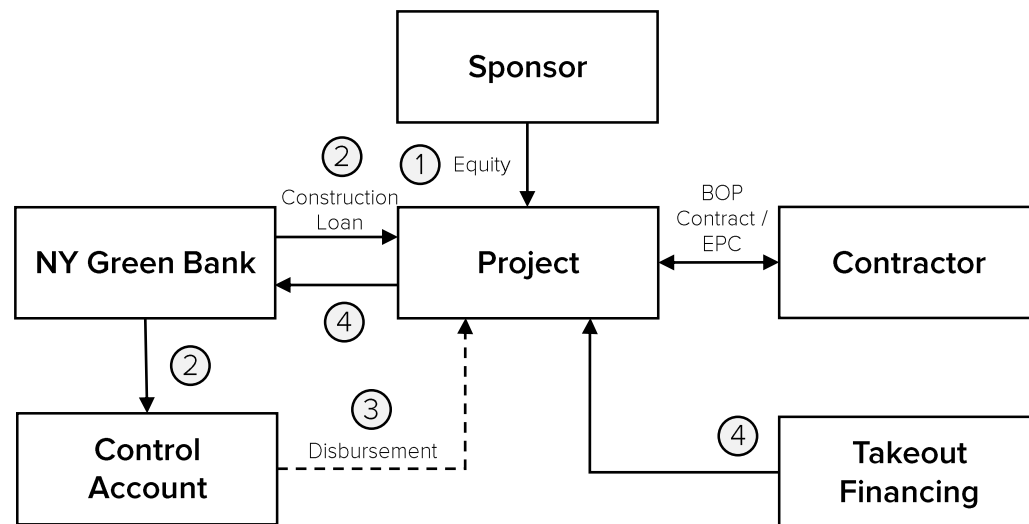
Executed Transactions:

- **BQ Energy** – \$23.1 MM (5 transactions total)
- **Delaware River Solar** - \$25.0 MM

Construction Loan

Transaction Steps:

1. Sponsor funds its equity commitment not already spent on the project into an operating account, which is pledged to NYGB and used to fund the project construction
2. Upon satisfaction of conditions precedent for funding, NYGB funds a portion or the total construction loan into a control account
3. NYGB loan disbursed from the control account according to the draw schedule to fund construction. An Independent Engineer certifies disbursements
4. At completion, repaid from a takeout financing



Senior Secured Term Loan (or Mini Perm)

Market Gap Filled: For smaller projects, NYGB can act as the sole lender. For larger projects, NYGB can participate in a lender syndicate.

Loan Product Considerations:

- Senior secured against project assets
- Variables:
 - Source of capital (ie. tax equity) and need for backleverage
 - Contracted NYSERDA RECs, contracted / hedged wholesale power or capacity revenue – loan generally sized at P99, with sculpted repayment sized based on a DSCR and to a target loan balance
 - Uncontracted wholesale power or capacity revenue – additional cash sweeps tied to view on power prices
 - Amount of reserves needed (e.g. O&M, debt service)

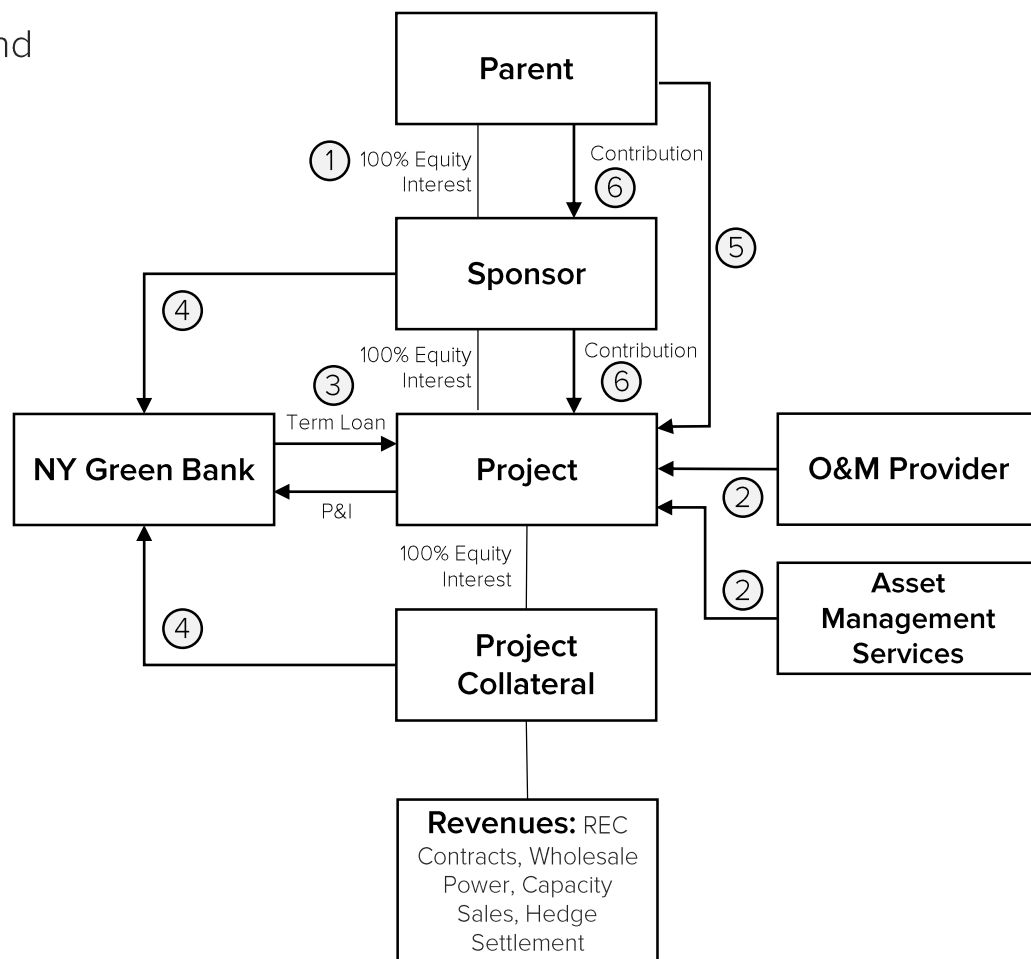
Executed Transactions:

