

Bankable Savings: Analyzing New York’s Green Bank

Evan J. Peters*

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I. INTRODUCTION

The American clean energy industry has a problem. Many clean energy¹ technologies have demonstrated not only commercial viability, but also lucrative returns to project investors.² Despite this performance, many clean energy projects are unable to obtain appropriately priced capital to finance construction or must pay scarcity prices for the financing they can obtain.³ There are many reasons for this funding gap, but some popularly cited shortcomings

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1. In this Note, “clean energy” refers to renewable energy and energy efficiency.

2. See Mindy Lubber, *Investors are Making Money on Renewable Energy*, FORBES, Mar. 20, 2013, <http://tinyurl.com/7sa7qlf>.

3. FELIX MORMANN & DAN REICHER, BROOKINGS INST., SMARTER FINANCE FOR CLEANER ENERGY: OPEN UP MASTER LIMITED PARTNERSHIPS (MLPS) AND REAL ESTATE INVESTMENT TRUSTS (REITS) TO RENEWABLE ENERGY INVESTMENT 1–2 (2012), available at <http://tinyurl.com/nskk9om>.

include: 1) clean energy projects require large capital expenditures,⁴ 2) the capital markets lack familiarity with the underlying technologies,⁵ 3) loan agreements are not standardized across the industry and can include transaction cost-heavy structures,⁶ 4) the industry relies on complicated tax credit arbitrage,⁷ and 5) any secondary market for project interests remains nascent.⁸

These market barriers suggest that the clean energy industry's financing problems are largely a function of fissures in the finance supply chain. This view assumes that, were such barriers removed, new capital would easily flow to end-users and project developers who want to install solar panels or upgrade energy efficiency systems, but lack capital.⁹ New dollars will certainly find a number of projects eager for capital, but capital is not always the missing link.

The demand side of the energy markets is heterogeneous and includes many players such as utilities, regulators, independent power producers, homeowners, and businesses. Each of these groups has different incentives and will respond to increased capital flows for clean energy in different ways—if at all. When allocating scarce capital across bundles of goods and services, various energy consumers/investors may not believe that investing in clean energy presents the best-value proposition available.¹⁰ This may be because of poor information about the value proposition, utility billing structures, preferences, or actual opportunity costs and liquidity risks. The energy markets also fail to price carbon and thereby skew the value of clean energy.

Given these demand-side market barriers, and absent credibly

4. *See id.* at 2 (noting that renewable power projects do not require fuel, but do necessitate up-front purchases of equipment like solar panels or wind turbines).

5. *See* N.Y. STATE ENERGY RESEARCH & DEV. AUTH., CASE 13-M-0412, PETITION OF THE NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY TO PROVIDE INITIAL CAPITALIZATION FOR THE NEW YORK GREEN BANK 1 (2013), *available at* <http://tinyurl.com/pjy5rrg> [hereinafter NYSERDA NYGB PETITION].

6. *See* MORMANN & REICHER, *supra* note 3, at 2.

7. *Id.*

8. *See id.* at 3 (noting the current absence of mature secondary markets for renewable energy investment).

9. NYSERDA NYGB PETITION, *supra* note 5, at 1–3, 5.

10. *See* KENNETH BERLIN, CREATING STATE GREEN BANKS: HOW NEW WAYS TO FINANCE CLEAN ENERGY AND ENERGY EFFICIENCY PROJECTS CAN REDUCE THE COST OF CLEAN ENERGY AND REPLACE EXPIRING FEDERAL CREDITS AND SUBSIDIES 3 (2011), *available at* <http://tinyurl.com/kcyba2a> (explaining that individuals and businesses alike often choose not to invest in energy efficiency).

binding carbon pricing, how do we stimulate the demand side to invest in clean energy projects if increasing capital flows will only take us so far? Some tools include state-level renewable portfolio standards (RPS), which set renewable generation targets, as well as subsidies and tax credits.¹¹ But New York State, by order of the Public Service Commission (PSC), has repurposed \$165.6 million of ratepayer money to provide the initial capitalization of a new tool: the Green Bank of New York (NYGB).¹²

