



Fannie Mae®

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# Fannie Mae Multifamily Green Bond Framework

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# 1 Background and Objective

## 1.1 Fannie Mae Multifamily Green Financing

The mission of Fannie Mae's Multifamily Green Financing Business is to target positive, measurable impact to environmental, social and financial metrics, also known as the "Triple Bottom Line." Our Green Financing portfolio is transforming rental housing in the United States to be greener and healthier.

Fannie Mae is committed to harnessing the positive impact of energy and water efficiency, green buildings and renewable energy to create more affordable, quality housing in the United States, reducing real estate's impact on the environment, and creating financial value. Fannie Mae launched its first Green Mortgage Loan product in 2011, and issued its first Green MBS in 2012.

## 1.2 Fannie Mae

Fannie Mae is the largest government-sponsored enterprise (GSE) provider of financing for the U.S. market. As a GSE, Fannie Mae was chartered by U.S. Congress in 1938 to support America's housing market. Fannie Mae's mission specifically is to provide stability in and increase the liquidity of the residential mortgage market and to help underserved markets, such as affordable housing and low- and moderate-income families. Fannie Mae supports the liquidity and stability of the U.S. mortgage market primarily through purchasing and securitizing mortgage loans originated by lenders into Fannie Mae mortgage-backed securities (MBS) that we guarantee.

Fannie Mae was placed into conservatorship in 2008. Our regulator and conservator, the Federal Housing Finance Agency (FHFA) and the U.S. Treasury entered into an agreement that permits us to continue to fulfill our mission. A key term of the agreement is that the U.S. Treasury provides funding if our net worth falls below zero in any given quarter. Upon entering into the agreement, the U.S. Treasury stated that holders of senior debt, subordinated debt, and MBS issued or guaranteed by the GSEs are protected by the agreement without regard to when those securities were issued or guaranteed.

Fannie Mae does not lend directly to consumers. Fannie Mae operates in the secondary mortgage market, in two business lines:

- Single-Family (1-4 residential units)
- Multifamily (5+ residential units)

## 1.3 Fannie Mae Multifamily Mortgage Business

Fannie Mae supports multifamily housing by providing financing for the acquisition and refinance of individual properties or groups of properties. Fannie Mae Multifamily Mortgage Business provides this financing primarily through a nationwide network of Delegated Underwriting and Servicing (DUS<sup>®</sup>) lenders. Through its DUS lenders, Fannie Mae either finances or guarantees the financing of several types of multifamily properties including:



- apartment buildings, where the property is owned and operated as a commercial entity and all the units are rented through a single owner or operator;
- manufactured housing communities, where the land on which manufactured homes are placed is owned and operated as a commercial entity;
- seniors housing, where the property is owned and operated as a commercial entity, all the units are rented through a single owner or operator and the rentals may only be rented to residents above designated age limits;
- dedicated student housing, where the property is owned and operated as a commercial entity, all the units are rented through a single owner or operator and the rentals are primarily to students, but the property is not a dormitory owned by an educational institution;
- affordable housing, where the property is owned and operated as a commercial entity, all the units are rented through a single owner or operator and the rents are restricted to low and very low income residents, and;
- cooperatives with five or more individual units, where the property is governed by shareholders who live in and own shares in the property.

The loans are originated by our DUS lenders, sold to Fannie Mae and then securitized into Mortgage-Backed Securities (MBS) that carry Fannie Mae's guarantee of timely payment of principal and interest. These securities are sold to investors and are freely tradable in the secondary market.

## **1.4 Fannie Mae Multifamily Green Financing Team and Governance**

The Green Financing Business' strategy, loan products and portfolio is led by a Director and consists of a dedicated team of finance and sustainability experts. The Director's and team members' deep expertise includes solar financing, energy and water efficiency technologies, energy audit standards and energy benchmarking protocols to green building certifications. The Director reports on the performance of the Green Financing Business to the executive leadership of the Multifamily Business. In addition, Fannie Mae has had the Green Financing Advisory Council (the "Council") in place since 2010. Originally called the Green Rental Housing Task Force, the Council meets at least once a year in-person to discuss market transformation goals and the strategy of the Green Financing Business. The Council is governed by a Charter and its invited members represent key stakeholders in the multifamily and sustainability industries including US federal agencies, Green Building Certification-issuing organizations, non-profits engaged in energy efficiency policy, multifamily lenders and property owners.