- **Odyssey** – \$10.5 MM
- **BlueRock Solar** - \$0.8
- **DRS** - \$55.0 MM
- **Valcour Wind** - \$33.8 MM
- **Rock Wind** - \$31.3 MM

Senior Secured Term Loan (or Mini Perm)

Transaction Steps:

1. Sponsor owns and operates Borrower and manages the Borrower
2. O&M Services provided to the Borrower and other asset management serves as required
3. NYGB provides loan to Borrower
4. Sponsor pledges equity in Borrower and assets of Borrower to NYGB
5. Parent guarantee, if necessary
6. Borrower repays P&I



HoldCo Loan / Subordinated Loan

Market Gap Filled: While many will finance only against contracted cash flows, NYGB can provide incremental leverage against uncontracted revenues, resulting in loan repayment over a longer period of time than a senior loan.

Loan Product Considerations:

- Variables similar to senior secured term loans
- Holding Company Loan
 - Loan repaid after senior loan debt service
 - Pledge of equity interest in holdco, and holdco's ownership of senior loan borrower
 - Priced at premium to senior loan
- Subordinated Loan
 - Junior to Senior Debt in waterfall
 - 2nd lien on collateral, may require an intercreditor agreement
 - Priced at premium to Senior Debt

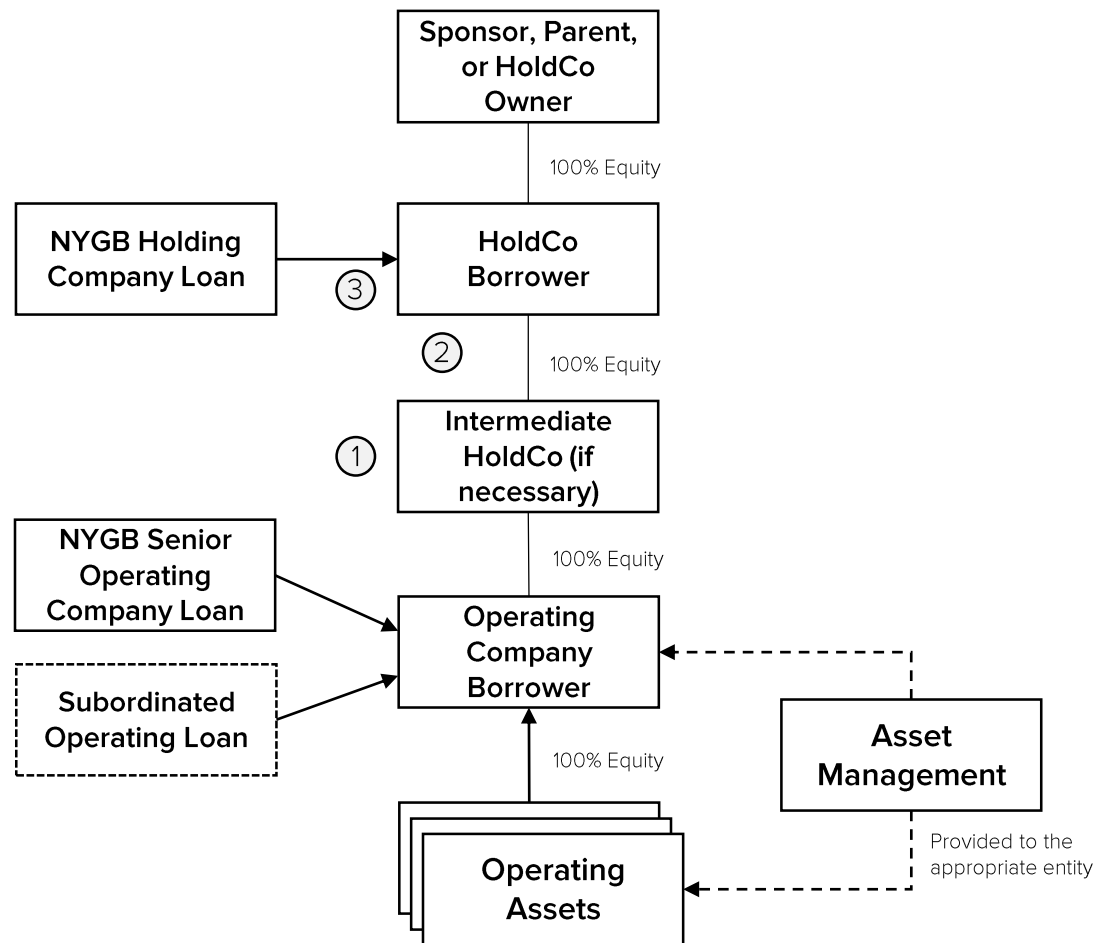
Executed Transactions:

