



Fannie Mae 2020  
Affordable Housing Preservation  
Loan Product

**ACTIVITY:**

H. Regulatory Activity: Energy or water efficiency improvements on single-family, first lien properties that meet the FHFA Criteria (12 C.F.R. § 1282.34 (d) (3)).

**OBJECTIVE:**

1. Increase liquidity for energy or water efficiency improvements through outreach, research, and developing solutions (Analyze, Partner and Innovate, Test and Learn).

**SUMMARY OF RESULTS:**

Following are the 2020 Actions under this Objective per the January 1, 2021 Duty to Serve Plan:

<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"/> Based on lessons learned in 2018 and 2019 and to further increase knowledge through market outreach, research, analysis, and tests:	•N/A	•N/A
<input checked="" type="checkbox"/> Enhance and continue to execute the business-to-business marketing and outreach campaign by identifying new market entrants and incorporating impact and needs into outreach efforts and updating product materials and webinars or presentations. Target engagement with an additional seven lenders and three additional stakeholders (i.e., lenders and stakeholders not approached in 2018 or 2019), representing a significant commitment of time. The additional lenders and stakeholders will be selected based on evaluation of 2019 activities and responses as well as an assessment of geographical and other needs.	<ul style="list-style-type: none"> <li>•Fannie Mae launched a HomeStyle® Energy and HomeStyle® Renovation marketing campaign to create awareness among lenders, including those located in MSAs where the home building stock averages 40 years or older.</li> <li>•We created a HomeStyle Energy eLearning Course for lenders.</li> <li>•We updated our HomeStyle Energy variance training, which all lenders with the variance are required to take.</li> <li>•We updated the HomePath® energy options information sheet for the HomePath webpage.</li> </ul>	•N/A



Fannie Mae 2020  
Affordable Housing Preservation  
Loan Product

<p>Fannie Mae will also work with additional HFA in two more States and work with the non-profit organizations engaged in 2018 and 2019 to determine additional organizations we should target. Ten additional relationships will be a significant commitment of time and will provide substantial learnings on how to expand engagement in following years.</p>	<ul style="list-style-type: none"> <li>•We conducted outreach to 14 lenders to discuss HomeStyle Energy and current variances to help encourage DTS-eligible loan deliveries.</li> <li>•We conducted non-lender stakeholder outreach, including Action, Inc., BestBuy, CenterPoint Energy, Eversource, Northeast Energy Efficiency Partnership, New Jersey Natural Gas, Clearly Energy, Energy Futures Initiative, and The Rocky Mountain Institute.</li> </ul>	
<p><input checked="" type="checkbox"/> Continue to expand industry leadership efforts by participating in two key industry conferences and speaking at two other events for purposes of informing the industry of research findings, product enhancements, and/or market insights. Host one energy advisory council meeting with cross-functional industry representation, incorporating feedback from 2018 and 2019 and including two new participants in</p>	<ul style="list-style-type: none"> <li>•We attended the American Council for an Energy Efficient Economy’s (ACEEE) Rural Energy Conference, the Midwest Energy Solutions Conference, and the Behavior, Energy and Climate Change (BECC) Conference.</li> <li>•We moderated a panel at the ACEEE Rural Energy Conference.</li> <li>•We presented our research findings at the BECC Conference.</li> </ul>	<p>•N/A</p>