## **2 Use of Proceeds**

The proceeds of Fannie Mae's Green Bonds are used to finance the Green Mortgage Loan products backing those Green MBS. Fannie Mae's Multifamily Green Financing Program works within Fannie Mae's 30-year old DUS Multifamily business to source potential Green Financing opportunities.

### **2.1 Eligible Green Mortgage Products**

Fannie Mae offers three Green Mortgage Loan products through its Multifamily DUS business:

- Green Building Certification



- Green Rewards
- Green Preservation Plus

### 2.1.1 Green Building Certification

To be eligible for a Green Building Certification loan, a property must have been awarded one of 15 certifications recognized by Fannie Mae. These certifications are:

Green Level	Green Level Definition	Green Building Certification
Level 1	<ul style="list-style-type: none"> <li>• Reduces water or energy consumption by 15% or more over the property's baseline or a national standard</li> </ul>	<ul style="list-style-type: none"> <li>○ ENERGY STAR Existing Multifamily Building</li> <li>○ ENERGY STAR Qualified Multifamily High Rise – Performance</li> <li>○ Enterprise Green Communities Criteria</li> <li>○ LEED v4 Operations and Maintenance</li> <li>○ NGBS Green Multifamily Building Certification</li> <li>○ NGBS Green Home Remodeling Project</li> <li>○ EarthCraft</li> <li>○ GreenPoint Rated New Home Multifamily</li> </ul>
Level 2	<ul style="list-style-type: none"> <li>• Has prerequisites tied to reducing water or energy consumption that must be satisfied to receive the certification</li> </ul>	<ul style="list-style-type: none"> <li>○ ENERGY STAR Qualified Multifamily High Rise – Prescriptive</li> <li>○ ENERGY STAR Certified Homes</li> <li>○ LEED v4 Homes</li> <li>○ LEED v4 Building Design and Construction</li> <li>○ GreenPoint Rated Existing Multifamily Whole Building</li> </ul>
Level 3	<ul style="list-style-type: none"> <li>• Targets improvements in several environmental areas to receive certification</li> </ul>	<ul style="list-style-type: none"> <li>○ Green Globes New Construction</li> <li>○ Green Globes Existing Building</li> </ul>

Fannie Mae engaged an independent consulting firm, [MK Think](#), to evaluate the multifamily green building certifications in the market according to three Green Levels, with Level 1 certifications being the greenest and requiring a measurable reduction of at least 15% in energy or water usage. Fannie Mae evaluates this list annually to determine if a certification should be removed due to failure to meet the criteria, or if a new certification should be added due to meeting the criteria.

### 2.1.2 Green Rewards

This Green Mortgage Loan product rewards owner's initiative to rehab or retrofit existing Multifamily property including workforce and seniors housing. To be eligible for a Green Rewards Loan, the property owner must select energy and water efficiency measures (EWEMs) that are projected to save 25% or more on energy consumption or 25% or more on water consumption, or to generate and save 25% or more of baseline energy through a combination of renewable energy generation and energy consumption reduction. Loans originated before December 18, 2017 were eligible if the owner selected EWEMs that were projected to save 20% or more on energy consumption, 20% on water consumption, or a 20% energy generation and energy reduction combination.

Eligible EWEMs may include:



- Solar systems
- Energy efficiency heating, ventilation and air conditioning (HVAC) systems
- Energy efficient lighting
- Water efficient fixtures including low-flow toilets, faucets
- Energy efficient appliances such as ENERGY STAR® refrigerators

### **2.1.3 Green Preservation Plus**

This Green Mortgage Loan product provides owners with incentives to rehab or retrofit existing Multifamily Affordable property. To be eligible for a Green Preservation Plus loan, the property owner must select energy and water efficiency measures (EWEMs) which have capital costs equivalent to at least 5% of the loan proceeds.

At the time of closing of a Green Building Certification, Green Rewards or Green Preservation Plus loan, the borrower signs loan documents committing to report to Fannie Mae annually the property's energy and water performance, including the ENERGY STAR Score and Source Energy Use Intensity (EUI), for the life of the loan.

