

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 [Analytical Approach: Second Party Opinions](#).

Second Party Opinion

California Housing Finance Agency's Impact Framework

May 19, 2025

Primary contact

Henrik Cotran

San Francisco

+1-415-371-5018

henrik.cotran

@spglobal.com

Location: U.S.

Sector: Real estate

Alignment Summary

Aligned = ✓ Conceptually aligned = ○ Not aligned = ✕

- ✓ 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

California Housing Finance Agency (CalHFA) has a strong social license to operate in the communities it serves. Since its inception, CalHFA has helped more than 226,000 low- to medium-income Californians purchase their first home via its affordable single-family loans and down payment assistance program, and helped preserve or build more than 82,000 affordable homes and apartments. CalHFA offers education and counseling services to promote financial literacy and upward mobility to the populations it serves, including historically underserved groups.

A stringent regulatory framework underscores compliance with social objectives. All CalHFA single-family loans and multifamily rental developments financed under the framework are governed by various federal and state laws, which set specific requirements to lend to and set aside housing for low- to moderate- income residents and maintain affordable rent levels for residents.

California has among the most ambitious state energy codes in the U.S., and financed projects will likely meet or exceed state regulations. Properties financed will likely have third-party green building certifications, GreenPoint and LEED, which exceed the 2019 version of Title 24. Projects may also contain

Weaknesses

Multifamily developments financed under the framework may fund projects that contain fossil fuel direct heating. Any fossil fuel direct heating, in our view, increases emissions lock-in risk and prolongs the asset life of a technology that is incompatible with a low carbon, climate resilient (LCCR) future. However, CalHFA intends to fund projects with heating systems that optimize energy efficiency and emissions reduction per regulatory requirements.

Areas to watch


The properties that CalHFA finances are subject to physical climate risks. California is prone to extreme weather events and the physical impacts of climate change (such as wildfires, droughts, heat waves, and floods) and earthquake risks. CalHFA requires insurance for certain hazards, including fire and flood, where relevant, and Title 24 of the California Building Code stipulates additional protective building features for houses situated in wildfire-prone areas. We believe these measures address some environmental risks but do not mitigate the potential physical risks to CalHFA's properties and its residents.

Mortgages financed under the framework must not be previously labeled as social or sustainability bonds by loan originators or other parties to avoid double-counting of benefits. If the loans or MBS purchased by CalHFA already carry a social or sustainability label, the social or sustainability benefits of financings could be counted twice.

heating technologies that are not a requirement of the code but are known to result in significant energy savings and GHG emissions reductions relative to traditional heating sources.		
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	--

Shades of Green Projects Assessment Summary

Based on the project category's Shade of Green detailed below and consideration of environmental ambitions reflected in CalHFA’s Impact Framework, we assess the green use of proceeds portion of the framework as receiving a Light green shade.

Green buildings	 Light green
Finance affordable multifamily rental housing projects that include energy efficiency features and/or certifications that exceed the requirements set forth by the Title 24 of the California Building Code.	

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

CalHFA is a state agency established in 1975 that provides financing and programs that help low- and moderate-income individuals and families throughout the state access affordable housing, both as homebuyers and renters. Its mission is to invest in diverse communities with financing programs to advance its single- and multifamily programs. To date, CalHFA has helped more than 226,000 Californians purchase their first home with a mortgage they can afford and helped build or preserve more than 82,000 units in affordable housing developments for veterans, seniors, those with special needs and families in danger of experiencing homelessness. Under the impact framework, CalHFA intends to issue social-labeled bonds that facilitate single-family mortgage lending products and down payment assistance for low- and moderate-income individuals in California, including first-time homebuyers, and sustainability-labeled bonds that provide financing for affordable rental housing through partnerships with local jurisdictions, affordable housing developers and other financial institutions.

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 are especially important for residential tenants in areas where rents can account for a substantial 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 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 coverage, 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 around a third of global GHG emissions on a final-energy-use basis according to the IEA. 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

The framework's single-family and multifamily housing investments aim to address access and affordability and impact on communities and energy-efficient multifamily housing projects aim to address climate transition risk, which we view as the most material sustainability factors in the sector. In our view, physical climate risk is also a relevant consideration as the frequency of extreme weather events, such as wildfires, increases in California. CalHFA mitigates this risk via flood insurance policies, compliance with Title 24 of the California Building Code, which contains additional requirements for building homes in wildfire-prone areas, and use of low-water landscaping for certain properties.

