Exhibit H:

Annual Outreach Narrative Reporting Template

FREDDIE MAC

AFFORDABLE HOUSING PRESERVATION

2018 REPORT

EVALUATION AREA: OUTREACH

ACTIVITY:

Activity 6 – Energy or water efficiency improvements on Multifamily rental properties: Regulatory Activity

OBJECTIVE:

Objective A: Publish an annual study of energy and water efficiency through the Green Advantage program

ACTIONS:

In 2018, Freddie Mac exceeded this planned objective. We published high impact, precedent-setting research and data in our white paper entitled Green Improvements in Workforce Housing as part of our "Spotlight on Underserved Markets" series[1]. Per the Plan, it provides analysis of our extensive green loan portfolio and offers insight into cost-effective green improvement practices. Beyond the Plan, it examines the impacts of changing green loan qualification criteria on borrower behavior. We also published proprietary property-level green improvement data to enable market participants to perform their own analysis. To our knowledge, this is the first substantive public data source about green retrofits on multifamily housing, and our paper is the first report published on green improvements being implemented in existing workforce housing. The combination of the white paper and dataset has a direct and substantial impact on the market. FHFA used the underlying research to set new market guidelines for green loans to be excluded from the Multifamily lending caps in 2019.

To perform this analysis, we combined loan level information with data collected from Freddie Mac's Green Assessment® reports, which cover nearly 367,000 units of workforce housing. This study accounted for two evolutions of the program parameters: a) the initial consumption savings threshold at 15% owner-paid, tenant or whole property consumption reduction; and b) in 2018, the consumption savings threshold increasing to 25% whole property consumption.

Our paper is especially innovative given the previously limited data in the market and the impact that these findings will have on the industry (discussed in greater detail below). We found that the most common water savings improvements for these properties are showerheads, bathroom aerators, kitchen aerators and toilets. The most common energy saving improvements are LED lighting for interior, exterior and common areas, and HVAC thermostats. Water improvements are projected to save 3.6 billion gallons in water per year, and energy improvements are projected to save 1.4 billion kBtu per year.

The paper was published in Q4 2018, distributed to our network of Optigo[SM] lenders, and promoted aggressively on social media. It received 6,482 Twitter impressions, 1,978 LinkedIn impressions as of 1/31/19. To help inform our research, we engaged with WegoWise by AppFolio, which has extensive experience with multifamily property benchmarking. They performed a data quality analysis on a sample of loans to better understand our ability to measure and report on energy and water savings based on the data received, which to date is primarily projections. The assessment found the data quality acceptable for ongoing analysis. We are well positioned to begin collection of on-going utility consumption data to perform analysis between the projections and the actuals received.

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[1] *https://mf.freddiemac.com/research/insight/20181023-duty-to-serve-series.html*

Planned Actions	2018 Actions
Create a research database that will contain estimated and actual energy efficiency data collected from Green Assessment reports and Energy Star Portfolio Manager on properties with Freddie Mac Green Advantage loans as that data becomes available. This data will include: a. Basic property information b. Potential green improvements c. Improvements selected by borrowers d. Estimated costs of improvements e. Projected savings by efficiency measure and in aggregate	We created a research database containing property level and energy efficiency data collected from Green Assessments and Energy Star Portfolio Manager on properties with Freddie Mac Green Advantage loans. This database was used to support our paper and the publication of property-level data. We also developed an automated process capture to data from our Green Assessments® and EPA's Portfolio Manager tool and populate the database. The database contains property information, potential green improvements, improvements selected by borrowers, the estimated cost of improvements, and the projected savings by efficiency measures and in aggregate. A detailed list of fields is identified below.
Publish Report	This paper provides analyses of our extensive Green Advantage portfolio and offers insight into cost-effective green improvement practices. Our paper included an analysis of basic property information, most common green improvements, estimated costs of improvements, and projected savings by various measures. In addition, we also addressed the differences between both iterations of our Green Programs: 1) the initial consumption savings threshold at 15% owner-paid, tenant-paid or whole property consumption reduction; and 2) in 2018, the consumption savings threshold increasing to 25% whole property consumption. This analysis revealed how borrower behavior changes depending upon qualification thresholds, and enabled FHFA to establish new guidelines for Enterprise green lending in 2019.
Post report on website and promote with press release	The paper was published in Q4 2018 and promoted aggressively on social media. It has received 6,482 Twitter impressions and 1,978 LinkedIn impressions as of January 31, 2019. Additionally, we promoted this report to our entire Optigo lender network and our LIHTC syndicators via email, reaching over 7,000 individuals.
Publish underlying property level data including the following: a. Property state b. Property county c. Year built d. Number of units e. Property type (for example, garden, high-rise, mid-rise) f. Type of savings pursued (energy/water/both) g. Green improvement measures pursued h. Projected savings of measures i. Estimated costs of measures	We published a collection of property level data to enable market participants to perform their own analysis. To our knowledge, this is the first publicly accessible data source providing information about green retrofits on multifamily housing, and our paper is the first report published on green improvements being implemented in existing workforce housing properties. In our data publication, we included the following: • MSA • County • State • Property Type • Year Built • Number of Units • Number of Buildings • Type of Savings • Estimated Cost of Green Improvements • Estimated Cost of Improvements per Unit • Annual Projected Water Cost Savings • Annual Projected Water Cost Savings per Unit • Annual Projected Energy Cost Savings • Annual Projected Energy Cost Savings per Unit Annual Projected Water Consumption Savings • Annual Projected Water Consumption Savings per Unit • Annual Projected Energy Consumption Savings per Unit • Annual Projected Energy Consumption Savings per Unit • Projected Water Percentage Savings

