Second-Party Opinion

Fannie Mae Sustainable Bond Framework

Evaluation Summary

Sustainalytics is of the opinion that the Fannie Mae Sustainable Bond Framework, applicable to unsecured debt and mortgage-backed securities (MBS), is credible and impactful and aligns with the Sustainability Bond Guidelines 2018. This assessment is based on the following:

USE OF PROCEEDS The eligible categories for the use of proceeds – Access to Essential Services, Socio-Economic Advancement and Empowerment, Affordable Housing, Energy Efficiency and Green Buildings – are aligned with those recognized by both the Green Bond Principles and Social Bond Principles. Sustainalytics considers eligible investments under the Framework will lead to positive environmental or social impacts and advance the U.N. Sustainable Development Goals, specifically SDGs 1, 7, 10, and 11.

PROJECT EVALUATION / SELECTION Fannie Mae will select and evaluate eligible loans to include in MBS issuance in line with existing policies and procedures to ensure compliance with social impact selection criteria. Fannie Mae has established a designated Sustainable Debt Bond Group to review and recommend eligible assets for unsecured corporate debt bonds. Sustainalytics considers the project selection process to be in line with market practice.

MANAGEMENT OF PROCEEDS Sustainable Debt Bonds will be managed through an internal clearing account, and Fannie Mae will fully allocate the proceeds within 24 months of issuance. Sustainable MBS will be managed through Fannie Mae's securitization program, which ensures 100% allocation at the time of issuance. Sustainalytics considers this process to be in line with market practice.

REPORTING For unsecured corporate debt bonds, Fannie Mae intends to publish allocation reporting until the full allocation of all proceeds. Fannie Mae provides ongoing data regarding Single-Family and Multifamily MBS on its public website. Fannie Mae intends to provide investors impact reporting on the assets and projects financed on an annual basis. Sustainalytics views Fannie Mae's allocation and impact reporting as aligned with best practice.

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Report Sections

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Introduction

Founded in 1938, Fannie Mae ("Fannie Mae", or the "Issuer", the "Company") is a government-sponsored enterprise (GSE) chartered by Congress to support the U.S. housing market. Operating in the secondary mortgage market, the Issuer purchases and guarantees mortgages originated by lenders. Through its two primary lines of business, Single-Family and Multifamily, Fannie Mae provided more than $650 billion financing to the mortgage market in 2019 supporting 3 million home purchases, refinancings and/or rental units.

Fannie Mae has developed the Fannie Mae Sustainable Bond Framework (the "Framework") and may issue green, social, or sustainable unsecured corporate debt bond(s) or green, social, or sustainable single-family or multifamily mortgage-backed securities (MBS) in alignment with the Framework, with the proceeds financing socially or environmentally impactful mortgage lending and other related initiatives. The Framework defines eligibility criteria in five areas:

1. Access to Essential Services
2. Socio-Economic Advancement and Empowerment
3. Affordable Housing
4. Energy Efficiency
5. Green Buildings

Fannie Mae engaged Sustainalytics to review the Fannie Mae Sustainable Bond Framework, dated November 2020, and provide a Second-Party Opinion on the Framework's environmental and social credentials and its alignment with the Sustainability Bond Guidelines 2018 (SBG).[1] This Framework has been published in a separate document.[2]

Scope of work and limitations of Sustainalytics Second-Party Opinion

Sustainalytics' Second-Party Opinion reflects Sustainalytics' independent[3] opinion on the alignment of the reviewed Framework with the current market standards and the extent to which the eligible categories are credible and impactful.

As part of the Second-Party Opinion, Sustainalytics assessed the following:

- The Framework's alignment with the Green Bond Principles 2018, Social Bond Principles 2020, and Sustainability Bond Guidelines 2018, as administered by ICMA;
- The credibility and anticipated positive impacts of the use of proceeds; and
- The alignment of the Issuer's sustainability strategy and performance and sustainability risk management in relation to the use of proceeds.

For the use of proceeds assessment, Sustainalytics relied on its internal taxonomy, version 1.6, which is informed by market practice and Sustainalytics' expertise as an Environmental, Social and Governance (ESG) research provider.

As part of this engagement, Sustainalytics held conversations with various members of Fannie Mae's management team to understand the sustainability impact of their business processes and planned use of proceeds, as well as management of proceeds and reporting aspects of the Framework. Fannie Mae representatives have confirmed (1) they understand it is the sole responsibility of Fannie Mae to ensure that the information provided is complete, accurate or up to date; (2) that they have provided Sustainalytics with all relevant information and (3) that any provided material information has been duly disclosed in a timely manner. Sustainalytics also reviewed relevant public documents and non-public information provided by the Issuer.

This document contains Sustainalytics' opinion of the Framework and should be read in conjunction with that Framework.

[1] The Sustainability Bond Guidelines are administered by the International Capital Market Association and are available at https://www.icmagroup.org/green-social-and-sustainability-bonds/sustainability-bond-guidelines-sbg/

[2] The Fannie Mae Sustainable Bond Framework will be made available on Fannie Mae's website: https://www.fanniemae.com/

[3] When operating multiple lines of business that serve a variety of client types, objective research is a cornerstone of Sustainalytics and ensuring analyst independence is paramount to producing objective, actionable research. Sustainalytics has therefore put in place a robust conflict management framework that specifically addresses the need for analyst independence, consistency of process, structural separation of commercial and research (and engagement) teams, data protection and systems separation. Last but not the least, analyst compensation is not directly tied to specific commercial outcomes. One of Sustainalytics' hallmarks is integrity, another is transparency.

