

# New York State Energy Research and Development Authority

\$24,300,000\*

Residential Energy Efficiency Financing Revenue Bonds  
Series 2013 A (Federally Taxable)

Investor Presentation

Andrew M. Cuomo, Governor

Richard L. Kaufman, Chairman  
Francis J. Murray, Jr., President and CEO

\*Preliminary and Subject to Change

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Energy. Innovation. Solutions.



New York State Environmental  
Facilities Corporation

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# Transaction Participants

## Issuer

**New York State Energy Research and Development Authority (“NYSERDA”)**

Jeff Pitkin, Treasurer

## Guarantor

**New York State Environmental Facilities Corporation (“NYSEFC”)**

Tracey H. Boyd, Deputy Director of Finance

James Levine, Senior Vice President and General Counsel

## Bond Counsel to NYSERDA

**Hawkins Delafield & Wood LLP**

John Connorton, Partner

Bruce Van Dusen, Partner

## Financial Advisors to NYSERDA

**Lamont Financial Services Corp**

Bob Lamb, President

**First Infrastructure, Inc.**

Steven Klein, Managing Principal

## Senior Managing Underwriter

**Citigroup Global Markets Inc. (“Citi”)**

Dan Tomson, Managing Director

Shai Markowicz, Director



# Presentation Agenda

- 1) Transaction Overview
- 2) New York State Energy Research and Development Authority
- 3) New York State Environmental Facilities Corporation
- 4) Payment Guarantee
- 5) Green Jobs Green New York (“GJGNY”) Series 2013A Financing Summary
- 6) GJGNY Program Overview
- 7) GJGNY Portfolio Details
- 8) Security for the Transaction
- 9) Projected Debt Service Coverage
- 10) Financing Overview
- 11) Conclusion

# Transaction Overview

<b>Issuer:</b>	New York State Energy Research and Development Authority
<b>Guarantor:</b>	New York State Environmental Facilities Corporation
<b>Preliminary Par*:</b>	\$24,300,000
<b>Use of Proceeds:</b>	Finance and refinance loans made by NYSERDA to fund energy audits and residential energy efficiency improvements for eligible applicants pursuant to NYSERDA's Green Jobs – Green New York program
<b>Pricing Date:</b>	July 30, 2013
<b>Settlement Date:</b>	August 13, 2013
<b>Structure*:</b>	Serial Bonds through 2023, Term Bond in 2028
<b>Tax Status:</b>	Taxable (Qualified Energy Conservation Bonds)
<b>Ratings:</b>	Aaa / AAA (Moody's and S&P)

# NYSERDA

- NYSERDA is a public benefit corporation created in 1975 under Article 8, Title 9 and Title 9A of the State Public Authorities Law
- The purposes of NYSERDA include the development and implementation of new energy technologies consistent with economic, social and environmental objectives and the development and encouragement of energy conservation technologies
- NYSERDA is an experienced issuer with over \$3.4 billion of outstanding tax-exempt bonds issued to finance qualified capital expenditures on behalf of New York investor-owned utilities
- Governed by a board consisting of 13 members, including the Commissioner of the Department of Transportation, the Commissioner of the Department of Environmental Conservation, the Chair of the Public Service Commission, and the Chair of the Power Authority of the State of New York, who serve ex officio
- NYSERDA is primarily funded by state rate payers through a System Benefits Charge (“SBC”)
  - These SBC funds are allocated towards energy-efficiency programs, technology and market development initiatives and programs to support the implementation of renewable energy technologies

# GJGNY Program – Legislative Authority

- **Green Jobs-Green New York Act of 2009 (Oct 2009)**
  - The GJGNY Program was authorized by Title 9-A of Article 8 of the Public Authorities Law of the State of New York, as amended to establish a program to provide funding to support sustainable community development, create opportunities for green jobs, and establish a revolving loan fund to finance energy audits and energy efficiency retrofits or improvements
    - \$112 million allocated from the proceeds of selling carbon dioxide allowances under the Regional Greenhouse Gas Initiative
- **Power NY Act of 2011 (Aug 2011 – amended in 2012)**
  - Establishes an on-bill recovery mechanism for repayment of GJGNY loans
    - Utility customers of: Central Hudson, Con Edison, NYSEG, National Grid, Orange & Rockland, Rochester Gas & Electric, and Long Island Power Authority
  - Requires the Authority to record, with the appropriate recording officer, a declaration of the existence of the loan with respect to the property improved
  - Prior to sale of property, seller must provide written notice of the loan to purchaser
  - Unless satisfied prior to sale, on-bill recovery charge survives changes in ownership

