



**Financing Committee Meeting Minutes
Wednesday, February 7, 2018 at 3:00PM**

EIC Offices, 2051 Baldwin Road, Yorktown Heights, NY 10598 and via video conferencing at City Hall 515 North Ave, New Rochelle, NY 10801 and audio conferencing at 22 Market St # 15, Poughkeepsie, NY 12601

Present:

Heidi Seelbach, Committee Chair (audio only)
Charles B. Strome, III
Mark Thielking, EIC Executive Director
Alain Pierroz

A roll call was taken and Mark Thielking called the meeting to order at 3:05pm.

Mark described the progress of securing capital for PACE 2.0 and brought the committee up to date on the proposed municipal permanent loss reserves that completes that component of PACE 2.0.

Mark outlined Article 5L amendments which will accommodate no cap on commercial projects, allows metering solar projects and the use of state and federal funds for reserves. PACE 2.0 benefits now adds components to allow prepayment and construction financing. EIC's bond documents must be revised to allow prepayments and construction phase capital financing as well as simplify the flow of funds and lower EIC costs and to enable creditor reserves to be optional. EIC bond documents, Master Indenture and Master Inter-creditor Agreement, will require modifications to accommodate the PACE 2.0 amendments.

The Finance Committee will need to meet again in mid-March to review documents and make a recommendation to the full Board at their Annual Meeting of the Board for their approval of the new capital structure documents.

Mark discussed PFM 's, EIC's Financial Advisor, recommendations to properly size available reserve funds: Municipal Reserve Fund (MRF), Municipal Tax Delinquency Fund, Cash Flow Stabilization Fund and Debt Service Reserve. A summary of the reserve funds will be prepared for the Committee's review and for the proposal to the full board for their approval.

A discussion on what timeframes EIC would likely be notified of a property tax delinquency occurs and when a delinquent tax payment is made, how long is the accounting process and how quickly would the monies collected be disbursed to creditors.

There being no further discussion, the meeting ended at 3:55pm.



**ENERGY IMPROVEMENT CORPORATION
FINANCE COMMITTEE**

February 7, 2018 3-4pm

Energize NY Offices: 2051 Baldwin Road, Yorktown Heights, NY 10598

City of New Rochelle, City Manager's Office: 515 North Avenue New Rochelle, NY 10801.

Dutchess County Department of Finance, 22 Market Street, Poughkeepsie, NY 12601

Agenda:

1. Roll Call
2. Update the Committee on progress securing capital for PACE 2.0 **(Presentation)**
 - a) Edits to Master Indenture, Master Inter-creditor Agreement to include PACE 2.0 elements, Construction Finance, Pre-Payments
3. Approve new Reserve Fund structure for PACE 2.0
4. New Energize NY PACE Product: "No Make Whole PACE"
5. Upcoming PACE projects

To: Heidi Seelbach
Chair of the Finance Committee of the Board of Directors of Energy Improvement Corporation and Members of the EIC Finance Committee

Date: February 6, 2018

Re: EIC Reserve Structure

This memo makes recommendations about optimal EIC C-PACE reserve levels and structure based on detailed calculations performed by PFM, EIC's Financial Advisor. The recommendations determine EIC's preferred reallocation of NY Green Bank letters of credit between PACE 1.0 and 2.0 as well as using existing EIC sourced federal and project-based reserve funds.

For PACE 2.0, PFM has worked through a number of scenarios to properly size the reserve funds for ongoing program success and support. PFM has analyzed a wide variety of deal origination, payment delinquency and recovery, and reserve scenarios to develop recommendations for revised allocations of the currently held reserve funds. In all instances, we have assumed that the current Energize NY PACE facility (PACE 1.0) remains available and originates a small amount (~\$1M) of additional new transactions, until the anticipated full switch-over to PACE 2.0 by all municipal members.

Background

During the initial 2013 Program development and implementation with municipal members, EIC established several reserve funds available for a variety of specific distinct purposes.

Municipal Reserve Fund (MRF): If the municipality can demonstrate that it suffered a permanent loss and was not able to collect the amounts due through foreclosure or other means, then the municipality can collect the amount of the loss that was attributable to the Energy Improvement Charge from EIC's Municipal Reserve Fund (MRF).

Municipal Tax Delinquency Fund (MTDF): The Municipal Tax Delinquency Fund (MTDF) was created to provide member municipalities with access to a ready source of funds during the pendency of a delinquent charge associated with an Energize NY PACE financing. Municipalities have the option of participating in the MTDF by paying an upfront fee which is rebated if the MTDF is not utilized.

Cash Flow Stabilization Fund (CFSF): Used to manage timeliness anomalies between receipt of Municipal Payments and EIC debt service payments.

Debt Service Reserve (DSRF): Overflow from CFSF used to pay debt service in the case a Municipality withholds Tax Charge receipts to EIC.

For discussion purposes, initial reserve funding levels will be known as PACE 1.0 Reserves and can be summarized as follows:

CURRENT						
Reserve Fund	Payable To	PACE 1.0 (original)	Funding From	Purpose	Current Balance	Notes
Debt Service Reserve Fund (DSRF)	Trustee for Bondholder	Federal and NY Green Bank shared sources	DOE & NY Green Bank; overflows from CFSF once CFSF threshold of 1% is reached	Pays debt service in the event that adequate funds are not available after all municipal payments are received.	See Shared Reserves	Additional funding to DSRF originates from CFSF overflows once CFSF threshold of 1% is reached. Once DSRF reaches 1% of outstanding balance, additional overflow may flow to MRF or EIC Program Fund. Indenture allows payments from DSRF amounts to municipality in the event of permanent loss.
Cash Flow Stabilization Fund (CFSF)	Trustee for Bondholder	\$0 to start	Property owners 0.65% at close, 0.35% each year	Pays debt service during periods of timing mis-match between payments due and distributions from municipal members. Not a "draw on reserves."	\$21,959	When fund exceeds 1% of outstanding balance, EIC directs excess to DSRF (above) until it also reaches 1% of outstanding balance. ALL funds are project-sourced.
Municipal Tax Delinquency Fund (MTDF)	Municipal Members, optionally available	\$5,000,000 NYGB LOC	NY Green Bank LOC; property owners 0.25% at close	At their option, muni members can receive reimbursement for any make whole payments due to PACE delinquency. Upon recovery by muni, amount is paid back to fund.	\$5,002,557	\$5M Green Bank LOC with costs are 0.50% for undrawn and 1.86% for drawn funds. Includes project-sourced funds of \$2,557.
Municipal Reimbursement Fund (MRF)	Municipal Member	Federal and NY Green Bank shared sources	Property owners 0.35% at close	AKA permanent loss fund, available for any PACE amounts paid by municipality that are not recovered in tax sale.	See Shared Reserves	Funded at closing at 0.35%. Additional funds may flow to MRF from CFSF once CFSF and DSRF thresholds of 1% are reached. Balance shown includes project-sourced funds of \$6,354.