Any update of the present Second-Party Opinion will be conducted according to agreed upon engagement conditions between Sustainalytics and Fannie Mae.

Sustainalytics' Second-Party Opinion, while reflecting on the alignment of the Framework with market standards, is no guarantee of alignment nor warrants any alignment with future versions of relevant market standards. Furthermore, Sustainalytics' Second-Party Opinion addresses the anticipated impacts of eligible projects expected to be financed with bond proceeds but does not measure the actual impact. The measurement and reporting of the impact achieved through projects financed pursuant to the Framework is the responsibility of the Issuer.

In addition, the Second-Party Opinion opines on the intended allocation of proceeds but does not guarantee the realised allocation of the bond proceeds towards eligible activities.

No information provided by Sustainalytics under the present Second-Party Opinion shall be considered as being a statement, representation, warrant or argument, either in favour or against, the truthfulness, reliability or completeness of any facts or statements and related surrounding circumstances that Fannie Mae has made available to Sustainalytics for the purpose of this Second-Party Opinion.

Sustainalytics' Opinion

Section 1: Sustainalytics' Opinion on the Fannie Mae Sustainable Bond Framework

Sustainalytics is of the opinion that the Fannie Mae Sustainable Bond Framework is credible, impactful and aligns with the four core components of the Green Bond Principles 2018 (GBP) and Social Bond Principles 2020 (SBP). Sustainalytics highlights the following elements of Fannie Mae's Sustainability Bond Framework:

- Use of Proceeds:
  - The eligible categories – Access to Essential Services, Socio-Economic Advancement and Empowerment, Affordable Housing, Energy Efficiency and Green Buildings – are aligned with those recognized by the GBP and SBP.
  - Pursuant to the Framework, Fannie Mae may issue Green, Social or Sustainable Debt Bonds (unsecured senior debt instruments), as well as Green, Social or Sustainable MBS. There is no variation in the eligibility criteria for the underlying assets based on the type of issuance; however, some categories or criteria may only be relevant to either Green, Social, or Sustainable Debt Bonds or Green, Social, or Sustainable MBS.
  - Within the category of Access to Essential Services, Fannie Mae may provide financing related to supporting vulnerable groups in times of crisis as well as strengthening communities in which Fannie Mae operates.
    - As it relates to support for vulnerable groups, Fannie Mae intends to finance costs associated with providing mortgage payment relief, such as a payment deferral or a loan modification,[4] to borrowers who have experienced a financial impact related to the COVID-19 pandemic or a natural disaster. Sustainalytics views positively this program in light of the support it provides to specific vulnerable populations.
    - Investments in strengthening communities may include maintaining properties that have been the subject of mortgage default in order to avoid disrepair and subsequent negative impacts to the communities in which these homes are located. Sustainalytics recognizes the benefits that may arise from such spending, and further notes that this is anticipated to be a small minority of proceeds from any issuance.
  - Within the category of Socio-economic Advancement and Empowerment, the Framework defines investments that support underserved communities and underrepresented or

[4] A payment deferral is a solution for borrowers who have experienced a temporary hardship, like financial difficulty caused by the COVID-19 pandemic, and are able to continue making their monthly payment but unable to bring the loan current through other means. A payment deferral solution defers the amount of the borrower's delinquency into a non-interest bearing balance due and payable at maturity of the mortgage loan or earlier payoff, and other terms of the mortgage loan remain unchanged. A loan modification is a solution for borrowers who have experienced a permanent impact to their ability to make their monthly payment. A loan modification permanently changes some of the terms of the loan, such as interest rate, loan term, or monthly payment amount.

underserved groups.[5] Activities in this area may include enabling the acquisition or financing of housing in underserved communities or providing direct equity investment in affordable rental housing. Sustainalytics considers the support of affordable housing for disadvantaged or vulnerable groups to be in line with market expectations.

- Within the category of Affordable Housing, Fannie Mae will finance single-family and multifamily housing, including financing that will enable investments that improve tenant wellbeing in multifamily buildings, and provide liquidity to Housing Finance Authorities (HFAs) or Community Development Financial Institutions (CDFIs) which support affordable housing in underserved communities.
  - Fannie Mae has defined income thresholds for considering its single-family residential lending as affordable, and considers 50% of Area Median Income (AMI) as very low income, 80% AMI as low-income, 100% AMI as moderate income, and 120% as workforce housing. Sustainalytics considers the very low and low income thresholds to be fully aligned with best practice, and notes positively that Fannie Mae intends to make use of the workforce housing designation in high cost-burden markets in addition to reporting, at the issuance level, on the thresholds used.
  - Eligible multifamily lending is classified into three groups: restricted affordable, unrestricted affordable, and manufactured housing communities.
    - Restricted affordable consists of housing subject to regulatory agreements[6], while unrestricted affordable is determined based on rental rates being affordable based on market factors.[7] Sustainalytics considers these criteria to be aligned with market practice.
    - Manufactured housing communities are recognized to provide affordable options to both owners and renters.[8] Additionally, Fannie Mae implements additional screening criteria relating to lease rates, ownership structures, and physical characteristics in order to ensure quality for tenants. Based on these considerations, Sustainalytics views positively the intended social impacts of this financing.
  - Investments enabling tenant wellbeing are provided through the Issuer's Healthy Housing Rewards initiative, which provides incentives to affordable housing operators which offer amenities, design features, or resident services. Eligibility for this program can be demonstrated through activities such as complying with the FitWel® certification for healthy environments or through the Enhanced Resident Services certification offered by the Stewards for Affordable Housing for the Future. Sustainalytics views positively the intended outcomes of these initiatives, and highlights that eligible properties otherwise qualify as affordable housing.
  - Through the provision of liquidity, Fannie Mae assists HFAs and CDFIs in supporting affordable housing within their focus communities. Sustainalytics notes that the housing financed by the underlying mortgages will be considered affordable as per the criteria of the Framework and views the leveraging of financial capacity to support other organizations in the promotion of housing to have positive outcomes.
- The green categories of the Framework – Energy Efficiency and Green Buildings – are intended to align with Fannie Mae's existing Green Bond frameworks.[9] Overall, Sustainalytics views favourably the objectives and outcomes of this program.
  - Eligible loans under the Energy Efficiency criteria must satisfy the Green Rewards program, which includes multifamily buildings that have demonstrated combined improvement of energy and water efficiency of at least 30% (of which energy