NYGB is a “bank” in name only—it does not take deposits or make consumer loans.¹³ Rather, it is a “state-sponsored investment fund” with a broad mandate to remove market obstacles in the clean energy industry by offering a suite of financial products such as securitization, loan warehousing, and credit enhancements.¹⁴ Ideally, these offerings will induce private sector spending for clean energy and grow the capital pool available for projects. To achieve maximal leverage of its ratepayer-financed initial capitalization, NYGB should attack demand-side inefficiencies and generate demand for clean energy.¹⁵ NYGB has an opportunity to succeed at this early stage so long as it works to overcome demand-side inefficiencies. This Note briefly reviews the creation of NYGB, its objectives, and financial products. It then discusses some

11. Felix Mormann, *Requirements for A Renewables Revolution*, 38 *ECOLOGY L.Q.* 903, 940 (2011).

12. N.Y. PUB. SERV. COMM’N, CASE 13-M-0412, ORDER ESTABLISHING NEW YORK GREEN BANK AND PROVIDING INITIAL CAPITALIZATION 9 (2013), *available at* <http://tinyurl.com/k7j7625> [hereinafter NYGB ORDER].

13. N.Y. PUB. SERV. COMM’N, CASE 13-M-0412, NEW YORK GREEN BANK ORGANIZATION PLAN FILING FOR THE PUBLIC SERVICE COMMISSION 2 (2014), *available at* <http://tinyurl.com/mhhb27m> [hereinafter NYGB ORG. PLAN].

14. *Id.* Credit enhancements include loan loss-reserve funds (LLRFs). In an LLRF arrangement, loan originators pay NYGB to cover a certain percentage of the first losses on the portfolio of loans. N.Y. PUB. SERV. COMM’N, CASE 13-M-0412, NEW YORK STATE GREEN BANK BUSINESS PLAN DEVELOPMENT FINAL REPORT 35–37 (2013), *available at* <http://tinyurl.com/n6xroxz> [hereinafter BOOZ REPORT].

15. Although demand generation is not discussed in earnest in the regulatory proceedings concerning NYGB’s creation, some commentators expressed concern that NYGB’s focus should either include or not subtract from significant efforts to drive demand for clean energy and clean energy finance. *See, e.g.*, Comment of Community Environmental Center on New York Public Service Commission Case 13-M-0412, at 5 (Oct. 28, 2013), *available at* <http://tinyurl.com/k5d4s57> (“More than anything, CEC urges that funds are allocated for the Green Bank only after a clear demand for funds is realized.”); Comment of Bloom Energy on New York Public Service Commission Case 13—M-0412, at 6 (Oct. 28, 2013), *available at* <http://tinyurl.com/lgqxymc> (“In short, the Green Bank financial product offerings should be accretive to, not instead of, the ‘demand driver’ programs currently administered by NYSERDA.”).

shortcomings of its current financing model), suggesting that NYGB must pay more attention to non-financial barriers holding back clean energy projects.

II. BUILDING NYGB

In 2013, New York Governor Andrew Cuomo announced his intention to establish a self-sustaining green bank in conjunction with the New York State Energy Research and Development Authority (NYSERDA).¹⁶ The idea of green banking did not start there, however. Connecticut, Vermont, Hawaii and the United Kingdom all have green banks of a similar character.¹⁷ But Governor Cuomo imagines that NYGB will ultimately achieve a market capitalization of \$1 billion, which would make it the largest in the United States.¹⁸ To kick-start operations, NYGB needed an initial capitalization. So, NYSEDA turned to the PSC, which had \$165.6 million of uncommitted ratepayer money. New York's public utilities collected that money pursuant to the Energy Efficiency Portfolio Standard (EEPS), Renewable Portfolio Standard (RPS), and the System Benefits Charge (SBC).¹⁹

At Governor Cuomo's behest, NYSEDA petitioned the PSC to release \$165.6 million from these public funds into its custody. Specifically, NYSEDA asked to repurpose \$50 million from its RPS funds, \$22.1 million from its SBC funds, and \$3.5 million from its EEPS funds. NYSEDA also asked the PSC to release \$90 million of utility EEPS funds. NYSEDA planned to add that \$165.6 million to \$52.9 million it raised from selling Regional Green House Gas

16. See Press Release, Governor's Press Office, Governor Cuomo Launches New York Green Bank Initiative to Transform the State's Clean Energy Economy (Sep. 10, 2013), available at <http://tinyurl.com/nu3hx9x>; NYGB ORG. PLAN, *supra* note 13, at 3.

