

Clean Energy Fund Informational Webinars

Frequently Asked Questions

July 24, 2015 Revised August 12, 2015

On July 15, 2015, the New York State Energy Research and Development Authority conducted two Clean Energy Fund (CEF) Informational Webinars, each including a brief presentation and an opportunity for interested stakeholders to ask questions and receive answers.¹ Below is a summary of frequently asked questions and answers emanating from the Webinars.

Budget

Q: For what will the **\$844.4** million in repurposed Renewable Portfolio Standard (RPS) funds be used?

A: When the RPS program concludes at the end of 2015, it is anticipated that \$844.4 million in authorized funds for that purpose will remain uncommitted. NYSERDA proposes repurposing them to support State policies for renewables, specifically to support funding of the NY-Sun solar program. This approach is consistent with prior Public Service Commission (PSC) authorization for repurposing funding to support the first two years of NY-Sun.

Q: Will the RPS funds backfill the amount of money already authorized for the NY-Sun, or is this amount in addition to the \$960 million already authorized for the NY-Sun?

A: In April 2014 the Commission approved a NYSERDA petition for \$960.6 million of funding for NY-Sun, but did not establish collections to support program activities. The funding for NY-Sun identified in the CEF is to satisfy this previously approved funding and is not incremental to the \$960.6 million.

Q: Is the use of repurposed **RPS** money for **NY-Sun** available for large-scale projects?

A: No, they are not. We have proposed to repurpose the uncommitted RPS funds to support renewables within the CEF, specifically NY-Sun. We have also included an additional \$150 million of funding in 2016 for a Main Tier RPS solicitation.

Q: For what will the Regional Greenhouse Gas Initiative (RGGI) funds be used?

A: The RGGI funds included in the CEF are not delineated to specific programs; rather they would be used to support fuel neutrality in the CEF.

Q: The adopted RGGI Operating Plan contains \$6.25 million for the CEF. Has New York State already collected the \$250 million in RGGI funds, or is this amount forward looking?

A: The \$6.25 million represents one quarter of one year, as the RGGI Operating Plan is done on a Fiscal Year basis and covers the first quarter of 2016. The \$250 million would be from future RGGI proceeds.

Q: Why would it be prudent for utilities to hold on to cash balances, instead of NYSERDA, under the pay as you go approach? It seems as if NYSERDA is avoiding the responsibility of paying interest on unused funds, an expense that should be paid by NYSERDA.

A: NYSERDA's expectation is that the utilities would hold the CEF collections in segregate accounts and any interest gained would accrue for future customer benefit.

Q: Regarding the pay as you go approach, would the money be collected on a volumetric basis as it is now, but the utilities would hold the money (rather than NYSERDA) until needed? Will utilities be allowed to keep any interest earned?

A: The PSC will determine the method of collections, whether on a volumetric basis or by any other means. NYSERDA's expectation is that any interest gained would accrue for customer benefit.

Q: The first draft of the CEF suggested collections were \$925M while the current draft suggests \$700M. Can you please explain the reduction in collections?

A: The \$925 million figure was the total collections level for both NYSERDA and utility clean energy programs, including those authorized under the RPS, the Energy Efficiency Portfolio Standard (EEPS) (both utility and NYSERDA) and the Technology & Market Development (T&MD) portfolio; the \$700 million figure includes collections for only the NYSERDA program; specifically, it excludes the collections for the utility EEPS programs.

Q: How do the CEF budget allocations (slides 8 and 9 in each Informational Webinar presentation) relate to the investment plans?

A: The budgets identified in Table 11 were used in calculating the benefits estimates. Additional detail on the breakdown of program area budgets among initiatives will be included in the Investment Plans.

Q: Instead of funding NY Green Bank (NYGB) with ratepayer funding, why not issue bonds and repay the bond proceeds with RGGI proceeds?

A: Bonding requires funding certainty and with RGGI there is uncertainty in the amount of future proceeds available.

Q: Why not use outstanding cash balance to pay for NYGB?

