



Underwriting Efficiency: A Practical Approach

Capturing the value of efficiency through mortgage finance

Uncommon Expertise. Unmatched Impact.



**Community[®]
Preservation
Corporation**

The Community Preservation Corporation (CPC): Uncommon Expertise. Unmatched Impact.

CPC believes housing is central to transforming underserved neighborhoods into thriving, vibrant communities.

Our goal is to be more than just a lender. At CPC, we work as a partner to provide technical expertise, support and flexible solutions that help meet the capital needs and broader community revitalization goals of our customers, local stakeholders and the communities we serve.

CPC's deep strategic relationships with government agencies, local community groups, banks and other investors position us as a trusted partner who works hand-in-hand with housing providers to create customized financing solutions.

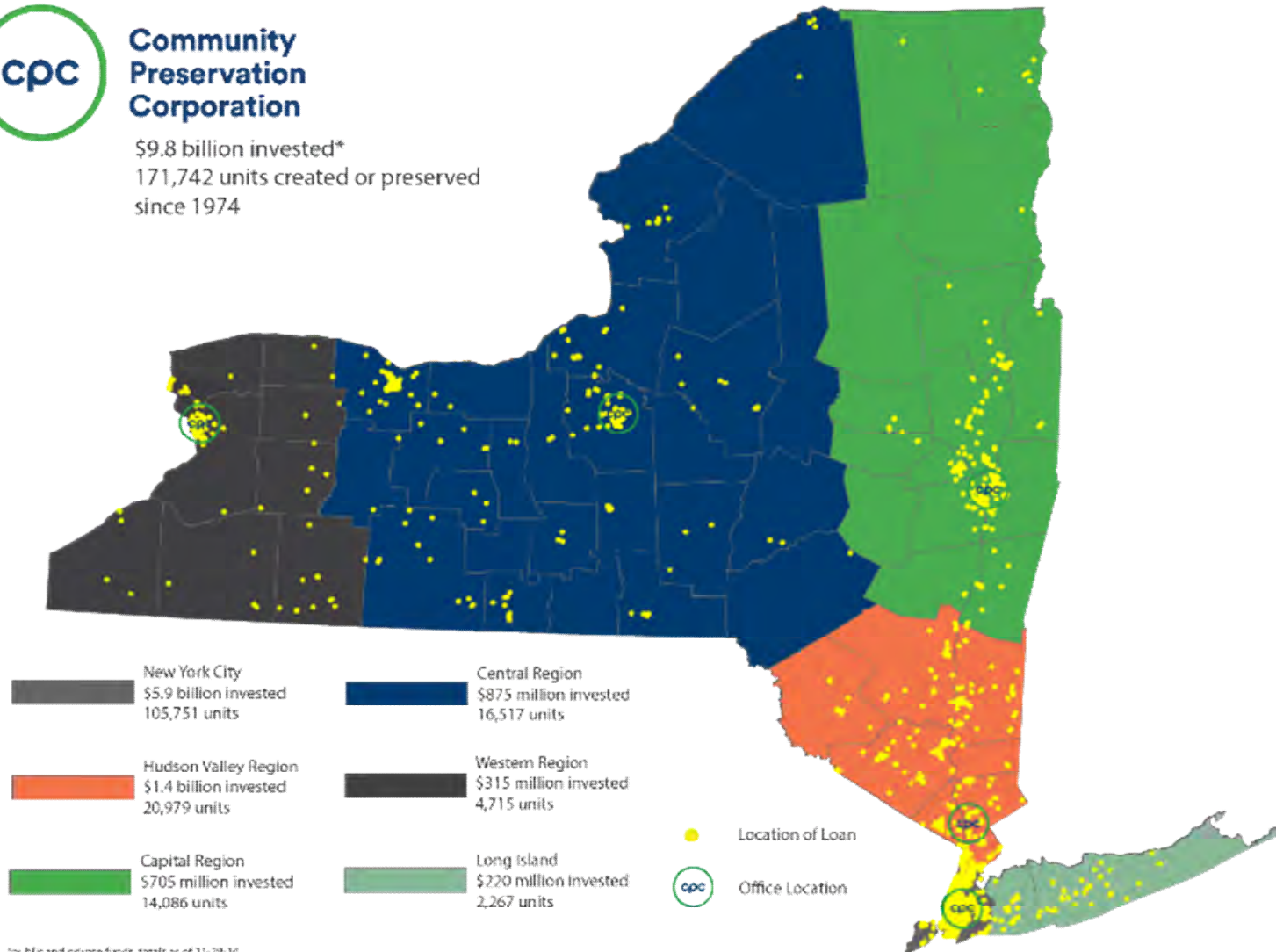


Revitalizing New York State



Community Preservation Corporation

\$9.8 billion invested*
171,742 units created or preserved since 1974



*public and private funds, totals as of 11-28-16



Sustainability at CPC

The cost savings associated with energy-efficient measures play a key role in ensuring the long-term economic stability of multifamily properties, which is critical to the preservation of rental affordability in our communities.

Lending & Originations

- Underwrite to projected savings
- Support new technologies

Evaluation

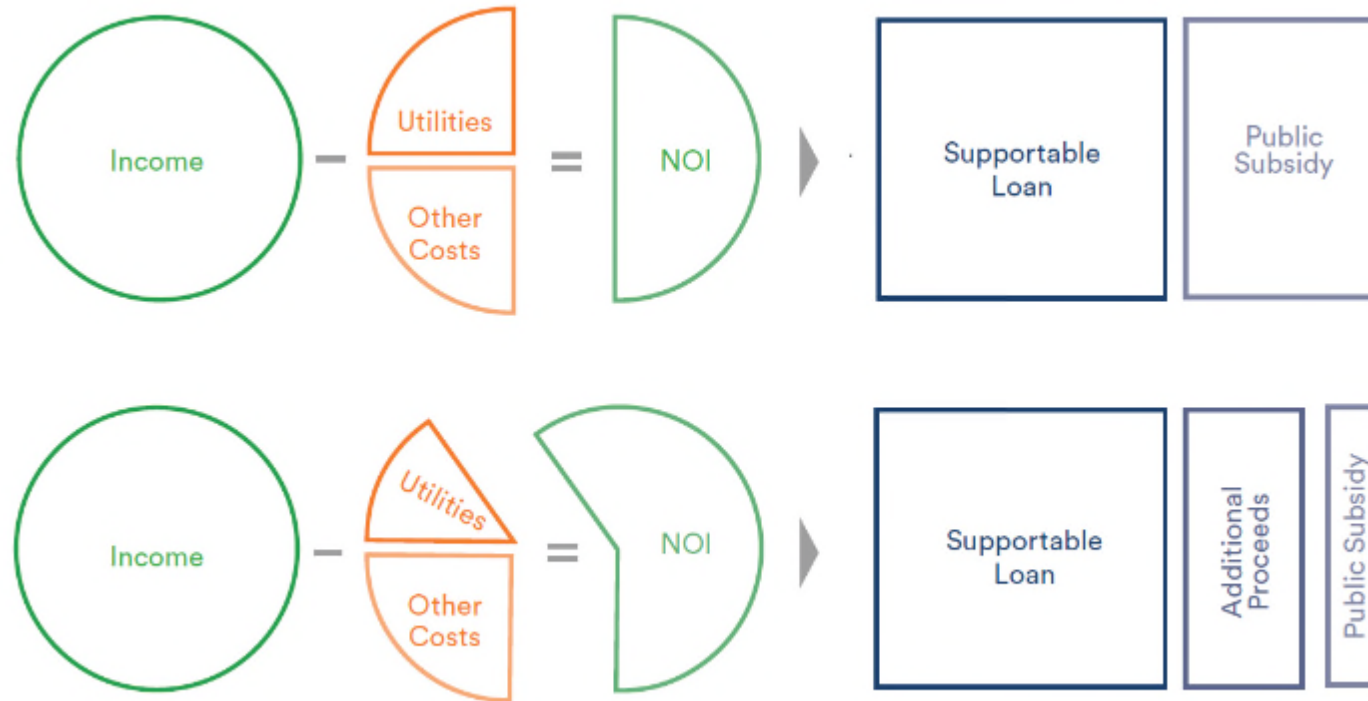
- Criteria and reporting procedures
- Energy and water benchmarking