# NYSEFC Program Background



- NYSEFC manages the largest State Revolving Fund (SRF) program in the U.S., providing financial assistance to local governments and other public entities in the State to finance or refinance clean water and drinking water projects
- NYSEFC's SRF assets exceed \$12.2 billion<sup>(1)</sup>
- NYSEFC has issued \$15.5 billion<sup>(2)</sup> in SRF Bonds to date of which approximately \$6.1 billion<sup>(2)</sup> are currently outstanding
- NYSEFC determined that reductions in fossil fuel combustion and related reductions of air pollutants being emitted and deposited into New York State's water bodies which are forecasted to be achieved through the GNGJY Program qualify the GJGNY Program for financial assistance under the Clean Water SRF
- **Organization**
  - NYSEFC is a public benefit corporation created by the New York State Legislature in 1970
  - NYSEFC is governed by a board of 7 Directors, 3 of whom are required to be certain State officials. The remaining 4 are appointed by the Governor and confirmed by the State Senate
- **Mission**
  - NYSEFC's mission is to provide low-cost capital and expert technical assistance for environmental projects in New York State
- **Clean Water (CW) and Drinking Water (DW) State Revolving Funds**
  - Responsible for managing the CW SRF and DW SRF on behalf of grant recipients
- **SRF Bond Issuance to Date**
  - Bonds have been issued under three primary programs: the 1991 Master Financing Indenture ("1991 MFI") Program, the 2010 Master Financing Indenture ("2010 MFI") and the NYSEFC senior and subordinated financings for New York City Municipal Water Finance Authority ("NYCMWFA")
  - NYSEFC SRF Bonds are secured by pledged recipient payments
  - NYSEFC has made 1,495 leveraged financings to 387 recipients and there have been no shortfalls in recipient payments
- For more information, please refer to the NYSEFC website: <http://www.efc.ny.gov/>

(1) As of March 31, 2013.

(2) Reflects the issuance of NYSEFC's Clean and Drinking Water State Revolving Fund 2013B Bonds on August 1, 2013.



# The Guarantee



Pursuant to the Series 2013A Guarantee the NYSEFC will irrevocably and unconditionally guarantee to the Trustee for the benefit of the owners from time to time of the Bonds: (i) the full and timely payment of all scheduled payments of principal and of interest on the Bonds, and (ii) payments of principal, interest and redemption premium, if any, by reason of optional redemption when such optional redemption is consented to in writing by the Guarantor pursuant to the Indenture

- The Series 2013A Guarantee constitutes a 2010 MFI guarantee under NYSEFC's 2010 Master Finance Indenture ("2010 MFI")
  - The 2010 MFI senior lien indebtedness is rated Aaa / AAA / AAA
  - The Series 2013A Guarantee will be a subordinate obligation under the 2010 MFI payable from the sources specified under the 2010 MFI
- The Series 2013A Bonds are rated Aaa / AAA based on the NYSEFC Guarantee, which constitutes a Credit Facility as defined in and under NYSERDA's Indenture. The Series 2013A Guarantee shall not be a debt of the State nor shall the State be liable pursuant thereto