A: Existing cash balances are largely committed in current programs. Existing cash balances and future collections which have not been, or are not expected to be, committed have already been proposed to be repurposed to support the program authorization.

Q: For NYGB credit facility, it seems that the future ratepayer collections will be used to repay the credit extended. What if expected returns are lower than expected? Ratepayers could then need to pay more than estimated to cover debt, correct?

A: No, shortfalls don't result in increases in funding from ratepayers.

Q: How long are current NYSERDA commitments and encumbrances good for, as in what amount of time is allowed for a commitment and encumbrance to actually come to fruition before the money is uncommitted?

A: The expiration date for NYSERDA funding agreements varies by program and by project. NYSERDA regularly reviews outstanding commitments and encumbrances and does not renew or terminate commitments and agreements for projects that are not anticipated to proceed.

Benefits

Q: How are the leverage ratios in slide 15 calculated?

A: The leverage ratios were developed based on prior experience and expectations as to the level of improvement and performance going forward for new strategies. Where possible, based on data available, leverage ratios were estimated for new strategies individually and aggregated to arrive at portfolio level values. Like the energy savings and other benefits shown on this slide, most of the leverage ratios were estimated for the first three years and projected over a 10 year period. Leverage ratios will be further refined during investment plan development.

Q: How did you estimate private investment and leverage ratio for Innovation and Research and NYGB?

A: For Innovation and Research, the leverage ratio was developed based on prior experience and expectations as to the level of improvement and performance going forward. For NYGB, leverage ratio was arrived at through market research and reflects one recycling of funds during the 10year CEF period. Private investment in dollars was arrived at by a calculation using anticipated NYSERDA funding and the leverage ratio.

Q: How will 79% more energy savings be achieved in the market rate sector? Stated otherwise, how is NYSERDA valuing energy savings from market transformation initiatives in order to arrive at increased savings?

A: As part of the market research conducted for NYSERDA's Corporate Strategy Assessment, new market transformation strategies were analyzed to develop estimated cost effectiveness factors that yield 79% improvement when compared to existing market rate strategies. These factors represent the best assessment of expected program effectiveness at this time. They will be refined during the development of the Investment Plans and informed by actual program performance.

Q: Is the 79% more energy savings compared to Energy Efficiency Portfolio Standard (EEPS) based on NYSERDA's under spending of the full EEPS program budgets?

A: No, the comparison was made on a \$/MWh basis and the increased savings estimates are due to the nature of the investment being different.

Q: RE: Test-Measure-Adjust- Within the CEF's section on EM&V's test-measure-adjust approach, there is brief mention that test-measure-adjust will apply the "theory of change" can you expand upon this "theory of change" and how it will apply?

A: Each intervention will have a theory of change which defines long term goals and how they will be reached. The theory of change will be documented, mapping activities NYSERDA will undertake in the market to outputs, as well as near and long term outcomes. This discipline will be used to help define, in a transparent way, the key success metrics that will be routinely monitored as part of NYSERDA's testmeasure-adjust strategy, both for short term pilots and longer term strategies.

Q: How will energy savings be measured in prospective market transformation approaches?

A: In targeted market sectors we will characterize markets and establish baselines. We will measure energy savings from both a bottoms up savings, directly associated with a strategy based upon its theory of change, as well as top down total energy savings in a market sector, which we will seek to associate to the various strategies and independent actions in the market places.

Q: How will technical assistance, new tools, and demonstrations actually produce real, quantifiable energy savings?

A: We will work to monitor direct outcomes of technical assistance, tools, and demonstrations on initially supported projects and through partners we work with. We will also identify and quantify through market research the paths of replication and estimated impact as these activities gain awareness and use in the broader market.

Fuel Neutrality

Q: How does fuel neutrality provide equity to all ratepayers, especially low-income customers, ultimately providing collections to support the CEF?