17. See Hallie Kennan, *State Green Banks for Clean Energy 4* (Energy Innovation: Policy and Technology LLC, Working Paper, 2014), available at <http://tinyurl.com/kcab4zn> (describing existing state green banks); see also GREEN INVESTMENT BANK, <http://www.greeninvestmentbank.com> (last visited May 8, 2014) (describing the United Kingdom's green bank).

18. See Kennan, *supra* note 17, at 4.

19. See NYSEDA NYGB PETITION, *supra* note 5, at 14-16; N.Y. PUB. SERV. COMM'N, CASE 07-M-0548, ORDER ESTABLISHING ENERGY EFFICIENCY PORTFOLIO STANDARD 10 (2008) [hereinafter ORDER ESTABLISHING EEPS] (establishing the EEPS in the hopes of reducing energy demand and obviating costly utility infrastructure demand reduction); N.Y. PUB. SERV. COMM'N, CASE 03-E-0188, ORDER ESTABLISHING RENEWABLE PORTFOLIO STANDARD 2 (2010) [hereinafter ORDER ESTABLISHING RPS] (noting the goal of increasing the renewable portion of energy retailed in the state); N.Y. PUB. SERV. COMM'N, CASE 94-E-0952, ORDER ESTABLISHING SYSTEMS BENEFITS CHARGE 1 (2003) (creating the SBC to ensure certain public benefits continued in the deregulated market place).

Initiative carbon allowances—totaling a \$210.3 million initial capitalization for NYGB.²⁰ The requested transfer did not directly require new riders on ratepayer bills or new revenues.²¹

In December 2013, the PSC obliged, ordering New York's utilities to release the requested funds and granting NYSERDA permission to repurpose its public funds for NYGB.²² The mundane mechanics of the PSC's order downplay the magnitude of the shift in state energy policy that it represents. As the PSC noted, "NYSERDA plans to utilize a new form of financing assistance other than direct subsidies that will provide the same benefits . . . that the Commission sought in establishing the EEPS, SBC, and RPS programs. . . . [T]his approach may offer an opportunity to deploy those ratepayer funds more efficiently and thereby provide greater benefits."²³

In pursuit of that objective, the PSC agreed with NYSERDA that NYGB needs operational autonomy.²⁴ Ratepayer money, however, always comes with strings attached. As a division of NYSERDA, which is a public benefit corporation, NYGB is subject to reporting and operational obligations under New York's Public Authorities Law. NYGB must also certify that its investments meet its stated criteria, and report regularly to the PSC.²⁵ Moreover, NYSERDA's basic promise to the PSC and ratepayers is that NYGB, by better leveraging public funds with private capital, will more efficiently deploy ratepayer capital than do the programs from which it received money.²⁶ In this capacity, NYGB is a fiduciary²⁷ of these ratepayer funds and its operating model must insure its own success by responsibly driving demand for the financing it offers.

The PSC also restricted the technologies that NYGB may finance with its ratepayer funds. "In previous orders supported by environmental impact analyses required by SEQRA [State

20. NYSERDA NYGB PETITION, *supra* note 5, at 15.

21. *See* NYGB ORDER, *supra* note 12, at 9–10.

22. *Id.* at 23.

23. *Id.* at 10.

24. *Id.* at 16 (noting that the NYGB "will operate best if given the flexibility to fund based on dynamic market conditions rather than externally-imposed rules.").

25. *Id.* at 15.

26. *See id.* at 10.

27. *Clean Energy Financing Arrangements—Request for Proposals (RFP) No. 1*, N.Y. GREEN BANK, <http://greenbank.ny.gov/RFP1.aspx> (follow "RFP1—Clean Energy Financing Arrangements" hyperlink) (last visited May 8, 2014).

