S&P Global Ratings

An S&P Global Second Party Opinion (SPO) includes S&P Global Ratings' opinion on whether the documentation of a sustainable finance instrument, framework, or program, or a financing transaction aligns with certain third-party published sustainable finance principles. Certain SPOs may also provide our opinion on how the issuer's most material sustainability factors are addressed by the financing. An SPO provides a point-in-time opinion, reflecting the information provided to us at the time the SPO was created and published, and is not surveilled. We assume no obligation to update or supplement the SPO to reflect any facts or circumstances that may come to our attention in the future. An SPO is not a credit rating, and does not consider credit quality or factor into our credit ratings. See <u>Analytical Approach: Second Party Opinions</u>.

Second Party Opinion

Massachusetts Housing Finance Agency (MassHousing) Impact Framework

Aligned =

Feb. 21, 2025

Location: United States

Sector: Real Estate

Alignment Summary

- ✔ Social Bond Principles, ICMA, 2023
- ✓ Green Bond Principles, ICMA, 2021 (with June 2022 Appendix 1)
- ✓ Sustainability Bond Guidelines ICMA, 2021

See Alignment Assessment for more detail.

Strengths

MassHousing has a strong social license to operate in the communities it serves. For

close to 60 years, MassHousing has provided more than \$29 billion for affordable housing, including single-family loans, down payment assistance, and loans for the construction and rehabilitation of affordable and mixed-use multifamily rental units. MassHousing's efforts are underpinned by ambitious education and counseling services that aim to promote financial literacy and upward mobility to the populations it serves.

A stringent regulatory framework underscores compliance with social

objectives. All MassHousing's single-family mortgage loans and multifamily rental projects are governed by various federal and state laws with specific requirements to lend to and set aside housing for low- to moderate-income residents and maintain affordable rent levels for all residents.

Weaknesses

MassHousing does not include energy efficiency thresholds within its framework.

Conceptually aligned = O

We view this as standard practice for sustainable debt. However, the Qualified Allocation Plan (QAP) that governs the Low-Income Housing Tax Credit (LIHTC) program in Massachusetts includes minimum thresholds for energy efficiency that MassHousing's multifamily projects must meet when being evaluated for financing.

The final environmental performance of finanaced buildings is uncertain. This is because QAP is a points-based system. There is also a risk of financing new buildings with fossil-fuel heating. It is unclear how the QAP will continue to evolve over time, but we note the guidance has increased in climate ambition over recent years.

Areas to watch

Not aligned = 🗙

MassHousing's disclosures for assessing and managing physical climate risks are limited. While environmental impact assessments are completed before the development of multifamily projects, the issuer's transparency in quantifying climate risks is nascent, which we believe can be material for affordable housing projects in Massachusetts.

MassHousing does not report on the actual energy performance of multifamiy projects it finances. Though expected energy performance is modeled and reported on for some properties, the lack of uniform, quantitative impact reporting remains an area for improvement.

Primary contact

Jennifer Craft

Englewood, CO +1-303-721-4106 jennifer.craft @spglobal.com

Shades of Green Projects Assessment Summary

For each social financing under the framework, MassHousing expects to allocate 100% of net proceeds to eligible affordable housing projects. For each sustainability financing, it expects to allocate 100% of the net proceeds to projects eligible in the affordable housing and energy efficiency categories.

Based on the project category's Shade of Green detailed below, the expected allocation of proceeds, and consideration of environmental ambitions reflected in Massachusetts Housing's Impact Framework, we assess the framework as Light Green.

Light green

Financing of multifamily rental housing developments that provide affordable housing and include energy efficiency standards and features

See Analysis Of Eligible Projects for more detail.

Issuer Sustainability Context

This section provides an analysis of the issuer's sustainability management and the embeddedness of the financing framework within its overall strategy.

Company Description

MassHousing is an independent, quasi-public agency created in 1966 in the Commonwealth of Massachusetts. The agency provides affordable mortgage loans and other assistance for lowand moderate-income homebuyers, and financing to build and preserve affordable and mixedincome rental housing.