A: Fuel neutrality takes account of the interdependencies among all energy systems - electricity, natural gas, and fuel oil. This interdependency has increased over the past years as natural gas system interruptions cause more need to use fuel oil to maintain electricity reliability. As fuel oil prices are also higher at these times, this may lead to increased electricity prices for all customers, including lowincome customers. Implementation of programs on a fuel neutral basis also allows programs to be more responsive to consumer approaches to energy, which are on a holistic basis and not in a fuel-specific basis. A fuel neutral approach to the CEF allows for development of industries that are responsive to meet all energy needs. For residential customers, and even more critical for low-income customers, fuel costs are generally a larger percentage of overall energy bills. A fuel neutral approach to the CEF will allow investments to support market options that customers will be demanding and thus potentially provide greater opportunity for success.

Market Development

Q: How will the \$40 million for workforce development be used?

A: The proposed \$4 million annually (for a total of \$40 million over 10 years) would facilitate workforce development activities that address skills gaps preventing business growth, career pathways for low-to-moderate income (LMI), support technical training for emerging technologies, and focus on job placement and career advancement. Funding will be through open enrollment offerings wherever possible, but competitive solicitations are also anticipated.

Q: The Multifamily Performance Program (MPP) Affordable program is not mentioned at all in the CEF proposal - neither in the Multifamily section or the LMI section. Will it continue during the transition period and beyond?

A: The LMI multifamily incentives (MPP, although not mentioned by name) is referenced on page 88 section 6.6.2 of the filing and is expected to continue into the transition period and beyond.

Q: The Supplemental Proposal repeatedly refers to "demonstration" programs. Does this refer to demonstration projects within the scope of REV, i.e. utility-proposed and funded programs? Or will CEF demonstration projects cover a more broad set of proposals?

A: As the CEF is complementary to the REV regulatory proceeding, demonstration projects under the CEF would be relevant to REV; however, they would be broader than utility proposed projects. The intent of CEF demonstration projects is to provide reference examples and generate how-to lessons for decision-makers that might otherwise hold off on likely sound clean-energy decisions out of lack of confidence and perceived riskiness. Therefore, demonstration projects are an important tool to get people to saying "yes" to good clean energy investments.

Q: For the Multifamily, Residential and LMI programs, is AMI useful? How important is submetering?

A: Possibly, but more information is needed. NYSERDA intends to look at some outcomes of Reforming the Energy Vision (REV) decision-making and the market will need to assess whether alternatives to wide-scale or universal submetering is necessary to provide the level of detail needed to provide appropriate options to customers.

Q: How will all of these changes work with the Consolidated Funding Application (which currently connects to a number of NYSERDA programs/ incentives)?

A: The Consolidated Funding Application was established as the single entry point for access to New York State economic development funding to access multiple state funding sources through one application, making the process quicker, easier, and more productive. NYSERDA has been undertaking a concerted effort to streamline its application and contracting processes, included those tied to the Consolidated Funding Application, to make it as clear and straightforward as possible for applicants to take part in its programs.

Q: I believe you mentioned in your presentation some coordination between Housing and Community Renewal's Weather Assistance Program (WAP) and the EmPower program. Could you discuss/explain this further? Thank you.

A: Coordination is intended to reduce the redundancy between program administration and services offered. NYSERDA and HCR have been meeting on a regular basis to discuss opportunities to align policy and increase reach of both programs.

Q: There was a mention of an adjustment to the MPP 15% savings threshold, can you elaborate?

A: We're exploring eliminating the requirement of a 15% energy savings threshold to participate in MPP. The revision would allow us to support projects of any size.

Q: How will the new construction incentive program be impacted over the next three years?

A: The New Construction program will continue to be modified and transition to focus on higher performance with a greater reliance on technical assistance in place of incentives over time. As needed, new construction incentives for LMI projects will transition more gradually with an emphasis on coordinating with and addressing gaps left by other funding agencies.

Q: Can you explain what you mean by "Self Direct"?

A: The Self Direct program is directed by the PSC for the utility programs only; large commercial and industrial customers will have the option to opt-out of the surcharge for utility programs and instead use the funds that they would have paid in ratepayer surcharges to invest in energy efficiency in their own facilities. The opt-out is not proposed to apply to the CEF.