	▪ *Projected Energy Percentage Savings* ▪ *Fields for Different Green Improvement Measures Pursued*
Assemble a design team to create the database. This team will be made up of individuals from IT, research, and business teams.	*Freddie Mac formulated a team from multiple business areas to create and maintain the database*
Identify the needs of stakeholders by engaging with at least the following: *a. Two research and policy organizations* *b. Three appraisers* *c. Three borrowers* *d. Three sellers/servicers* *e. Three Green Assessment vendors*	*To help identify stakeholder needs and structure the database, we engaged with:* *a. Three research and policy organizations: The Institute for Market Transformation, Rocky Mountain Institute, and the National Housing Trust* *b. Over 80 appraisers at a Freddie Mac event, including CBRE, Cushman and Wakefield, and BBG* *c. Three borrowers: Sares-Regis, BH Management, and Fowler* *d. Three Optigo lenders: Walker & Dunlop, CBRE, Citi* *e. Four green assessment vendors: Partner, NOVA, CBRE, Abraxas, and Blackstone*
Produce an annual report	*In 2018, we published a Green Advantage Dataset, an overview of the dataset, and a paper which analyses our existing green portfolio and provides insights into the cost-effective green practices which have been completed thus far.*

SELF-ASSESSMENT RATING OF PROGRESS:

Select the category that best describes progress on this objective for the year.

☐ Objective met

☒ Objective exceeded

☐ Objective partially completed:

    ☐ 75-99% (substantial amount)

    ☐ 50-74% (limited amount)

    ☐ 25-49% (minimal amount)

    ☐ 1-24% (less than a minimal amount)

☐ No milestones achieved

PARTIAL CREDIT JUSTIFICATION:

N/A

IMPACT:

Provide a self-assessment of the level of impact that actions under the objective have accomplished.

☐ 50 – Substantial Impact

☒ 40

☐ 30 – Meaningful Impact

☐ 20

☐ 10 – Minimal Impact

☐ 0 – No Impact

IMPACT EXPLANATION:

Answer the following questions.

1. How and to what extent were actions under this objective impactful in addressing underserved market needs or laying the foundation for future impact in addressing underserved market needs? *(Character limit: 3,000 characters, including spaces)*

The workforce housing stock in the U.S. is aging, which often results in higher utility costs for tenants and owners. Since the introduction of Freddie Mac's Green Advantage program in August of 2016, owners have committed to make energy and water efficiency improvements through over $36 billion in Green Advantage loans. Not only has Freddie Mac made a difference for 367,000 units, we have now released market leading research on the subject. Promoting green improvements through lending is a new concept, and there is very little research showing the estimated costs and savings of such improvements. Freddie Mac is leading the industry by publishing data that can be used by borrowers, developers, and lenders to begin or continue to support green improvements in multifamily real estate. This research is foundational to a market understanding of the costs to implement improvements and the eventual savings that these improvements will lead to for property owners and tenants alike; it will reduce the uncertainty that has impeded this market's development over time.

Throughout 2018, we created a research database, collected the data on efficiency improvements on Green Advantage properties, and made this data publicly accessible at the property-level. This data, which will be refreshed annually, will act as a baseline for green improvements for the entire industry, helping to increase the adoption of energy and water efficiency improvements.

Our paper suggests that energy and water efficiency improvements create lasting benefits for owners and tenants. Energy savings are the most beneficial for tenants, but these improvements may cost more for owners to make. A primary advantage of Green Advantage is competitive loan pricing, which helps mitigate a property owner's expenses, allowing them to make more in-unit improvements that typically benefit the tenants. Overall, tenants are projected to save roughly $130 per unit per year, with property owners projected to save $90 per unit. With the shift to whole property consumption in 2018, these figures change to $215 per unit per year for tenants and $40 per unit for property owners. Since most of these properties are workforce units and do not have rent restrictions, tenants who benefit from the implemented green improvements will see greater affordability through a substantial decrease in their utility expenses. Ultimately, our annual report will continuously track these measurements to determine if there are any long-term savings for residents that spend a significant portion of their income on rent and utility expenses.