[5] Fannie Mae has disclosed that these groups or communities may include low-income communities, seniors, manufactured housing communitieis, and underserved rural areas. While the Issuer does not have a formal definition or approach for making this determination, it commits to reporting on the target populations served.
[6] Such as Low-Income Housing Tax Credits (LIHTC), the federal Section 8 program, state/local initiatives, or self-imposed restrictions committed to through covenants or on title.
[7] These factors could include building age, location, or amenities. Fanie Mae requires that 80% of a building's units be affordable at 120% AMI to receive this designation.
[8] A report by Fannie Mae (*Manufactured Housing Landscape 2020, Multifamily Economic and Market Commentary*) states that the median annual income of naufactured home owners is USD 30,000, less than half that of traditional home owners, while a third of renters earn less than USD 15,000 per year
[9] Fannie Mae's Green Bond frameworks are included as appendix to the Sustainable Bond Framework.

improvements make up at least 15%) through capital upgrades. Sustainalytics views positively the incentivizing of both water and energy performance improvements, and highlights that Fannie Mae's approach has been designed to maximize aggregate performance improvements.[10]

- Eligible financing for Green Buildings is based upon the achievement of recognized building certifications.
  - For single-family homes, buildings must either achieve ENERGY STAR® v3 or higher or a certification which either encompasses ENERGY STAR as one of its criteria or mandates equivalent energy performance. Sustainalytics views this as aligned with market practice.
  - For multifamily properties, Fannie Mae considers as eligible a variety of certifications. Fannie Mae has classified these certifications into four different groups, based on the magnitude of the environmental performance improvement based on the certifications' pre-requisite requirements, with Group 3 (the least stringent) representing a minimum of 10% improvement against the national baseline and higher Groups having 15%, 20%, and 50% minimums.[11] Sustainalytics considers the eligible certifications which Fannie Mae has cited to be robust and credible schemes, and notes positively that while eligible certification may result in varying levels of quantitative energy savings, that Fannie Mae's use of a tiered structure with preferential pricing is intended to encourage the uptake of more stringent schemes and by extension promote higher-performing buildings.[12]

- Project Evaluation and Selection:
  - For unsecured corporate debt bonds, a designated Sustainable Debt Bond Group consisting of members from Treasury, Financial Planning & Analysis, Enterprise ESG, Investor Relations & Marketing, and Legal will be responsible for reviewing and recommending eligible assets. This evaluation will assess potential investments against the criteria of the Framework and the potential positive social or environmental impact and relevant target populations. Final approval will be made by the relevant approving officer. For MBS, Fannie Mae will leverage existing policies and procedures to ensure compliance with social impact selection criteria, as well as other risk management and underwriting requirements.
  - Based on the establishment of a formal body to evaluate eligibility as well as the use of existing structures where applicable, Sustainalytics considers this process to be in line with market practice.
- Management of Proceeds:
  - Fannie Mae will manage and track the net proceeds of Sustainable Debt Bonds through an internal clearing account, monitored by the Issuer's Treasury team. Fannie Mae intends to fully allocate proceeds within 24 months of issuance; temporarily unallocated proceeds will be managed in line with Fannie Mae's normal liquidity activities.
  - Sustainable Mortgage-Backed Securities will be managed following the procedures of Fannie Mae's securitization program, with 100% allocation at the time of issuance.
  - Based on the management disclosure for Sustainable Debt Bonds and the leveraging of regulated structures for MBS instruments, Sustainalytics considers this process to be in line with market practice.
- Reporting:
  - For unsecured corporate debt bonds, Fannie Mae intends to provide publicly available allocation reporting until the full allocation of all use of proceeds. Fannie Mae provides ongoing data regarding Single-Family and Multifamily MBS through disclosure and analytical tools available on the Issuer's public website.

[10] Fannie Mae has conducted an internal analysis to support its setting of thresholds; this assessment concluded that imposing higher percent-improvement thresholds would result in fewer participating properties, and therefore in lower net environmental benefits. Sustainalytics recognizes that this approach is based on robust internal analysis and is appropriate for Fannie Mae's green and sustainability bonds.