Q: Self Direct is only for industrials or any large user? Will there be a minimum kW or kWh usage floor for those large industrial users seeking to self-direct?

A: The PSC's REV proceeding describe the Self Direct program as applying to larger commercial and industrial customers. The February 26, 2015 REV Order states DPS Staff and the utilities, in consultation with large commercial and industrial customers, will develop Guidance regarding the Self Direct program to be filed with the Secretary by August 3, 2015.

Q: Going forward, will Renewable Heat NY be funded solely through the CEF or will it continue to exist within the RGGI operating plan as well?

A: Renewable Heat NY activities that are included in the RGGI Operating Plan will continue to be funded as indicated there. However, if a fuel neutral CEF is granted, additional activities could be funded through the CEF.

Q: How much money will be provided for the development of the NY Generation Attribute Tracking System (NYGATS)?

A: NYSERDA has allocated approximately \$3 million in existing funds to develop and operate the NYGATS. The majority of these funds have already been allocated from System Benefits Charge and RGGI.

Q: Page 130 of the document states that: "NYSERDA can play a key role in facilitating the development of remaining renewable sites and increasing production from existing sites." How will this effort be funded?

A: This effort will be funded in the CEF as part of the Market Development Large-Scale Renewables (LSR) line item, which has \$11 million allocated to it over the first three years of the CEF. This is separate from the \$150 million Main Tier 2016 Solicitation line item.

Q: NYSERDA proposes to analyze and quantify the value of grid tied renewables and develop marketbased mechanisms to compensate generators for this value. How will this be funded?

A: This initiative involves highly analytical work, which will be funded from the CEF (from the Market Development LSR budget line, which has \$11 million allocated to it over the first three years of the CEF). The compensation mechanism is yet to be determined. Q: RE: the budget proposal by sectors, could NYSERDA provide a comparison to what budgets for these sectors have been during recent years (from SBC, EEPS, RPS)? That would be helpful to gauge the change in funding streams (though uses would differ, of course)

A: Following is a comparison of the proposed Clean Energy Fund (CEF) budgets for the Market Development and Innovation and Research portfolios, by segment, to existing average annual funding levels for NYSERDA programs. Please note that the CEF does not follow the exact program design and sector allocations as NYSERDA's current programs. Therefore, the following table reflects a comparison that aligns as close as possible between NYSERDA's current budget and proposed CEF budget. In some instances, current annual funding is supplemented

by funding provided through other sources not included in the summary, including but not limited to: Clean Air Interstate Rule (CAIR) funding, settlement agreements, funding provided through the Green Jobs-Green New York Act of 2009, and federal grants. As noted in the CEF Information Supplement, NYSERDA's 10-year estimated private investment leverage ratio is 4.2 for the Market Development portfolio and 5.0 for Innovation and Research portfolio. The Supplement also provides a comparison of certain market rate sectors of the existing NYSERDA EEPS portfolio which resulted in a leverage ratio of 4.6, whereas the CEF achievements for the same sectors are estimated at a leverage ratio of 6.3. NYSERDA's proposed CEF funding will work in the market alongside funding as proposed by utilities, as well as ongoing regulatory activities including Department of Public Service's Affordability and Large Scale Renewables proceedings.