CalHFA directly addresses the issues of access and affordability by financing the preservation and creation of affordable housing in California. It provides financing programs that give more people access to affordable homes through single-family mortgage loans and down payment assistance for low-and moderate-income individuals, including first-time homebuyers. Additionally, CalHFA partners with local jurisdictions, developers, and private financial institutions to finance the construction and rehabilitation of multifamily rental homes. California is among the most unaffordable states in terms of housing in the country and constructing more housing units, including affordable ones, is a strategic priority. The state's goal is to build 2.5 million new homes by 2030. Given the decreasing availability of affordable housing, CalHFA plays an increasingly crucial role in promoting and preserving access and affordability for vulnerable populations.

CalHFA's affordable housing preservation and creation programs can provide social benefits for communities. In 2023 and 2024, CalHFA utilized over \$2.5 billion in lending activity and bond issuances to develop and preserve single-family homes along with more than 3,900 affordable rental units for Californian families with incomes below 80% of the area median income (AMI) for multifamily properties. By targeting investments toward economically disadvantaged populations, CalHFA plays a crucial role in maintaining the social fabric of local communities throughout California.

CalHFA addresses climate transition risk through its multifamily housing investments, which comply with and/or exceed the increasingly stringent Title 24 regulations. California has among the strictest energy codes in the U.S. to ensure all new residential construction achieve greenhouse gas emissions reductions and zero-net-energy (ZNE). ZNE is defined as an energy-efficient building, where on a source basis, the actual annual consumed energy is less than equal to onsite renewable generated energy. Title 24 is refreshed every three years, with the latest update having been in 2022. With each update, the code brings the California building energy standards into closer alignment with ZNE; we anticipate the next update later this year. We

expect CalHFA's financed projects to follow the latest version of Title 24 as of the loan closing date.

Physical climate risk is a key sustainability issue for affordable housing providers, especially in California, which is prone to extreme weather events and other physical impacts of climate change. When physical risks such as wildfire and flooding materialize, the low- and moderate-income populations housed in the assets financed by CalHFA may have less financial capacity to rebuild their homes and communities. The loans acquired by CalHFA meet insurance requirements established by the government-sponsored enterprises (GSEs). The agency requires certain loans to be covered by flood insurance. The California Building Code requires buildings constructed in wildfire-prone areas to meet extra requirements to improve fire resistance, such as using fire-resistant exterior materials and maintaining a defensible perimeter around a home to prevent flammable vegetation from igniting. While we believe these measures address some environmental risks, they do not mitigate the potential physical risks of CalHFA's properties and its residents.

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 = ○ Not aligned = ✕

- ✓ 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. The single-family proceeds will finance first-mortgage loans as well as down payment and/or closing costs assistance to assist low- to moderate-income homebuyers in California to purchase single-family homes. The multifamily proceeds will finance affordable multifamily rental housing projects that benefit from tax credit allocation and include energy efficiency features. 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.

✓ Process for project evaluation and selection

The framework includes separate eligibility criteria for single-family and multifamily projects that are assessed by CalHFA staff and California state tax authorities. Single-family criteria include borrowers' income and property type. Multifamily housing also includes income requirements and environmental criteria pursuant to California's Title 24 building codes. The issuer's project evaluation and selection process incorporates a thorough review of risks and mitigants which includes reviewing any social and environmental risks.

✓ Management of proceeds

CalHFA will invest the proceeds of the single-family social bonds in investment obligations until disbursed to purchase MBSs or finance DPS loans under the HMRB General Indenture. CalHFA tracks these disbursements. Net of certain transaction costs, the proceeds of the multifamily projects are transferred to CalHFA to refinance borrower loans. As such, we do not view a commitment to temporarily manage or periodically adjust the use of proceeds for the multifamily projects as necessary.

✓ Reporting

For its single-family Social Bonds issued under the framework, CalHFA commits to report on the allocation of the net proceeds and on the financed single-family projects’ impact upon full allocation of the net proceeds in its Social Bonds Report, while the issuer reports the remaining balance of outstanding bond series in its annual financial statements. Where applicable and feasible, quantitative performance indicators such as the projects’ total financing amounts, number and value of loans per AMI band, and the amount of proceeds spent for down payment and closing cost assisted loans are included. As a quasi-public state agency subject to federal regulations, CalHFA is also legally mandated to conduct annual financial audits, including reviewing the allocation of the proceeds from the bond series, which will be made available on Electronic Municipal Market Access System (EMMA). Additionally, CalHFA’s annual financial reporting is subject to audit.