Fannie Mae 2020  
Affordable Housing Preservation  
Loan Product

<p>order to improve engagement and outcomes.</p>	<ul style="list-style-type: none"> <li>•We presented HomeStyle Energy to the National Association of Realtors Boston Chapter.</li> <li>•Due to the pandemic, we hosted a virtual Energy Advisory Council meeting with cross-functional industry representation providing feedback on our plan initiatives.</li> </ul>	
<p><input checked="" type="checkbox"/> Assess findings from Fannie Mae research to date and build upon the outcome of 2018 and 2019 as well as new trends to acquire additional data and industry research, conduct one new consumer survey and/or focus group that contributes to a trend analysis, add new acquisitions to the loan analysis, and publish findings publicly related to one set of these research outcomes.</p>	<ul style="list-style-type: none"> <li>•We completed a multi-year study on smart thermostats, and the impact small energy-saving investments can have on FICO Scores. In addition, the study surveyed participants to determine if their energy-saving behaviors changed over time. The research is published on Fannie Mae’s website.</li> <li>•We conducted one new consumer survey to determine preferences for energy and water upgrades, which considered the current pandemic’s impacts. The survey included responses from homeowners across the low- and moderate-income (LMI) spectrum.</li> <li>•We conducted a loan-level analysis on homes in Fannie Mae’s portfolio that were certified to the National Green Building Standard to determine how many loans would conform to Duty to Serve (DTS) eligibility, and how the delinquency rate of these National Green Building Standard certified homes compared with the average delinquency rate of loans in Fannie Mae’s portfolio.</li> </ul>	<p>•N/A</p>



Fannie Mae 2020  
Affordable Housing Preservation  
Loan Product

	<ul style="list-style-type: none"> <li>•We conducted a loan-level analysis of HomeStyle Energy loans, which refinanced PACE debt.</li> </ul>	
<p><input checked="" type="checkbox"/> Evaluate the outcomes of variance(s) executed in 2018 and 2019 and introduce one new variance with terms for one additional policy/product update, or review credit and/or collateral policy identifying opportunities to enhance policy/product parameters. If feasible, and depending on research, learnings, and analysis, publish publicly one policy update.</p>	<ul style="list-style-type: none"> <li>•We monitored the outcomes of our 2019 variance and documented it in our Energy Learnings Summary.</li> <li>•We implemented two new energy-related HomeStyle Energy variances this year: <ul style="list-style-type: none"> <li>•Smart Home HomeStyle Energy variance</li> <li>•Distressed Property Energy variance</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>•N/A</li> </ul>
<p><input checked="" type="checkbox"/> Continue to evaluate potential energy partnership opportunities from engagement in 2018 and 2019 with State energy financing agencies, utilities, or solar energy financing companies, to determine Fannie Mae’s role, if any, in collaborating with related financing, subsidy, or assistance programs. Execute one or more partnerships to help reduce energy and/or water consumption of very low-, low-, and moderate-income customers.</p>	<ul style="list-style-type: none"> <li>•This year, we launched a test-and-learn program with utilities. We developed a program, through outreach in 2018 and 2019, and in 2020 we launched the Welcome Home Kit Program. With the first participating utility, National Grid of Massachusetts, and with the assistance of our vendor, EFI, we provided smart thermostats to over 600 recent low- to moderate-income (LMI) borrowers in the utility’s service territory. The utility also promoted various energy-saving programs offered to their low-income customers. Fannie Mae launched two more utility collaborations in December 2020.</li> </ul>	



Fannie Mae 2020  
Affordable Housing Preservation  
Loan Product

**SELF-ASSESSMENT RATING OF PROGRESS:**

- Objective met
- Objective exceeded
- Objective partially completed: 75-99% (substantial amount)
- Objective partially completed: 50-74% (limited amount)
- Objective partially completed: 25-49% (minimal amount)
- Objective partially completed: 0-24% (less than a minimal amount)
- No milestones achieved

**PARTIAL CREDIT JUSTIFICATION:**

N/A

**IMPACT:**

- 50 – Substantial Impact
- 40 – Between Meaningful and Substantial Impact
- 30 – Meaningful Impact
- 20 – Between Minimal and Meaningful Impact
- 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?**

Outreach, education, and partnerships to reduce energy consumption and utility costs:

Through new training courses, individual meetings with lenders, and presentations at meetings and conferences, we helped educate, simplify, and inform the market in ways that could help encourage energy and water efficiency improvements and make them more affordable as outlined in the summary table.

In addition, we executed a test program with utilities to directly reduce energy bills for recent LMI borrowers by giving them access to smart thermostats and connections to other free energy reduction programs. Our initial launch partner, National Grid (MA), reported that 625 recent LMI borrowers have opted in to receiving a smart thermostat, and nearly 40 of them have already participated in the utility’s other energy programs since signing up to receive a smart thermostat. In mid-December, we launched with two more utilities, Eversource (MA) and CenterPoint (MN), offering no-cost smart thermostats to LMI borrowers. By working with utilities, we can introduce the homeowner to various utility-, energy-, and water-saving programs that they may have been previously unaware of, potentially reducing energy bills.