Comparison of Proposed CEF Funding to Current	Funding								
	Current Annual Average Budget						Proposed CEF Budgets		
	EEPSII	TM&D	RGGI (Jan 2012 - Jun 2015)	RPS Non-PV CST	Total Average Annual Funding		2016	2017	2018
Market Development									
Commercial	50,494,000	11,997,000	-	-	62,491,000		66,000,000	49,300,000	32,000,000
Industrial	45,648,000	2,509,000	-	-	48,157,000	а	59,800,000	26,000,000	18,100,000
Agriculture	5,104,000	-	-	-	5,104,000		6,200,000	6,800,000	4,200,000
Multifamily - Market Rate	9,526,000	-	1,865,000	-	11,391,000		8,300,000	8,000,000	5,800,000
RES - Market Rate	17,758,000	6,645,000	2,493,000	-	26,896,000		17,400,000	17,800,000	16,700,000
LMI	79,807,000	-	9,044,000	-	88,851,000	b	75,500,000	78,500,000	80,500,000
New Construction (Non-LMI)	39,738,000	-	255,000	-	39,993,000		35,300,000	29,700,000	24,800,000
Codes	-	3,687,000	-	-	3,687,000		4,000,000	4,000,000	5,000,000
Energy Storage	-	-	-	-	-		6,000,000	8,000,000	8,000,000
Onsite Power	-	16,579,000	-	19,298,000	35,877,000	с	41,500,000	27,000,000	23,000,000
Renewable Thermal	-	-	3,037,000	2,088,000	5,125,000		5,000,000	10,000,000	14,000,000
Products	5,954,000	-	-	-	5,954,000		5,000,000	6,000,000	7,000,000
Communities	-	-	31,322,000	-	31,322,000	d	7,000,000	8,000,000	8,000,000
Workforce	-	9,008,000	-	-	9,008,000	е	4,000,000	4,000,000	4,000,000
Large Scale Renewables	-	3,083,000	455,000	-	3,538,000		3,000,000	4,000,000	4,000,000
Total Market Development	254,029,000	53,508,000	48,471,000	21,386,000	377,394,000		344,000,000	287,100,000	255,100,000
Innovation and Research									
Energy-Related Environmental Research	-	4,101,000	671,000	-	4,772,000		4,000,000	4,000,000	4,000,000
Smart Grid	-	10,453,000	-	-	10,453,000		12,000,000	13,100,000	15,100,000
Renewables and DERs Integration	-	8,362,000	-	-	8,362,000		18,900,000	14,500,000	14,600,000
Building Innovations	-	9,648,000	1,077,000	-	10,725,000		9,700,000	13,600,000	12,700,000
Clean Transportation	-	3,094,000	2,226,000	-	5,320,000		8,700,000	8,500,000	7,500,000
Innovation Capacity and Business Development	-	10,257,000	3,648,000	-	13,905,000		10,700,000	17,200,000	17,000,000
Other Innovation Initiatives	-	-	7,464,000	-	7,464,000		-	-	-
Total Innovation and Research	-	45,915,000	15,086,000	-	61,001,000	f	64,000,000	70,900,000	70,900,000
Total Market Development and Innovation	254,029,000	99,423,000	63,557,000	21,386,000	438,395,000		408,000,000	358,000,000	326,000,000

a - Funding for open-enrollment incentives for process efficiency will be reduced in 2017 when industrial businesses can take advantage of anticipated REV self-direct program b - NYSERDA anticipates that it will not fully commit approximately \$28.7 million of its approved EEPS2 electric funding, resulting in anticipated average annual commitments of approximately \$72.6 million in EEPS2 funding and approximately \$81.7 million in total average annual commitments including RGGI. Total average annual expenditures for LMI programs from January 2012 through June 2015 funded from SBC3, EEPS1, and EEPS2 have been \$54.3 million, and total average annual RGGI expenditures for same time period have been \$6.8 million, for total LMI annual average expenditures of \$61.1 million.

c - Funding support for CHP will be reflected for new market and rate structures anticipated under REV, as well as revised standby electric tariffs and rates.

d - Includes Cleaner, Greener Communities initiative, which reflects the program's last annual commitment of \$30 million, as well as other regional clean energy initiatives. e - Initiatives to support workforce development will also be included in several sector/program budgets.

f - Prior ratepayer and RGGI funds for Innovation and Research have been supplemented with additional funding from Clean Air Interstate Rule (CAIR) which is now expired (averaging about \$5 million in annual funding) and miscellaneous settlement agreements and federal grants.