## **3 Process for Project Evaluation and Selection**

### **3.1 Fannie Mae DUS Guide, Forms and Loan Agreements**

All loans are purchased by Fannie Mae from its DUS Lenders and are considered to be **Eligible Green Mortgage Loans** if they conform to the following at the time of loan delivery:

- DUS Guide
- Additional requirements documented in Fannie Mae Forms
- Loan Agreements.

The DUS Guide chapters, Forms and Loan Agreements that specifically govern Green Mortgage Loan eligibility and the process for evaluation and selection of Green Mortgage Loans are available in the Annex, Section 8.1.

### **3.2 Process for project evaluation and selection of Green Building Certification Mortgage loans**

To secure the Green MBS designation on a Green Building Certification loan the borrower follows a six-step protocol as per Section 8.2 in the Annex.

### **3.3 Process for project evaluation and selection for Green Rewards Mortgage loans**

To secure the Green MBS designation on a Green Rewards Loan, the DUS lender must follow an eight-step protocol as per Section 8.3 in the Annex.

### **3.4 Process for project evaluation and selection for Green Preservation Plus loans**

To secure the Green MBS designation on a Green Preservation Plus loan:



1. The DUS lender must follow steps 1-8 of the Green Rewards process as per Section 8.3 in the Annex.
2. The DUS lender must have completed a report to evaluate pests at the property. More details can be found in Section 8.4 of the Annex.

## 4 Management of Proceeds

Each Fannie Mae Green financing product supports one or more multifamily properties that have either received a third-party Green validation (Green Building Certification) or had energy or water consumption improvements resulting in a 25% reduction in consumption (Green Rewards). The process and management of the proceeds from these financings are consistent across Fannie Mae's Multifamily program. Fannie Mae commits to acquire the mortgage loan from the DUS lender if it conforms to all sections of the DUS Guide and other requirements. Once acquired, Fannie Mae securitizes the loan into a fully guaranteed MBS and delivers the MBS back to the lender. The DUS lender auctions the loan/MBS to the general MBS investor community approximately 30 days before settlement. The proceeds from the auction are used to fund the loan from the lender.

More information relating to the logistics of the actual loan disbursements and lender-managed escrow accounts can be found in Section 8.5 of the Annex.

In addition to producing generally single-asset, single-loan backed MBS, the Fannie Mae DUS business provides the opportunity for investors to pool and then re-securitize their MBS into structured products, like Megas (pass-through structure) or Real Estate Mortgage Investment Conduits (REMIC) backed by multiple MBS. The REMICs and Megas created from MBS owned by Fannie Mae's Multifamily Trading Desk are called Guaranteed Multifamily Structures (GeMS). Fannie Mae also issues REMICS and Megas backed by MBS owned by third parties. By structuring groups of DUS MBS into Megas or REMICs, the trading desk provides investors with the ability to invest in a block size transactions with greater geographic diversity and provides opportunities to invest in securities with different durations by time-tranching the underlying cash flows. The Fannie Mae Multifamily Trading Desk has re-securitized \$5 billion of Green MBS into Green GeMS REMICs. This re-securitization process does not generate new proceeds for the Green properties backing the MBS, rather it creates better market liquidity for the MBS and provides an opportunity for certain socially responsible investors who may be unable to invest in single-asset securities to invest in the Fannie Mae Green MBS through the REMIC structure.

## 5 Governance and Internal Audit

There are two audit processes and two audited entities, the Lender and the HPB ("High Performance Building") Consultants. The two processes are:



1. The Fannie Mae Multifamily Loan Surveillance team conducts audits on several Green Mortgage Loan characteristics as part of their standard reviews. The Loan Surveillance team only reviews the Lenders' activities.
2. The Green Financing Business team conducts expanded audits to review a) items that Green Business determines are outside the scope of the Loan Surveillance audit, and b) a higher proportion of Green Loans than are included in the Loan Surveillance process. The Loan Surveillance team reviews Lenders' and the HPB Consultant's activities
3. Audits are conducted on a sampling of all Green Mortgage Loan products including Green Rewards, Green Building Certification and Green Preservation Plus.

For information on the process of loan selection for internal audit purposes, please see Section 8.6 of the Annex.