# 2010 MFI Overview

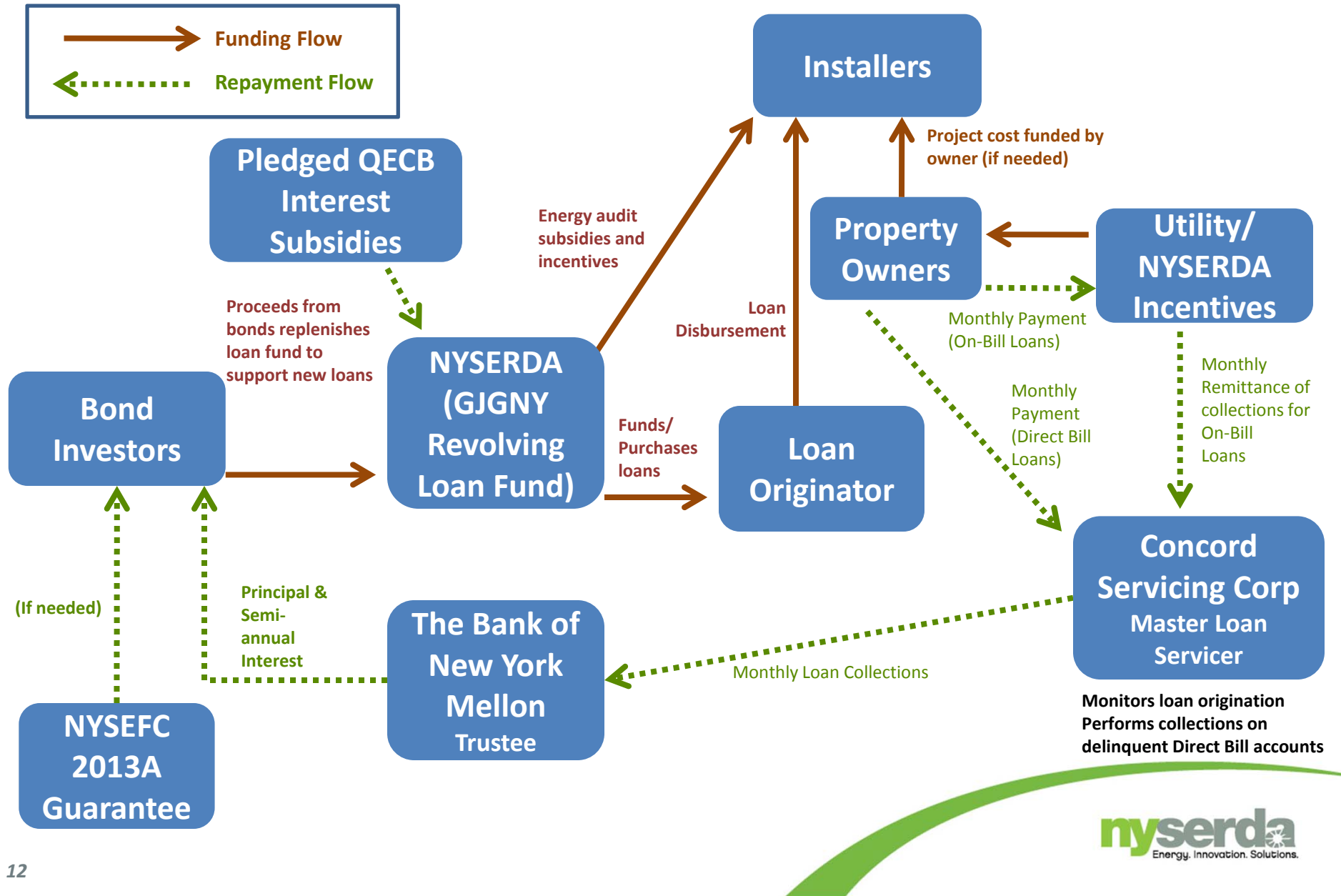


- Through the 2010 MFI, NYSEFC continues to offer AAA-rated bonds
- Projected pledged recipient payments provide strong over-collateralization of 2010 MFI bonds ( minimum of 1.46x)
- Available equity account balances provide a contingent source of payment for 2010 MFI bonds
- Diversified group of recipients, with most recipient financings evidenced by general obligation bonds
- **Recipient Payments are Pledged to the 2010 MFI**
  - Recipients provide general obligation or revenue bonds to NYSEFC and are NYS municipalities or authorities
  - Recipient payments are pledged to the 2010 MFI
  - Cashflows from equity funded recipient financings provide over-collateralization
- **1991 MFI and NYCMWFA Indenture Reserve De-allocations are Pledged**
  - NYSEFC has \$224 million<sup>(1)</sup> in reserves allocated to the 1991 MFI and \$1 billion<sup>(1)</sup> in reserves allocated to the NYCMWFA Indenture. As bonds in these programs amortize or if they are refunded with bonds issued under other indentures, associated reserve amounts “de-allocate”
  - De-allocated reserves are available to the 2010 MFI after curing any deficiencies in the 1991 MFI and the NYCMWFA programs. After any deficiencies in 2010 MFI Senior debt service are met, reserves are available to satisfy 2010 MFI subordinate obligations
- **NYSEFC Unallocated Equity Accounts Provide a Contingent Source of Payment**
  - SRF Equity account balances total \$1.3 billion as of July 22, 2013
  - NYSEFC’s investment policies direct NYSEFC management to liquidate equity investments in the event that funds are needed for payment of 2010 MFI Obligations, after all other amounts are deemed insufficient
  - These amounts are available to satisfy Senior and Subordinate 2010 MFI obligations on parity

# GJGNY 2013A Financing Summary

- Through NYSERDA the Green Jobs-Green New York Act of 2009 established a revolving loan fund and innovative financing mechanisms to provide loans to finance energy efficiency improvements for:
  - Residential 1-4 family dwelling (up to \$26,000)
  - Multifamily buildings (program limit \$5,000/unit or \$500,000 per building)
