

Exhibit G:  
**Annual Loan Products Narrative Reporting Template**

FREDDIE MAC  
 AFFORDABLE HOUSING PRESERVATION  
 2023  
 LOAN PRODUCT

**ACTIVITY:**

9 – Financing of Energy- and/or Water-Efficiency Improvements on Single-Family Properties: Regulatory Activity

**OBJECTIVE:**

A – Develop Automation and Industry Standards to Support Loan Purchases on Energy-Efficient First-Lien Properties

**INFEASIBILITY:**

Check here if the Enterprise is submitting an infeasibility request for the objective.

**SUMMARY OF RESULTS:**

Freddie Mac met our goals under this objective in 2023 to enhance our systems to implement an energy-efficiency dataset and to make industry participants aware of the enhancement and its benefits.

Above and beyond the actions stated in our Plan, we updated GreenCHOICE Mortgages® policies to provide financing for the following types of improvements:

- Electrification projects (for example, replacing equipment or appliances that run on natural gas or other combustible fuel with efficient, all-electric technologies)
- ENERGY STAR® energy-efficient products
- Health and safety improvements (for example, ventilation, radon remediation, asbestos, and mold or lead abatement and building-code compliance, if cited by the applicable jurisdiction)
- Resiliency and preventative improvements to either repair natural disaster damage or improve a home’s ability to withstand future natural disasters

Action	2023 Achievements
1. Implement an energy-efficiency dataset in Freddie Mac’s lender-facing applications through a technology release.	<p><b>Complete</b></p> <ul style="list-style-type: none"> <li>• Implemented two new energy-efficiency data points in the Uniform Loan Delivery Dataset (ULDD) that lenders can use when entering loan data related to our renovation product suite:                             <ul style="list-style-type: none"> <li>○ Energy Improvement Amount</li> <li>○ Renewable Energy Component Type (solar, wind turbines, geothermal, other)</li> </ul> </li> <li>• Mandated that lenders begin collecting the new data points on May 22, 2023, for loans with Application Received Dates on or after January 1, 2023.</li> </ul>

	<ul style="list-style-type: none"> <li>Implemented the Residential Energy Services Network (RESNET) Home Energy Rating System (HERS) score attribute and made it accessible via the RESNET application programming interface (API), allowing the ratings information to flow directly from RESNET to Freddie Mac's Loan Selling Advisor® (LSA) and facilitating inclusion of eligible loans in Green Bonds.</li> <li>Developed and implemented a Solar Web Application that automates the process of searching appraisals to identify properties with solar panels that can be included in Green Bonds, thereby reducing manual search efforts.</li> </ul>
<p>2. Issue at least one notice to lenders of upcoming system enhancements to incorporate an energy-efficiency dataset.</p>	<p><b>Complete</b></p> <ul style="list-style-type: none"> <li>Issued notices relevant to lenders and to appraisers about the new dataset and related Uniform Appraisal Dataset (UAD) requirements.</li> <li>Issued a <a href="#">joint GSE statement</a> in March on the UAD rollout with links to Freddie Mac implementation resources to make lenders and appraisers aware of data that must be captured.</li> <li>Featured items about the new dataset in six issues of Single-Family Lender News, which is sent through e-mail to Freddie Mac lenders and other subscribers and <a href="#">posted</a> to the Freddie Mac Single-Family web site.             <ul style="list-style-type: none"> <li><a href="#">February issue</a> under Loan Selling Advisor® Updates, which links to a <a href="#">January News &amp; Insights article</a> with a reminder of the upcoming mandatory effective date.</li> <li><a href="#">April issue</a> under UAD Redesign Rollout Begins, which links to our <a href="#">Uniform Appraisal Dataset page</a>. From there, lenders can access a range of <a href="#">related resources</a>.</li> <li><a href="#">May issue</a> under Loan Selling Advisor Updates, which links to an <a href="#">April News &amp; Insights article</a> with a reminder about the upcoming mandatory effective date.</li> <li><a href="#">June issue</a> under Loan Selling Advisor Updates, which links to a <a href="#">June News &amp; Insights article</a> reminding lenders that the new dataset is fully in effect.</li> <li><a href="#">July issue</a> under New Uniform Appraisal Dataset Documentation, which links to <a href="#">documentation requirements</a> and to a <a href="#">joint GSE announcement</a> with information about UAD and the revised Uniform Residential Appraisal Report.</li> <li><a href="#">August issue</a> under Loan Selling Advisor Updates, which links to a <a href="#">July News &amp; Insights article</a> reminding lenders about the new loan delivery processes and offering access to the <a href="#">ULDD Delivery Tips course</a>.</li> </ul> </li> <li>Added related information, links to announcements, and other resources on our <a href="#">ULDD</a> web page.</li> <li>Added related information, links to announcements, and other resources to our <a href="#">UAD</a> web page.</li> </ul>