[11] The four Groups, in order of increasing stringency, are "Group 3", "Group 2", "Group 1", and "Towards Zero"

[12] Fannie Mae considers this approach to be part of its role in "driving the market", and has therefore analysed the minimum prerequisites associated with a wide variety of green building certifications schemes and developed an impact calculator to inform of the various schemese are grouped. This analysis is discussed in detail in a report the Issuer has published: https://multifamily.fanniemae.com/media/14001/display.

- Fannie Mae intends to provide investors impact reporting on an annual basis that will draw on several relevant metrics, including number and AMI percentage distribution of homes financed, projected number of jobs supported and metric tons of greenhouse gases (GHG) prevented.
- Sustainalytics considers this process to be in line with best practice, and highlights positively that Fannie Mae's green impact reports provide ongoing energy performance post-issuance and the ambition to collect and report equivalent social impact data.

Alignment with Sustainability Bond Guidelines 2018

Sustainalytics has determined that the Fannie Mae Sustainable Bond Framework aligns with the four core components of the Green Bond Principles (2018) and Social Bond Principles (2020). For detailed information please refer to Appendix 1: Sustainability Bond/ Sustainability Bond Programme External Review Form.

Section 2: Sustainability Strategy of Fannie Mae

Contribution of Framework to Fannie Mae's sustainability mandate

Sustainalytics is of the opinion that Fannie Mae demonstrates a strong commitment to sustainability through its focus on key environmental and social areas such as the financing of green properties and access to credit and affordable housing. Sustainalytics highlights the following as indicative of this performance:

- Fannie Mae has developed its enterprise strategic plan, which incorporates ESG performance as one of its three strategic objectives. In addition, the Company defines the sustainable increase in access to housing as its strategic priority and has committed to high-quality and high-impact green financing, which it has demonstrated by being a leading issuer of green bonds aligned with the Green Bond Principles.[13]

- Through its Multifamily business line, Fannie Mae has supported over $75 billion in Green MBS, and $9 billion in green structured securities from 2012 to 2019. A total of 528,000 metric tons of GHG and 7.8 billion kBTUs of energy and 7.7 billion gallons of water are projected to be saved through Fannie Mae's multifamily green-financed properties annually.[14]

- To further demonstrate its commitment to leading in green finance, in 2020, the inaugural year of the program, Fannie Mae issued approximately $80 million Single-Family Green MBS backed only by newly constructed single-family residential homes with ENERGY STAR Version 3.0 certification or higher.[15]

- In addition to the aforementioned approaches to green financing, Fannie Mae recognizes its responsibility towards achieving positive social impacts. The Company financed $30.5 billion in affordable rental housing for low- to extremely low-income renters and 298,702 home purchase mortgages for low-income groups in 2019. In complement to its focus on purely affordable housing, targeting low income groups, Fannie Mae has financed $15 billion and $11 billion housing options for other underserved groups such as seniors and students, respectively since 2008.[16]

- Fannie Mae's commitment to addressing the affordable housing shortage in the U.S. is demonstrated through its Sustainable Communities Partnership and Innovation Initiative. Fannie Mae promotes the development of different sectors such as education, employment and racial equity to build sustainable and affordable communities. Additionally, the Company strives to search for new and innovative ways to address affordable housing by issuing a $10 million commitment to attract scalable new affordable housing solutions.[17]

Sustainalytics is of the opinion that the Fannie Mae Sustainable Bond Framework is aligned with the Company's overall ESG strategy and initiatives and will further the Company's action on its key ESG priorities.

[13] Fannie Mae Multifamily Green Bond Impact Report 2019, available at: https://multifamily.fanniemae.com/media/8921/display?_ga=2.241883844.737119524.1606837598-131584209.1606150507
[14] Fannie Mae Website, Environmental, available: https://www.fanniemae.com/about-us/esg/environmental
[15] Fannie Mae Website, Environmental, available: https://www.fanniemae.com/about-us/esg/environmental
[16] Fannie Mae Website, Social, available https://www.fanniemae.com/about-us/esg/social
[17] Fannie Mae Website, Sustainable Communities, available: https://www.fanniemae.com/about-us/sustainable-communities

Well-positioned to address common environmental and social risks associated with the projects

While Sustainalytics recognizes that the use of proceeds from the Framework will be directed towards eligible projects that are recognized by the GBP and SBP to have net-positive environmental and social impact, Sustainalytics is aware that such eligible projects could also be associated with negative environmental and social outcomes. Some key environmental and social risks related to the eligible projects could include air/water/soil pollution from housing construction or renovation, occupational health and safety concerns for construction workers, and the exacerbation of social inequities within the communities in which financing is provided. In addition, Sustainalytics recognizes that mortgage lending and securitization is exposed to financial risks and that Fannie Mae's large role in housing finance in the U.S. makes its risk management processes of key importance for the stability of the housing sector.

