

2023 Affordable Housing Preservation Outreach

ACTIVITY:

F. Finance improvements on multifamily properties: (a) which reduce energy or water consumption by tenant or property by at least 15%; and (b) where the savings generated over the improvement's expected life will exceed its cost (FHFA Criteria) (12 C.F.R. § 1282.34 (d)(2))

OBJECTIVE:

1. Increase positive environmental and social impact of green financing through development of market awareness and understanding of energy and water efficiency improvements and financing.

SUMMARY OF RESULTS:

<i>Objective's components detailed in the Plan</i>	<i>Corresponding actions taken</i>	<i>Explanation of any deviations from the Plan (if applicable)</i>
<input checked="" type="checkbox"/> Increase stakeholder knowledge of energy efficiency financing and capacity building. Continue Fannie Mae's leadership efforts in financing, measurement, and verification.	Target met through 2023 actions; see subsequent implementation steps.	
<input checked="" type="checkbox"/> Continue implementation of electrification roadmap developed in 2022 and host two related sessions for the lender learning series. The activities selected for the roadmap in 2022 will direct the implementation in 2023 but may include product development or enhancement to finance electrification, requirements for electrification assessments, and outreach efforts to explain the benefits of electrification to Borrowers and Lenders.	<p>In 2023, Fannie Mae continued the implementation of the electrification road map by:</p> <p>Developing and publishing a two-page document summarizing the key findings of the electrification road map for stakeholders.</p> <p>Changing the energy metric used to qualify properties for Green Rewards from source to site energy to ensure that properties switching from fossil fuel-based heating, water heating, and cooking systems to electric systems would be incentivized to decarbonize.</p> <p>Analyzing the Green Rewards portfolio to determine the impact of combining solar photovoltaic installation with electrification to determine the projected energy generation and cost savings.</p>	



	<p>Holding internal working group meetings to evaluate and build a business case to explore opportunities to reduce credit risk and assist borrowers in decarbonizing.</p> <p>Additionally, we held four Green Financing Lender Learning Series webinars for Fannie Mae DUS® lenders:</p> <p>April 6, 2023: “Multifamily Decarbonization and What It Means for Your Borrowers”; 269 attendees.</p> <p>June 21, 2023: “Hear Directly from Cities with Building Performance Standards”; 251 attendees.</p> <p>Sept. 20, 2023: “Green Rewards and Solar PV training”; 281 attendees.</p> <p>Dec. 13, 2023: “Cost and Benefits of Green Rewards”; 200 attendees.</p>	
<p><input checked="" type="checkbox"/> Conduct a research study according to the workplan developed in 2022. The research will include:</p> <ul style="list-style-type: none">o Using insights from the white paper released in 2021 and leveraging internal data analysis tool created in 2020-2021 to inform further analysis of energy and water data to build on program efficacy.o Researching billing practices to improve understanding of how savings accrue to tenants and owners.	<p>We conducted a research study on utility billing practices at multifamily properties, which included an evaluation of renter utility costs across the Multifamily Green portfolio, analysis of how renter billing practices impact household energy cost savings, and how costs compare between utility types.</p> <p>We are on track to publish the results as part of the 2024 Duty to Serve Plan.</p>	
<p><input checked="" type="checkbox"/> Continue to show industry presence and leadership by participating at energy efficiency/green building industry conferences.</p>	<p>Members of the Fannie Mae Green Financing Team participated in four key industry conferences in 2023:</p> <p>Greenbuild International Conference & Expo.</p> <p>DOE Better Buildings Summit.</p> <p>Building Energy Boston.</p> <p>Building Energy NYC.</p>	



<p><input checked="" type="checkbox"/> Develop new resources to support lenders and encourage borrowers to pursue deep energy efficiency retrofits. This may include a focus on decarbonization and electrification.</p>	<p>We developed several resources to encourage the pursuit of deeper energy efficiency retrofits, including:</p> <p>An Inflation Reduction Act (IRA) incentives blog post to showcase the benefits through case studies.</p> <p>A billbacks infographic to explain the various methods of billbacks (submetering, ratio utility billing systems [RUBs], flat fee) to help borrowers identify which process they use at their property and how billing strategies impact whether utility savings accrue to property owners or renters.</p> <p>A decarbonization infographic to explain how coupling efficiency improvements and electrification with grid decarbonization helps reduce greenhouse gas emissions in multifamily properties.</p>	
<p><input checked="" type="checkbox"/> Use knowledge gained from 2022 outreach to lender partners and High Performance Building Consultants to improve guidance and/or refine requirements for green mortgage loans to increase positive program outcomes.</p>	<p>Our tools, requirements, and outreach in 2023 are summarized below.</p> <p>Our tools/requirements to encourage electrification projects include:</p> <p>Updating the energy metric used to qualify properties for Green Rewards from source to site energy to ensure that properties switching from fossil fuel-based heating, water heating, and cooking systems to electric systems would be incentivized to decarbonize. We developed and published a new Form 4099.H (Analysis Tool for a High Performance Building Report) to reflect this change.</p> <p>Developing and publishing a new Form 4099.I (Technical Solar Assessment) to reflect new IRA incentives for decarbonization.</p> <p>Our program guidance included:</p> <p>Promoting Green Rewards through a Multifamily communication debunking three myths about the program</p>	