For its multifamily Sustainability Bonds issued under the framework, CalHFA provides the projects’ qualitative environmental and social performance indicators in the POS, such as inclusion of EnergyStar appliances and compliance with state-level environmental regulations and quantitative performance indicators such as the projects’ local area median income (AMI) bands served for its projects. Because all multifamily loans financed under the framework are refinancings of permanent mortgage loans with all construction complete further reporting is not required. As a quasi-public state agency subject to federal regulations, CalHFA is also legally mandated to conduct annual financial audits, including reviewing the allocation of the proceeds from the bond series. Separately, CalHFA’s impact metrics for the projects are subject to audit by federal, state, and local governments, as well as mission-aligned third parties, as part of the LIHTC program.

Analysis Of Eligible Projects

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

Green project categories

Green buildings

Assessment

 Light green

Description

Finance affordable multifamily rental housing projects that include energy efficiency features and/or certifications exceeding requirements in the Title 24 of the California Building Code.

Analytical considerations

- The real estate and the building sectors are among the leading contributors to global greenhouse gas emissions. The IPCC and IEA emphasize that reaching net-zero emissions in buildings demands major strides in energy efficiency and fossil fuel abandonment. All properties must achieve high energy performance. New properties should also cut emissions from building materials and construction. Additionally, addressing physical climate risks is crucial for strengthening buildings' climate resilience.
- We assign a Light green shade to this project category, reflecting our view that the framework criteria and state law ensure financed buildings have environmental attributes that exceed requirements. California’s Title 24, which all projects under this framework must follow, includes energy efficiency, green building certifications, and sustainable design, among others.
- Title 24 of the California Building Code is applicable statewide, governing the design, construction, alteration, and repair of all buildings. It establishes minimum standards, including safety, fire protection, energy efficiency, air quality, and sustainable design. Title 24 is updated every three years by the California Energy Commission (CEC)--the main agency responsible for developing, updating, and enforcing compliance with Title 24, Part 6. This ensures California’s building energy standards align with the state's evolving goals for energy efficiency, environmental sustainability, and climate policy.

- Title 24, Part 6, features some of the most stringent building energy efficiency standards in the country, requiring measures such as mandatory solar photovoltaic systems and battery storage in new multifamily buildings, installing electric vehicle (EV)-capable infrastructure, energy performance improvement mandates, and specific requirements for HVAC systems and insulation. This contrasts with many other states that typically adopt other baseline energy codes (like the International Building Code {IBC}, ASHRAE, or the International Energy Conservation Code {IECC}) that are less ambitious, in our opinion.
- All multifamily projects CalHFA funds must adhere to Title 24 regulations. We expect it will meet these requirements even though it does explicitly commit to complying with the most current version of Title 24 in the framework. Historically, CalHFA has financed multifamily projects with energy efficiency features and green building certifications that exceeded the Title 24 baseline requirements, including heat pumps and GreenPoint and LEED certifications. Pursuant to the state's Qualified Allocation Plan (QAP) of low-income tax credits, new construction developments must also utilize EnergyStar rated appliances and rehabilitation developments must produce at least 10% post-rehabilitation energy efficiency improvement over pre-existing energy usage, further supporting environmental performance that exceeds stringent local standards.
- The properties CalHFA finances are exposed to physical climate impacts, and it requires insurance for certain hazards, including fire and flood, where relevant. Title 24 of the California Building Code stipulates additional protective building features for houses situated in wildfire-prone areas. The issuer does not have separate policies for physical climate risk mitigation and adaptation.

Social project categories

Affordable housing

Finance single-family mortgage loans for first-time homebuyers through the acquisition of mortgage-backed securities and make down payment and/or closing costs assistance loans, and affordable multifamily rental housing projects that benefit from tax credit allocation.

Analytical considerations

- The construction and preservation of affordable mixed-income multifamily housing will improve living conditions for low- and moderate-income residents in California by maintaining and expanding access to safe, affordable housing.
- CalHFA offers several loan programs with competitive rates and long-term financing to advance the creation and preservation of affordable housing to help address the shortage of affordable rental housing in California. The CalHFA Multifamily Programs provide permanent, long-term financing and financing for new construction or the acquisition, rehabilitation and/or development of an existing project.
- We believe CalHFA's use of AMI, a metric the U.S. Department of Housing and Urban Development (HUD) utilizes, is a best practice when defining low-income target populations. The target population is well-defined, and the selected groups are restricted to families with household income between 30% to 80% of the local AMI. However, with Mixed-Income Program, the eligible AMI is 30% to 120% of AMI. We believe these broad AMI brackets adequately minimize income segregation, which is a common social risk associated with affordable housing. By housing families and lending to individuals across a wide income band, CalHFA mitigates this social risk.
- Further, these multifamily rental projects provide important community facilities such as computer labs, community rooms, fitness rooms, playgrounds, and learning centers. In addition, all multifamily developments are within a half mile of public transit, adjacent to bus stops, elementary schools, and grocery stores, which can have ancillary environmental benefits from reduced vehicle usage.
- The construction and preservation of single-family homes will improve living conditions for low- and moderate-income residents in California by maintaining and expanding access to safe, affordable housing. The Homeowner Mortgage Revenue Bond program provides low-interest rate home financing and down payment and closing costs assistance. The primary objectives are to enable low- and moderate-income individuals and families to purchase homes on affordable terms, make home mortgage financing available in mortgage-deficient areas, and stimulate the housing construction industry by making attractive, permanent mortgage financing available through qualified lenders. Importantly, most borrowers receive down payment and closing costs assistance, according to the issuer, greatly increasing the affordability. This underscores the strong social benefit that market participants such as CalHFA provide.



