NEW YORK CITY
HOUSING DEVELOPMENT
CORPORATION

MEMORANDUM

To: The Chairperson and Members

From: Marc Jahr
President

Date: November 29, 2012

Re: HDC Energy Retrofit Loan Program ("ERLP")

I am pleased to recommend that the Members approve the Corporation's Energy Retrofit Loan Program ("ERLP" or the "Program") with funding of up to $17,500,000 from the Corporation's unrestricted reserves to make loans that finance energy improvements and clean heat conversions in eligible projects currently in the Corporation's portfolio or that of the New York City Department of Housing Preservation and Development ("HPD"). The Program has been developed in conjunction with the New York City Energy Efficiency Corporation ("NYCEEC"), an independent, non-profit financial corporation established by New York City to assist the City in implementing its Greener, Greater Buildings Plan and to advance the goals of PlaNYC. To support the Program, NYCEEC has established a $2,500,000 top-loss debt service reserve fund to be held by the Corporation, subject to the Corporation's Investment Guidelines ("ERLP Reserve"). Once a sufficient number of loans are made under the Program, the Corporation expects to issue taxable bonds to replenish the Corporation's reserves; the Members' approval for such bonds will be sought at the time of bond issuance.

Purpose

The Program intends to be a source of financing available to help building owners comply with Local Law 87 and Local Law 43, two essential components of PlaNYC's Greener, Greater Buildings Plan ("GGBP"). Local Law 87 requires that all buildings over 50,000 square feet commission energy audits every ten years and upgrade their base building systems. Local Law 43 requires buildings to convert any heating systems that burn "residual fuel" (No. 6 or No. 4 oil) to No. 2 oil or natural gas.

Energy efficiency loans financed under the Program shall also support retrofits designed to maximize energy efficiency and subsequently induce building operation savings. The Program requires that retrofits financed through ERLP loans can demonstrate a minimum of 15% projected energy savings (on a usage basis).

Staff have identified an initial pipeline of eligible properties in the Corporation's portfolio that must comply with the aforementioned GGBP laws as well as properties that have been identified as high fuel spenders. This initial pipeline includes more than sixty properties financed under the Corporation's Affordable Housing Permanent Loan Program ("AHPLP"), Low-Income Affordable Marketplace Program ("LAMP") and Mitchell-Lama Restructuring Program ("MLRP"). Staff have also identified several priority projects whose base energy systems were affected by Superstorm Sandy that would benefit from loans conveyed through the ERLP.

Use of Proceeds

The $2,500,000 in NYCEEC funds will be leveraged at a ratio of 7:1 to create the ERLP in an amount totaling $17,500,000. The Corporation's staff believes that the establishment of the ERLP Reserve will enable the Corporation to mitigate the risk of such subordinate lending while also leveraging the funds available to NYCEEC to support the GGBP. The ERLP shall be used to make subordinate loans to fund energy efficiency improvements identified through an energy audit process. Eligible costs under the Program include, but are not limited to:

- ASHRAE Level II energy audit
- Residual fuel conversions
- Heating and cooling systems upgrades and replacement
- Lighting replacement
- Cogeneration facilities
- Ventilation
- Insulation
- Installation of building management systems
- Any required asbestos and lead remediation activities specifically related to the above work

A portion of the loan proceeds may also be used for other necessary building improvements, based on the current building condition, that are not specifically related to energy efficiency improvements but are reasonable scope of work items as requested by the Borrower and approved by the Corporation.

Loan Terms

ERLP loans (each a "Loan" or collectively, the "Loans") will typically have a maximum term of 10 years and shall be permanent upon loan closing. A 6-month interest-only construction period may be included in the term of the Loan for projects with rehabilitation scopes that extend beyond the energy efficiency-related work. In such cases, a Loan may be structured with a term of up to 12 years. The Loans will be self-amortizing with an all-in rate of approximately 4%. HDC will earn 0.4% combined for servicing and credit enhancement (0.2% servicing; 0.2% credit enhancement), and NYCEEC will earn 0.6% as a credit enhancement fee.