Environmental Quality Review Act],²⁸ the Commission created rules governing the eligibility of technologies for funding under the RPS, EEPS, and SBC programs, all of which are targeted at expanding the State's clean energy portfolio and achieving emissions reductions"²⁹ The PSC reasoned that those limitations should follow the funds to NYGB to ensure that proper environmental benefits accrue.³⁰

At least according to NYGB's request for proposals, these SEQRA boundaries appear broad.³¹ NYGB is calling for proposals based on technologies including: solar photovoltaic, solar thermal, onshore and offshore wind, biogas, biothermal, tidal power, and numerous energy efficiency technologies.³² Within these broad program bookends, NYGB plans to offer credit enhancements and purchase loans, and create other financial instruments as it sees fit.³³

III. NEW ENERGY POLICY: NEW OPPORTUNITIES

As "state-sponsored investment fund[s]," free from the profit-maximizing pressures of private firms, state green banks are uniquely positioned to help the clean energy industry overcome market barriers.³⁴ NYGB does not have shareholders, nor is it actually a "bank" subject to regulation by the Federal Deposit Insurance Corporation or other similar agencies. That means NYGB, like other clean energy finance banks, is free to charge sub-market interest rates for loans and offer products, such as loans with very long repayment periods, which would not likely otherwise be commercially available.³⁵

Flexibility is key for NYGB to achieve its mission. Booz & Company's "Business Development Plan for the New York Green

28. N.Y. COMP. CODES R. & REGS. tit. 6, § 617.1(c) (2014) ("The basic purpose of SEQR is to incorporate the consideration of environmental factors into the existing planning, review and decision-making processes of state, regional and local government agencies at the earliest possible time.").

29. NYGB ORDER, *supra* note 12, at 14–15.

30. *Id.*

31. See *Illustrative Guidelines for Eligible Investments*, N.Y. GREEN BANK, <http://greenbank.ny.gov/RFP1.aspx> (follow "RFP 1—Attachment B—Illustrative Guidelines for Eligible Investments" hyperlink) (last visited May 8, 2014).

32. *Id.*

33. NYGB ORG. PLAN, *supra* note 13, at 2.

34. *Id.* at 2-3.

35. See Reed Hundt, Mark Muro & Richard Kauffman, Presentation for the Yale Center for Business and the Environment: State Energy Finance Banks: New Investment Facilities for Clean Energy Deployment (Jan. 24, 2013), available at <http://tinyurl.com/nj9y3o3>.

Bank” (“Booz Report”), estimates that NYGB will achieve an average annualized return on investment (ROI) of 1.5% [to] 4.1% over its first twenty years.³⁶ This return would likely be too low for private firms, given project default risks.³⁷ NYGB’s modest projected ROI, however, underscores the logic of its financial products. NYGB invites clean energy market actors to transfer investment risk to it through hedges such as credit enhancements.³⁸ Over time, these products may lead to greater clean energy deployment and other social benefits. Therefore, NYGB’s financial ROI undervalues its special policy purpose.

A. *Spreading investment risk to increase leverage of public dollars*

As the PSC noted, NYGB’s “ability to animate private financing and help technologies achieve lower costs of capital and economies of scale will be a critical tool for maturing the clean energy market.”³⁹ So-called “leverage” of ratepayer funds is the ambition of not only green banking, but of the EEPS, SBC, and RPS as well.⁴⁰ This concept means that for each dollar of public money spent on clean energy, policymakers hope to spur a certain amount of private investment and other social returns.⁴¹ NYGB may increase economic activity within New York, help reduce the State’s carbon footprint, and achieve other positive effects. By granting NYGB uncommitted money from the EEPS, RPS and SBC programs, New York and its PSC cast a serious vote of confidence that NYGB can help ratepayers achieve greater “leverage” per dollar.⁴²

That is probably a good bet, although NYGB will not immediately replace other policy tools.⁴³ What NYGB can do that other entities or policies may not be able to do as easily is recapitalize and recycle

36. BOOZ REPORT, *supra* note 14, at 27.

37. By comparison, essentially riskless twenty-year Treasury bonds were yielding approximately 3.45% per year on May 8, 2014, which is in within the optimistic range of NYGB’s projected returns. *Daily Treasury Bond Yield Rates*, U.S. DEP’T OF THE TREASURY (May 8, 2014), <http://tinyurl.com/24zfpud>.