Since its inception, MassHousing has provided more than \$29 billion in financing for affordable housing, including financing single-family loans, down payment assistance loans, and multifamily loans. These activities further its mission to confront the housing challenges facing the commonwealth and improve the lives of its citizens. In addition, MassHousing operates the Massachusetts Community Climate Bank, the nation's first green bank dedicated to affordable housing, created in 2023.

Material Sustainability Factors

Access and affordability

Low housing stock and lack of affordable options can severely influence people's livelihoods, especially vulnerable, low-income populations who can face the threat of homelessness. Access and affordability is especially important for residential tenants in areas where rents can account for a large percentage of residents' incomes. Lack of accessibility and affordability of commercial properties can also hinder the sustainable growth of local communities.

Impact on communities

Properties, and by extension the owners, are inherently part of the communities in which they operate because they provide an essential service and can shape communities economically and socially. The residential sector is particularly meaningful to communities, where affordable housing and gentrification pressures can alter communities' social fabric and can be challenging to remediate.

Not-for-profit housing operators are not significantly exposed to consumer preferences as providers of safety-net accommodation. Rather, we see more localized risks related to residents being opposed to public housing or negative externalities (concerns about high crime, for example). Similarly, if a public housing association fails to keep its residents safe with proper housing standards, its reputation and relations with various stakeholders can be damaged, increasing risks around social cohesion and community unrest.

Physical climate risk

The geographically fixed nature of real estate assets exposes them to physical climate risks. While varying by location, these could include acute risks (such as wildfires, floods, and storms), which are becoming more frequent and severe, as well as chronic risks (such as long-term changes in temperature and precipitation patterns and rising sea levels). Acute and chronic risks could damage properties or place tenant health and safety at risk.

These challenges can also require investments to manage the potential impact on, in severe cases, relocation of tenants. While the aggregate impact is moderate--the type, number, and magnitude of these risks varies by region--highly exposed regions may be subject to material physical climate risk exposure. Most participants have some insurance, but it could become more difficult to secure insurance for the most exposed assets in the future, absent adaptation.

Climate transition risk

Energy use in buildings has been a major contributor to climate change, representing about one-third of global greenhouse gas (GHG) emissions on a final-energy-use basis, according to the International Energy Agency. Embedded emissions from building materials and new construction may also adversely affect progress toward future low-carbon climate resiliency goals. This leaves the sector highly susceptible to the growing public, political, legal, and regulatory pressure to accelerate climate goals.

Building occupiers and operators may face higher energy bills as power prices rise and higher capital expenditures as upgrades are required to accommodate the energy transition and meet more stringent efficiency standards. Incremental climate-related investments can require significant capital outlays but will potentially reduce the risk of obsolescence due to changes in regulation or climate goals. In addition, low-carbon properties may achieve higher cost efficiencies or attract premium rents in the longer term, therefore enhancing their value.

Issuer And Context Analysis

Through its social project categories, MassHousing addresses access and affordability and impact on communities. MassHousing's green project category addresses climate transition risk.

By financing the preservation and creation of affordable housing in Massachusetts, MassHousing directly addresses the issues of access and affordability. The state has one of the highest costs of living and rent in the U.S. As a non-profit housing finance agency, MassHousing is a pure-play entity, whose sole mission is to help low- to moderate-income residents secure safe, quality housing. The agency accomplishes this mission by providing singlefamily mortgage loans for first-time homebuyers (single-family program) and financing the construction and rehabilitation of multifamily rental homes (multifamily program).

Considering the decline of affordable housing stock in the U.S., the role of housing finance agencies is rising in importance. MassHousing has a five-year goal (fiscals 2022-2026) to expand lending and servicing activity by 10% relative to the previous five-year period, for both single-family and multifamily programs. The growth of such programs plays a role in combatting the housing affordability crisis in the U.S.

Preserving and creating affordable housing units is integral to maintaining the social fabric of communities in Massachusetts. From 2021-2024, 91% of MassHousing's single-family program mortgage loans went to families who fell below 100% of the area median income (AMI). The multifamily program properties are also AMI-restricted because they receive LIHTC. As a result, they must set aside 40% or more of units to those whose income falls below 60% AMI, 20% for those whose income falls below 50% AMI, and 10% for those whose income falls below 30% of AMI.