Portfolio Performance

- Connect costumers to incentives
- Integrate efficiency into inspections



Understanding Efficiency



Efficiency & Cash Flow

Efficiency reduces utility bills, maintenance costs, and vacancy, thereby increasing NOI and value. Underwriting a portion of projected energy savings supports additional private loan proceeds to finance improvements while reducing the need for public subsidy dollars. Efficiency savings beyond conservative underwriting create additional, ongoing cash flow to the borrower.

Project Criteria

CPC encourages projects to pursue at least one of the following pathways to a more environmentally sustainability building:

- IPNA or Energy Audit
- High-efficiency heating/HVAC system
- Renewable energy
- Sustainability Certification (e.g. LEED, Passive House)

Underwriting Process

When CPC underwrites projected energy savings our loan officers take time to review “energy reports” and evaluate post-construction energy costs.

1. Evaluate Efficiency Savings

Evaluate the energy report and compare the scope of work and savings with similar projects.

2. Adjust for Risk

Conduct a risk analysis to determine the percentage of savings to include in underwriting.

3. Monetize Savings

Incorporate results of the savings and risk analysis into the final underwriting.

4. Finalize Loan Terms

Further incentivize borrowers to pursue efficiency by reducing the loan’s interest rate or lowering origination or servicing fees.



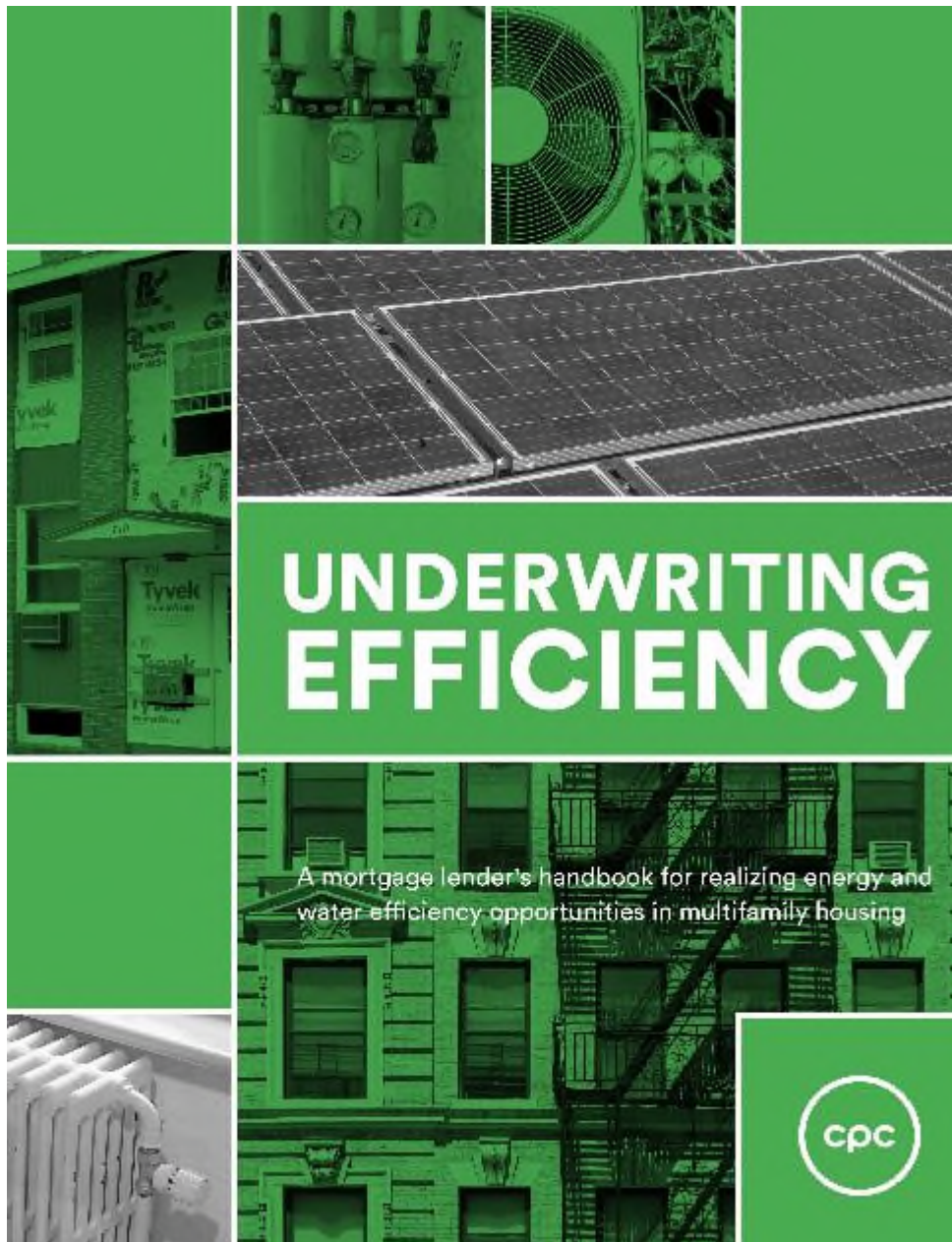
Building Profile

1920s Walk-Up Rental Building
35 Apartments, 34,600 Gross Square Feet
Oil-Fired, Steam Boiler, 1-Pipe Distribution
Owner Paid Utilities: Heat, Hot Water, Water/Sewer
Loan Type: Construction and Permanent Loan
Loan Offering: \$1.4 Million

Work Scope

New boiler, controls, radiator valves, pipe insulation, separate DHW heater, new roof and insulation, low-e coated windows, upgraded lighting and sensors, low-flow fixtures, ENERGY STAR appliances