Sustainalytics is of the opinion that Fannie Mae is able to manage and/or mitigate potential risks through implementation of the following:

- To address concern relating to sustainability and ESG development, Fannie Mae established a new Board-level Committee, the Community Responsibility & Sustainability Board Committee ("the Committee") in 2019. The Committee is responsible for overseeing initiatives and activities related to access to credit, green financing, affordable housing and the Company's environmental, social and governance strategy.[18]
- Sustainalytics further notes that the U.S. is recognized as one of the Equator Principles' designated countries[19] for having a robust environmental and social governance, as well as strong legislation in place. The U.S. has formulated strict laws and regulations for overseeing construction activities in the country.
- As a part of Fannie Mae's credit underwriting process, a Property Condition and Environmental Report assessment is required for multifamily loans to mitigate any occupational and resident health and safety risks.
- Fannie Mae has a corporate operational risk framework that aligns with their Enterprise Risk policy and the Committee of Sponsoring Organizations of the Treadway Commission's Enterprise Risk Management Framework,[20] evolving based on business needs and Federal Housing Finance Agency (FHFA) regulatory guidance.[21] Fannie Mae has a designated board-level Risk Policy and Capital Committee responsible for overseeing Fannie Mae's Enterprise Risk Management Program that establishes Fannie Mae's risk policies, risk appetite, addresses exposure to credit risk market risk, operational risk, strategic, reputational, and compliance risks.[22] The FHFA, an independent federal agency in the United States, regulates Fannie Mae's operations and conducts an annual examination to assess its risk management practices.[23] Sustainalytics considers this regulatory oversight, and the associated policies the FHFA imposes[24], as supporting responsible development and important for integrating stakeholder concerns.[25]

Based on these policies, standards and assessments, Sustainalytics is of the opinion that Fannie Mae has implemented adequate measures and is well-positioned to manage and mitigate environmental and social risks commonly associated with the eligible categories.

Section 3: Impact of Use of Proceeds

All five use of proceeds categories are aligned with those recognized by GBP or SBP. Sustainalytics has focused on three below where the impact is specifically relevant in the local context.

[18] Fannie Mae, Community Responsibility and Sustainability Committee Charter, available: https://capmrkt.fanniemae.com/resources/file/aboutus/pdf/community-responsibility-sustainability-committee-charter.pdf
[19] Designated Countries are those countries deemed to have robust environmental and social governance, legislation systems and institutional capacity designed to protect their people and the natural environment.
[20] The Committee of Sponsoring Organizations of the Treadway Commission is an internal controls and anti-fraud partnership sponsored by various accounting-sector organizations
[21] Fannie Mae, 10-K, 2019, available at: https://capmrkt.fanniemae.com/resources/file/ir/pdf/quarterly-annual-results/2019/q42019.pdf
[22] Fannie Mae, Risk Policy and Capital Committee Charter, available at: https://www.fanniemae.com/sites/g/files/koqyhd191/files/migrated-files/resources/file/aboutus/pdf/risk-committee-charter.pdf
[23] Federal Housing Finance Agency, Fannie Mae & Freddie Mac, available: https://www.fhfa.gov/SupervisionRegulation/FannieMaeandFreddieMac
[24] Federal Housing Finance Agency, Policies, available: https://www.fhfa.gov/AboutUs/Policies
[25]Fannie Mae, 10-K, 2019, available at: https://www.fanniemae.com/sites/g/files/koqyhd191/files/migrated-files/resources/file/ir/pdf/quarterly-annual-results/2019/q42019.pdf

Importance of access to affordable financing for low income, very low and extremely low income households in the U.S.

No state in the U.S. has a sufficient number of affordable rental housing for low income renters.[26] According to the National Low Income Housing Coalition, there is a 7 million shortfall of affordable and available rental homes for extremely low income[27] households in the U.S.[28] Since renters are generally considered able to afford houses that account for less than 30% of their incomes, extremely low income renters have to compete with higher income groups for the limited number of affordable houses, which leave them with even higher housing cost burdens.[29] However, due to funding limitations, only 23% of low income renters receive federal rental assistance, making affordable houses less available to lower income groups.[30]

Beyond specific low-income housing needs, there is a recognized gap in suitable housing options for a variety of underserved groups. For example, the shortage of senior housing is escalating with a fast-ageing population. It is estimated that more than 20% of the total population in the U.S. will be over 65 years old by 2050.[31] The housing burden on seniors is also critical, as nearly 10 million senior Americans are facing difficulties paying for housing and one-third of the seniors spend more than 30% of the income on housing-related payments.[32] As such, Sustainalytics recognize positive social impacts for underserved populations in the United States that will be supported through Fannie Mae's investment in affordable housing.

Importance of addressing housing needs in the face of the COVID-19 pandemic

The demand for affordable homes has intensified with the impact of COVID-19. With an increasing need for services during the pandemic and a fall in tax revenues at the same time, state and local governments will have less budget for affordable housing.[33] As the pandemic caused more than 14 million people to file for unemployment from February to May 2020, the lack of availability and affordability of affordable homes is likely to grow even further.[34]

In addition, demand for mortgage relief, such as payment forbearance, has significantly elevated due to the impact of COVID-19. Furthermore, since more than 62% of homeowners finance their houses through mortgages and the median mortgage payment is about 15% of a homeowner's median income, unemployment due to the pandemic is expected to cause a large amount of deferred mortgage payments in the U.S.[35] As of December 2020, the Mortgage Bankers Association estimates about 2.7 million homeowners in the U.S. are in forbearance programs together representing 5.48% of servicers' portfolio volumes.[36] Due primarily to the COVID-19 pandemic, in September 2020, 4.1% of Fannie Mae's loan based single-family book of business was in forbearance,[37] which shows the urgency of the need for mortgage relief in the U.S.

In this context, Sustainalytics believes that investments by Fannie Mae in affordable housing projects, support for underserved populations, and investments in response to emerging crises in the United States will have overall positive social impacts.