SHARED RESERVES	
Federally Sourced:	
- less than 30K population	\$351,433
- Orange County only	\$145,448
NY Green Bank (NYSERDA) Sourced:	
- large municipalities	\$500,000
FEDERAL AND STATE SOURCED	\$996,881
Project Sourced:	
- less than 30K population	\$3,813
- Orange County	\$248
- large municipalities	\$2,293
PROJECT SOURCED	\$6,354
TOTAL SHARED RESERVES	\$1,003,235
<i>Currently, no CFSF transfers have been deposited to the shared reserves.</i>	

Looking at all available amounts, sourced from federal, state and property-owners at closing, the total available reserve funds equal \$6,027,751. In addition to the amounts identified above, EIC maintains a dedicated fund for its warehouse with First Niagara of \$150,614; this amount is separate from the bond reserves and is not included in this analysis.

PACE 2.0 and Below "A"-rated Municipalities

In order to improve deal flow and with changes to NYS General Municipal Law Article 5-L completed, local law and municipal agreements are being amended to reduce several hurdles and allow new PACE products to emerge. The first new product, known as PACE 2.0, specifically addresses the following:

1. Maximum available financing amount increases from 10% of assessed value to 35% of assessed value.
2. Positive Savings –to-Investment Ratio (“SIR”) is required over life of project instead of annually.
3. Credit Support (e.g. reserves of 1%) may come from State or Federal sources, and will be implemented with the goal of facilitating the inclusion of municipalities with credit ratings below “A,” as well as unrated municipalities.
4. Projects may be funded and the tax charge added during construction.
5. Debt Service Reserve Fund (“DSRF”) and Municipal Reserve Fund (“MRF”) will no longer share funding. Each will have distinct funding amounts, additional detail related to these and other existing reserves to follows.

EIC and Bank of America, started funding projects with the condition that only municipal members with an “A” or higher rating would be accepted for funding. However, as the Program has progressed and project development has been occurring in a broader expanse of municipalities, it has become evident that unrated and below “A”-rated municipalities were interested in joining EIC and offering PACE.

PACE 2.0 Recommendations: Cash Flow Stabilization Fund (CFSF), Debt Service Reserve (DSRF) and Municipal Reserve Funds (MRF):

Taking into account a variety of scenario outcomes, delinquency and recovery assumptions (**see Appendix A: MRF Adequacy Testing Model Results for descriptions of assumptions), and available reserve funds; we are making the following recommendations for reallocation of reserves:

- **CFSF:** EIC will be converting from semiannual debt service payments to annual payments to coordinate timing with the payment of Municipal Payments. As such, the CFSF will not be needed and will be eliminated from PACE 2.0.
- **DSRF:** Due to lack of demand from capital providers, EIC will be removing the requirement of a DSRF from PACE 2.0.
- **MRF for EIC Members with credit ratings of “A” or Above A:**
 - \$250k from NYGB LOC#1, \$351k federal funds, \$29k of CFSF funds
 - Closing Fees of 20 bps and Interest Rate Surcharge of 20 bps.
- **MRF for EIC Members with credit ratings Below “A”:**
 - \$250k from NYGB LOC#1
 - Closing Fees of 30 bps and Interest Rate Surcharge of 30 bps.
- **Discretionary Reserve for EIC:** reserve to support EIC finance activities
 - Sourced from closing fee and interest rate surcharge

DETAIL: MRF for EIC Members with credit ratings of "A" or Above A

\$250k of NYGB LOC#1,

\$351k EIC sourced federal funds,

\$29k of existing Cash Flow Stabilization Fee funds

Closing Fees of 20 bps and Interest Rate Surcharge of 20 bps.

As the table below shows, in 100% of the time, the MRF grows steadily with fees 20 bps up-front and 20 bps ongoing. The only exception to this is an early, big loss on a large financing. With 1919 loans originated over 20 years, only a loss on one of the \$1.5 M loans right up front in the 5th year would be a problem where \$1.5M financings have annual payments of \$136k. If that municipality experiences an immediate 4-year total loss (non-payment in years 1-4) and a claim in year 5, it would induce a \$544k-\$680k loss to the MRF. Given that the MRF has not had time to grow very much, it would leave a balance of around 300k. The power of the fees is their cumulative impact, building over time. While this is an extreme outlier risk, if 100% certainty is needed to protect against a big early loss, a bigger initial deposit would be required.

MRF (A and Above - including all PACE 1 0 and A and above in PACE 2.0) - \$629.5k starting balance							
Maturity Rate	Total losses		Net MRF Growth		Minimum MRF Balance		Avg First Year of Negative MRF Balance
	Worst case	Average	Worst case	Average	Worst case	Average	
0.00%	0.00%	0.00%	\$10,656,010	\$10,656,010	\$629,498	\$629,498	N/A
0.50%	0.19%	0.09%	\$9,144,916	\$9,947,112	\$629,498	\$629,498	N/A
1.00%	0.28%	0.17%	\$8,494,491	\$9,304,347	\$629,498	\$629,498	N/A
1.50%	0.39%	0.25%	\$7,621,602	\$8,670,214	\$629,498	\$629,498	N/A
2.00%	0.53%	0.36%	\$6,531,132	\$7,863,980	\$629,498	\$629,498	N/A
3.00%	0.80%	0.51%	\$4,409,212	\$6,648,063	\$628,012	\$629,448	N/A
4.00%	1.07%	0.76%	\$2,273,390	\$4,693,083	\$629,498	\$629,498	N/A

DETAIL: PACE 2.0 MRF for EIC Members with credit ratings Below "A":

\$250k of NYGB LOC#1,

Closing Fees of 30 bps and Interest Rate Surcharge of 30 bps.

MRF fees of 30 bps up-front and 30bps ongoing for this pool keeps the balances positive 99% of the time, with the only exceptions being situations in which there are early losses on big loans.