## 6 External Reporting

Fannie Mae's Green Financing business reporting is focused on the energy and water performance of funded multifamily properties. As part of that reporting, Fannie Mae maintains a Green Financing website where investors can find background materials on its Green Financing programs (<https://www.fanniemae.com/multifamily/green-initiative>). In addition, Fannie Mae maintains a file listing all of the MBS and GeMS products backed by Fannie Mae Green Financing products by Pool Number and CUSIP Identifier (<https://www.fanniemae.com/multifamily/green-initiative-green-mbs>). This file is updated on a monthly basis. For more extensive disclosure, investors can look up any DUS MBS or GeMS or Mega security CUSIP Identifier on Fannie Mae's public disclosure system, DUS Disclose <https://mfdusdisclose.fanniemae.com/#/home>. As described in the Annex Section 8.7, DUS Disclose contains both at-issuance and ongoing data at the property level for each underwritten property securing a Fannie Mae Multifamily MBS. For those assets designated as having received Green financing, the data includes the property's ENERGY STAR Score and Source Use Intensity rating as well as the as-of-date for that value.

Fannie Mae is committed to improving the reporting and transparency of the energy and water performance of its Green Mortgage Loans. FNMA will publish an annual investor report describing the financing of Green eligible assets for the preceding year. This report will be made available on the investor relations pages of the FNMA website. The details of such financing for the purposes of this report will include 1) a list of the different categories of Green eligible assets financed and the percentage distribution to each such category of Green eligible assets, 2) a description of a selection of Green eligible assets, as examples of the eligible assets financed in that year and 3) a summary of FNMA's Green Bond development and green financing activities in general.





## 7 External Review

Fannie Mae has obtained an independent opinion from the Center for International Climate and Environmental Research (CICERO), to verify the greenness and governance of our Green Bond Framework. The opinion can be found on Fannie Mae's website [www.fanniemaegreenfinancing.com](http://www.fanniemaegreenfinancing.com).



## 8 Annex

### 8.1 Process for Project Evaluation & Selection

Fannie Mae must conform to key requirements governing loan credit and property quality. These requirements are documented in the DUS Guide and in multiple forms.

Name	Type
Form 4099.H - Appendix H: HPB Module Report Tables	Form
Form 4099 – Instructions for Performing a Multifamily Property Condition Assessment (PCA)	Form
Form 4250 - Green Building Certifications	Form
Form 4660 - Multifamily Underwriting Standards	Form
Guide Part IIIB Chapter 11 – Green Mortgage Loans	Guide
Guide Part IIIB Chapter 7 - Multifamily Affordable Housing Partners	Guide
Guide Part IVB Chapter 2 – Streamlined Rate Lock	Guide
MBS Prospectus	Prospectus
Form 6001 8.02(b)(2)(D) - Multifamily Loan and Security Agreement	Loan Agreement
Form 6241 - Modifications to Multifamily Loan and Security Agreement	Loan Agreement
Form 6430 - Streamlined Rate Lock Agreement	Loan Agreement
Form 6502 - Multifamily Mortgage Loan Delivery Package Table of Contents	Loan Agreement
Form 6620.b - Annual Loan Agreement Certification	Loan Agreement

### 8.2 Process for project evaluation and selection of Green Building Certification Mortgage loans

To secure the Green MBS designation on a Green Building Certification loan:

1. The borrower must provide the DUS® Lender a copy of the property's certification. The certification must be from the issuing certification organization; letters or emails confirming the award from consultants or other entities are not acceptable.
2. The certification must be one of the 15 certifications recognized by Fannie Mae in Form 4250. See Table 1.
3. The certification must be unexpired prior to locking the all-in interest rate.
4. At the time of loan closing, the borrower must sign loan document Form 6241 committing to report to Fannie Mae annually the property's energy and water performance including the ENERGY STAR Score and Source Energy Use Intensity (EUI). See "Modifications to Multifamily Loan and Security Agreement (Green Mortgage Loan)" on our website.
5. The Lender must provide the certification to Fannie Mae at the time of loan delivery, which occurs after locking the rate and closing the loan with the borrower.
6. Failure to meet any of the above conditions will result in the inability of the MBS backed by the loan to obtain a "green" label, and of the borrower to realize the lower all-in interest rate available to loans in the Green Financing program.