38. See Kennan, *supra* note 17, at 4.

39. NYGB ORDER, *supra* note 12, at 7–8.

40. *Id.* at 10 (“NYSERDA plans to utilize a new form of financing assistance other than direct subsidies that will provide the same benefits to ratepayers and the public that the Commission sought in establishing the EEPS, SBC, and RPS programs.”).

41. See Kennan, *supra* note 17, at 2–3 (describing how green banks can leverage private investment).

42. NYGB ORDER, *supra* note 12, at 10.

43. *Id.* (noting that the NYGB is at this time intended to supplement, rather than replace, the RPS, SBC, and EEPS).

(reinvest) its funds into new projects, thereby marshaling ever more private money towards the capital-intensive task of scaling the clean energy industry.⁴⁴

Better yet, NYGB achieves leverage through a public-private partnership whereby it reduces risk for clean energy project principals.⁴⁵ Each of NYGB's proposed financial offerings is designed to achieve this goal. NYGB's loan loss reserve funds (LLRF), for example, would allow loan originators (banks or other lenders) to pay NYGB to cover a certain percentage of the first losses on a portfolio of loans. In such an arrangement, NYGB could charge originators a fixed fee on a portfolio of loans in exchange for the promise to use a dedicated pool of money to cover the first 20% of losses on 90% of the lender's portfolio.⁴⁶ As a credit enhancement, LLRFs would be a particularly helpful tool for unsecured lending arrangements in which financiers may be reluctant to lend because borrowers lack adequate collateral (which is typical in many clean energy deals). In this way, NYGB helps lenders spread project risk, hopefully reducing the risk premium that lenders will demand and inducing more lending in the clean energy space.

Another risk sharing instrument NYGB plans to offer is loan warehousing. To build a loan warehouse, NYGB would purchase outstanding project loans from originators (or equity interests from project principals), aggregate them, and group them into structured products to sell to other investors on the secondary market. This liquidity-creating instrument would allow clean energy loan originators to cash out of their project loans ahead of schedule. The ability to convert once-illiquid clean energy loans to cash may reduce liquidity risk for lenders.⁴⁷ In turn, NYGB will share this risk with investors seeking certain risk profiles by selling structured loan products comprised of warehoused loans to the public.

This risk sharing may help New York achieve maximal leverage of its public funds for clean energy development. LLRFs, credit and other risk-sharing products spend public money, but in doing so attract private financing by reducing investment risks. The SBC, RPS and EEPS may be less adept at reducing investment frictions. The

44. *Id.* at 7-9; see BOOZ REPORT, *supra* note 14, at 6, 8 (explaining that as NYGB recoups its investment, it can simply redeploy that money into new projects).

45. See Kennan, *supra* note 17, at 12.

46. See BOOZ REPORT, *supra* note 14, at 36.

47. *Id.* at 36. Originators can also sell loans to NYGB in order to free up cash to invest in yet more clean energy projects. *Id.*

Booz Report estimates that public dollars used to fund EEPS and RPS programs are leveraged 4.2x and 2.8x, respectively (3.8x average).⁴⁸ This “business as usual” baseline simply divides one by the percentage share that government incentives comprise of each portfolio.⁴⁹ The Booz Report further estimates NYGB will achieve an average leverage ratio on its initial capitalization of 1-to-3.5 (public funds to private capital).⁵⁰ Also according to that report, the cumulative leverage could be much higher after twenty years of recycling funds and transferring risk. Leverage could reach a 1-to-13.8 portfolio average as NYGB recoups its investments, plus interest, and recycles that money into new opportunities.⁵¹

B. *Limitations of NYGB's financing model*

If the Booz Report is correct, then as long as NYGB triggers investment in projects of at least the same quality as those the EEPS, RPS and SBC would have funded, then the PSC order may well be a good deal for New Yorkers. There is good reason to believe NYGB will make high-quality investments. While declining to affirmatively require that NYGB fund any specific projects or technologies, the PSC constrained NYGB from using repurposed EEPS, RPS, and SBC funds to finance technologies beyond the scope of its previous SEQRA analyses that accompanied the creation of those programs.⁵²

Specifically, the RPS SEQRA analysis found that increasing renewable energy consumption would have a number of impacts—most important, the reduction of nitrogen oxide, sulfur dioxide, and greenhouse gas emissions.⁵³ Similarly, the EEPS SEQRA analysis found that reducing energy consumption with energy efficiency programs would reduce greenhouse gas emissions.⁵⁴ NYGB is limited to investing in technologies that the PSC has already determined create those benefits. After all, the RPS, EEPS, and SBC were designed with improved environmental quality and reduced greenhouse gas emissions in mind. NYGB is a logical extension of those policy objectives.