<input checked="" type="checkbox"/> Host one convening of the Green Rental Housing Task Force, building on the 2021 and 2022 sessions. Continue to solicit and evaluate ideas for increasing the impact of green financing.	<p>We held two Green Rental Housing Task Force meetings in July and November 2023:</p> <p>July 2023: Discussed Greenhouse Gas reporting research and key learnings from multifamily resilience literature review.</p> <p>November 2023: Reviewed and discussed existing green financing solutions.</p>	
<input type="checkbox"/> Develop and launch multifamily energy and water survey for multifamily property owners to collect whole property consumption and property data to support U.S. Environmental Protection Agency's (EPA's) update of the 1-100 ENERGY STAR Score and EPA Water score for Multifamily Housing.	<p>The 2023 Multifamily Energy and Water Survey launched on March 1 and ran through Aug. 31, 2023. The survey collected multifamily property energy and water consumption and costs from over 2,200 properties, representing 47 states and the District of Columbia.</p>	

SELF-ASSESSMENT RATING OF PROGRESS:

- Target met
- Target exceeded
- Target partially completed
- No milestones achieved

IMPACT:

- 50 – Very Large Impact
- 40
- 30 – Meaningful Impact
- 20
- 10 – Minimal Impact
- 0 – No Impact

IMPACT EXPLANATION:

1. How and to what extent were actions under this objective impactful in addressing underserved market needs, or in laying the foundation for future impact in addressing underserved market needs?

Our work in 2023 focused on laying a foundation for multifamily buildings to meet current and future policy and/or market pressures to significantly reduce carbon emissions. Our focus is on helping to drive energy efficiency and carbon reduction improvements in multifamily properties, which also positively impacts resident affordability.

To do this, we refined existing products, and built capacity and understanding of the changing market among our lenders.

Refining existing products

Building on our efforts in 2022 to drive more electrification projects through our Green Rewards product (which included integrating an electrification assessment into the Green Rewards energy audit tool (Form 4099.H) and prohibiting new fossil fuel



space heating systems as an eligible Green Rewards efficiency measure), we further augmented the program to ensure that the existing program requirements were incentivizing properties to convert existing fossil fuel equipment/appliances to electric systems.

Additionally, we updated the energy metric used to qualify properties for Green Rewards from source energy to site energy to ensure that properties switching from fossil fuel-based heating, water heating, and cooking systems to electric systems would be incentivized to decarbonize. Historically, the program eligibility was based on source energy, which represents the total amount of energy incorporating all transmission, delivery, and production losses. Site energy represents the amount of energy consumed just at the building site and does not account for anything lost in generation or transmission. Electricity currently has a source-site ratio of 2.8 in the U.S., according to EPA, meaning that it requires 2.8 units of energy generated and transmitted to deliver one unit of energy to the site. Since losses are typically negligible from source to site for natural gas and other fuels (source-site ratio closer to 1.0), moving from a fuel-based to electric system can mean increasing source energy even when the new electric system is much more efficient. In effect, switching to site energy enhances the ability of borrowers to qualify for the energy savings requirements of Green Rewards with projects that involved fuel conversion, even when they were poised to provide meaningful cost savings, carbon emissions reductions, and indoor environmental quality benefits.

Building lender understanding of decarbonization and building performance standards

Lenders play a critical role in providing information and options to borrowers, so we continued the effort initiated in 2022 to educate lenders and borrowers on decarbonization and building performance standards. This ongoing effort lays the groundwork for future impact. While only a handful of Building Performance Standards exist (in Washington, D.C., Boston, MA, New York, NY, and Denver, CO), many have long lead times for compliance, and dozens more (~40) are expected to be adopted by jurisdictions nationwide. Through the Lender Learning Series, we provided an overview of decarbonization, allowed attendees to hear directly from jurisdictions implementing Building Performance Standards, and described how Green Rewards can help support their efforts. The decarbonization infographic was published to explain the respective roles of efficiency and electrification in helping to decarbonize buildings. Based on strong attendance and engagement in the Lender Learning Series and polling questions to evaluate comprehension of the topics and effectiveness of the sessions (66% of respondents said they now understand Building Performance Standards; 31% said that while they understand the standards, they would like another session on the topic), our lender education efforts helped lay the foundation for future impact.

Supporting the ENERGY STAR® Score for multifamily properties

In 2012, Fannie Mae collaborated with the EPA and multifamily industry partners to develop and implement an energy and water survey for multifamily properties. This effort resulted in the development of the EPA 1-100 ENERGY STAR® Score for Multifamily Housing, released in 2014, and the EPA Water Score for Multifamily, released in 2017.

To update the decade-old data underlying these scores, Fannie Mae again partnered with industry leaders to launch the 2023 Multifamily Energy and Water Survey, which ran from March 1 through August 30, 2023. The survey collected property characteristics, utility costs, and whole energy and water consumption data for over 2,200 multifamily properties, including variations in climate zone, size, building type, vintage, and affordability.

As the efficiencies of multifamily buildings change, the data underlying the EPA's ENERGY STAR and Water Scores for multifamily properties must continue to be updated so that scores accurately represent the relative efficiency of properties. These publicly available metrics allow building owners and managers to track and compare their energy and water usage and allow them to identify areas of improvement.

2. What did the Enterprise learn from its work about the nature of underserved market needs and how to address them?

One of the biggest drivers of large capital improvements for borrowers today is property condition, so we need to consider how messaging, guidance, and products can set borrowers up to integrate electrification and efficiency into property condition upgrades.

Stakeholders and our research findings continue to highlight the importance of grounding efforts in energy efficiency, rather than focusing solely on electrification, as efficiency is key to minimize affordability implications of transitioning to electric systems.



3. Optional: If applicable, why was the Enterprise unable to achieve the Plan target?

N/A