### 8.3 Process for project evaluation and selection for Green Rewards Mortgage loans

To secure the Green MBS designation on a Green Rewards loan:

1. The DUS® lender must have completed a High Performance Building (HPB) Report. The HPB Report must adhere to the requirements of an ASHRAE Level II Energy Audit and any additional requirements set by Fannie Mae.
2. The HPB Report must be completed according to Fannie Mae Form 4099 “Instructions for Performing a Multifamily Property Condition Assessment (PCA)”, Section 5.08. MODULE: High Performance Building Assessment.
3. The HPB Report must be completed by a Consultant who holds at least one of the following professional designations, in good standing:
  - Certified Energy Manager (CEM) or Certified Energy Audit or (CEA), certified by the Association of Energy Engineers (AEE);
  - Multifamily Building Analyst (MFBA), certified by the Building Performance Institute, Inc. (BPI);
  - High-Performance Building Design Professional (HPBD) certified by ASHRAE; or Building Energy Assessment Professional (BEAP ) certified by ASHRAE.
4. The HPB Consultant is required to report all opportunities to save energy and water or to generate energy at a property in a written document with photographs, and a standard Excel form that captures hundreds of data points on the property’s historical and projected energy and water performance. See Appendix: Sample HPB Report and 4099.H.
5. The borrower must select improvements that are projected to save 25% or more on energy consumption or 25% or more on water consumption. See figure below for typical property improvements listed in an HPB Report that are projected to save energy and water at a multifamily property.

Figure 1: Sample table from HPB Report

EWEM No.	EWEM Category	EWEM	Installed Cost	Owner Annual Cost Savings	Tenant Annual Cost Savings	Source Energy Savings	Water Savings
			\$	\$	\$	%	%
1	Building envelope	Add attic/knee wall insulation	\$ 199,750	\$ -	\$ 6,400	1.4%	0.0%
2	Heating ventilating and air conditioning	Install programmable thermostats	\$ 116,000	\$ -	\$ 22,200	4.6%	0.0%
3	Heating ventilating and air conditioning	Replace split system AC with furnace	\$ 1,600,000	\$ 1,500	\$ 51,000	10.7%	0.0%
4	Water and steam distribution	Add pipe insulation	\$ 3,750	\$ 1,100	\$ -	0.2%	0.0%
5	Lighting	Upgrade in-unit lighting	\$ 131,500	\$ -	\$ 64,100	12.9%	0.0%
6	Lighting	Upgrade common area lighting	\$ 121,250	\$ 20,200	\$ -	4.2%	0.0%
7	Appliances and plug load reductions	Replace refrigerators with ENERGY STAR rated	\$ 100,250	\$ -	\$ 6,300	1.3%	0.0%
8	Water and sewer conservation	Install low-flow fixtures	\$ 60,250	\$ 31,459	\$ -	1.1%	14.2%
9	Water and sewer conservation	Install low-flush toilets	\$ 141,250	\$ 28,299	\$ -	0.0%	15.0%
10	Electric motors and drives	Add VSD motor controller	\$ 2,000	\$ 300	\$ -	0.1%	0.0%
11	Renewable energy systems	Install photovoltaic system	\$ 570,000	\$ 19,000	\$ -	4.9%	0.0%
<b>TOTAL</b>			<b>\$ 3,046,000</b>	<b>\$ 101,858</b>	<b>\$ 150,000</b>	<b>41.3%</b>	<b>29.2%</b>



6. At the time of closing the loan, the borrower must sign loan document Form 6241 committing to report to Fannie Mae annually the property's energy and water performance including the ENERGY STAR Score and Source Energy Use Intensity (EUI). See "Modifications to Multifamily Loan and Security Agreement (Green Mortgage Loan)," on our website.
7. The Lender must submit the HPB Report to Fannie Mae at the time of loan delivery, which occurs after locking the rate and closing the loan with the borrower.
8. Failure to meet any of the above conditions will result in the inability of the MBS backed by the loan to obtain a "green" label, and of the borrower to access the financial incentives available to loans in the Green Financing program.