MRF (Below A and unrated) - \$250k starting balance							
Maturity Rate	Total losses		Net MRF Growth		Minimum MRF Balance		Avg First Year of Negative MRF Balance
	Worst case	Average	Worst case	Average	Worst case	Average	
0.00%	0.00%	0.00%	\$5,179,684	\$5,179,684	\$250,000	\$250,000	N/A
0.50%	0.25%	0.09%	\$4,544,389	\$4,958,389	\$250,000	\$250,000	N/A
1.00%	0.36%	0.17%	\$4,235,817	\$4,742,540	\$250,000	\$250,000	N/A
1.50%	0.65%	0.23%	\$3,505,228	\$4,585,229	\$250,000	\$250,000	N/A
2.00%	0.64%	0.38%	\$3,518,842	\$4,188,321	\$250,000	\$250,000	N/A
3.00%	0.98%	0.64%	\$2,638,504	\$3,526,115	\$233,031	\$249,434	N/A
4.00%	1.11%	0.67%	\$2,302,706	\$3,435,139	\$52,629	\$243,421	N/A

PACE 2.0 Recommendations Municipal Tax Delinquency Reserve (MTDF):

Taking into account a variety of scenario outcomes, delinquency and recovery assumptions (see Appendix A for assumptions), and available reserve funds; we are making the following recommendations for reallocation of Green Bank (GB) Line of Credit #2

- PACE 2.0 Above A MTDF: \$750k from NYGB LOC#2
- PACE 2.0 Below A MTDF: \$750k from NYGB LOC#2

Analysis:

The MTDF model results are less dependent on delinquency rate, since delinquencies are always modeled to be repaid: 50% in year one, 30% in year two, and 20% in year three following the delinquency (the MTDF is paid back by the MRF for the 10% of delinquencies that are assumed to turn into permanent losses). In every case for both above A's and below A's, reserves of \$750k each in the >A and <A are robust (maintain positive balance, although very long-tail scenarios do experience minimum balances close to zero) at delinquency rates of 5%. The MTDF is assumed to be accessed more frequently than the MRF (because the likelihood of delinquency is higher than likelihood of permanent loss), but the average lowest balance per each 30 model iterations (column 5) is still close to the starting balance. In all cases the reserve grows by a similar amount (columns 2 and 3), as it is always replenished within 4 years of a delinquency, either by the property owner or the MRF. Note that for below A's, the minimum MTDF balances are similar to above A's, but the net MTDF growth is much lower. This is a byproduct of assuming less origination (and hence less origination income) for below A's than the higher rated category.

PACE 2.0 MTDF (A and Above) - \$750k starting balance					
Delinquency Rate	Net MTDF Growth		Minimum MTDF Balance		# of scenarios with negative MTDF Balances
	Worst case	Average	Worst case	Average	
0.00%	\$922,500	\$922,500	\$750,000	\$750,000	0
0.50%	\$920,773	\$922,344	\$657,559	\$741,038	0
1.00%	\$921,596	\$922,459	\$716,122	\$748,088	0
1.50%	\$921,703	\$924,658	\$698,217	\$742,536	0
2.00%	\$920,360	\$922,976	\$592,947	\$733,289	0
3.00%	\$909,501	\$921,604	\$381,731	\$670,543	0
4.00%	\$911,672	\$928,469	\$395,350	\$627,120	0
5.00%	\$897,271	\$933,895	\$229,207	\$542,572	0

PACE 2.0 MTDf (Below A and unrated) - \$750k starting balance					
Delinquency Rate	Net MTDf Growth		Minimum MTDf Balance		# of Negative MTDf Balances
	Worst case	Average	Worst case	Average	
0.00%	\$210,000	\$210,000	\$750,000	\$750,000	0
0.50%	\$207,606	\$211,192	\$613,708	\$739,977	0
1.00%	\$205,202	\$217,497	\$561,009	\$729,264	0
1.50%	\$201,563	\$210,805	\$474,674	\$708,236	0
2.00%	\$201,267	\$214,487	\$476,720	\$709,740	0
3.00%	\$194,310	\$210,969	\$410,377	\$644,337	0
4.00%	\$189,576	\$215,196	\$323,889	\$640,020	0
5.00%	\$190,973	\$208,959	\$300,332	\$570,133	0

APPENDIX A:

MRF and MTDf Funds Adequacy Testing Assumptions

PFM’s testing of fund adequacy assumes full payment from the municipality according to municipal law. Modeling for the MTDf and MRF assumes the following:

- A distribution of 75% of project originations allocated to PACE 2.0, “A” rated and above, and 25% of projects allocated to PACE 2.0 below “A”-rated and unrated municipalities. This corresponds to \$427.5 million and \$142.5 million, respectively, over 20 years of origination.
- For “A” and above municipalities, year 1 origination = \$7.5 million, year 2 origination = \$15 million, and years 3 and following = \$22.5 million.
- For below-A and unrated municipalities, year 1 origination = \$2.5 million, year 2 origination = \$5 million, and years 3 and following = \$7.5 million.
- For “A” and above municipalities, in each year assume 1 deal at \$1.5 million, 1 deal at \$1.0 million, 2 deals of \$750,000, and the remainder of originations split in equal amounts across deals of three sizes: \$500,000, \$250,000, and \$100,000. In years 1 and 2, due to their lower volume, assume fewer of the larger sized deals.
- For below-“A” and unrated municipalities, in each year assume 1 deal at \$1.5 million, 1 deal at \$1.0 million, 2 deals of \$750,000, 2 deals of \$500,000, 4 deals of \$250,000, and 15 deals of \$100,000. In years 1 and 2, due to their lower volume, assume fewer of the larger sized deals.
- All deals are assumed to have a 20-year term and an interest rate of 6.5%. Note that the time period being measured is 39 years, representing the last year of debt service on 20-year loans originated in year 20.
- All scenarios assume a four-year recovery period for delinquencies to realize full repayment (MTDf), or permanent loss (MRF). Delinquencies are assumed to be recovered as follows: 50% in the year following delinquency, an additional 30% in the subsequent year (two years after delinquency), and the final 20% in the subsequent year (three years following delinquency). All draws from the MTDf are repaid, either by the

property owner, or, in the event of a permanent loss, from a tax foreclosure collection, from the permanent loss fund (MRF).

- For the MTDF, it is assumed that municipalities assume a very conservative delinquency rate of 10%, such as they pay to be able to access up to 10% of debt service in a given year in the event that it becomes delinquent. Unused amounts are rolled over to the next year and are maintained in the MTDF balance for the life of the program. Such unused amounts are subtracted out of the final MTDF balance on the assumption that they are returned to municipalities.
- A permanent loss constitutes four consecutive years of non-payment, after which a property sale is assumed, with the new owner remaining current on any remaining assessment obligation.

