

Introduction to New York Green Bank

Executive Summary

Overview

Strategy

Timeline

- **What:** NYGB is a state-sponsored investment fund designed to accelerate clean energy deployment through various wholesale financing strategies.
- **Why:** Immature, fragmented clean energy markets keep soft costs high even as hard costs decline, keeping many attractive investments out of reach to private sector.
- **How:** Work with existing intermediaries to make progress in the market.
- **When:** Early 2014 – building the organization and developing business even as we meet.

What is the NY Green Bank?

An integral & integrated part of a larger state energy strategy

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NY Green Bank is a **state-sponsored investment fund** designed to help fill gaps in clean energy financing markets while supporting strategic statewide energy plan

NY Green Bank Objectives

- ✓ Mobilize greater private sector clean energy investment
- ✓ Use a financing / partnership model to overcome market-level obstacles and uncertainties
- ✓ Enable fluid private financing markets and functioning capital markets
- ✓ Create new value for ratepayers; unlock opportunities for investors & businesses

New Direction for the State

- ✓ Cabinet-level Chairman of Energy & Finance created to marshal assets and integrate NYGB as part of larger comprehensive statewide strategy
- ✓ Focus on animating markets, getting more leverage with public dollars, and optimizing strategies to drive scale
- ✓ Solidify and expand New York's leadership in clean energy economy

A new division of and direction for NYSERDA

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NYSERDA's mission is to **advance innovative energy solutions** to improve New York's economy & environment

New York Green Bank

Core NYSERDA Programs

Energy Efficiency & Renewable Energy Deployment

Energy Technology Innovation & Business Development

Energy Education & Workforce Development

Energy & the Environment

Energy Data, Planning & Policy

Roles

Promote private financing and public capital markets development

Provide financial resources, expertise, and objective information allowing New Yorkers to make confident, informed energy decisions

Clients

Financial institutions and other market intermediaries

Broad range of residential, commercial and industrial energy end-users across New York State

Products

- Senior or subordinated debt
- Credit enhancements
- Warehouse lending
- Mezzanine finance

- Grants and subsidy-based incentives
- Training & education
- Technical expertise
- Low or no interest loans

Substantial (and growing), attractive investments remain unrealized

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NY-Based Clean Energy Markets

Selected Technologies	Est. Market Size (\$B)
Energy Efficiency	\$55
Solar PV	\$13
Combined Heat & Power (CHP)	\$8
Biomass	\$4
Onshore Wind	\$4
Further Technologies	-

Source: Booz – NY Green Bank Final Report

\$85B

Sizeable Investment Opportunities

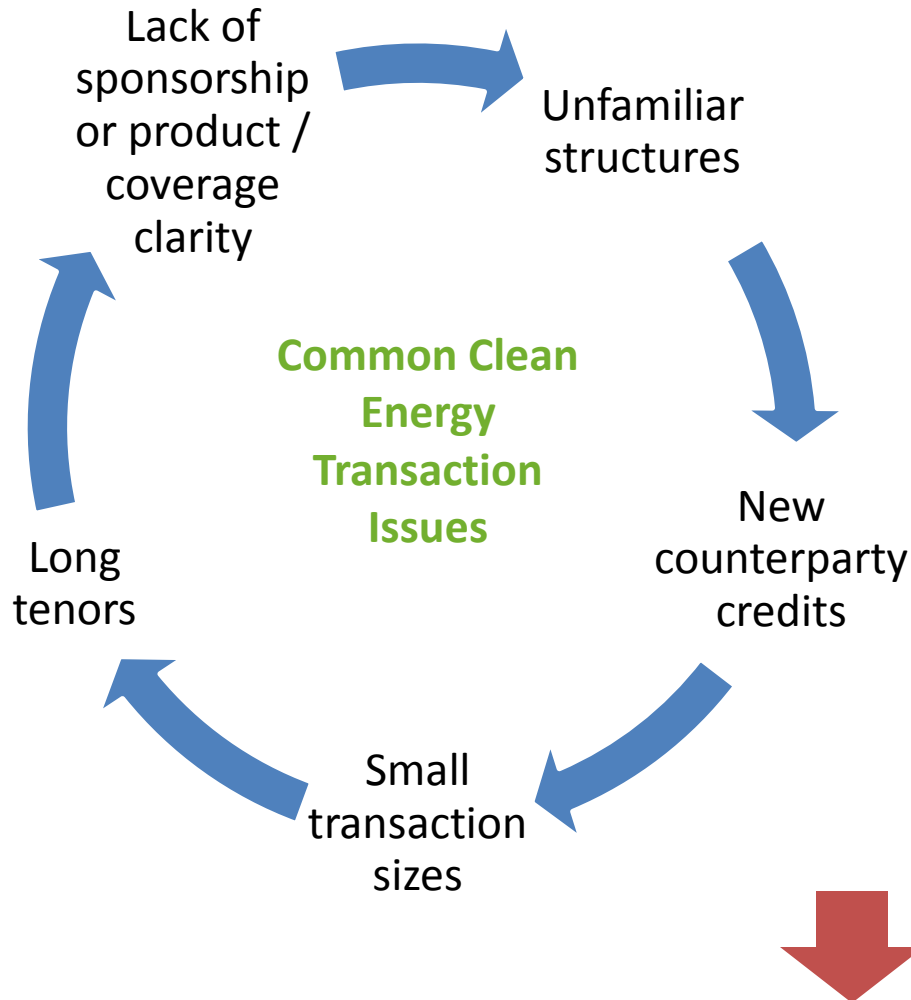
- ✓ Clean energy project investment can provide attractive risk/return profiles
- ✓ \$85B directional estimate of NY-based projects is conservative; excludes potential for:
 - ✓ Further technology improvement
 - ✓ Utility scale generation, fuel cells, charging stations, solar hot water systems, and other emerging clean technologies