## **8.4 Process for project evaluation and selection for Green Preservation Plus loans**

To secure the Green MBS designation on a Green Preservation Plus loan:

1. Steps 1-8 of the Green Rewards process above must be followed
2. The Lender must have a completed a report to evaluate pests at the property. The report must be completed according to the Fannie Mae Form 4099 "Instructions for Performing a Multifamily Property Condition Assessment (PCA)", Section 5.07. MODULE: Integrated Pest Management Plan

## **8.5 Management of Proceeds for Green Rewards and Green Preservation Plus Mortgage Loans**

For those existing property owners who choose to use Fannie Mae's Green Rewards and Green Preservation Plus to renovate an existing asset with energy- and water-consumption improvements, the tool for proceeds tracking is the use of an escrow account. Escrow accounts are often used in the commercial real estate sector to control loan proceeds. When a Green Rewards loan closes, the capital costs associated with the selected improvements are put into an escrow account and documented in the Completion Repair Agreement. These proceeds represent the anticipated cost of making the necessary energy or water improvements to the property. The Green Rewards program requires that borrowers implement their energy and water improvements no later than 12 months from loan closing. The Lender releases the funds from escrow back to the multifamily owner/borrower only when the owner provides documentation, such as invoices, confirming that the improvements have been purchased. The Lender will conduct a site visit of the property to evaluate its condition on a periodic basis. Fannie Mae requires confirmation from the lenders that the green improvements are made to the borrower's property by the deadline. Fannie Mae is continuing to expand its IT systems in order to aggregate more detailed data on the energy and water improvements made by borrowers in accordance with energy audits.

Although the Green MBS program has only been part of Fannie Mae's multifamily business for 6 years, the Delegated Underwriting and Servicing model that supports the Green MBS program is 30-years old, and has



provided more than \$470 billion in liquidity to the mortgage market. Each Fannie Mae lender partner that oversees the escrow accounts for the Green Rewards borrowers holds a license to conduct Fannie Mae business and is a risk-sharing partner in the loans originated. This relationship ensures the responsible management of the energy and water improvements-related proceeds in the Green escrow accounts.

## **8.6 Governance and Internal Audit**

### **8.6.1 Selection of Loans: Lenders**

There are two loan sampling protocols:

1. For the first three months after a lender has been delegated approval of green loans, 20% of each lender's delivered Green Mortgage loans are reviewed each month.
2. Starting with month 4 after delegation, 10% of each lender's delivered Green Mortgage loans that were lender-approved are reviewed each month. If a lender uses multiple HPB Consultants in a given month, at least one HPB Report by each consultant is reviewed.

### **8.6.2 Selection of Loans: HPB Consultants**

There are two loan sampling protocols:

1. For the first three months after a Consultant is pre-qualified, a minimum of three reports by each consultant that were approved by Lenders are reviewed each month.
2. Starting with month 4 after pre-qualification, a minimum of two reports by each consultant that were approved by Lenders are reviewed each month. If a given consultant has not submitted the number of reports needed for review in a given month, then all the reports submitted by the Consultant in that month are reviewed.

### **8.6.3 Audit protocol**

Documentation required from the review includes, but is not limited to:

- HPB Report
- Form 4099.H excel file
- Green Building Certification
- DUS Gateway waivers and Chatter
- Loan Surveillance review results, if applicable
- HPB Report Post-Delivery Review Template (Excel file)

The HPB Report Post-Delivery Review Template contains a roadmap for each audit. The reviews cover:

- Green Loan Process (flags and waivers)
- Documentation
- Pricing



- Green Loan Eligibility
- Underwriting, if applicable
- HPB Report review, if applicable
- Green Building Certification review, if applicable
- Acquisition Data
- Disclosure
- Loan Documents

This audit is conducted monthly, with loans drawn from the previous month's deliveries. Audits for a given month are generally completed within 45 days of the end of that month.

#### **8.6.4 Audit Results**

Lenders and consultants are given a summary of their reviews for the month with any deficiencies or best practices noted. This summary is in a standardized Excel template, and details issues with specific HPB Reports. The review template indicates which review items are relevant to HPB Consultants, Lenders, or both.

Results are conveyed to the primary contact(s) at each organization via email within 30 days of the end of the review process for a given month. The results of the reviews, as well as a narrative overview of the progress arc (general improvement over time), are incorporated into the bi-annual Lender Assessment process.