The Loans will typically be secured by a subordinate lien. For properties that have no other liens, the Loans will be secured by a senior lien. Where a first or second lien for the Loan is not reasonably possible due to covenants associated with the senior lien on the property or other specific circumstances associated with the property, the Loan may be unsecured. Loans will be offered to buildings that currently or are projected to generate excess cash flow after scheduled debt service, or to properties with excess reserve capital or that complete a rent or mortgage restructuring in conjunction with the improvements for which they obtain a Loan. The debt service coverage ratio for projects may be as low as 1.00 including the Loan, as determined by the Corporation's Credit Committee on a project-by-project basis.

Loans will be underwritten and originated by the Corporation's Asset Management division, according to the Corporation's standard underwriting and approval processes. Loans failing to conform in one or more respects with the ERLP term sheets, or that are over $2,000,000 for a single project, will be subject to review by NYCEEC at its staff level. NYCEEC has reserved the right to add additional layers of approval for loans that can be interpreted to deviate from the intended purpose of the program. All Loans shall be subject to the Corporation's Credit Committee approval.

Please see the attached ERLP Term Sheets for additional detail on structure, eligibility, and fees.

Risks and Risk Mitigation

The primary risk associated with the ERLP stems from a Borrower's inability to repay a Loan. To mitigate this risk and induce the Corporation to make these subordinate, uninsured Loans, NYCEEC funds will be deposited into the cash-funded ERLP Reserve held by HDC to provide top-loss protection to the Corporation in the event that any Loan is not repaid by the respective borrower. As noted above, NYCEEC has initially committed $2,500,000 to the ERLP Reserve and may provide additional funds if warranted by the volume of the Program. The Credit Enhancement will be structured on a pooled basis for all Loans in the portfolio. Annually the credit enhancement fund will be rebalanced to maintain the 7:1 ratio based upon the dollar amount of Loans made to date. In the event of an unresolved payment deficiency by a borrower, the Corporation may draw on this reserve fund semi-annually to cover debt service payments on loans that are 90 days or more delinquent for the prior six months.

In addition to review by the Corporation, ERLP will have particular requirements and scope items intended to measure and ensure the projected energy savings. NYCEEC and HDC have designed a Technical Guidance Manual to inform the energy auditors' rigorous qualifications and scope of work, as well as comprehensive monitoring and verification tasks.

Action by Members

The Members are requested to: (i) approve the funding of the Energy Retrofit Loan Program from the Corporation's unrestricted reserves in an amount not to exceed $17.5 million, (ii) authorize the President of HDC to make repair loans subject to HDC's Credit Committee Approval, and (iii) authorize any authorized officer of the Corporation to execute any document necessary to effectuate the making of the Energy Retrofit Loan Program and Loans thereby advanced.

New York City Energy Efficiency Corporation
New York City Housing Development Corporation

Energy Retrofit Loan Program Term Sheet

The following DRAFT Term Sheet is provided for convenience only and does not constitute a commitment to lend or borrow or an agreement to issue or accept a commitment on these or any other terms or to arrange any financing and shall not create a binding or legally enforceable obligation on the New York City Energy Efficiency Corporation (NYCEEC) or any other party in any way. The terms contained herein are of a summary nature and are not all-inclusive. Approval of final commitments will be governed by NYCEEC's Corporate Officers.

Program:	Energy Retrofit Loan Program (ERLP or the Program)
Description:	ERLP is a partnership between the New York City Housing Development Corporation (HDC) and the New York City Energy Efficiency Corporation (NYCEEC) to facilitate eligible energy improvements and clean heat conversions in mixed income housing throughout the five boroughs. The Program will provide financing for capital improvements that assist building owners in their efforts to comply with Local Law 87 and DEP rules enacted pursuant to Local Law 43, which are essential components of PlaNYC's Greener, Greater Buildings Plan. The ERLP loans (the Loans) would be added on as subordinate position loans to eligible projects currently in HDC's or HPD's portfolio.
Program Sponsor:	HDC is a quasi-governmental public benefit corporation that is the first mortgagee on over 120,000 units of housing throughout the city. Its portfolio of affordable housing includes a mix of low income housing tax credit developments, middle and mixed income housing, "80/20s" and other housing types. HDC is mission-driven, actively supports the City's housing policy goals, and has access to significant lending capital through its bonding capacity. This presents an opportunity to develop a program that can have a significant impact, in terms of reducing energy consumption, demonstrating energy savings through residential retrofits, and reducing particulate matter emissions through conversions from residual fuels to clean fuels.
Sponsor Capital Source:	Initial projects may be closed with internal HDC capital. Bonds would be issued under HDC's Open Resolution, which is rated AA/Aa2 based on its asset to liability ratio and overall debt service coverage.
Cost of Capital:	Interest rate on the Loans will be approximately 4%. Principal and interest will be payable monthly in arrears.