  - Small business (<101 employees) and not-for-profit structures (up to \$50,000)
- The residential loans consist of two types:
  - Direct Bill loans (approximately 65%)
    - Consumer obligor is billed monthly by the Master Loan Servicer (Concord Servicing Corporation)
  - On-Bill Loans (approximately 35%)
    - Monthly loan installment will be incorporated in the consumers' monthly utility invoice
    - Installment is subordinate to the collection of the monthly commodity charge
- The Bonds are secured by a pledge of loan payments from 3,116 residential loans originated since November 2010, aggregating approximately \$29.98 million in original principal, and an outstanding principal balance of \$27.75 million as of June 30, 2013
- Additional \$1.48 million in residential loan principal will be originated no later than December 31, 2013 (but expected within 1-2 months of transaction closing) and will become additional pledged revenue
- Bonds will be sold as taxable Qualified Energy Conservation Bonds (partial interest subsidy from US Treasury)
  - Subsidy to NYSERDA equals lesser of (i) the interest payable on the QECBs on an interest payment date, or (ii) 70 percent of the amount of interest which would have been payable if the interest were based on the applicable tax credit rate
  - The Budget Contract Act of 2011 and the Sequestration Transparency Act of 2012 reduced by 8.7% the amounts payable for direct subsidy payments for QECBs for the federal fiscal year ending September 30, 2013. The projected Pledged Interest Subsidies assume continuation of the 8.7% reduction in direct subsidy payments for all Bond Years.

# GJGNY Residential Program Diagram



# Portfolio Composition and Attributes

## Key Loan Attributes

- Not subject to a prior perfected lien
- An original maturity of not more than 15 years
- Maximum principal balance of \$26,000
- Repayment via level scheduled monthly payments
- Loans are geographically dispersed across the State of New York
- FICO® score of at least 640
- **The pledged GJGNY loan portfolio has had very modest delinquency and loss experience thus far**