Known market barriers create widespread financing constraints

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Market Issues

- ✓ Projects rely on non-capital market sources of tax equity, bank debt, and private equity
- ✓ Highly fragmented market inhibits scale and related efficiencies

Policy Issues

- ✓ New regulatory regimes make banks less viable on balance sheet funders
- ✓ Potential expiration of certain tax benefits has increased demand for innovative financing options

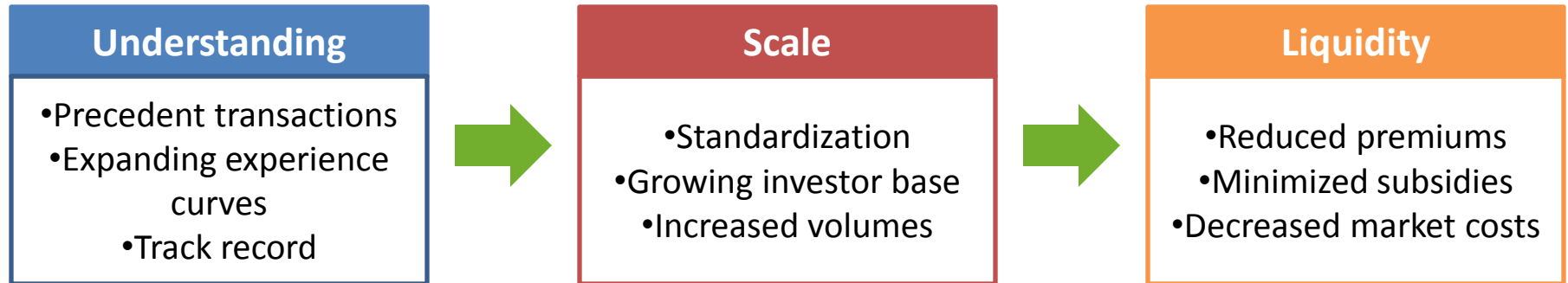
Overwhelmed system and de-prioritization of energy investments

NY Green Bank will strategically leverage \$1 billion to overcome barriers

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- ✓ **Value proposition:** incubate and drive volume for underserved transaction types and act as bridge to efficiently functioning private sector financing markets
- ✓ **Key activities:** combine conventional credit tools with commercially-proven technologies and economic but not readily financeable projects
- ✓ **Key partners & resources:** work in conjunction with (not as competitor to) private entities to leverage both capital pools and institutional capabilities
- ✓ **Cost/revenue structure:** achieve return of (and targeted return on) capital invested

How will NY Green Bank work?

Fulfill certain roles that maximize potential to expand markets

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NY Green Bank is in the business of investing to move financing markets forward

What we will do:

- ✓ Support development of liquidity in markets
- ✓ Provide various forms of credit enhancement
- ✓ Develop and incubate new structures
- ✓ Standardize and aggregate for further distribution

What we won't do:

- ✓ Accept credit and/or project risks that are unacceptable to the private market
- ✓ Take non-commercially-proven technology risks
- ✓ Offer direct subsidies
- ✓ Pick winners and losers or pursue one-off transactions without the ability to replicate

Identify, develop, and execute on scalable opportunities

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At a minimum, NY Green Bank transactions will:

- ✓ Have **expected financial returns** such that the revenues of the Green Bank on a portfolio basis will be in excess of expected portfolio losses;
- ✓ Be expected to **contribute to financial market transformation** in terms of scale, improved private sector participation, level of awareness and confidence in clean energy investments, and/or other aspects of market transformation; and
- ✓ Have the potential for **energy savings and/or clean energy generation** that will contribute to greenhouse gas reductions in support of New York's clean energy policies.



Following a period of Green Bank involvement, these transactions should ultimately be **able to be funded by the private sector** on a standalone basis

Offer solutions to clean energy market and transaction issues

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Example financial support mechanisms

- ✓ **Credit enhancements** – e.g. set-up loan loss reserve funds or payment / performance guarantees
- ✓ **Warehouse lending**– e.g. pool funds to aggregate smaller loans until ready for secondary sale
- ✓ **Direct lending/investing** – e.g. take subordinated debt positions or revolving loans to fund broader origination
- ✓ Other structured solutions as needed

Advancing financing markets

- Develop structures and do groundwork to streamline processes
- Tie deals to precedents as applicable
- Engage in strategic partnerships
- Promote ratings and standardization
- Require accumulation of credit and performance data
- Isolate and distribute off-take or servicer credit to appropriate institutional parties