[26] The Gap Map, A shortage of affordable homes, National Low Income Housing Coalition, available: https://reports.nlihc.org/gap
[27] National Low Income Housing Coalition defines extremely low-income households as households with income at or below the Poverty Guideline or 30% of Area Median Income, whichever is higher.
[28] The Gap, A shortage of affordable homes, National Low Income Housing Coalition, available: https://reports.nlihc.org/sites/default/files/gap/GapReport_2019.pdf
[29] The Gap, A shortage of affordable homes, National Low Income Housing Coalition, available: https://reports.nlihc.org/sites/default/files/gap/GapReport_2019.pdf
[30] Center on Budget and Policy Priorities, Three Out of Four Low-Income At-Risk Renters Do Not Receive Federal Rental Assistance, available: https://www.cbpp.org/three-out-of-four-low-income-at-risk-renters-do-not-receive-federal-rental-assistance
[31] Statista, Senior Housing – Statistics & Facts, available: https://www.statista.com/topics/4817/housing-for-seniors-in-the-us/
[32] Center for Retirement Research at Boston College, Senior Housing Shortage is Getting Worse, available:https://squaredawayblog.bc.edu/squared-away/senior-housing-shortage-is-getting-worse/
[33] Multi-housing News, COVID-19's Impact on Multifamily and Affordable Housing, available: https://www.multihousingnews.com/post/covid-19s-impact-on-multifamily-and-affordable-housing/
[34] Pew Research Center, Unemployment rose higher in three months of COVID-19 than it did in two years of the Great Recession, available: https://www.pewresearch.org/fact-tank/2020/06/11/unemployment-rose-higher-in-three-months-of-covid-19-than-it-did-in-two-years-of-the-great-recession/
[35] USA Today, Contact your mortgage lender: Payments may be deferred as coronavirus pandemic causes worker hardships, available: https://www.usatoday.com/story/money/2020/03/20/coronavirus-mortgage-payments-may-deferred-amid-pandemic/5073179002/
[36] Share of Mortgage Loans in Forbearance Decreases to 5.48 Percent, available: https://www.mba.org/2020-press-releases/december/share-of-mortgage-loans-in-forbearance-decreases-to-548-percent
[37] Fannie Mae, Fannie Mae Reports Net Income of $4.2 Billion for Third Quarter 2020, available: https://www.fanniemae.com/media/36576/display

Importance of energy efficient residential buildings

Buildings are responsible for a large proportion of total energy consumption in the U.S. According to EIA, residential buildings alone represented 23% of total end-use energy consumption in 2019.[38] Of the various energy needs in a home, space heating and air conditioning represent more than 50% of a household's annual energy consumption, while, electricity accounts for the other half.[39] As direct GHG emission from buildings has increased by 5% from 2010 to 2019, it is important to recognize the long-term positive environmental impact of green building in residential buildings.[40] Based on the World Green Building Council research, it is projected that from 2018 to 2040, there is the potential to save about 100 exajoules[41] of energy if existing residential buildings are made more efficient and new residential buildings are designed to operate near zero carbon. In addition, improving residential air conditioning equipment would help save 3.5 exajoules from 2017-2025, which is almost the same amount of electricity used in India in 2015.[42] As green buildings with reputable third-party certification schemes, such as LEED in the U.S. have shown 25% less energy consumption than non-green buildings,[43] Sustainalytics views positively Fannie Mae's support for energy efficient housing.

Alignment with/contribution to SDGs

The Sustainable Development Goals (SDGs) were set in September 2015 and form an agenda for achieving sustainable development by the year 2030. This sustainability bond advances the following SDGs and targets:

Use of Proceeds Category	SDG	SDG target
Access to Essential Services	1. No Poverty	1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters
Socio-Economic Advancement and Empowerment	10. Reduced Inequality	10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.
Affordable Housing	11. Sustainable Cities and Communities	11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums.
Energy Efficiency	7. Affordable and Clean Energy	7.3 By 2030, double the global rate of improvement in energy efficiency
Green Buildings	11. Sustainable Cities and Communities	11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries.

Conclusion

Fannie Mae, consistent with its Sustainable Bond Framework, intends to issue green, social, or sustainable bonds and MBS and use the proceeds to finance projects related to Access to Essential Services, Socio-Economic Advancement and Empowerment, Affordable Housing. Energy Efficiency and Green Buildings. Sustainalytics considers that the projects funded by the green, social, or sustainable bond proceeds are expected to provide positive environmental and social impacts.

[38] U.S. Energy Information Administration, Consumption and Efficiency, available: https://www.eia.gov/consumption/
[39] U.S. Energy Information Administration, Use of energy explained, available: https://www.eia.gov/energyexplained/use-of-energy/homes.php#:~:text=Electricity%20is%20used%20in%20almost,use%20energy%20consumption%20in%202019.
[40] IEA, Tracking Building, 2020, available:https://www.iea.org/reports/tracking-buildings-2020
[41] One exajoule (EJ) is equal to 1018 (one quintillion) joules.
[42] UN Environment, Towards a zero-emission, efficient, and resilient buildings and construction sector, available: https://www.worldgbc.org/sites/default/files/UNEP%20188_GABC_en%20%28web%29.pdf
[43] World Green Building Concil, About Green Building ,https://www.worldgbc.org/benefits-green-buildings

The Framework outlines a process by which proceeds will be tracked, allocated, and managed, and reported on the allocation and impact of the use of proceeds. Furthermore, Sustainalytics believes that Fannie Mae's Framework is aligned with the overall ESG strategy of the Company and that the use of proceeds categories will contribute to the advancement of the U.N. Sustainable Development Goals 1, 7, 10 and 11. Additionally, Sustainalytics is of the opinion that Fannie Mae has adequate measures to identify, manage and mitigate environmental and social risks commonly associated with the eligible projects funded by the use of proceeds.