MRF and MTDF Funds Adequacy Testing Model Specifications

Our model works as follows:

- Using the origination assumptions defined above, the model contains each individual loan. For each loan, two accompanying random numbers are generated.
 - The first is a random number between 0 and 1 that is compared with the specified likelihood of a permanent loss (more detail below). If the permanent loss rate specified is 1% (0.01) and the random number is 0.01 or less, that loan experiences a permanent loss (or in the case of the MTDF, a delinquency); otherwise full payment is made every year.
 - The second is a random number between 1 and 20 that determines, for loans having a permanent loss (or delinquency), in what year the four years of permanent losses (or the delinquency, whether it is one, two, or three years) begin.
- Every time the model is run (i.e. each model iteration), the random numbers change, and therefore so do the volumes and timing of permanent losses.

MRF Adequacy Testing Model Results

- The tables show the results of the funds adequacy testing for the MRF. Each line of the table represents the summary outcome of 30 model runs, as explained more fully below. “Worst Case” is the highest total loss rate out of 30 iterations; and “Average” is the average total loss rate across those same 30 iterations.
- The permanent loss rate represents the probability that an individual loan will experience a permanent loss. We tested likelihoods of 0.5% up to 4.0%.
- “Total losses” represents the total share of money not collected. For example, a permanent loss rate of 1.00% means that one out of every 100 properties would experience a permanent loss, which is defined as four consecutive years of PACE

assessments that are never paid. Note that these numbers tend to be about one-fifth of the permanent loss rate. This is because these are 20-year loans that experience four years of losses.

- Net MRF growth represents the difference between the ending MRF balance in year 39 and the initial amount capitalized into the MRF. Anything below zero is a net loss from the MRF, not necessarily a negative balance.
- Minimum MRF balance reflects the lowest balance reached by the MRF; the average minimum MRF balance is across 30 model iterations; the worst case is the lowest balance in any of those 30 iterations. A negative number means the MRF is overdrawn. Note: this requires extremely high permanent loss rates that are unprecedented.
- The Average First Year of Negative MRF balance takes the first year in which the MRF experiences a negative balance for each set of 30 model iterations and averages them. "N/A" means there are no negative MRF balances to average.

Below "A"-rated Municipalities – Analysis of Below A Municipal Credit

Based on a representative sample of 140 municipalities with tax lien authority statewide, PFM determined that 110 of those were rated "A" or better (79%), 20 were rated below "A" (14%), and 10 did not have a rating or had their rating withdrawn (7%).

Further analysis, using current and prospective target members without regard to rating, demonstrates a negligible difference in collection of property taxes across all property types:

	5 Year Average Percentage of Total Current Levy Collected	5 Year Average Percentage of Total Collections to Total Current Levy
Above "A"-rated (sample size)	94.92% (17)	98.35% (14)
Below "A"-rated (sample size)	94.62% (9)	98.86% (4)

This analysis¹ indicates that from a tax collection stand-point, the below-A rated municipalities are only a slight amount worse off for current year collections (-0.30%); but, when taking into account collections to the current levy, the below A municipalities actually fare slightly better (+0.51%). This second data point demonstrates the collection of prior year amounts. Even considering the above data, given the overall market and municipality sensitivity to ratings, we

¹ See Exhibit A for full data representation.

agree that separation of available reserves is advised to address these rating distinction concerns. However, based on the data available, we do not recommend higher fees for participating property owners in these lower-rated jurisdictions.

EXHIBIT A: Above and Below "A"- rated municipal tax collections

	Below A municipalities				Percent of total current levy collected							Percent of total collections to total current levy				
	Entity	Population	Rating	Average	2013	2014	2014	2015	2016	Average	2013	2014	2015	2016	2016	
Below A municipalities	Franklin County	51,589	NR / A- / NR	92.29%	90.61%	93.92%	92.35%			91.62%						
	Lockport City	21,119	Baa3 / BBB / NR	93.68%		93.62%	94.32%	95.17%								
	Monroe County	744,344	Baa1 / A / BBB+	99.15%	98.09%	99.49%	99.50%	99.50%								
	Newburgh City	29,026	Baa2 / NR / NR	92.27%	89.80%	93.90%	93.10%									
	Poughkeepsie City	32,790	Ba1 / NR / NR	95.94%	95.35%	97.87%	97.43%	96.11%		96.94%	96.36%	97.87%	97.43%	96.11%		
	Rockland County	311,687	Baa3 / BBB+ / NR	97.95%	98.09%	97.97%	98.03%	97.78%	97.92%	100.49%	100.27%	100.36%	100.54%	100.52%	100.46%	
	Saint Lawrence County	111,994	Baa2 / A / NR	89.03%	88.44%	90.08%	88.41%	89.19%								
	Suffolk County	1,493,350	A3 / A- / A-	96.20%	96.10%	96.30%	96.20%	96.20%		99.30%	99.80%	99.60%	99.30%	98.50%		
	Utica City	62,110	Baa2 / A- / BBB	94.28%	94.04%	93.72%	94.80%	94.49%	94.36%	98.78%			99.65%	98.64%	98.06%	
			94.64%						98.86%							
			9						4							