	<ul style="list-style-type: none"> <li>• Sent a reminder of the effective date in a Single-Family Tools &amp; Technology newsletter.</li> </ul>
3. Create lender training on how to submit and report on the energy-efficiency dataset.	<p><b>Complete</b></p> <ul style="list-style-type: none"> <li>• Revised existing training and collateral offerings to incorporate the new and updated energy-efficiency data points and how to enter and report on them through ULDD.</li> </ul>
4. Create a marketing campaign targeted at appraisers, builders, and real estate professionals on the energy-efficiency data and how it enhances property valuation.	<p><b>Complete</b></p> <ul style="list-style-type: none"> <li>• Developed an integrated marketing plan for promoting the energy-efficiency data, opportunities for increasing home energy efficiency, and the benefits of energy-efficient homes.</li> <li>• Prepared marketing collateral in support of the ULDD enhancements.</li> <li>• Reviewed existing collateral for GreenCHOICE and refreshed content and messaging to reflect the introduction and benefits of recent data and policy updates, such as the new Loan Program Identifiers, new and updated data points, and the ability to pair GreenCHOICE Mortgages and CHOICERenovation to make financing more holistic home-improvement projects faster, easier, and more cost-effective.</li> </ul>

**SELF-ASSESSMENT RATING OF PROGRESS:**

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

**PARTIAL CREDIT JUSTIFICATION:**

Not applicable.

**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 the actions or deliverables under this objective impactful in addressing the applicable underserved market’s needs, or in laying the foundation for future impact in addressing the underserved market’s needs?**

Our efforts under this objective made a large impact on the market, and laid the foundation for greater future impact, by expanding standardization and automating processes. The new energy-efficiency data points allow Freddie Mac to better track the types of improvements that homeowners are financing and the associated costs,

which will offer Freddie Mac deeper insight into GreenCHOICE usage and loan performance. Such information also could help inform future product enhancements that could lead to more lending in this market. Our marketing and communications efforts aimed to make industry participants aware of the data points, help ensure that lenders use data points effectively, and educate lenders, builders, and real estate professionals on the benefits of improved home energy efficiency.

In addition, creating an application programming interface (API) with RESNET allows Freddie Mac to receive RESNET Home Energy Rating System (HERS) scores on new, energy-efficient homes to flow directly from RESNET into our systems. This eliminated the need for manual queries into the HERS database and automating identification of loans eligible for inclusion in Green Bonds. This information along with information that we will gather through the new data points will help enable Freddie Mac in tallying Duty to Serve-qualifying energy-efficiency loans. In 2024, we will initiate an energy-efficiency loan purchase target.

Freddie Mac also refined our tools for identifying loans eligible for inclusion in our Single-Family Green Bonds; continuing to issue Green mortgage-backed securities (MBS) helped raise the visibility of mortgage financing for energy-efficient homes and increase liquidity in the market. Freddie Mac Single-Family's [Green MBS Impact Report 2022](#), released in July 2023, highlighted the difference that our green mortgage purchases and securitizations made to homeowners and homebuyers, the housing and capital markets, and the environment. Single-Family Green MBS issuances totaled \$1.4 billion of bonds backed by 3,982 loans, more than double 2021 issuances. The increase largely was due to the inclusion of mortgages backed by newly constructed homes with HERS Index Scores of 60 or less in addition to GreenCHOICE Mortgage refinance loans used to pay off existing debt incurred to buy and install solar panels.

Around one-third of properties with mortgages included in our Green MBS issued in 2022 were in states that generated more carbon through energy production than the national average. Almost 60% of the mortgages were made to borrowers who live in states with above average electricity bills. Our analysis also showed that 40% of mortgages were made to borrowers in the 10 states with the highest average electricity bills.

Using the methodology developed with Earth Advantage, we estimated that our 2022 Single-Family Green MBS issuances supported the following results:

- Saved an estimated average of \$722 in annual utility costs for each homeowner with a GreenCHOICE Mortgage or whose home received a HERS rating of 60 or less, representing a 31% anticipated average decrease in total annual utility bills for each of these borrowers.
- Avoided greenhouse gas emissions equivalent to removing 3,797 cars from the road for a year, representing an estimated 54% decrease in emissions.<sup>1</sup>

Freddie Mac intends to release a Green MBS impact report yearly. The 2023 impact report will be available in the second half of 2024.