Based on the above, Sustainalytics is confident that Fannie Mae is well-positioned to issue green, social, and sustainable unsecured debt bonds and green, social, and sustainable MBS and that Fannie Mae Sustainable Bond Framework is robust, transparent, and in alignment with the four core components of the GBP 2018 and SBP 2020.

Appendices

Appendix 1: Sustainability Bond / Sustainability Bond Programme - External Review Form

Section 1. Basic Information

Issuer name:	Fannie Mae
Sustainability Bond ISIN or Issuer Sustainability Bond Framework Name, if applicable:	Fannie Mae Sustainable Bond Framework
Review provider's name:	Sustainalytics
Completion date of this form:	December 18, 2020
Publication date of review publication:	

Section 2. Review overview

SCOPE OF REVIEW

The following may be used or adapted, where appropriate, to summarise the scope of the review.

The review assessed the following elements and confirmed their alignment with the GBP and SBP:

☒	Use of Proceeds	☒	Process for Project Evaluation and Selection
☒	Management of Proceeds	☒	Reporting

ROLE(S) OF REVIEW PROVIDER

☒	Consultancy (incl. 2nd opinion)	☐	Certification
☐	Verification	☐	Rating
☐	Other *(please specify)*:		

Note: In case of multiple reviews / different providers, please provide separate forms for each review.

EXECUTIVE SUMMARY OF REVIEW and/or LINK TO FULL REVIEW *(if applicable)*

Please refer to Evaluation Summary above.

Section 3. Detailed review

Reviewers are encouraged to provide the information below to the extent possible and use the comment section to explain the scope of their review.

1. USE OF PROCEEDS

Overall comment on section *(if applicable)*:

The eligible categories for the use of proceeds – Access to Essential Services, Socio-Economic Advancement and Empowerment, Affordable Housing, Energy Efficiency and Green Buildings – are aligned with those recognized by both the Green Bond Principles and Social Bond Principles. Sustainalytics considers eligible investments under the Framework will lead to positive environmental or social impacts and advance the U.N. Sustainable Development Goals, specifically SDGs 1, 7, 10, and 11.

Use of proceeds categories as per GBP:

☐	Renewable energy	☒	Energy efficiency
☐	Pollution prevention and control	☐	Environmentally sustainable management of living natural resources and land use
☐	Terrestrial and aquatic biodiversity conservation	☐	Clean transportation
☐	Sustainable water and wastewater management	☐	Climate change adaptation
☐	Eco-efficient and/or circular economy adapted products, production technologies and processes	☒	Green buildings
☐	Unknown at issuance but currently expected to conform with GBP categories, or other eligible areas not yet stated in GBPs	☐	Other (please specify):

If applicable please specify the environmental taxonomy, if other than GBPs:

Use of proceeds categories as per SBP:

☐	Affordable basic infrastructure	☒	Access to essential services
☒	Affordable housing	☐	Employment generation (through SME financing and microfinance)
☐	Food security	☒	Socioeconomic advancement and empowerment
☐	Unknown at issuance but currently expected to conform with SBP categories, or other eligible areas not yet stated in SBP	☐	Other (please specify):

If applicable please specify the social taxonomy, if other than SBP:

2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Overall comment on section (if applicable):

Fannie Mae will select and evaluate eligible finance for MBS issuance in line with existing policies and procedures to ensure compliance with social impact selection criteria. Fannie Mae has established a

designated Sustainable Debt Bond Group to review and recommend eligible assets for unsecured corporate debt bonds. Sustainalytics considers the project selection process to be in line with market practice.

Evaluation and selection

- ☒ Credentials on the Issuer's social and green objectives
- ☒ Documented process to determine that projects fit within defined categories
- ☒ Defined and transparent criteria for projects eligible for Sustainability Bond proceeds
- ☒ Documented process to identify and manage potential ESG risks associated with the project
- ☒ Summary criteria for project evaluation and selection publicly available
- ☐ Other (please specify):

Information on Responsibilities and Accountability

- ☒ Evaluation / Selection criteria subject to external advice or verification
- ☐ In-house assessment
- ☐ Other (please specify):

3. MANAGEMENT OF PROCEEDS

Overall comment on section *(if applicable)*:

Sustainable Debt Bonds will be managed through an internal clearing account, and Fannie Mae will fully allocate the proceed within 24 months of issuance. The Sustainable Mortgage-Backed Securities will be managed through Fannie Mae's securitization program, which ensures 100% allocation at the time of issuance. Sustainalytics considers this process to be in line with market practice.