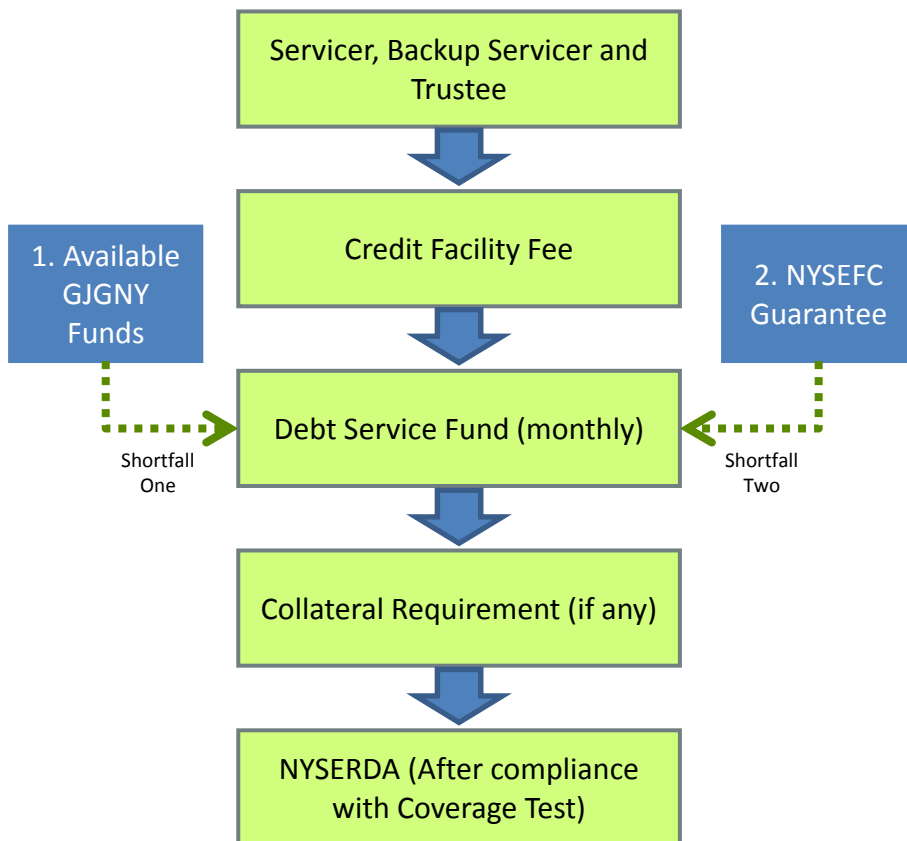
## Composition of the Initial Portfolio Loans as of the Cutoff Date

	<u>On-Bill Loans</u>	<u>Direct Bill Loans</u>	<u>Total</u>	
Aggregate Principal Balance	\$8,706,602	\$19,040,971	\$27,747,573	
Percentage of Pool Balance	31.4%	68.6%	100.0%	
Number of Initial Portfolio Loans	829	2,287	3,116	
Average Principal Balance	\$10,503	\$8,326	\$8,905	
Average Coupon Rate	3.05%	3.58%	3.44%	
Average Original Term*	173.9	145.0	152.7	
Original Term* (Range)	60-180	60-180	60-180	
Average Remaining Term*	170.4	129.8	140.6	
Remaining Term* (Range)	50-180	13-180	13-180	
*Months	Average FICO® Score	752	751	751

# Flow of Funds and Security

- Pledged Revenues consist of all Pledged Loan Payments and Pledged Interest Subsidies and all money, revenues and receipts to be received thereunder
- NYSEFC will provide a guarantee of gross principal and interest on the Series 2013A bonds

## Flow of Pledged Revenues Under Indenture



## Indenture Provisions

### Substitution of Loans:

Authorizes substitution of Portfolio Loans by the Authority based upon meeting Coverage Test and loan criteria

### GJGNY Funds:

To the extent there is a deficiency of Pledged Revenues to meet the debt service requirements, NYSERDA may transfer GJGNY Funds to the extent available to meet the deficiency

### Coverage Test:

Net Pledged Revenues, together with amounts held in the Reserve Fund and Debt Service Fund, are equal to or greater than 110% of Maximum Annual Debt Service for the then current and each future Bond Year

# Projected NYSERDA Debt Service Coverage\*

Bond Year Ended (June 30)	Total Pledged Revenues (Loan + Subsidy) <sup>(1,2)</sup>	Credit Facility Fees and Admin Expenses <sup>(3)</sup>	Net Pledged Revenues	Annual Debt Service <sup>(4)</sup>	Debt Service Coverage
2014	\$3,649,173	\$276,850	\$3,372,324	\$2,720,995	124%
2015	3,731,934	273,040	3,458,894	2,664,359	130%
2016	3,689,689	266,605	3,423,085	2,673,634	128%
2017	3,473,510	253,707	3,219,803	2,474,574	130%
2018	3,216,754	239,342	2,977,412	2,288,424	130%
2019	3,058,715	229,464	2,829,252	2,233,563	127%
2020	3,008,300	224,380	2,783,920	2,238,180	124%
2021	2,933,075	217,745	2,715,330	2,169,562	125%
2022	2,635,785	198,145	2,437,640	1,926,999	126%
2023	2,315,917	178,210	2,137,708	1,731,071	123%
2024	2,134,989	166,465	1,968,524	1,621,898	121%
2025	2,068,640	161,666	1,906,974	1,530,764	125%
2026	1,986,399	155,391	1,831,008	1,501,048	122%
2027	1,651,623	132,324	1,519,299	1,145,320	133%
2028	924,193	85,326	838,867	686,750	122%
<b>Total</b>	<b>\$40,478,696</b>	<b>\$3,058,658</b>	<b>\$37,420,038</b>	<b>\$29,607,141</b>	