Sharing Best Practices

A Practical Approach:

- Underwrite to projected savings
- Increase loan size
- Mortgage proceeds cover incremental cost

Positive Impact:

- Low cost, long term, capital
- Quality retrofits
- High performance buildings
- Long term economic stability



TAKE AWAY

Property owners have the greatest access to capital when they obtain their first mortgages.

- Access to low-cost, long-term capital
- Better loan terms
- Marketability and Retention

Engineers and designers can support this process.

- Make cost saving and utility expense info easy to read.
- Encourage customers to start a conversation with their mortgage lender or broker.

Bank of America Environmental Business

Presented by Amy Brusiloff October 12, 2017



Bank of America Merrill Lynch U.S. Bank of America
America Lynch Trust Merrill Lynch

Commitment to the environment

Our Environmental, Social & Governance (ESG) program is integral to Bank of America's sustainable, responsible growth strategy, and environmental sustainability is a key component of our ESG program.

Bank of America is engaging every part of our company to address climate change and demands on critical natural resources — our businesses, our operations, our partners and our people.

As one of the world's largest financial institutions, we believe we play a critical role in accelerating the transition to a low-carbon economy.

Recent recognition



Commitment to the environment

Our business



- Drive innovative new financial solutions across all our lines of business.
- \$125 billion in low-carbon business to be committed by 2025. Since 2007, have provided more than \$70 billion to low-carbon and other sustainable business activities.
- From supporting renewable energy and low-carbon vehicles, to a robust Environment, Social, Governance (ESG) investment platform for wealth management clients.