	A and Above municipalities				Percent of total current levy collected							Percent of total collections to total current levy				
	Entity	Population	Rating	Average	2013	2014	2014	2015	2016	Average	2013	2014	2015	2016	2016	
A and Above municipalities	Albany County	304,204	Aa3 / AA / NR	88.52%	89.61%	87.04%	88.17%	89.78%	89.99%	97.05%	98.30%	97.87%	97.47%	96.48%	95.13%	
	Broome County	191,906	A2 / A- / NR	94.41%	93.34%	94.40%	94.53%	94.62%	95.15%	98.23%	99.89%	99.62%	98.87%	97.63%	95.15%	
	Buffalo City	292,648	A1 / A+ / A+	95.01%	95.32%	94.85%	94.68%	95.19%		99.12%	99.67%	99.35%	99.18%	98.29%		
	Cayuga County	80,026	A1 / AA / NR	95.39%	95.85%	95.29%	95.65%	94.76%		97.61%	99.11%	98.58%	97.40%	95.36%		
	Columbia County	134,905	A1 / A+ / NR	92.68%	92.65%	93.02%	92.71%	92.32%		99.00%	99.76%	99.68%	99.61%	96.93%		
	Chemung County	88,830	A1 / NR / NR	95.00%	95.78%	94.72%	94.80%	94.71%								
	Corlandt Town	19,212	Aa2 / A+ / NR	98.87%	98.84%	98.88%	98.90%			99.10%	99.29%	98.99%	99.03%			
	Columbia County	919,040	Aa2 / A+ / A+	97.20%	97.00%	97.19%	97.32%	97.30%		98.80%	99.34%	98.85%	98.20%			
	Montgomery County	50,219	A1 / A+ / NR	91.92%	92.53%	90.69%	92.55%			95.40%	98.66%	94.99%	92.55%			
	St. Vernon City	67,780	A2 / AA / NR							98.87%	99.65%	99.30%	97.67%			
	Nassau County	1,339,532	A2 / A+ / A	98.73%	98.65%	98.74%	98.74%	98.79%		99.65%	99.92%	99.96%	99.94%	98.79%		
	Orleans County	234,878	A1 / AA / AA	93.00%	91.41%	92.13%	94.01%	93.74%	93.69%	99.00%						
	Rockwell City	23,755	A1 / NR / NR	97.08%	96.68%	96.90%	96.90%	97.83%		99.27%	99.76%	99.42%	98.28%	98.61%		
	Schenectady County	147,302	A1 / AA / NR	95.95%	97.84%	96.49%	94.69%	94.77%								
	Schenectady City	154,727	A3 / A / NR	93.38%		93.01%	93.46%	93.45%	93.59%							
	Syracuse City	145,151	A1 / A / A	94.31%		94.37%	93.92%	94.68%	94.26%	98.53%		98.45%	98.42%	98.82%	98.44%	
	Troy City	50,120	A2 / A- / NR	95.17%		95.00%	94.00%	94.90%	96.76%							
Warren County	197,399	A2 / A / NR	96.65%	95.88%	95.69%	97.32%	97.09%	97.26%	97.29%	97.54%	96.75%	97.58%	97.22%	97.34%		
			90.92%						98.35%							
			17						14							

EIC Finance Committee PACE 2.0 Capital Structure

February 7, 2018

Clean Energy Public Benefits

Property Assessed Clean Energy (PACE)



“Municipalities would fulfill an important public purpose by providing financing to property owners for the installation of renewable energy systems & energy efficiency measures.”

- Article 5L of the NYS General Municipal Law

- Repayments collected by municipality via tax bill charge

PACE Benefits

Property Assessed Clean Energy (PACE) = alternative, affordable financing

- **Up to 100% of the cost** of solar and energy efficiency projects of all sizes
- Eligibility is based on on the **building's ability to carry the extra tax charge** and generate savings from reduced energy costs
- **Repayment through an annual charge on the tax bill** for the property over the term of the loan
- **Automatically transfers to new owner** if the property is sold
- Flexible customizable loan terms up from 5 - 20 years
- **Competitive interest rates (5.00% to 6.25%)*** depending upon market conditions
- **Pre-Payments allowed**
- **Construction Finance**

Revisions to Bond Documents

- ✓ Pre-Payments
- ✓ Construction Phase Capital
- ✓ Indenture Payment Flows
 - Trustee Security Agent (to accommodate new PACE products)
 - Annual Pay Bonds (to reduce fees)
- ✓ Creditor Reserves Optional

PACE 2.0 – Bond Documents to Revise

EIC Documents:

1. Master Indenture
2. Master Inter-creditor Agreement

EIC/BOA Shared Documents:

3. BOA/EIC Master Purchase Agreement

BOA Documents:

4. Supplemental Indenture

Proposed PACE 2.0 Timeline + Loading Order

GOAL – Committed BOA capital by March 31, 2018

- EIC Legal Work began Jan 31: (Master Indenture, Master Inter-creditor Agreement)
- BOA Review of EIC Legal Work – Feb 5
- BOA PACE 2.0 Terms and Rates - Week of Feb 12
- Begin BOA / EIC Master Purchase Agreement – Feb 12
- 2nd Finance Committee approval – mid-March
- EIC Board Approval – Apr 4 (Annual Meeting)
- First PACE 2.0 Bond sale no sooner than July 31, 2018

Proposed PACE 2.0 Municipal Reserve Funds

Municipal Reserve Fund: If the municipality can demonstrate that it suffered a permanent loss and was not able to collect the amounts due through foreclosure or other means, then the municipality can collect the amount of the loss that was attributable to the Energy Improvement Charge from EIC's Municipal Reserve Fund (MRF).

EIC Members with credit ratings of "A" or Above A:

- \$250k from NYGB LOC#1, \$351k federal funds, \$29k of CFSF funds
- Closing Fees of 20 bps and Interest Rate Surcharge of 20 bps.

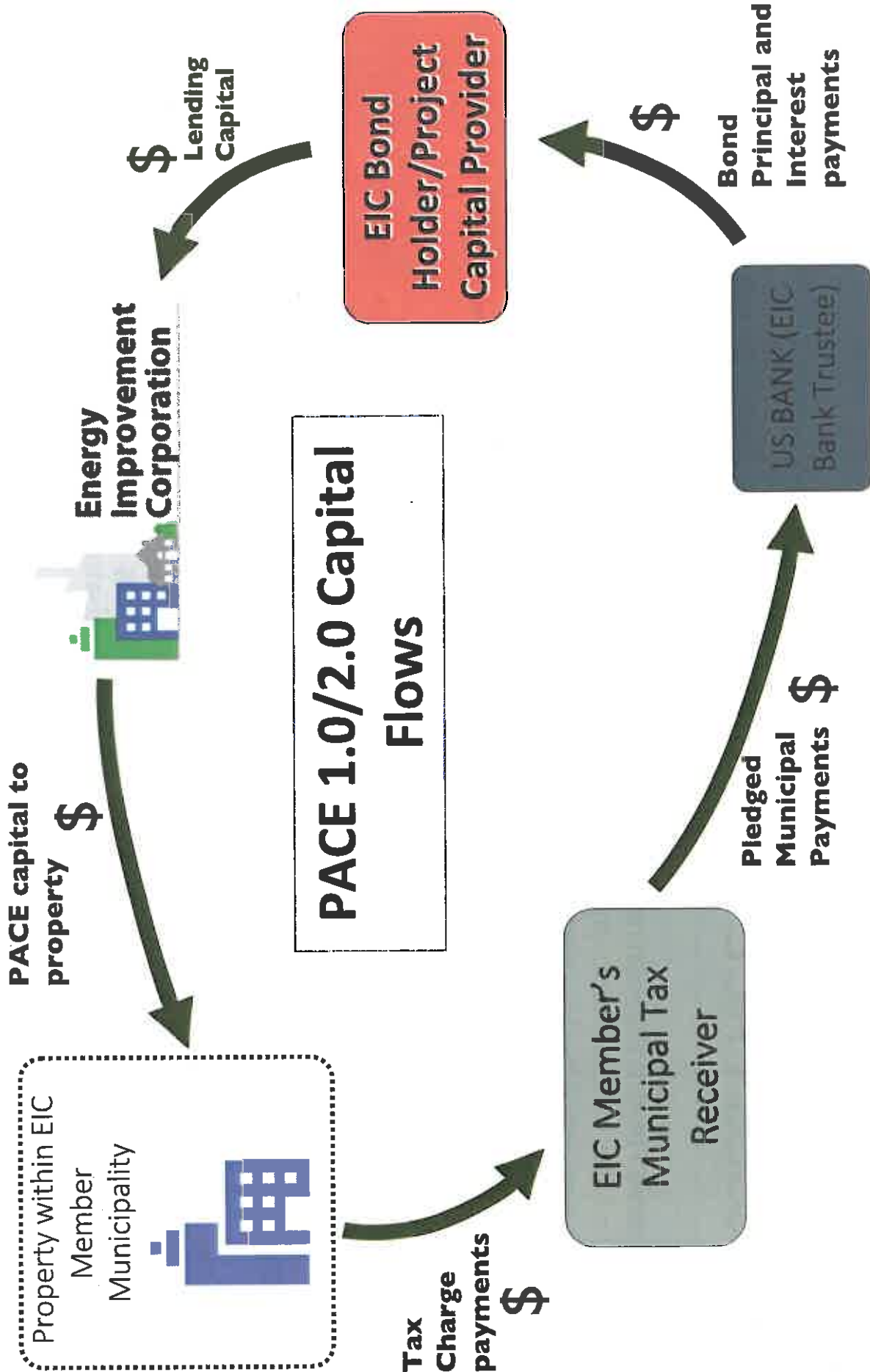
EIC Members with credit ratings Below "A":