- **Valcour Wind** - \$33.8 MM

HoldCo Loan / Subordinated Loan

Holdco Loan Transaction Steps:

1. Transaction steps similar to senior secured term loans
2. HoldCo pledges equity investment in intermediate company or OpCo Borrower
3. After senior debt service is paid, Holding Company debt service is repaid, typically through a 100% cash sweep to achieve repayment within life of asset



Working with NY Green Bank



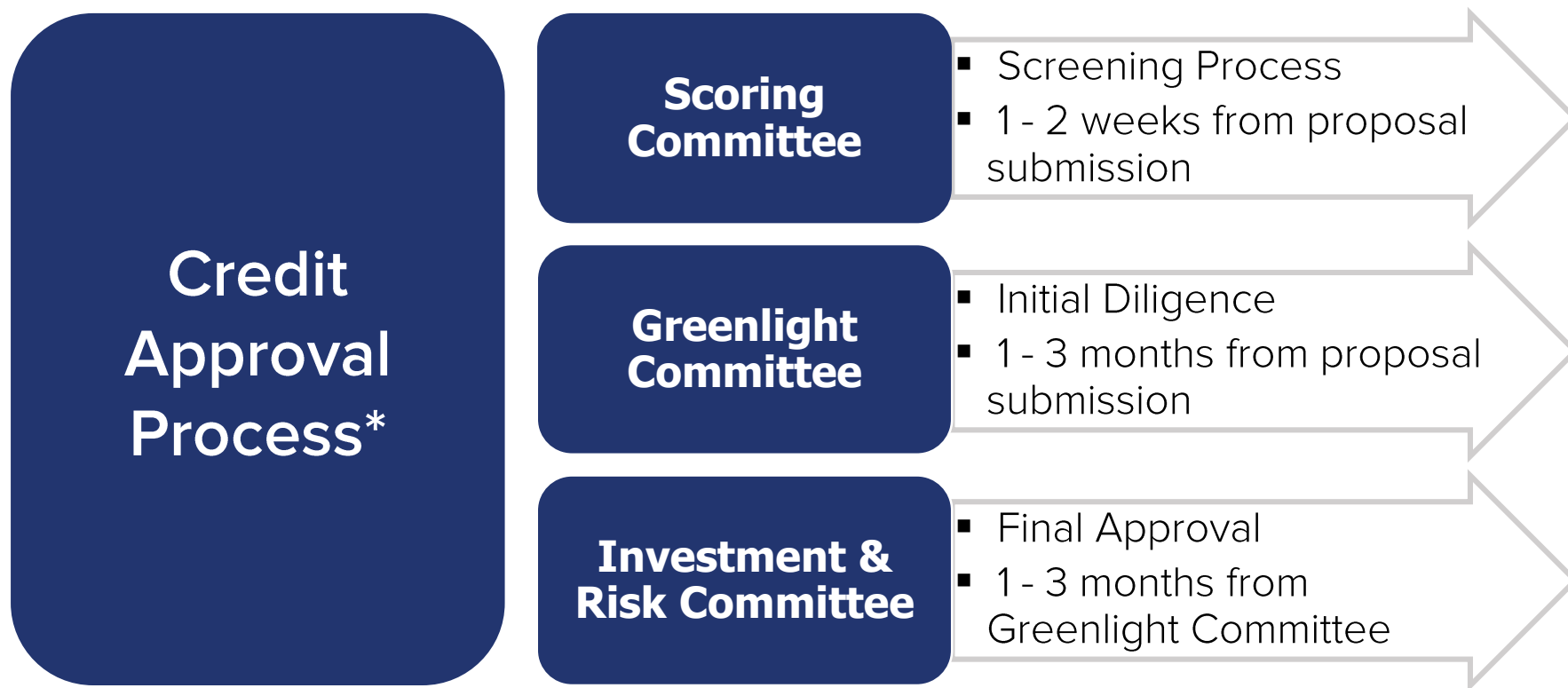
NEW YORK
STATE OF
OPPORTUNITY