This program immediately reduces borrowers' energy consumption and costs. Previous research has shown that low-income consumers can reduce utility bills by approximately 10-12 percent by using smart thermostats to help them manage their heating and cooling costs. A 2020 study by the ACEEE found that low-income households on average spent 8.1 percent of their income on energy costs compared to 2.3 percent for non-low-income households. Our own research conducted this year and described below also highlights the financial



## Fannie Mae 2020 Affordable Housing Preservation Loan Product

benefits of managing home energy usage. As this program expands with more partners in more markets, it builds the foundation for more impact in the future.

### Product Development:

We created a Smart Home Variance for HomeStyle® Energy that allows a borrower to finance the cost of purchasing and installing a pre-assembled bundle of eligible energy efficient home improvement devices in conjunction with a refinance loan. This variance helps provide immediate energy savings while also enhancing the appeal of the home.

### Expanded energy efficiency data:

We recognize the need to analyze data about efficient homes, homes with green certifications, and homes with energy ratings to better understand how loans tied to these homes perform and how the market values them. We cross-referenced the National Green Building Standard (NGBS) home certification database to loans in the Fannie Mae portfolio and found that of the 1,856 loans identified as homes with the NGBS certification, 218 were delivered to Fannie Mae in 2020. Of those 218 loans, 55 (25.2 percent) were at or below 100 percent Area Median Income (AMI) and a primary residence.

We also evaluated the loan performance of the 218 loans. The 60-in-6 delinquency rate was 2.17 percent, which is better than the overall portfolio rate of 2.90 percent. However, because the sample size was small, the results were not statistically significant. Overall, it is significant to find that 25 percent of these green and efficient homes met the Duty to Serve criteria, contradicting the general perception that green homes are out of reach for LMI consumers. This analysis will serve as a framework to understand other green certifications and energy attributes of homes and better design products that serve LMI owners and buyers.

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

We learned through our Smart Thermostat User Behavior Study that geography had an impact on how smart thermostats affected financial health (as measured by FICO score), likely due to the role of climate. For example, Phoenix had the highest number of Cooling Degree Days (CDD), a key factor in HVAC use, which may explain why study participants living in Phoenix tended to experience the most improvement to their financial health during the study period. We also learned that financial impact varies by AMI, such that borrowers with the lowest income benefit the most from having an energy-saving device, like a smart thermostat. Fannie Mae can leverage this information to test new programs based on geography and income groups.

According to our Energy Consumer Research, LMI groups are spending more time at home in response to the pandemic (67 percent). This is causing some of them to consider home improvement projects in the next 12 months (40 percent.) However, half of the respondents believe these improvements are initially too expensive and are focused on small energy-efficient projects and plan to do the work themselves. All consumers, including those LMI, reported financing the costs of those projects into a mortgage as an attractive option. It is critical for us to demonstrate the cost savings over time and pursue financing options to make energy efficiency improvements more attainable for LMI homeowners and buyers. We will continue to educate realtors and lenders of Fannie Mae products that enable this.



Fannie Mae 2020  
Affordable Housing Preservation  
Loan Product

Finally, we learned that developing energy-saving programs with utilities can directly impact new homeowners; however, the development and approval of program materials, marketing, and legal language can make the rollout a protracted effort. Evaluating best practices will help Fannie Mae and utilities refine these partnerships and influence the long-term viability of this program.

**3. (Optional): If applicable, why were all components of this objective not completed?**

N/A



**Fannie Mae**  
**Affordable Housing Preservation**  
**Second Quarter Report: April 1 - June 30, 2020**  
**Loan Product**

**ACTIVITY:**

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**OBJECTIVE:**

1. Increase liquidity for energy or water efficiency improvements through outreach, research, and developing solutions (Analyze, Partner and Innovate, Test and Learn).