If a loan is found to have significant issues that impact its eligibility for Green pricing and disclosure as a Green MBS, remedies may include requiring repurchase of the loan by the lender.

If multiple HPB Reports are found to have significant issues, remedies may include loss of a pre-qualified HPB Consultant's status as pre-qualified, or exclusion from eligibility to serve as a consultant.

### **8.7 External Reporting**

At the time of closing of a Green Building Certification, Green Rewards or Green Preservation Plus Mortgage loan, the borrower signs loan document Form 6241 committing to report to Fannie Mae annually the property's energy and water performance including the ENERGY STAR Score and Source Energy Use Intensity (EUI).

At the time of origination for Green Rewards and Green Preservation Plus, the lender, via the HPB Consultant, reports the property's ENERGY STAR Score and Source Energy Use Intensity (EUI) to Fannie Mae. These numbers are published through Fannie Mae's web-based disclosure site, DUS Disclose, described in Section 8.8, Publishing. The borrower is obligated to report on these performance indicators for the life of the loan.



In October 2017, the U.S. Environmental Protection Agency developed a water score for multifamily properties; the EPA Water Score is a new 1-100 number that allows multifamily owners and managers to see how their property's water consumption compares to similar properties nationwide. Fannie Mae is in the process of adding the Water Score to the list of required reporting from borrowers in the Green Financing business.

As with any Fannie Mae multifamily DUS loan, all related escrow accounts are reported upon through the asset management organization; the energy- and water- consumption-related proceeds in any Green Rewards escrow will be utilized within 12 month of the loan closing. The impact of the use of those proceeds is Fannie Mae's greater concern and the reason for our focus on obtaining and reporting on ongoing asset performance data.

## 8.8 Publishing

Fannie Mae's Multifamily business publishes at-issuance and on-going data for all of its DUS MBS through a web-based system called DUS Disclose. Through DUS Disclose, investors can obtain comprehensive information about multifamily securities including the performance of the loans backing multifamily MBS and related delinquency statistics and financial information at the property level.

DUS Disclose provides the following features:

- At-issuance and ongoing security disclosure to align with the industry;
- Detailed property financial statement disclosure to align with the industry;
- Security, loan, and property information in a downloadable format;
- The ability to look at active and terminated security information; and,
- User-friendly interface.

Any individual can search a multifamily pool number or CUSIP identifier in the website and quickly obtain at-issuance disclosure documents for a specific security. The advanced search feature allows investors to customize a downloadable search result, which will include extensive pool information, such as factors, loan details and weighted-average statistics are also available. For more information on Fannie Mae's Multifamily disclosure system, please see:

<https://mfdusdisclose.fanniemae.com/#/home>.

Fannie Mae's extensive disclosure system also includes the required energy and water performance data reported by all borrowers using Green Financing products. Currently on DUS Disclose, each property backing a Green MBS has its at-issuance ENERGY STAR Score and Source Energy Use Intensity (EUI) reported along with the date of that data. Each borrower who has taken a Green Financing loan is required to report those same data fields each year along with the property financials. Fannie Mae is in the process of developing a means to report the ongoing energy and water performance data to investors. Until the technology development work is complete, the firm may publish the data on its website in a report format. Fannie Mae is committed to improving the reporting and transparency of the energy and water performance of its Green properties. The available multifamily energy- and water-related data continues to develop; for



example, the EPA created a new Water Score in late 2017 and Fannie Mae has added the field to the list of required disclosures by Green borrowers.

### DUS Disclose Screen Shot: Green Building Certification

The screenshot shows the Fannie Mae DUS Disclose interface for transaction AN7925. The main header includes the Fannie Mae logo, search bar, and navigation links. Below the header, a table lists transaction details: Transaction ID (AN7925), CUSIP (3138LLYX7), Product (DUS), Int. Type (Fixed), Status (Active), Issuance UPB (\$16,294,000.00), Loans (1 (t)), Properties (1 (t)), and Resecuritization (Eligible). A red circle highlights the 'Green Building Certification' section, which lists 'Leadership in Energy and Environmental Design (LEED), US Green Building Council'. Other sections include 'Affordable Breakdown' and a map of the property location in Lemon Grove, CA.