How we operate



- Manage our operations efficiently to benefit the environment.
- Committed to become carbon neutral and purchase 100% renewable electricity by 2020 in Sept. 2016.
- Recommitted and increased operational goals:
 - Reduce energy usage by 40%
 - Reduce location-based GHG emissions by 50%
 - Reduce water use by 45%
 - Reduce waste to landfill by 35%

Working with others



- Engage with partners to increase our impact.
- Partners like the UN’s Sustainable Energy for All (SE4All) initiative and Stanford University’s Global Climate and Energy Project.
- Committed more than \$21 million in environmental philanthropy in 2016.

Our people

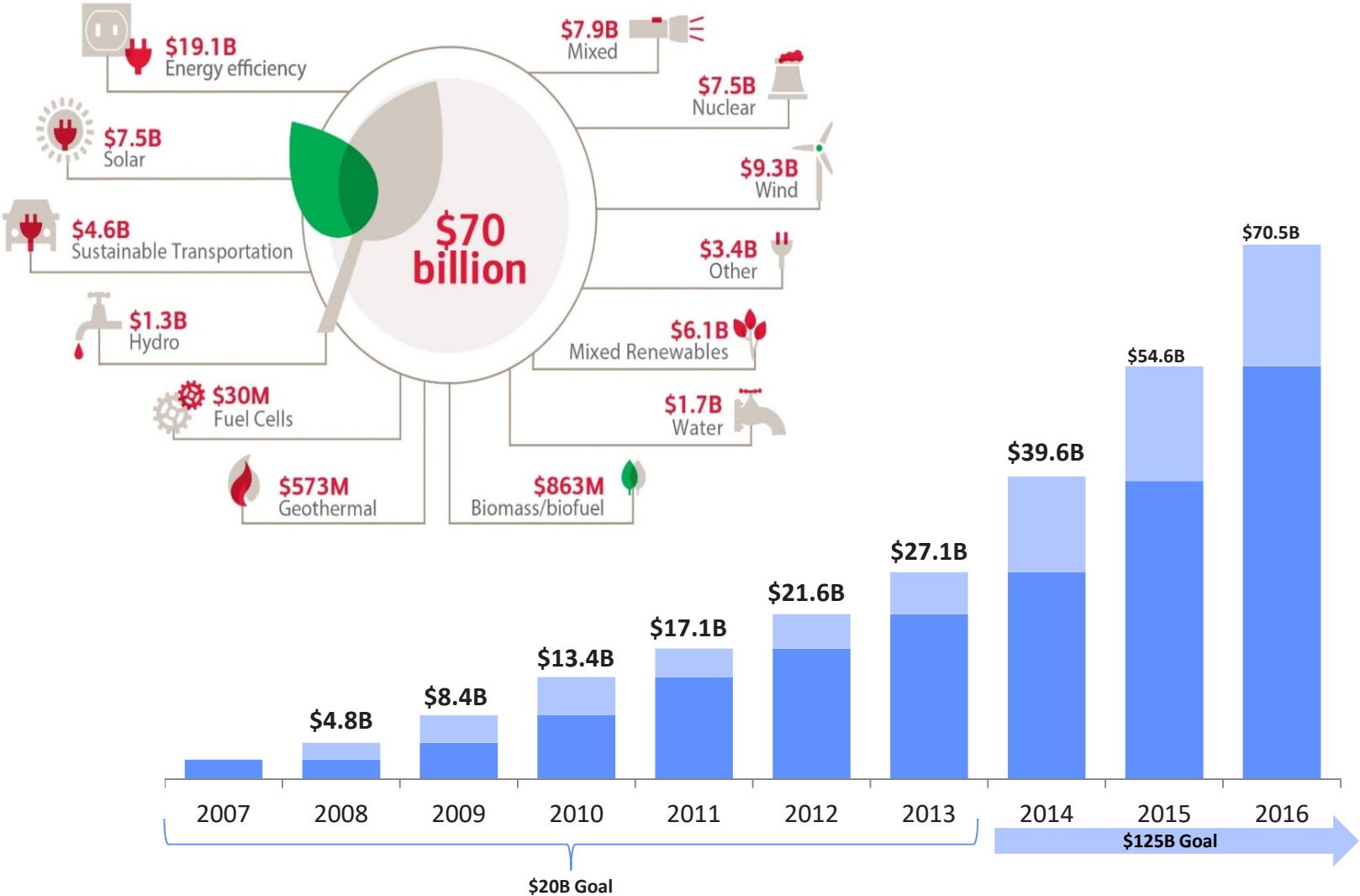


- Help our employees act as good environmental stewards at work, at home and in the community.
- Approximately 20,000 employees actively participate across the globe from Boston to Hong Kong.
- Provide incentives to encourage new environmental technology adoption at home.

Our business: Transformational finance



Since 2007, we've provided \$70 billion in low-carbon and sustainable financing



Our business: Transformational finance



<u>LOB</u>	<u>Environmental Engagement</u>	<u>2013-2016 Activity</u>
Investment Banking and Markets	Raises equity and debt capital and provides advisory services to support our clients' low-carbon business	\$22.9 billion
Leasing	Provides equipment and tax equity financing for energy efficiency projects and renewable energy projects	\$9.6 billion
Public Finance	Delivers debt for municipal sustainability projects	\$8.7 billion
Commercial Real Estate and Community Development Banking	Finances projects with LEED, ENERGY STAR and other environmental certifications, as well as brownfields redevelopment	\$5.5 billion
Global Commercial Banking	Extends lending and credit to lower-carbon companies and for lower carbon deals	\$738 million
Consumer Vehicle Lending	Provides loans for hybrid/electric vehicle purchases	\$1 billion
Global Wealth and Investment Management	ESG investment solutions for GWIM clients	\$270 million