In our view, such lending practices simultaneously mitigate gentrification and income segregation risk. In addition, from 2021-2024, most of the agency's single-family lending took place in Gateway Cities, midsize urban centers with median household income, and higher education attainment rates below the state's average. By targeting investment in these locations, many of which have majority populations of Black, Latino, and/or immigrant residents, MassHousing aims to spur economic growth in historically underinvested communities.

MassHousing addresses climate transition risk through its multifamily program, which has a track record of green building certifications for new construction and energy efficiency and water conservation retrofits in existing housing. MassHousing has adopted several climate transition goals and programs, in collaboration with other state agencies. The state itself has implemented a Clean Energy and Climate Plan, which aims to achieve net zero by 2050. From 2019-2024, 100% of multifamily homes in MassHousing's portfolio received LIHTC support. After 2020, 100% of newly constructed multifamily homes in MassHousing's portfolio achieved one or more green building standard. In addition, rehabilitations financed by MassHousing either achieved a certification or implemented upgrades it expects to result in significant energy and water savings.

Second Party Opinion: Massachusetts Housing Finance Agency (MassHousing) Impact Framework

MassHousing expects new projects to look materially similar to those in its current portfolio. However, while Massachusetts is among the best states in the U.S. building sector, the overall sector requires even more ambition to fulfill net zero and Paris-aligned goals, and efforts to improve the environmental performance are not integrated into single-family programs the way they are in multifamily programs.

Although the Impact Framework does not directly address physical climate risk, it is a key sustainability issue for MassHousing, as the Northeast is facing intensifying flooding and storm events. When physical risks such as flooding or serious storms materialize, the low- and moderate-income populations housed in the assets financed by MassHousing may have less financial capacity to rebuild their homes and communities.

The Massachusetts Building Code contains provisions regarding flood standards in buildings, construction near floodplains, and stormwater management. The Massachusetts QAP also places greater emphasis on climate resilient design, such as native plant landscaping, if relevant.

Alignment Assessment

This section provides an analysis of the framework's alignment to the Social and Green Bond principles and the Sustainability Bond Guidelines.

Alignment Summary

Aligned = 🗸

✓ Conceptually aligned = O Not aligned = X

- ✓ Social Bond Principles, ICMA, 2023
- ✓ Green Bond Principles, ICMA, 2021 (with June 2022 Appendix 1)
- ✓ Sustainability Bond Guidelines ICMA, 2021

✓ Use of proceeds

We assess all the framework's green project categories as having a green shade and consider all social project categories to be aligned. The issuer commits to allocate the net proceeds issued under the framework exclusively to eligible green and social projects. Please refer to the Analysis of Eligible Projects section for more information on our analysis of the environmental and social benefits of the expected use of proceeds.

\checkmark Process for project evaluation and selection

The framework clearly describes the process MassHousing uses to evaluate and select projects for financing within the eligible project categories. In harmony with the specifications and standards of Fannie Mae, Federal Home Loan Mortgage Corp., Ginnie Mae, and other such leading mortgage organizations, MassHousing's single-family home ownership program clearly stipulates its policies and procedures as well as key eligibility requirements that must be met to qualify low- and moderate-income first-time homebuyers for residential homes in Massachusetts. For multifamily projects, MassHousing evaluates a projects' safety, affordability, and efficient energy use based on criteria outlined in the Massachusetts Executive Office of Housing and Livable Communities (EOHLC) QAP, as well as its own underwriting and closing standards to ensure they will be providing high-quality, energy efficient, and affordable housing for low- and moderate-income individuals and families. In addition, multifamily projects seeking to incorporate LIHTC must fulfill the requirements set forth within MassHousing's Multifamily Loan Closing Standards, which include an additional set of criteria such as a sustainability narrative and capital needs assessment. Furthermore, MassHousing conducts its own internal impact assessments to identify and manage perceived social and environmental risks associated with the eligible programs, which we view favorably.