- \$250k from NYGB LOC#1

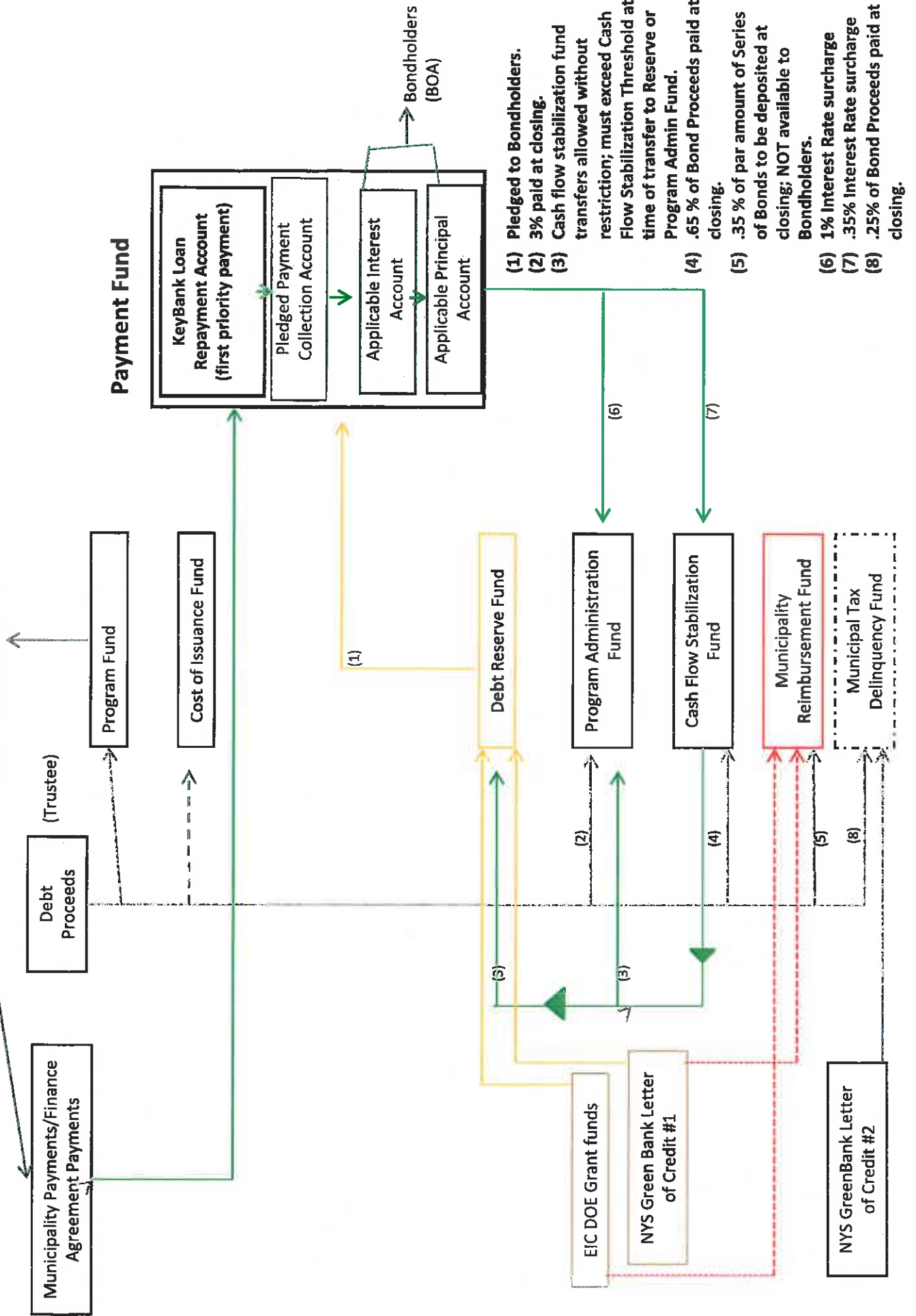
Municipal Tax Delinquency Fund: The Municipal Tax Delinquency Fund (MTDF) was created to provide member municipalities with access to a ready source of funds during the pendency of a delinquent charge associated with an Energize NY PACE financing. Municipalities have the option of participating in the MTDF by paying an upfront fee which is rebated if the MTDF is not utilized.