Tracking of proceeds:

- ☒ Sustainability Bond proceeds segregated or tracked by the Issuer in an appropriate manner
- ☐ Disclosure of intended types of temporary investment instruments for unallocated proceeds
- ☐ Other (please specify):

Additional disclosure:

- ☐ Allocations to future investments only
- ☒ Allocations to both existing and future investments
- ☐ Allocation to individual disbursements
- ☐ Allocation to a portfolio of disbursements
- ☐ Disclosure of portfolio balance of unallocated proceeds
- ☐ Other (please specify):

4. REPORTING

Overall comment on section (if applicable):

For unsecured corporate debt bonds, Fannie Mae intends to publish allocation and reporting until the full allocation of all proceeds. Fannie Mae provides ongoing data reporting regarding Single-Family and Multifamily MBS on its public website. Fannie Mae intends to provide investors impact reporting on the assets and projects financed on an annual basis. Sustainalytics views Fannie Mae's allocation and impact reporting as aligned with best practice.

Use of proceeds reporting:

☐ Project-by-project

☐ On a project portfolio basis

☐ Linkage to individual bond(s)

☒ Other (please specify): MBS reporting linked to individual bonds, unsecured debt reporting on a portfolio basis

Information reported:

☒ Allocated amounts

☐ Sustainability Bond financed share of total investment

☐ Other (please specify):

Frequency:

☒ Annual

☐ Semi-annual

☐ Other (please specify):

Impact reporting:

☐ Project-by-project

☐ On a project portfolio basis

☐ Linkage to individual bond(s)

☒ Other (please specify): MBS reporting linked to individual bonds, unsecured debt reporting on a portfolio basis

Information reported (expected or ex-post):

☒ GHG Emissions / Savings

☒ Energy Savings

☒ Decrease in water use

☒ Number of beneficiaries

☐ Target populations

☒ Other ESG indicators (please specify):

- AMI percentage distribution of homes financed
- Projected number of jobs supported

Frequency:

☒ Annual

☐ Semi-annual

☐ Other (please specify):

Means of Disclosure

☐ Information published in financial report

☐ Information published in sustainability report

☒ Information published in ad hoc documents

☒ Other (please specify):

On-going information about Single-Family and Multifamily MBS will be available on Fannie Mae's website.

☐ Reporting reviewed (if yes, please specify which parts of the reporting are subject to external review):

Where appropriate, please specify name and date of publication in the useful links section.

USEFUL LINKS (e.g. to review provider methodology or credentials, to Issuer's documentation, etc.)

N/A

SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE

Type(s) of Review provided:

☒ Consultancy (incl. 2nd opinion)

☐ Certification

☐ Verification / Audit

☐ Rating

☐ Other *(please specify)*:

Review provider(s):

Date of publication:

ABOUT ROLE(S) OF REVIEW PROVIDERS AS DEFINED BY THE GBP AND THE SBP

i. Second-Party Opinion: An institution with sustainability expertise that is independent from the Issuer may provide a Second-Party Opinion. The institution should be independent from the Issuer's adviser for its Sustainability Bond framework, or appropriate procedures such as information barriers will have been implemented within the institution to ensure the independence of the Second-Party Opinion. It normally entails an assessment of the alignment with the Principles. In particular, it can include an assessment of the Issuer's overarching objectives, strategy, policy, and/or processes relating to sustainability and an evaluation of the environmental and social features of the type of Projects intended for the Use of Proceeds.

ii. Verification: An issuer can obtain independent verification against a designated set of criteria, typically pertaining to business processes and/or sustainability criteria. Verification may focus on alignment with internal or external standards or claims made by the Issuer. Also, evaluation of the environmentally or socially sustainable features of underlying assets may be termed verification and may reference external criteria. Assurance or attestation regarding an issuer's internal tracking method for use of proceeds, allocation of funds from Sustainability Bond proceeds, statement of environmental or social impact or alignment of reporting with the Principles may also be termed verification.

iii. Certification: An issuer can have its Sustainability Bond or associated Sustainability Bond framework or Use of Proceeds certified against a recognised external sustainability standard or label. A standard or label defines specific criteria, and alignment with such criteria is normally tested by qualified, accredited third parties, which may verify consistency with the certification criteria.

iv. Green, Social and Sustainability Bond Scoring/Rating: An issuer can have its Sustainability Bond, associated Sustainability Bond framework or a key feature such as Use of Proceeds evaluated or assessed by qualified third parties, such as specialised research providers or rating agencies, according to an established scoring/rating methodology. The output may include a focus on environmental and/or social performance data, process relative to the Principles, or another benchmark, such as a 2-degree climate change scenario. Such scoring/rating is distinct from credit ratings, which may nonetheless reflect material sustainability risks.

Disclaimer

About Sustainalytics, a Morningstar Company

Sustainalytics, a Morningstar Company, is a leading ESG research, ratings and data firm that supports investors around the world with the development and implementation of responsible investment strategies. The firm works with hundreds of the world's leading asset managers and pension funds who incorporate ESG and corporate governance information and assessments into their investment processes. The world's foremost issuers, from multinational corporations to financial institutions to governments, also rely on Sustainalytics for credible second-party opinions on green, social and sustainable bond frameworks. In 2020, Climate Bonds Initiative named Sustainalytics the "Largest Approved Verifier for Certified Climate Bonds" for the third consecutive year. The firm was also recognized by Environmental Finance as the "Largest External Reviewer" in 2020 for the second consecutive year. For more information, visit www.sustainalytics.com.

Named
2015: Best SRI or Green Bond Research or Rating Firm
2017, 2018, 2019: Most Impressive Second Opinion Provider