**SUMMARY OF RESULTS:**

We have been active in our outreach, research, and product development activities during the first half of 2020. We have been developing a business-to-business HomeStyle Energy and HomeStyle Renovation marketing campaign targeting lenders in specific MSA's where the housing stock vintage is 40 years or older. This campaign will launch in August 2020 and continue through April 2021.

Lender outreach was on hold for most of the first half of 2020 due to Covid-19. However, we continued to engage with multiple stakeholders including utilities, home energy raters, retail stores that sell energy-efficient products, geothermal energy companies, and companies developing lending products that could align with HomeStyle Energy. Additionally, we moderated a panel on energy financing at the American Council for an Energy-Efficient Economy's (ACEEE) Rural Energy Conference while also attending the Midwest Energy Efficiency Alliance's (MEEA) Midwest Energy Solutions conference in February.

As part of our ongoing data and research efforts, we have identified an external energy dataset, that includes both property characteristics and energy rating data, which we will use to analyze loan performance in the second half of the year.

We are wrapping up the analysis on our multi-year consumer energy research which is studying both the financial health over time of low-income borrowers who make energy improvements and their behaviors toward energy savings and future improvements. We anticipate publishing a report on the research in Q4. We are also working with internal research team to field a consumer survey on energy and water this year.

Additionally, we are implementing a new variance for HomeStyle Energy which may contribute to our loan count in the fourth quarter. The HomeStyle Energy Smart Home Loan variance allows borrowers to purchase and install a pre-assemble bundle of eligible energy efficient home improvement devices. The bundle includes an ENERGY STAR-certified smart





**Fannie Mae**  
**Affordable Housing Preservation**  
**Second Quarter Report: April 1 - June 30, 2020**  
**Loan Product**

thermostat and remote sensor to improve energy efficiency and other connected home devices to improve safety and security of the home, and they must be professionally installed to ensure they are working properly.

Following are the 2020 Actions under this Objective:

Based on lessons learned in 2018 and 2019 and to further increase knowledge through market outreach, research, analysis, and tests:

Enhance and continue to execute the business-to-business marketing and outreach campaign by identifying new market entrants and incorporating impact and needs into outreach efforts and updating product materials and webinars or presentations. Target engagement with an additional seven lenders and three additional stakeholders (i.e., lenders and stakeholders not approached in 2018 or 2019), representing a significant commitment of time. The additional lenders and stakeholders will be selected based on evaluation of 2019 activities and responses as well as an assessment of geographical and other needs. Fannie Mae will also work with additional HFA in two more States and work with the non-profit organizations engaged in 2018 and 2019 to determine additional organizations we should target. Ten additional relationships will be a significant commitment of time and will provide substantial learnings on how to expand engagement in following years.

Continue to expand industry leadership efforts by participating in two key industry conferences and speaking at two other events for purposes of informing the industry of research findings, product enhancements, and/or market insights. Host one energy advisory council meeting with cross-functional industry representation, incorporating feedback from 2018 and 2019 and including two new participants in order to improve engagement and outcomes.

Assess findings from Fannie Mae research to date and build upon the outcome of 2018 and 2019 as well as new trends to acquire additional data and industry research, conduct one new consumer survey and/or focus group that contributes to a trend analysis, add new acquisitions to the loan analysis, and publish findings publicly related to one set of these research outcomes.

Evaluate the outcomes of variance(s) executed in 2018 and 2019 and introduce one new variance with terms for one additional policy/product update, or review credit and/or collateral policy identifying opportunities to enhance policy/product parameters. If feasible, and depending on research, learnings, and analysis, publish publicly one policy update.



**Fannie Mae**  
**Affordable Housing Preservation**  
**Second Quarter Report: April 1 - June 30, 2020**  
**Loan Product**

**SELF-ASSESSMENT RATING OF PROGRESS:**

- On-target to meet or exceed the objective
- Progress delayed and/or partial completion of the objective expected
- Unlikely to achieve any milestones of the objective

**ADDITIONAL INFORMATION (IF APPLICABLE):**