48. *Id.* at 57

49. *Id.*

50. *Id.* at 60.

51. *Id.* at 56.

52. See NYGB ORDER, *supra* note 12, at 14–15 (concluding that the existing incentive programs “provide appropriate boundaries”).

53. ORDER ESTABLISHING RPS, *supra* note 19, at 76.

54. ORDER ESTABLISHING EEPS, *supra* note 19, at 65–66.

Furthermore, NYGB's "focus on projects that are economically viable but not currently financeable" due to market barriers will keep NYGB from engaging in potentially costly technology speculation.⁵⁵ Significantly, this limitation means that NYGB will not be bankrolling clean energy technology innovation. Promising technologies that need financing to demonstrate viability at full scale, for example, will have to look elsewhere for funding.

With these strictures in place, NYGB appears ready to execute on its focused mission of facilitating clean energy project lending. But the Booz Report does not estimate how many projects are in NYGB's pipeline (i.e. currently held back by lack of capital). Neither the PSC nor NYSERDA appear to have seriously addressed this issue in regulatory proceedings. In fact, NYSERDA told the PSC that "the Booz work scope did not include a thorough assessment of end user demand for financing in the various market segments."⁵⁶ Without an assessment of end-user demand for clean energy financing, it is not possible to know whether the 1.6 to 4.1% ROI estimate is realistic. Nor can we be sure that NYGB will achieve higher leverage ratios than the RPS, EEPS, or SBC.

This is in part because there is no guarantee that NYGB will be able to find enough clean energy projects to fully deploy its capital or find enough projects that do not need supplemental subsidy support.⁵⁷ The willingness of capital markets to lend is likely insufficient to overcome some of the most stubborn structural demand-side barriers such as the split-incentive problem.⁵⁸ Split-incentive problems arise when building owners pay for capital improvements (i.e. clean energy systems or retrofits), but tenants enjoy the energy cost savings.⁵⁹

According to a 2011 study by the Office of the Mayor of New York City, 60% of commercial property owners in NYC reported that split incentives inhibited them from investing in energy retrofits.⁶⁰ The Booz Report estimates the addressable market for energy

55. NYSERDA NYGB PETITION, *supra* note 5, at 2.

56. *Id.* at 4 (promising to undertake this market research).

57. The more public dollars that NYGB's projects receive from other programs, the lower NYGB's leverage ratio.

58. See Neil Peretz, *Growing the Energy Efficiency Market Through Third-Party Financing*, 30 ENERGY L.J. 377, 386 (2009) (defining the split-incentive problem).

59. PLANYC, ENERGY-ALIGNED LEASE LANGUAGE: SOLVING THE SPLIT INCENTIVE PROBLEM 3 (2011), available at <http://tinyurl.com/kudsupw>.

60. *Id.* at 5.

efficiency in New York State alone to be \$55.2 billion, but it is less clear how much of that is encumbered by structural disincentives to invest in clean energy. Achieving 13.8x leverage only requires NYGB to catalyze \$2.292 billion of investment in all clean energy sectors. So, it is certainly possible that NYGB can reach that leverage in spite of pervasive incentive problems if its projects do not need much further subsidy support. But that is a big “if.” Other subsidies like tax credits remain important demand drivers for clean energy.

For NYGB to achieve its best-case scenario 13.8x leverage, its projects would have to receive no other outside subsidy support. The reason is simple math. The Booz Report’s leverage calculation measures *total* public dollars to private dollars.⁶¹ So, the more NYGB’s funding is bolstered by tax credits or other sources, the lower its leverage ratio. To maximize its leverage, NYGB should avoid investing in projects needing additional subsidy support to be economical. These other public incentives, however, drive demand for clean energy and the financing that NYGB provides. Neither NYGB’s regulatory proceedings nor the Booz Report give any indication as to how NYGB can drive demand for clean energy finance or increase clean energy without piggybacking on projects precipitated by other subsidy programs.