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Brooklyn, NY

Working with NY Green Bank

RFP 1: Clean Energy Financing Arrangements – NY Green Bank invites market participants to propose financial transactions to NYGB through our open proposal process



Contact us

Contact us:

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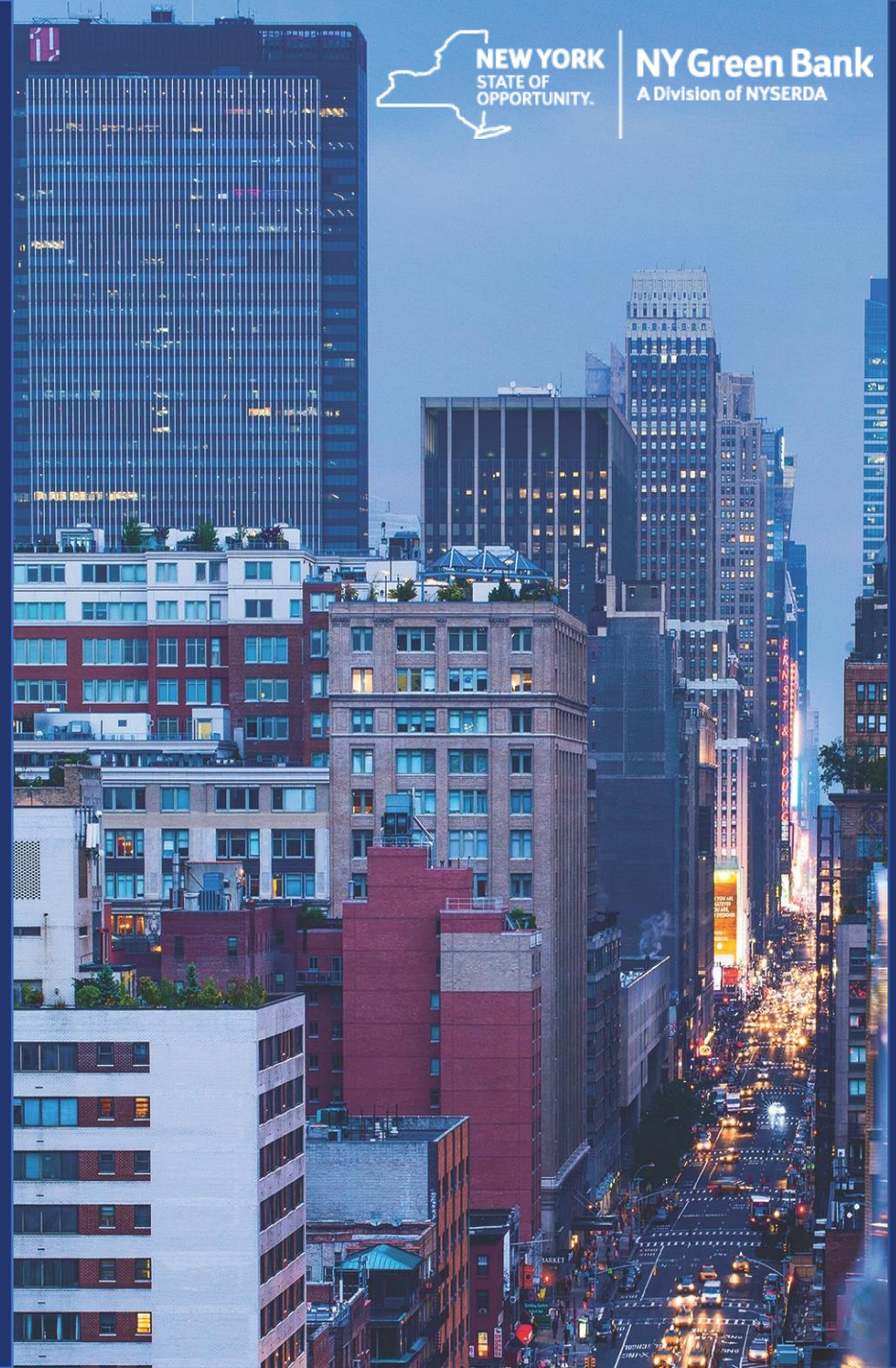
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Q&A



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