PACE 2.0 Above A MTDF: \$750k from NYGB LOC#2

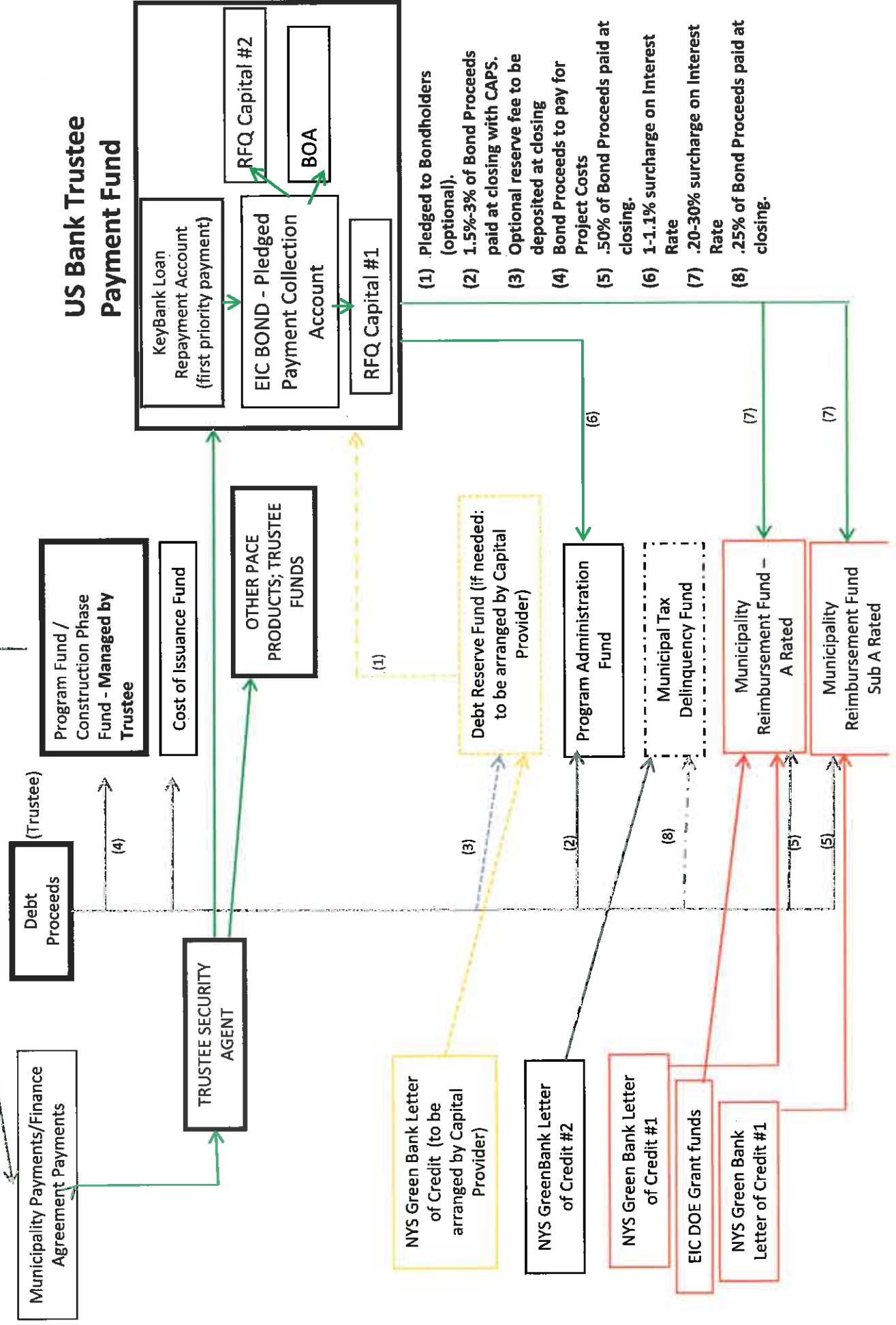
PACE 2.0 Below A MTDF: \$750k from NYGB LOC#2



PACE 1.0 FLOW OF MONIES



PACE 2.0- FLOW OF MONIES (Draft)



- (1) Pledged to Bondholders (optional).
- (2) 1.5%-3% of Bond Proceeds paid at closing with CAPS.
- (3) Optional reserve fee to be deposited at closing
- (4) Bond Proceeds to pay for Project Costs
- (5) .50% of Bond Proceeds paid at closing.
- (6) 1-1.1% surcharge on Interest Rate
- (7) .20-30% surcharge on Interest Rate
- (8) .25% of Bond Proceeds paid at closing.

PACE 1.0 - Fees

EIC Sourced Projects:

4.25% upfront fee*

1.35% interest rate surcharge**

RFQ Sourced Projects using ENY PACE:

3% upfront fee

1.35% interest rate surcharge***

Other fees:

\$100 – \$1000 Application Fee (EIC Sourced Projects only)

\$400 Title Search

Appraisal – (as needed)

*4.25% Upfront Fee:

3% to EIC

.65% to Cash Flow Stabilization Fund (CFSF)

.35% to Municipality Reimbursement Fund (MRF)

.25% to Municipal Tax Delinquency Fund (MTDF)

**1.35% Surcharge

1% to EIC

.35% to CFSF

***3% Upfront Fee:

1.75% to EIC

.65% to CFSF

.35% to MRF

.25% to MTDF

****1.35% Surcharge

1% to EIC

.35% to MRF

PACE 2.0 + “No Make Whole PACE” - Fees

- *3.75% Upfront Fee
3% to EIC (\$150k cap)
- .50% to Reserves (.20/.30MRF, EIC Reserve)
- .25% to MTDF
- **1.30% Interest Rate Surcharge
1% to EIC
- .30% to Reserves (.20/.30MRF, .10 EIC Reserve)
- ***2.25% Upfront Fee
1.5% to EIC (\$75k cap)
- .50% to Reserves (.20/.30 MRF, EIC Reserve)
- .25% to MTDF
- ***1.30% Surcharge
1% to EIC
- .30% to Reserves (.20/.30 MRF, EIC Reserve)
- *****1.5% to EIC (\$75k cap)
- *****.25% to EIC