To achieve maximal leverage, NYGB needs to investigate end-user demand for clean energy financing. This Note does not purport to do that. My aim is instead to call attention to how critical that analysis is. NYGB’s success depends upon demand not only for clean energy financing, but also *its specific financial products*. NYGB can recalibrate its products to meet market demand, but to best do that, NYGB needs to gauge not only statewide demand for clean energy finance, but also what other factors (like split incentives) are keeping end-users and project developers from executing transactions.

NYGB received its initial capitalization on the promise it would achieve greater leverage than other projects. It must, then, work hard to bolster the demand generated by subsidies and tax credits so that leverage is maximized. As fiduciaries of ratepayer funds, it should be NYGB and NYSERDA’s duty to tackle demand-side barriers. The Booz Report suggests that serious inroads into that \$55.2 billion “addressable” market are only realistic if NYGB can overcome “incentive misalignment” such as the split-incentive

61. BOOZ REPORT, *supra* note 14, at 7.

problem.⁶² Minor inroads may prove difficult, as well. But, NYGB, working with NYSERDA, could partner with third-party energy financiers to advertise financing options for energy efficiency along with lease clauses that allow owners and tenants to enjoy energy savings.⁶³ Perhaps NYGB could actually grow demand for its financing and clean energy by helping parties overcome split-incentives.

For its part, NYSERDA believes that NYGB will actually outperform the Booz Report's "conservative" estimates.⁶⁴ This Note does not intend to suggest that NYGB will not succeed. In fact, the idea of a central clean energy finance authority has been floated for years and successfully implemented in other jurisdictions; moreover, it appropriately tasks government-like entities with overcoming market inefficiencies.⁶⁵ However, it is critical that NYGB help generate demand by overcoming misaligned demand-side incentives—maximal leverage of ratepayer funds, public benefits, and carbon abatement depend on it.

NYSERDA believes its "other programmatic efforts will help identify opportunities and drive demand for Green Bank-supported private . . . capital while the Green Bank's focus on the financing market frontier will help sharpen NYSERDA's effort to achieve market response in its other programs."⁶⁶ It makes sense to leverage NYSERDA's resources, but this division of responsibility puts a high premium on the planned coordination between NYSERDA and NYGB. Generating demand may mean educating landlords on already available lease clauses, which allow recovery for clean energy improvements,⁶⁷ or working to modernize building codes. Because NYGB will receive constant market feedback and can best appraise its capabilities, it should lead the effort to increase the pipeline of projects (i.e. demand for clean energy finance) rather than rely on NYSERDA.

62. *Id.* at 47.

63. PLANYC, *supra* note 59, at 7–10.

64. NYSERDA NYGB PETITION, *supra* note 5, at 4.

65. Mormann, *supra* note 11, at 944; *see* Kennan, *supra* note 17, at 9.

66. NYSERDA NYGB PETITION, *supra* note 5, at 12.

67. *See* PLANYC, *supra* note 59, at 8 (providing examples of boilerplate leases that allow landlords to capture some energy efficiency savings from energy efficiency capital improvements).

IV. CONCLUSION

The stakes are high. NYGB may become important to decarbonizing energy not only in New York, but also, perhaps, nationally. If NYGB is successful, it may serve as a model for other states or even the federal government to help get financing to clean energy projects that need it. Poor financial ROI or other discrete high-profile failures may erode public trust and tempt the PSC to capriciously intervene. The opportunities, however, outweigh the risks. NYGB may eventually help shift support for clean energy away from fickle subsidies towards permanent market viability. This may be just the impetus that both the supply and demand sides of the energy markets need to undertake more clean energy investment. But moving towards the full clean energy opportunity in New York will require demand generation just like any other industry. For NYGB, that means helping projects get to the point where a lack of finance, and not other barriers, is holding projects back. This endeavor should be a serious part of NYGB's mission to deliver on its promise and fiduciary duty to better leverage ratepayer funds. NYGB's core strength is its financial expertise, but delivering financing is not enough to achieve New York's goals. NYGB must also clarify risk, educate clean energy consumers, and help those consumers create structures that allow them to take advantage of available financing.