

ACTIVITY:

G. Regulatory Activity: Finance improvements on multifamily properties: which reduce energy or water consumption by tenant or property by at least 15 percent; and where the savings generated over the improvement?s expected life will exceed its cost.

OBJECTIVE:

2. Facilitate the establishment and dissemination of energy or water efficiency improvements finance industry standards that will facilitate increased liquidity to the multifamily energy efficiency improvements finance market (Partner and Innovate).

SUMMARY OF RESULTS:

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

Objective's components detailed in the Plan	Corresponding actions taken	Explanation of any deviations from the Plan (if applicable)
Facilitate industry-wide adoption of the new technical solar assessment standard by:	All of the underlying activities associated with this action contributed to the completion of this objective's target.	N/A
Developing and implementing a training program on the Technical Solar Assessment Module and guidance to lenders, borrowers, and industry stakeholders such as solar energy professionals and solar industry advocates and trade groups.	Fannie Mae developed and executed a comprehensive training program on our Technical Solar Assessment that leveraged feedback and common questions from the first Green Rewards transactions where it was implemented, hosting two training sessions targeted at DUS® Lender partners and solar energy professionals. The training sessions provided a detailed review of the Technical Solar Assessment components and how it is integrated into Green Rewards for any deals where the borrower elects to install a solar photovoltaic (PV) system.	N/A



Advocating on behalf of the new standard and module at one industry conference.	Fannie Mae shared the new Technical Solar Standard and discussed the benefits of standardizing the process for inclusion of solar PV at multifamily properties in three presentations: at the American Council for an Energy Efficient Economy's (ACEEE) Finance Forum, the Passive House Institute US (PHIUS) Annual Conference (PHIUSCon), and at a DC Government Solar Roundtable.	N/A
☐ Improving the standard as needed, based on industry feedback and market participation.	Fannie Mae solicited feedback from initial users of the Technical Solar Assessment tool as well as the broader multifamily solar and efficiency industry and incorporated enhancements to improve usability. In addition, users have indicated that the standard is useful for assessing the estimated financial benefits of solar PV for borrowers and tenants; as a result, we are evaluating whether to integrate elements of the Technical Solar Assessment tool into every High-Performance Building Report done for Green Rewards. We also integrated elements of the Technical Solar Assessment into Fannie Mae's Property Condition Assessment as a requirement for all multifamily properties with existing solar PV to help us and our lender partners manage risk and understand the benefits of solar PV systems.	N/A



Create deal spotlights that highlight Green Rewards with Solar transactions that use the new Technical Solar Assessment module.	Fannie Mae's 2020 Green Bond Impact Report, published in June 2021, included a one-page case study highlighting an affordable multifamily housing project in Arizona that leveraged Green Rewards to install a large solar PV system as part of a comprehensive renovation at the property. Fannie Mae also sent a Multifamily Green Wire to all DUS Lenders spotlighting two transactions – one in California and one in Florida – that had Technical Solar Assessments performed and decided to install a solar PV system as part of a broad package of energy and water efficiency improvements through Green Rewards	N/A
	Rewards.	

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?

The Technical Solar Assessment is a standard developed by Fannie Mae in 2020 to ensure appropriate due diligence is done for all Green Rewards mortgage loans where a borrower installs solar photovoltaics (PV) at the property. The standard sets forth required elements of the property assessment and the accompanying report to ensure property-specific conditions and configurations are considered whenever solar PV is selected as a part of Green Rewards. Prior to the introduction of the technical solar assessment, both owners and Fannie Mae relied on energy auditors without targeted solar expertise for information about the cost of installation and projected energy savings. The Technical Solar Assessment is conducted by a specialized solar PV assessor who gives borrowers more reliable information on the costs and benefits associated with installing solar PV and mitigates risk by identifying potential roadblocks upfront. The specialized assessment also allows lenders and Fannie Mae to predict a property's energy savings more accurately, which can affect pricing and loan terms for the borrower.

Fannie Mae rolled out the Technical Solar Assessment in 2020, and in 2021 focused on ensuring that the industry was prepared to adopt and leverage the new tool. Since the standard was implemented in 2020, 34 Green Rewards transactions have elected to install solar PV and completed a Technical Solar Assessment. In 2021, more than one-third (36%) of those transactions were multifamily affordable housing properties where comprehensive efficiency improvements plus solar PV will provide significant savings.

Technical Solar Assessment training saw strong participation and engagement as a result of our efforts to drive market adoption. More than 400 lender staff and almost 40 energy industry consultants were trained on the use and benefits of the Technical Solar Assessment in webinars tailored to each audience. Based on the positive feedback from these trainings, we plan to hold additional sessions in 2022.

Fannie Mae also contributed to the development of an additional industry standard, which was finalized in November 2021 – the Commercial Green Utility Data Standard released by the Mortgage Bankers Association's Commercial Mortgage Industry Standards Maintenance Organization (C-MISMO). We chaired a working group to develop this standard, which aims to facilitate the efficient exchange of multifamily green utility data across the commercial real estate finance industry. This built upon efforts that we conducted and described as part of the 2019 Duty to Serve plan.

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

The development and implementation of the Technical Solar Assessment has reinforced for Fannie Mae that standardization of data and analysis relating to energy/water efficiency and renewable energy improvements is critical to successful adoption and implementation of green programs in multifamily properties. The Technical Solar Assessment provides a clear roadmap to ensure that recommendations for solar PV systems at multifamily properties include critical considerations including roof age and ability to support solar, the configuration of electric metering, initial and ongoing costs, requirements and/or restrictions of the local jurisdiction, and other factors. The comprehensive due diligence upfront not only enables borrowers to understand the full costs and



benefits from implementing solar PV, but also reduces the risk of unexpected roadblocks to the project, which we believe leads to successful system implementation at the property level.

3. If applicable, why was the Enterprise unable to achieve the Plan target? $\ensuremath{\text{N/A}}$