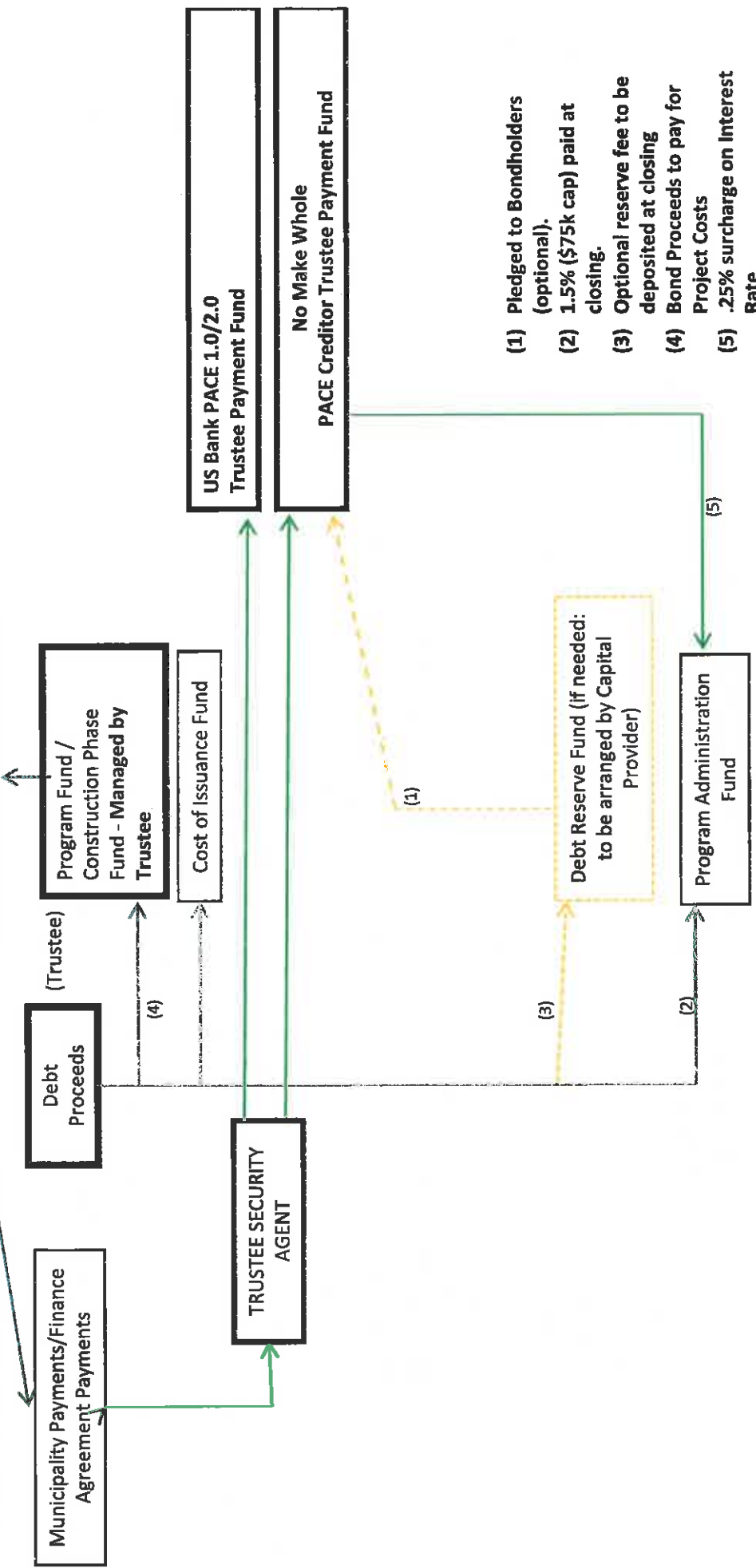
PACE 2.0 - EIC Sourced Projects:
 3.75% upfront fee* (EIC Fee capped at \$150k)
 1.30% interest rate surcharge**

PACE 2.0 - RFQ Sourced Projects using ENY PACE Capital:
 2.25% upfront fee*** (EIC Fee capped at (\$75k))
 1.30% interest rate surcharge****

RFQ Sourced Projects using “No Make Whole PACE”:
 1.5% upfront fee**** (EIC Fee capped at (\$75k))
 .25% interest rate surcharge*****

Other fees:
 \$100 – \$1000 Application Fee (EIC Sourced Projects only)
 \$400 Approx. Title Search
 Appraisal – (as needed)

NO MAKE WHOLE PACE (DRAFT) FLOW OF MONIES



Key Features:

PACE 2.0
PACE 1.0

	ENERGIZE NY PACE 2.0 PRODUCT DESCRIPTION	ENERGIZE NY PACE 1.0 PRODUCT DESCRIPTION
MAXIMUM AMOUNT OF FINANCING AVAILABLE	35% of the property's appraised value	10% of Appraised Value
MINIMUM FINANCE AMOUNT	\$10,000	\$5,000
LENGTH OF FINANCING TERM	Minimum term of 5 years and Maximum term of 20 Years	Minimum term of 5 years and Maximum term of 20 Years
ELIGIBLE MUNICIPALITIES	Municipalities with a Credit Rating Above Investment Grade, provided that municipalities rated A or better will have access to reserve pools that are separate from those for Below A rated municipalities	Municipalities with a Credit Rating Above "A"

Key Features:

PACE 2.0 PACE 1.0

ELIGIBLE PROJECTS	Energy efficiency and renewable energy projects, including remote net metering, that comply with NYSERDA and investor owned utility programs or otherwise meet NYSERDA's Commercial PACE Guidelines; renewable energy projects on new construction and substantial renovations are eligible	Energy efficiency and renewable energy projects that comply with NYSERDA and investor owned utility programs including certain Remote Net Meter Projects
ELIGIBLE PROPERTIES	Existing buildings owned by an entity, other than an individual, including new constructions and substantial renovations in the case of renewable energy projects	Existing buildings owned by an entity, other than an individual, including substantial renovations and new construction in the case of renewable energy projects
ELIGIBLE PROPERTY OWNERS	Not in bankruptcy; current on mortgage and property taxes for the past three years	Not in bankruptcy; current on mortgage and property taxes for the past three years
LOAN TO VALUE (LTV) LIMITATION	Property's total amount of land secured loans is less than or equal to 90%, including the requested PACE financing	Property's total amount of land secured loans is less than or equal to 90%, including the requested PACE financing

Key Features:

PACE 2.0 PACE 1.0

	Yes, must satisfy NYSERDA's cost effectiveness test, where the cumulative estimated savings must exceed the total cost of the project	Estimated Savings must be greater than total cost of improvements
COST EFFECTIVENESS/SIR TEST		
EIC MEMBER OBLIGATED TO PAY DURING DELINQUENCY	Yes	Yes
ABILITY TO ADD PACE TAX CHARGE TO BILL DURING CONSTRUCTION	Yes	No
MUNICIPAL RESERVE FUNDS	Yes	Yes

PACE 2.0

Finance Criteria

- **Improvements have savings-to-investment ratio > 1**
- **Financing capped at 35% of value of benefitted property**
- Property's total loan-to-value is no greater than 90%
- No bankruptcy within last 7 years
- 3 Year history of timely property tax payments
- No mortgage or other property related defaults
- Existing mortgage holder consent required
- **NYSERDA/Utility/C-PACE Guidelines** approved energy assessments and upgrade process