



NY Green Bank
A Division of NYSERDA

NY Green Bank

Financing Solutions for the Energy Storage Marketplace

Nick Whitcombe | July 31, 2018

New York, NY

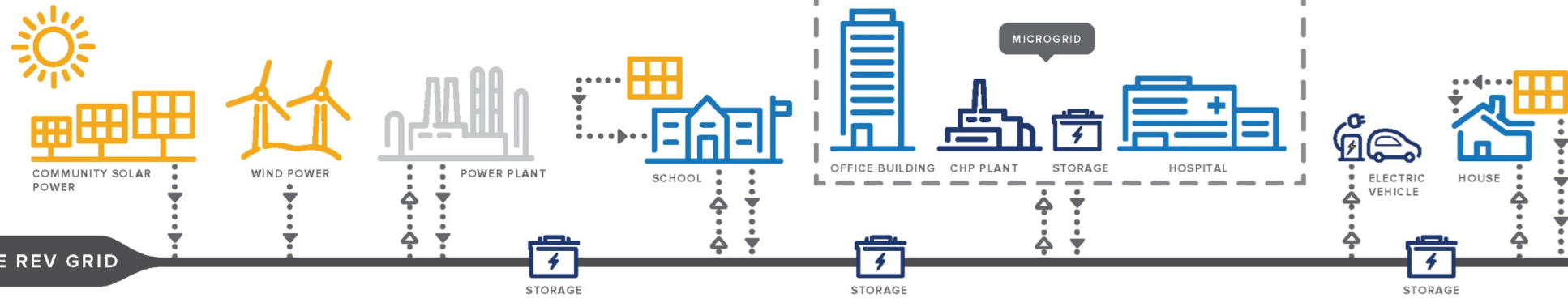
NY Green Bank Advances New York's Clean Energy Opportunities

Mission:

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

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

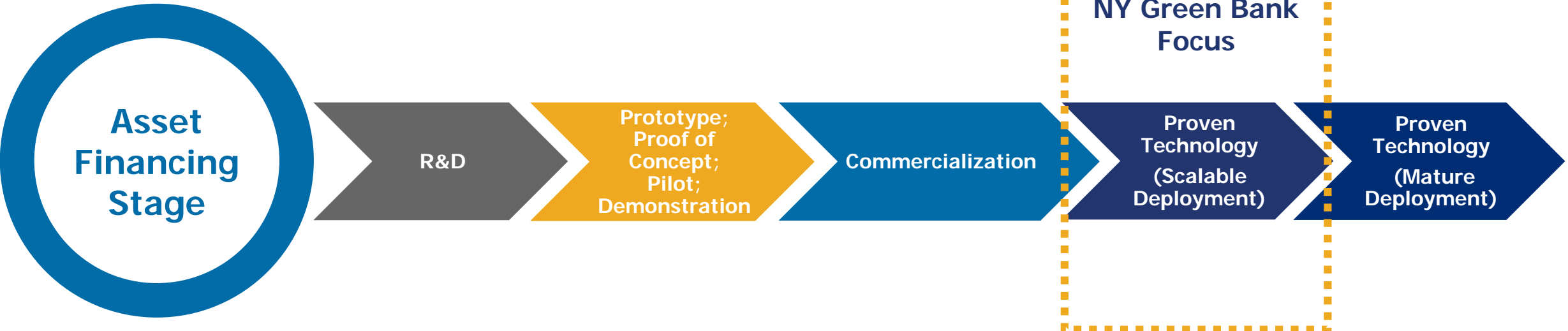
New York's Reforming the Energy Vision



Reforming the Energy Vision (REV):

Governor Andrew M. Cuomo's strategy to build a clean, resilient and affordable energy system for all New Yorkers

NY Green Bank Investment Focus



NY Green Bank Investment Criteria

Primary Investment Criteria:

- ✓ Demonstrate potential energy savings and/or GHG reductions
- ✓ Demonstrate how the transaction contributes to market transformation
- ✓ Be economically and technically feasible, and provide financial returns to NY Green Bank

Elements of a Strong Transaction:

- ✓ Capable and experienced management team
- ✓ Quality counterparties
- ✓ Interested and engaged private sector capital providers
- ✓ Identified and articulated role for NY Green Bank
- ✓ Economically viable business model that is replicable, scalable, and
- ✓ A financial model with realistic assumptions

NY Green Bank Sample Product Offerings

- Warehousing and aggregation credit facilities
- Term loans and investments
- Credit enhancements
- Construction finance
- Construction finance + term loans and investments

Working with NY Green Bank

Open Solicitations

- **RFP 1:** Clean Energy Financing Arrangements
- **RFP 7:** Construction & Back-Leveraged Financing for Ground-Mounted Solar
- **RFP 8:** Efficiency & Renewables Financing Arrangements: Building & Property Owners
- **RFP 10:** Construction and Aggregation-to-Term Financing for CDG Solar Projects
- **RFI 4:** Financing for Energy Storage Projects in New York State

Select Counterparties to Date

GUGGENHEIM



vivint.Solar™



motivate



SolarCity



Energy Storage Market Drivers

Policy Tailwinds:

- Gov. Cuomo's Energy Storage Deployment target: \$200 MM of NYGB investment committed to meet energy storage target of 1,500 Megawatts by 2025
- REV – 50% clean energy by 2030 (but needs storage to support solar growth)

Battery Cost Reduction:

- Lithium ion battery costs have reduced 75% since 2010
- Increased global manufacturing capacity driving additional cost reductions

Financing Mechanism:

- NY Green Bank to support policy tailwinds and help provide financing solutions to monetize the full value of storage

Energy Storage Select Barriers

- Lack of understanding around risk allocation
- Lack of clarity around storage benefits (eg. resiliency, load shifting, peak shaving/demand management, frequency regulation, capacity support, load leveling) for end users not familiar with the technology
- Risk associated with offtake price/revenue fluctuation and appropriate hedging methodologies
- Limited number of financing partners willing to provide long term capital commitments
- Uncertainty associated with technology risks and unfamiliar financing opportunities affiliated with VDER structures

Potential NY Green Bank Financing Solutions for Energy Storage

- Provide credit for various value streams
- Take a forward view on price – LMBP and ICAP for every utility every zone + other value streams
- Remain technology agnostic
- Leverage NYSERDA technical and markets expertise

Contact us at **info@greenbank.ny.gov**
to discuss potential investment opportunities



NEW YORK
STATE OF
OPPORTUNITY.

NY Green Bank
A Division of NYSERDA