Note: includes program funding, program administration, and cost recovery fee but excludes funding for program evaluation.									
Following is a reconciliation including Program Evaluation Funding:									
	2016	2017	2018						
Market Development									
Program and Administration	344,000,000	287,100,000	255,100,000						
Program Evaluation	12,600,000	11,200,000	10,200,000						
Total Proposed Funding	356,600,000	298,300,000	265,300,000						
Innovation and Research									
Program and Administration	64,000,000	70,900,000	70,900,000						
Program Evaluation	2,400,000	2,800,000	2,800,000						
Total Proposed Funding	66,400,000	73,700,000	73,700,000						

Q: What is the expenditure plan for the **\$11M** over the three year period, as outlined in the Market Development LSR line item?

A: Section 7.2 Large-Scale Renewables Market Development Approach in the CEF Information Supplement outlines the activities that NYSERDA proposes to engage that correspond to the LSR budget line item. Those activities include facilitating NY's renewables voluntary market, providing technical and pre-development assistance, developing appropriate energy market valuation for LSR, and enabling the development of the next generation of renewable technologies. Additional detail on the breakout of the budget amongst these initiatives will be provided in the Investment Plan.

Q: Can you elaborate on the different activities you envision being funded under Market Development vs. Innovation, particularly in relation to energy storage?

A: Under Innovation, proposed activities would support feasibility studies, product development and technology demonstrations for energy storage used in smart grid, renewable and distributed energy resources, buildings, and transportation applications. Market development activities would seek to remove barriers to deployment. These would include activities such as developing and validating models to quantify the value of customer-sited storage to the electric system; reducing soft costs through safety and performance validation, streamlined permitting, standard interconnection, and reducing customer acquisition cost; and working with the financial sector and aggregators to develop new financial and ownership models.

This strategy differentiation between Innovation investments and Market Development investments is generally consistent across the CEF portfolio, i.e. in Innovation we will be developing products, technologies and new businesses in strategic priority areas and in Market Development we will be removing barriers to clean energy adoption by developing supply chains, building a workforce, increasing consumer confidence and demand, reducing soft-cost and unleashing new financing strategies. Together this CEF portfolio can be powerful and transformative in New York State.

Innovation and Research

Q: How many clean tech companies have graduated from the incubator network?

A: We have launched six cleantech incubators across New York from Long Island to Buffalo. These incubators have helped 130 clean energy companies get a start with 40 companies having graduated from those incubators.

Q: Will any consideration be given to natural gas vehicles, which are much more efficient and environmentally-friendly compared to traditional electric vehicles?

A: In the CEF, the transportation area focus is on electric. We will also be looking for federal funding opportunities to support clean natural gas fueled vehicle activities.

Q: In the Clean Transportation focus, what was NYSERDA's intended approach toward tackling the opportunities surrounding electric vehicles?

A: NYSERDA intends to engage in consumer outreach, including to dealers, Original Equipment Manufacturers (OEMs), and consumers, a purchasing collaborative for charging stations, and work with large employers to promote uptake.

NY Green Bank

Q: How can the NY Green Bank be used to support large-scale renewables?

A: NYGB achieves its mission of accelerating clean energy deployment in New York State through investment in all types and sizes of eligible projects – from distributed, behindthe-meter renewable and efficiency initiatives to small-tomedium clean energy projects and LSR. NYGB is eager to participate in LSR projects that meet its investment criteria, including replicability, market transformation, additionality and environmental benefit elements (all as detailed in NYGB's investment RFP (available at http://greenbank.ny.gov/ Partnering-With-Us/Propose-an-Investment) and Business Plan from June 2015 (available at http://greenbank.ny.gov/ About/Public-Filings)).

NYGB can participate in various ways in the capital structure for a LSR project, through the provision of products like credit enhancements (e.g., letters of credit and guarantees, including in support of proposed rated debt issuances) and asset loans and investments (e.g., construction facilities, lease or PPA guarantees in certain cases, term loans, takeout equity etc.), all alongside private capital providers (e.g., sponsors, lenders, tax equity etc.). NYGB's typical investment size is between \$5.0 – 50.0 million.