✓ Management of proceeds

MassHousing commits to track the disbursement of proceeds until full allocation using an internal tracking system. It will deposit net proceeds into separate purchase accounts and temporarily invest them until they are distributed to eligible green and social projects, including single-family loans, down payment assistance loans, and multifamily loans.

✓ Reporting

The agency discloses reports annually regarding the disbursement of proceeds until the full allocation that encapsulates data as of the final day of the last fiscal year. The framework includes a commitment to disclose certain social metrics regarding the disbursement of proceeds for new mortgage loans for single-family homes and any subsequent down payment assistance loans, including the cumulative percentage of proceeds allocated by the income threshold of homeowners. In addition, reporting for multifamily units includes quantitative metrics for each of the projects financed, such as the allocation of LIHTC and the expected number of units at various AMI levels, and qualitative information on the expected green building standards and other energy efficiency features for the bond proceeds that have been disbursed to eligible projects as of the end of the fiscal year. Once all proceeds have been disbursed to a project, the project will be removed from subsequent sustainability reporting.

Analysis Of Eligible Projects

This section provides details of our analysis of eligible projects, based on their environmental benefits and risks, using the "<u>Analytical Approach: Shades Of Green Assessments</u>," as well as our analysis of eligible projects considered to have clear social benefits and to address or mitigate a key social issue.

For each social financing under the framework, MassHousing expects to allocate 100% of net proceeds to eligible affordable housing projects. For each sustainability financing, it expects to allocate 100% of the net proceeds to projects eligible in the affordable housing and energy efficiency categories.

Social project categories

Affordable Housing

Provision of affordable housing under the following MassHousing programs:

• Single Family Homeownership Program: Finance single-family loans for low-to moderate-income first-time homebuyers, includes down payment assistance loans.

Analytical considerations

Single Family Homeownership Program

- We believe providing single-family mortgage loans for qualifying low- and moderate-income, first-time homebuyers has significant benefits in expanding access to affordable housing and encourages investment in sustainable communities. Single-family homebuyers receive fixed-rate mortgages, and debt to income cannot exceed 45%. The program incorporates purchase price restrictions on residential dwellings. The program also provides homeowner education and consulting services, along with post-purchase education and guidance to promote financial literacy and preparedness.
- We believe MassHousing's use of AMI, a metric the U.S. Department of Housing and Urban Development uses, is a best practice when defining low-income target populations. For single-family homes, the income limit is 100% of AMI for homes with up to two people and 115% of AMI for homes with three people or more. In identified targeted areas, a household with up to two people can go up to 120% AMI and homes with three or more people as high as 140% of AMI.
- Qualifying first-time, income-eligible homebuyers may also receive assistance from MassHousing's single-family Down Payment Assistance Program. MassHousing offers two types of down payment assistance loans. Eligible properties under the traditional down payment assistance mortgage loan program are one- to four-family unit properties, including condominiums for first-time homebuyers who earn up to 100% of AMI or up to 135% of AMI for borrowers who are purchasing a property in the City of Boston, Framingham, Randolph, or in a Gateway City. The second type of down payment assistance loan program is MassHousing's Workforce Advantage, which is available to income-eligible (less than 80% of AMI based on household size) first-time homebuyers looking to purchase a single-family dwelling, a two-family dwelling, or a condominium located in the Commonwealth. As of March 2024, this program offers a flat loan of \$30,000. In addition, through Operation Welcome Home, MassHousing provides military personnel and their families, including members of the National Guard or Reserves, up to \$2,500 of closing cost assistance in addition to down payment assistance. We believe these programs can provide long-term benefits in helping individuals stay in their homes and achieve the long-term socioeconomic benefits of home ownership.
- We believe MassHousing's established track record in providing affordable single-family housing, combined with its
 comprehensive policies, procedures, and programs, such as its mortgage payment protection coverage, ensures that both
 perceived and realized social risks associated with the eligible projects are appropriately identified, managed, and mitigated.

Social and Green project categories

Affordable Housing and Energy Efficiency

Assessment	Description
Light green	Multifamily Rental Housing Program: Financing of multifamily rental housing developments that provide affordable housing and include one or more energy efficiency standards and features.