1. Does not include estimates of loan prepayments or defaults. Actual loan prepayments and loan defaults will affect debt service coverage.
2. The Budget Contract Act of 2011 and the Sequestration Transparency Act of 2012 reduced by 8.7% the amounts payable for direct subsidy payments for Qualified Energy Conservation Bonds for the federal fiscal year ending September 30, 2013. The Pledged Interest Subsidies shown assume continuation of the 8.7% reduction in direct subsidy payments for all Bond Years.
3. Includes estimated fees for Servicer, Backup Servicer, and Trustee.
4. For purposes of determining Debt Service Coverage, principal and interest due on each July 1 is assumed to accrue on the preceding June 30.

\*Preliminary, subject to change.

# Financing Detail

- The Series 2013A Bonds are the first issue of Bonds to finance and refinance energy efficiency improvements in residential (1-4 family) dwelling units as a part of the Authority's Green Jobs-Green New York program
- Approximate par amount of \$24.3 million\*
  - Fixed rate structure
  - Taxable Qualified Energy Conservation Bonds
- Dates
  - Principal due: July 1
  - Interest payable: July 1 and January 1
  - Optional redemption:
    - Make-whole call on all bonds
    - 10 year optional par call on 2028 term bond
- Credit Ratings
  - Aaa / AAA

## NYSERDA Residential Energy Efficiency Financing Revenue Bonds, Series 2013 A (Federally Taxable)

Series 2013A			
Preliminary Amortization*			
<u>Serial Bonds</u>			
7/1/2014	2,195,000		
7/1/2015	2,080,000		
7/1/2016	2,105,000		
7/1/2017	1,930,000		
7/1/2018	1,775,000		
7/1/2019	1,755,000		
7/1/2020	1,800,000		
7/1/2021	1,780,000		
7/1/2022	1,590,000		
7/1/2023	1,445,000		
<u>Term Bond</u>			
7/1/2028	5,845,000		
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; padding: 5px;">Total:</td> <td style="border: 1px solid black; padding: 5px; text-align: right;">\$24,300,000</td> </tr> </table>		Total:	\$24,300,000
Total:	\$24,300,000		



# Schedule

July 2013							August 2013						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
	1	2	3	4	5	6					1	2	3
7	8	9	10	11	12	13	4	5	6	7	8	9	10
14	15	16	17	18	19	20	11	12	13	14	15	16	17
21	22	23	24	25	26	27	18	19	20	21	22	23	24
28	29	30	31				25	26	27	28	29	30	31

- Electronic Posting of Preliminary Official Statement -- Tuesday, July 23, 2013
- Pricing -- Tuesday, July 30, 2013
- Closing and Delivery -- Tuesday, August 13, 2013

## Senior Manager



## Co-Managers



# Conclusion

- Series 2013A will be the inaugural bond issue under NYSERDA's Green Jobs-Green New York program
- The NYSEFC Guarantee of Series 2013A represents its inaugural SRF guarantee
- The bonds will be secured by:
  - Residential energy efficiency loan portfolio repayments
  - QECB subsidy payments from the US Treasury
  - NYSEFC guarantee
  - Other RGGI funds
- Characteristics of the loan portfolio and debt service structure include:
  - Average FICO score of participants in the initial loan portfolio is 751
  - Debt service coverage requirement under the Indenture of at least 1.10x
- Series 2013A bonds are rated Aaa / AAA

With questions, please contact your institutional sales representative or

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