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

We learned about opportunities to enhance our GreenCHOICE product through performing a survey of existing energy-efficiency products in the market and gathering industry feedback. In reviewing a range of products for financing home energy-efficiency improvements, we identified features beyond those in GreenCHOICE that further support energy savings, resiliency, and health and safety. Market research and industry feedback reinforced the need for additional financing options to support those types of improvements. As a result, we updated our GreenCHOICE mortgage policies to include electrification projects, ENERGY STAR-qualifying products, and improvements that positively affect health, safety, and resiliency.

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

Not applicable.

<sup>1</sup> Calculated using EPA GHG Equivalencies Calculator <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>

Exhibit C:  
**Second Quarter Loan Products Narrative Reporting Template**

FREDDIE MAC  
 AFFORDABLE HOUSING PRESERVATION  
 Q2: JANUARY-JUNE 2023  
 LOAN PRODUCT

**ACTIVITY:**

9 – Financing of Energy or Water Efficiency Improvements on Single-Family Properties: Regulatory Activity

**OBJECTIVE:**

A – Develop Automation and Industry Standards to Support Loan Purchases of Energy-Efficient First-Lien Properties

**SUMMARY OF PROGRESS:**

Freddie Mac made progress during the first half of 2023 toward our goals under this objective to implement technology enhancements needed to support an energy-efficiency dataset and raise industry awareness of the enhancements.

Action	2023 Achievements through Q2
<p>1. Implement an energy-efficiency dataset in Freddie Mac’s lender-facing applications through a technology release.</p>	<p><b>In progress</b></p> <ul style="list-style-type: none"> <li>• Implemented two new energy-efficiency data points in the Uniform Loan Delivery Dataset (ULDD) that lenders can use when entering loan data related to our renovation product suite:                             <ul style="list-style-type: none"> <li>○ Energy Improvement Amount</li> <li>○ Renewable Energy Component Type (solar, wind turbines, geothermal, other)</li> </ul> </li> <li>• Mandated that lenders begin collecting the new data points on May 22, 2023, for loans with Application Received Dates on or after January 1, 2023.</li> <li>• Working with Residential Energy Services Network (RESNET) to identify ways to make it easier for lenders to understand the energy efficiency of a home.</li> <li>• Implemented the RESNET Home Energy Rating System (HERS) score attribute and made it accessible via the RESNET application programming interface (API), which allows the ratings information to flow directly from RESNET and eliminates the need for manual data entry. Freddie Mac Loan Selling Advisor® (LSA) will be integrated with RESNET API by Q4 to access the HERS Score dataset, which will facilitate inclusion of eligible loans in Green Bonds.</li> <li>• Developed and implemented a new Solar Web Application that automates the process of searching appraisals to identify properties with solar panels that can be included in Green Bonds, thereby reducing manual search efforts.</li> </ul>

<p>2. Issue at least one notice to lenders of upcoming system enhancements to incorporate an energy-efficiency dataset.</p>	<p><b>Complete</b></p> <ul style="list-style-type: none"> <li>• Issued an <a href="#">announcement</a> that provided an overview of the updated Uniform Appraisal Dataset (UAD) data requirements, which entail new data points as well as updates to existing data points. Released additional documentation around implementation, including an implementation guide, to the mortgage community.</li> <li>• Issued an <a href="#">announcement</a> that the ULDD Phase 4a mandate went into effect.</li> <li>• Issued an <a href="#">announcement</a> about the requirements to identify renewable energy improvements and the amount financed in ULDD. Provided an overview of the updated data requirements, which entail new data points as well as updates to existing data points as part of our continuing efforts to improve loan delivery standards.</li> </ul>
<p>3. Create lender training on how to submit and report on the energy-efficiency dataset.</p>	<p><b>In progress</b></p> <ul style="list-style-type: none"> <li>• Revising existing training and collateral offerings to incorporate the new and updated energy-efficiency data points and how to enter and report on them through ULDD.</li> </ul>
<p>4. Create a marketing campaign targeted at appraisers, builders, and real estate professionals on the energy-efficiency data and how it enhances property valuation.</p>	<p><b>In progress</b></p> <ul style="list-style-type: none"> <li>• Developing an integrated marketing plan for promoting the energy-efficiency data, opportunities for increasing home energy efficiency, and the benefits of energy-efficient homes.</li> <li>• Preparing marketing collateral in support of the ULDD enhancements.</li> <li>• Reviewing existing collateral for GreenCHOICE and refreshing the content and messaging to reflect the introduction and benefits of recent data and policy updates, such as the new LPIs, new and updated data points, and the combination of GreenCHOICE Mortgages and CHOICERenovation as a means of making financing for more holistic home-improvement projects faster, easier, and more cost-effective.</li> </ul>

**SELF-ASSESSMENT RATING OF PROGRESS:**

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

**ADDITIONAL INFORMATION (IF APPLICABLE):**

Not applicable.