	The interest rate shall consist of: 1. Current base rate: approx. 3.00% 2. .20% loan-servicing fee to HDC; 3. .20% annual credit enhancement fee to HDC; and 4. .60% to NYCEEC for utilizing its funds as a debt service reserve. The annual fees will be charged on the outstanding principal of the Loan.
Credit Enhancement:	To induce HDC to make subordinate, uninsured Loans, NYCEEC funds would be deposited into a cash-funded reserve account held by HDC to provide loss protection to HDC in the event such Loans are not repaid by the borrowers. NYCEEC will initially commit $2,500,000 to the reserve, and may provide additional funds if warranted by the volume of the Program. The Credit Enhancement will be structured on a pooled basis for all Loans in the portfolio. The Terms of the Credit Enhancement have been set forth in an agreement between NYCEEC and HDC (the Credit Enhancement Agreement) In the event of an unresolved payment deficiency by the borrower, HDC may follow procedures detailed in the Credit Enhancement Agreement to draw on the reserve.
Credit Enhancement Draw Rights:	Loans will be considered delinquent 30 days after each monthly payment is due. HDC will use its best efforts to cure delinquencies by following HDC's Delinquent Project and Collection Procedures. Pursuant to these procedures, HDC will perform activities including, but not limited to: issuing written default notifications, meeting with borrowers, assessing the property's financial condition, performing a property income and expense analysis, and assisting in securing maintenance and rent increases. Draws on the reserve will be made semi-annually to cover debt service payments delinquent over 90 days for the prior six months. Any debt service arrears subsequently repaid by the borrower will be used to replenish the NYCEEC reserve.
Leverage Ratio:	Initially, the ratio of the outstanding Loan balance to the reserve balance would be a minimum of 7:1. The leverage ratio may be adjusted based on actual default rates and other portfolio performance metrics.
Security:	The Loans will typically be secured by a subordinate lien. For properties that have no other liens on them, the Loan will be secured by a senior lien. Where a first or second lien for the Loan is not

	reasonably possible due to covenants associated with the senior lien on the property or other specific circumstances associated with the property, the Loan may be unsecured. Loans will be offered only to buildings that currently generate excess cash flow after scheduled debt service, or, at HDC's discretion, to properties that have excess reserve capital or will complete a rent restructuring or other modification that will materially improve the building's projected financial performance in conjunction with the improvements for which they obtain a Loan.
Recourse Guarantees:	The Loans will be non-recourse.
Loan Origination Procedures:	Loans will be underwritten and originated by HDC according to HDC's standard underwriting and approval processes. Loans failing to conform, in one or more respects, with the Program Underwriting Standards will be subject to review by NYCEEC. HDC shall reference NYCEEC's Technical Guidance Manual to inform the required auditing scope of work, commissioning and monitoring and verification processes. The NYCEEC Technical Guidance Manual will be revised periodically by NYCEEC, with HDC's input as applicable. Draft Underwriting Standards are attached hereto as Exhibit 1.
Audit Requirement:	Pursuant to the NYCEEC Technical Guidance Manual, buildings will be required to conduct an ASHRAE Level II audit. Each audit must be completed by an auditing firm preapproved by NYCEEC and HDC. HDC and NYCEEC will maintain a list of preapproved firms and Audit and Commissioning Guidelines.
Energy Savings:	Loans will be made available only to projects that are projected to achieve a reduction in energy usage (measured in kBTUs) of at least 15% on affected building square footage. Water conservation will not be factored into savings projections but energy savings relating to hot water heating can be counted. For clarity, projects that incorporate clean heat conversions must also meet a 15% minimum projected reduction in energy usage.
Contractors:	The borrower will be responsible for securing all third party reports, preparing scopes of work in accordance with the audit recommendations, and selecting general contractors. General contractors will be subject to approval by HDC during the underwriting process. Scopes of Work and construction contracts

	will be subject to the approval of HDC's engineering and technical departments.
Commissioning:	All systems improvements must be commissioned by the project auditor. Other commissioning agents may be approved by HDC & NYCEEC. Commissioning requirements will be established by the Technical Guidance Manual.
Loan Servicing:	HDC will administer and service all Loans.
Financial Performance Reporting Requirement:	HDC must report to NYCEEC on a quarterly basis the payment history of each Loan across the portfolio. For delinquent Loans only, HDC will report to NYCEEC on a monthly basis.
Energy Monitoring and Verification:	Monitoring and Verification requirements will be detailed in the NYCEEC Technical Guidance Manual and codified by the Loan Commitment for each loan.