This analysis has already had a direct and substantial impact on the market, as the underlying research (prior to publication) was shared with FHFA who used it to establish new guidelines for green loans to be excluded from the Multifamily lending caps in 2019 with a deliberate requirement to make energy efficiency improvements.

2. Optional: How do actions under this objective support future actions detailed in the Plan for the underserved market? If there have been any changes in the planned next steps or timeline for work under or related to this objective, describe the changes and provide a brief explanation. (Character limit: 1,500 characters, including spaces)

Our work in 2018 laid the foundation for even deeper analysis in future years. The creation of an automated process and database allows us to quickly extract historical property level consumption and projected savings data from all green reports. Borrowers are required to report all owner-paid utility consumption data and a minimum of 10% tenant data. In the future months, this data will be submitted and captured into our database. We will then perform additional analysis to compare the borrower reported consumption data to the baseline historical data to evaluate the property performance and determine realized savings.

3. Optional: Are there any market factors that adversely impacted the actions under this objective? If so, describe. *(Character limit: 3,000 characters, including spaces)*

The primary market challenge affecting our research is in data collection (A) at the time of the loan, and (B) on an ongoing basis.

A. *There are data limitations with the historical data collected at the time of the green reports. Capturing tenant level data is challenging. In nearly every case, consultants are unable to capture the tenant level data within the required deal timelines. As a result, consultants estimate the tenant portion of the property data, which means all the savings projections are based on estimates. As borrowers become responsible for reporting their actual energy and water usage at the properties, they will also be faced with the challenge of collecting tenant data.*

B. *This combination of estimated historical data with a mix of actual reported data provides a mismatch when performing measurement and verification analysis. Under the International Performance Measurement and Verification Protocol (IPMVP), the analysis would typically be performed using the same historical data as the same actual reported data (i.e. - modeled to modeled or actual to actual). Given the market challenges in receiving timely tenant data during the historical data gathering phase, analysis will likely need to be performed outside of the IPMVP approach. This will provide challenges in knowing how accurate the upfront estimated data is in comparison to the mix of actual borrower reported utility data.*

To mitigate these challenges, we took two steps. First, we hired WegoWise by AppFolio, who has extensive experience with multifamily property benchmarking. They performed a data quality analysis on a sample of loans to better understand our ability to measure and report on energy and water savings based on the data received, which to date is primarily projections. The assessment found the data quality acceptable for ongoing analysis. Second, starting in 2019, we began requiring that an experienced third-party data collection firm be engaged for the life of every new Green Advantage loan to collect energy and water consumption data.

4. Optional: How did the actions under this objective contribute to increased or future loan purchases for the underserved market? (Character limit: 1,500 characters, including spaces)

Purchasing loans that support green improvements in workforce housing is not an objective in Freddie Mac's DTS plan, however doing so continues to be a fundamental part of our daily business. For example, while we did not have a DTS target for loans to support energy or water efficiency improvements, we still purchased approximately 1,30 loans across 367,000 units for $36 billion since the Green Advantage's launch in August 2016.

With each year of Green Advantage loan purchases, we will continue to amass more data on green improvements and their impacts for tenants and owners. If consumption savings projections hold true and market adoption continues to be strong, over a 10-year period averaging 170,000 units financed per year, there is the potential to save 16.8 billion gallons of water and 6.8 billion kBtu of energy, potentially equating to a projected $210 million of tenant utility cost savings.

Attach the information detailed in the list of documentation specific to the objective that was provided by FHFA.

Exhibit D:

Second Quarter Outreach Narrative Reporting Template

FREDDIE MAC

AFFORDABLE HOUSING PRESERVATION

2Q REPORT

EVALUATION AREA: OUTREACH

ACTIVITY:

Activity 6 – Energy or Water efficiency improvements on Multifamily rental properties: Regulatory Activity

OBJECTIVE:

Objective A: Publish an annual study of energy and water efficiency through the green advantage program

ACTIONS:

Following the development of the Green Advantage program, we have seen rising interest in the property data we collect and the types of improvements that borrowers have been making. Consequently, we have launched an effort to create a database to collect and analyze this data. In the first half of 2018, we have created the research database, have been collecting current data, and have begun populating historical data. This database will serve to identify cost savings found in making green improvements, which will act as a baseline for the entire industry.

Action Category	Action Reference – Activity 6; Objective A	Status
Market Actions	Action 1A-E	Create research database – Complete
	Action 2	Publish Report – Outstanding
	Action 3	Post report on website and promote with press release – Outstanding
	Action 4A-I	Publish underlying property level data – Outstanding

SELF-ASSESSMENT RATING OF PROGRESS:

Select the category that best describes progress on this objective for the reporting period.

☒ 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):

N/A

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