CDFI Lending	Supports environmental nonprofits and CDFIs	\$77 million



\$125B Environmental Commitment Economic Impact Report

Summary:

- To estimate the economic benefits of our \$125 billion environmental commitment, Bank of America commissioned EY to analyze a subset of our commitment, examining \$12.6 Billion deployed directly in projects within the U.S. from 2013-2016.
- The report was released on September 18, timed with Climate Week NYC 2017 kick-off.

Report Findings:

- Over the four year period examined, Bank of America's environmental business initiative:
 - Helped support an annual average of **39,728 jobs**, nearly half of which pay **significantly higher** than the U.S. average compensation;
 - Realized a cumulative **\$29.9 billion** in economic output; and
 - Contributed a cumulative **\$14.8 billion** to US GDP.
- The results demonstrate that the transition to a low-carbon and more sustainable economy can provide both an environmental and economic return on investment.



Economic Impacts of Environmental Business Initiative



CDFI lending for environmental sustainability



- **\$10 million loan to finance energy efficiency projects in NYC**

Bank of America made a \$10 million loan to New York City Energy Efficiency Corporation (NYCEEC). NYCEEC funded several energy efficiency/environment projects with Bank of America capital, including a \$1 million loan to an energy storage company to bring a battery storage system to a low-income housing development in the Brownsville section of Brooklyn, NY. The system stores power generated onsite by the property's solar panels at the 625-unit Marcus Garvey Apartments.

- **\$1.5 million loan to finance energy efficiency improvements to homes**

Bank of America made a \$1.5 million loan to Neighborworks of Western Vermont for their "HeatSquad" program. The HeatSquad program finances energy-efficient home upgrades to homes, helping families save money on their heating and electricity bills. Average loan size is \$11,000 and work is typically air sealing and insulation, and/or heat pumps and new boilers.