Exhibit 1: Draft Underwriting Standards

Eligible Borrowers/ Eligible Projects:	Existing borrowers and projects generally must meet the following criteria: • HDC holds the first mortgage for the property and/or the property is participating in an HPD program, such as the Participation Loan Program (PLP) or the Article 8a Loan Program (8a); • The property meets or exceeds a minimum historical Debt Service Coverage ratio. In some cases, at HDC's discretion, excess reserves and/or a concurrent rent restructuring may be taken into consideration; • General good standing with HDC and HPD with no defaults or delinquencies in the past 3 years; • Demonstrated potential for at least 15% energy usage savings; • A minimum pre-retrofit kBTU/sf, to be established[1]; and • The property's heat and hot water payments are made by the building owner. The program will actively target those properties that must comply with Local Law 87 and convert their heating systems in order to comply with Local Law 87 and DEP rules enacted pursuant to Local Law 43. NYCEEC and HDC have identified an initial list of 40 target properties. Additional properties will be identified by HDC and HPD with NYCEEC assistance as needed.
NYCEEC Approval:	Loans in excess of $2,000,000 and projects that fail to conform, in one or more respects, with the requirements contained in these Underwriting Standards.
Origination Fee:	0.5%-1.0% Origination Fee, depending on Loan size. HDC and NYCEEC will share the Origination Fee in accordance with the following formula: 1/3 is paid to NYCEEC and 2/3 is paid to HDC. The Origination Fee may be capitalized into the Loan.
Loan to Cost:	Maximum 95% of the total hard and soft costs. Total soft costs include the costs of project engineering and audit reports.
Borrower Equity:	Borrower Equity may be used to cover the cost of capital improvements in excess of debt coverage limits. Sources of equity may include cash contributions, draw downs on replacement

[1] NYCEEC will recommend a minimum pre-retrofit kBTU/sf.

	reserves, or incentive payments made by sources such as NYSERDA or Consolidated Edison.
Debt Service Coverage Ratio ("DSCR"):	The ratio of Net Operating Income to debt service payments. Net Operating Income will be defined as actual operating revenue less all building operating expenses (including replacement reserves and real estate taxes).
Historical DSCR:	Minimum of 1.15 as demonstrated by three (3) years of audited financials. In certain cases, at HDC's discretion, a Historical DSCR of less than 1.15 is acceptable provided there is a financial offset such as a release of excess reserves, a concurrent rent restructuring or other modification that will materially improve the building's projected financial performance.
Retrofit DSCR:	As low as 1.00 combined DSCR including the Loan for some property types.
Reserves:	Available replacement reserves may be drawn down to be used as a source of funds.
Term:	Maximum term of 10 years depending on cash flow projections of the improvements. In certain circumstances such as when tied to a larger refinancing, Loans may be structured with a 12 year term. Loans will be self-amortizing, and will typically begin to amortize on their first day. For certain Loans with large scopes of work or other specific circumstances, a 6-month interest-only construction period may be included in the term of the Loan.
Eligible Uses:	Loan proceeds may fund hard and soft costs associated with the approved Scope of Work.
Eligible Scope of Work:	The majority of the loan proceeds, defined as greater than 50%, must be used for energy efficiency measures identified through the audit process including but not limited to: • Residual fuel conversions • Heating and cooling systems upgrades and replacement • Lighting replacement • Cogeneration facilities • Ventilation • Insulation • Installation of building management systems • Any required asbestos and lead remediation activities specifically

related to the above work

The remaining loan proceeds, defined as less than 50%, may be used for other necessary building improvements based on current building condition that are not specifically related to energy efficiency improvements but are reasonable scope of work items as requested by the Borrower and approved by HDC.

"In unit" upgrades are only eligible for (i) buildings that are master metered; or (ii) those "in unit" upgrades that directly impact the building owner's energy cost. "In unit" appliance upgrades are not eligible improvements in either case.