### DUS Disclose Screen Shot: Green Financing Type

The screenshot shows the Fannie Mae DUS Disclose interface for transaction AN8708. The main header includes the Fannie Mae logo, search bar, and navigation links. Below the header, a table lists transaction details: Transaction ID (AN8708), CUSIP (3138LMVA8), Product (DUS), Int. Type (Fixed), Status (Active), Issuance UPB (\$11,976,000.00), Loans (1 (t)), Properties (1 (t)), and Resecuritization (Eligible). A red circle highlights the 'Green Financing Type' section, which lists 'Green Rewards'. Other sections include 'Loan 1717474724' and 'Loan Detail'.





## DUS Disclose Screen Shot: Energy Performance Data

The screenshot displays the 'Property Detail for Duval Villa Apartments' window. The window contains a table of property details. A red circle highlights the following data points:

Field	Value
ENERGY STAR® Score	36
ENERGY STAR® Score Date	1/2018

Other visible data in the window includes:

Field	Value
Unit of Measure	Units
Property Value As of Date	12/29/2017
Tax Escrow	Y
Terrorism Insurance	Y
UW Replacement Reserves	\$34,832.00
HAP Remaining Term	
Source Energy Use Intensity	138
Source Energy Use Intensity Date	1/2018
Most Recent Debt Service Amount	

In addition to the DUS Disclose website, Fannie Mae issues a number of disclosure files that feed third party security sites such as Bloomberg, Intex, eMBS and Trepp, These third party data providers are also working to improve their Green-related disclosures. Currently, Fannie Mae DUS MBS carry a Green bond flag on their description pages in the Bloomberg system, enabling investors to quickly determine if a bond falls under the Green Financing Business. In addition, Green GeMS deals disclose the nature of their underlying securities on the third page of the tranche description page in Bloomberg. Fannie Mae continues to work with these data providers to improve the clarity around a bond's ability to fit into a portfolio with some kind of Socially Responsible Investment (SRI) mandate.



## Bloomberg Green Bond Flag

DES 4-BLOOMBERG

GO F1 F2 F3 F4 PRINT HELP MEMO SEARC QUOTE QUOTE MONIT NEWS MSG

MENU PG BA PG FW BC35 10PRP 7PRP 5PRP 76ARM

< > FN AN8708 Mtge DES Related Functions Menu Message

FN AN8708 99-11<sup>3</sup><sub>B</sub> 99-04<sup>7</sup><sub>B</sub>/99-18 Yield 3.603/3.552 Coupon 3.450% BVAL  
As of 23 May Fannie Mae Pool Prepay 0CPY

FN AN8708 Mtge Export Page 1/3 Security Description

US POOL 4.460(118)2 CUSIP 3138LMVAB Pool Level Buy Sell

Summary Comments Notes

Pool FN AN8708 As Of 05/2018  
Type (HY) Actual / 360 Balloon Conv >7 years Level pay Issue Date 03/01/2018  
Traits IO, Balloon, ACT/360 Maturity Date 03/01/2028  
Seller Arbor Commercial Funding I, LLC

Pool Information

Coupon	3.450	WAC*	4.460	Orig WAC	4.460
		WARM	118	Orig WAM	120
		WALA*	2		

Collateral Information

WAOLS	11,976,000	Orig Amort	0	Prop Name	Duval Villa Apartments
WALS*	11,976,000	Rem IO*	118	Prop Addr	4305 DUNAL ST
Orig Date	--	Tier	3	City	AUSTIN, TX
LD End Date	--	DSCR (Curr)*	1.87	Prop Type	Dedicated Student
Orig Pen*	YM(114),1(3)...	DSCR (Orig)	1.87	Num Units	112
Rem Pen*	YM(112),1(3)...	NCF (Orig)	\$1MM	Units <60%	--
		Orig LTV*	63.7	Green Bond	Y
		Occ (Orig)	95%		

# Loans\* 1 Delay 54 ( 24 ) #Value calculated by Bloomberg

Paydown Information TRACE Eligible

Performance Hist May18 Apr Mar18

1 Month CPR	0.0	0.0	
3 Month CPR			
6 Month CPR			
12 Month CPR			