Social analytical considerations

- The construction and preservation of affordable mixed income housing will improve living conditions for low- and moderateincome residents in Massachusetts by helping maintain and expand access to safe, affordable housing.
- The target population is well defined, and the groups selected represent the underserved residents who earn up to 80% or less of the state's AMI. For multifamily homes, under the provisions outlined within the QAP, MassHousing anticipates 10% of rental units to be allocated to individuals or families earning below 30% of AMI, 20% to be earning less than 50% AMI, and 40% to be earning less than 60% AMI. In some instances, affordable housing projects may exceed the underwritten AMI levels, if necessary, but we believe the broad range of AMI brackets adequately seeks to minimize income segregation, which is a common social risk associated with affordable housing.
- Multifamily rental units also include at least one or more energy efficient features of which residual savings are passed along to the resident in the form of monthly energy bill cost savings.
- We believe MassHousing's established track record in providing affordable multifamily rental housing, combined with its comprehensive policies, procedures, and programs, such as aligning with Massachusetts' QAP, ensures that both perceived and realized social risks associated with the eligible projects are appropriately identified, managed, and mitigated.

Green analytical considerations

- We have assessed this project as category Light green under the assumption that all financed projects will score highly under the state's QAP scoring system, which creates incentives for climate-friendly building design and encourages green building certifications, thereby representing a meaningful improvement over the existing building stock and new construction that only complies with the State Base Code. While the QAP guidance is not an absolute requirement of MassHousing's multifamily projects, we believe that the issuer will only finance projects beholden to the guidance in an effort to qualify for an ambitious level of LIHTC program QAP points. We believe that all projects will score high enough on the point-based QAP to receive scarce LIHTC funding, as all projects financed by MassHousing from 2019-2024 received LIHTC and the tax credits play a key role in the financial viability of the projects.
- The 2023-2024 QAP has incorporated the latest Stretch Code Home Energy Rating System (HERS) scoring requirements, where lower scores are considered more energy efficient. The QAP allocates points to new construction that receives a HERS score of 45 or less (i.e. the home is 55% more efficient than the same home built in 2006) and a HERS score of 65 or less for rehabilitations. In 2023, the average HERS score, for both single-family and multifamily new builds, nationwide was 57 and the average HERS score in Massachusetts was 50, therefore better than the national average.
- The QAP is refreshed annually, with the 2023-2024 refresh placing greater emphasis on climate action, in alignment with the states' goals. The latest QAP allocates points to a subcategory titled "Emphasis on Green, Sustainable, and Climate Resilient Design and Enhanced Accessibility." Within this category, the QAP rewards points for green building and energy performance certifications (U.S. Leadership in Energy and Environmental Design (LEED), Passive House, PHIUS+, ENERGY STAR Multifamily new construction, Enterprise Green Communities, Massachusetts Stretch Code, or EPA WaterSense) and energy-efficient features including low carbon construction materials, on-site clean energy generation, and electrification, among others. Recent multifamily projects financed by MassHousing have all incorporated a range of energy efficiency features, and all but two historic renovation projects financed after 2020 have achieved one or more green building standard.
- Massachusetts has three building energy codes that municipalities may abide by, increasing in order of stringency: Base Code, Stretch Code, and Specialized Opt-in (net zero) code. All municipalities must meet the Base Code, and it is refreshed every few years to reflect the latest International Energy Conservation Council (IECC) recommendations, quantitative and qualitative guidelines that promote energy conservation, and sustainability in building design and operation. In 2023, the

Base Code was updated to IECC 2021 (with Massachusetts amendments), demonstrating increasing stringency in energy performance, and indirectly, reduction in GHG emissions intensity. Since it is one of 15 states to have adopted IECC 2021 with amendments, we believe Massachusetts is on the forefront of improving U.S. energy building codes. In addition, 253 out of 351 municipalities have adopted the state's Stretch Code, which builds upon the Base Code and requires buildings to meet a maximum HERS index score, or receive an equivalent, alternative green building certification. We expect the financed buildings to see at least a material energy efficiency improvement beyond the Base regulation given the Stretch Codes inclusion in the QAP. In addition, MassHousing's current portfolio of properties has a higher percentage of electrified heating systems (heat pumps) than Massachusetts homes overall, a trend MassHousing expects to continue.