- **\$5 million loan commitment to bring safe water and sanitation to low-income families**

Water.org launched WaterEquity to raise and deploy social impact capital to make safe water and sanitation more accessible and affordable to very low-income people. WaterEquity is raising a \$50 million fund to make loans to microfinance institutions in India, Indonesia, Cambodia, and the Philippines for the purpose of lending to households so that they can install a toilet and/or get a connection to safe water in their home. Bank of America has made a \$5 million loan commitment to this fund.

- **Created \$60 million Energy Efficiency Finance Program for CDFIs**

Bank of America provided catalytic resources to Community Development Financial Institutions (CDFIs) working on innovative financing programs for energy efficient retrofits in low- and moderate-income communities. Results: 27% Electricity Savings, 17% Gas Savings, 15% Water Savings.

Bank of America Energy Efficiency Finance Program



This program, launched in 2011 and completed in 2015, provided catalytic resources to Community Development Financial Institutions (CDFIs) working on innovative financing programs for energy efficient retrofits in low- and moderate-income communities.

Grants

\$5 million in total. Grants of \$500,000 per program participant, paid over two years (2011 and 2012).

Loans

\$55 million in total. Loans to program participants ranged from \$5 million to \$8 million. Loans at 1% interest rate and for terms as long as ten years.

Data

CDFIs worked with BrightPower to collect utility data and monitor post-retrofit energy and water consumption against pre-retrofit performance.

Results

- ACEEE published the program findings on July 28, 2016. <http://aceee.org/research-report/f1601>
- 27% Electricity Savings, 17% Gas Savings, 15% Water Savings
- Lessons learned: Borrower education necessary to understand the savings, and technical assistance is important.
- Many projects include non-energy savings measures (better building approach versus pure energy efficiency loan)



Fannie Mae®

Fannie Mae Multifamily Green Financing

October 12, 2017





Fannie Mae Multifamily Green Financing Framework

Fannie Mae Multifamily Green Financing targets a **positive, measureable** impact to each pillar of the **Triple Bottom Line**.

Financial

- Lower credit risk
- Higher cash flows
- Higher property value

Social

- Greater affordability for tenants
- Higher quality, more durable housing
- Healthier housing

Environmental

- Lower use of energy, water, and natural resources
- Greater resiliency to natural disasters



From an Initiative to a Business, Fannie Mae pioneered Green Financing



- Piloted Green Financing products
- Launched Green MBS
- Developed ENERGY STAR® Score for Multifamily with US EPA
- Developed High Performance Building Report scope
- And more...



Delivered \$10.8B in
Multifamily Green Loans
in Q1-Q2 2017



Two Paths to Fannie Mae Green Financing

Already Green? **Green Building Certification**

Benefits:
Preferential Green Pricing

To Qualify:
Property has one of the recognized Green Building Certifications in place by Rate Lock

Making Some Improvements? **Green Rewards Green Preservation Plus**

Benefits:
**Preferential Green Pricing
Free Energy and Water Audit
Increased Loan Proceeds**

To Qualify:
Choose to implement Green improvements projected to reduce energy or water consumption by 20%



Case Study #1

Reducing water costs, accessing additional loan proceeds

Green Rewards Loan	\$22.8M, Acquisition, Fixed Rate
Property	156 units, 1984 construction
Budget / unit	\$301
Improvements	Low-flow faucets Low-flow showerheads Low-flow toilets Drip irrigation ENERGY STAR® washing machines
Additional Loan Proceeds / Underwriting	\$8,253 savings underwritten; 1% additional proceeds
Energy/Water Use Reduction	4% Energy, 20% Water



Case Study #2: Significant investments in central systems

Loan	\$5.6M, Refinance, Fixed Rate
Property	60 units, 1966 construction
Budget / unit	\$2,300
Improvements	Replace heating plant Replace hot water boiler
Additional Loan Proceeds / Underwriting	\$23,550 savings underwritten; 2.7% additional proceeds
Energy/Water Use Reduction	23% Energy, 0% Water