• We note that neither the Base Code nor Stretch Code explicitly prohibit the use of fossil fuel-based heating. As a result, there is risk of emissions lock in, whereby an activity delays or prevents the transition to low-carbon alternatives by perpetuating assets or processes and their corresponding GHGs. However, energy efficiency gains reduce associated emissions. The construction of new multifamily homes contributes to GHG emissions as well, with most of a building's lifecycle emissions coming from the construction phase. The QAP does create incentives for some investments to reduce embodied emissions, but these improvements may not be as consistent as operational efficiency gains throughout the portfolio. The construction of new multifamily homes exposes them to physical climate risk in a region that is facing intensifying flooding and storm events, which disproportionately affect vulnerable populations. By way of its scoring system, the QAP discourages builders from locating new projects near wetlands, sensitive habitats, and in land designated as Special Flood Hazard Areas (SFHA) in the Flood Insurance Rate Map (FIRM), published by the Federal Emergency Management Agency (FEMA). Such provisions partly mitigate physical climate risk, but we note that the latest update to FIRM was in 2020, which may not reflect the latest changes in ecological conditions in light of climate change.

S&P Global Ratings' Shades of Green



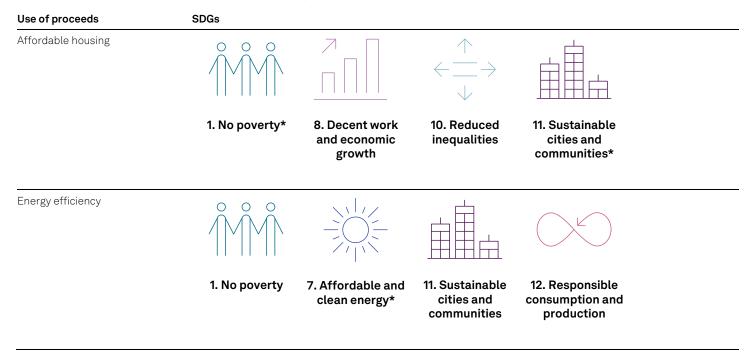
Note: For us to consider use of proceeds aligned with ICMA Principles for a green project, we require project categories directly funded by the financing to be assigned one of the three green Shades.

LCCR--Low-carbon climate resilient. An LCCR future is a future aligned with the Paris Agreement; where the global average temperature increase is held below 2 degrees Celsius (2 C), with efforts to limit it to 1.5 C, above pre-industrial levels, while building resilience to the adverse impact of climate change and achieving sustainable outcomes across both climate and non-climate environmental objectives. Long term and near term--For the purpose of this analysis, we consider the long term to be beyond the middle of the 21st century and the near term to be within the next decade. Emissions lock-in--Where an activity delays or prevents the transition to low-carbon alternatives by perpetuating assets or processes (often fossil fuel use and its corresponding greenhouse gas emissions) that are not aligned with, or cannot adapt to, an LCCR future. Stranded assets--Assets that have suffered from unanticipated or premature write-downs, devaluations, or conversion to liabilities (as defined by the University of Oxford).

Mapping To The U.N.'s Sustainable Development Goals

Where the financing documentation references the Sustainable Development Goals (SDGs), we consider which SDGs it contributes to. We compare the activities funded by the financing to the International Capital Markets Association (ICMA) SDG mapping and outline the intended linkages within our SPO analysis. Our assessment of SDG mapping does not affect our alignment opinion.

This framework intends to contribute to the following SDGs:



*The eligible project categories link to these SDGs in the ICMA mapping.

Related Research

- Analytical Approach: Second Party Opinions: Use of Proceeds, July 27, 2023
- FAQ: Applying Our Integrated Analytical Approach for Use-of-Proceeds Second Party Opinions, July 27, 2023
- Analytical Approach: Shades of Green Assessments. July 23, 2023

Analytical Contacts

Primary contact

Jennifer Craft

Englewood, CO +1-303-721-4106 jennifer.craft @spglobal.com Secondary contacts

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