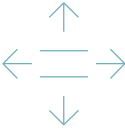



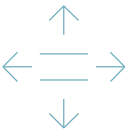

Second Party Opinion: California Housing Finance Agency's Impact Framework

- CalHFA offers several loan programs with competitive rates and long-term financing to advance the creation and preservation of affordable homes. Single-family lending programs are primarily targeted toward first-time homebuyers, though certain state and federal laws may allow single-family mortgage loans to non-first-time homebuyers. Single-family properties may be either newly constructed or existing. CalHFA will invest bond proceeds in MBS and DPA loans associated with underlying mortgages issued by government-sponsored mortgage companies including Ginnie Mae, Fannie Mae, and Freddie Mac. These firms provide liquidity to the mortgage market by purchasing mortgage loans from lenders, thereby replenishing lender funds for additional loans.
- The income eligibility of borrowers under the single-family program is consistent with income limits established by the State of California. The income limit varies by county; for certain urban counties under this issuance, the highest tier is the lesser of \$300,000 or 198% of AMI. We note this income eligibility limit is relatively high for single-family affordable housing in the U.S. However, California has some of the highest housing and other living costs in the nation. The demand for housing in California, particularly in urban areas, has surged due to population and economic growth and limited housing supply. This has resulted in significant increases in home prices, making it challenging for low- and moderate-income families to find affordable single-family options. According to the California Association of Realtors, the median home price in California was \$861,000 in December 2024, while the median household income was approximately \$96,000 in 2023, per the U.S. Census Bureau. Given this background, the issuer's adjustment of higher income and broader AMI bracket eligibility criteria improves the target population's ability to achieve home ownership.
- We also believe the broad AMI bracket in the single-family program minimizes income segregation, which is a common social risk associated with affordable housing. In prior decades, government-sponsored public housing projects, which exclusively housed those with low incomes, had the unintended consequence of creating areas of economic disinvestment and, as a secondary consequence, areas of higher crime and safety concerns. In 2024, more than half of the borrowers had incomes at or below \$100,000. Additionally, the issuer lends to a high proportion of minority borrowers, with approximately half identifying as either Hispanic/Latino or Black in the issuer's 2024 loans.
- We believe CalHFA's established track record in providing affordable single and multifamily housing, combined with its comprehensive policies, procedures, and programs, such as aligning with California's QAP, ensures that both perceived and realized social risks associated with the eligible projects are appropriately identified, managed, and mitigated.

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:

Use of proceeds	SDGs			
Green buildings	 1. No poverty	 7. Affordable and clean energy	 10. Reduced inequalities	 11. Sustainable cities and communities*
Affordable housing	 1. No poverty*	 8. Decent work and economic growth	 10. Reduced inequalities	 11. Sustainable cities and communities*

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

S&P Global Ratings' Shades of Green

Assessments					
 Dark green	 Medium green	 Light green	 Yellow	 Orange	 Red
Description					
Activities that correspond to the long-term vision of an LCCR future.	Activities that represent significant steps toward an LCCR future but will require further improvements to be long-term LCCR solutions.	Activities representing transition steps in the near-term that avoid emissions lock-in but do not represent long-term LCCR solutions.	Activities that do not have a material impact on the transition to an LCCR future, or, Activities that have some potential inconsistency with the transition to an LCCR future, albeit tempered by existing transition measures.	Activities that are not currently consistent with the transition to an LCCR future. These include activities with moderate potential for emissions lock-in and risk of stranded assets.	Activities that are inconsistent with, and likely to impede, the transition required to achieve the long-term LCCR future. These activities have the highest emissions intensity, with the most potential for emissions lock-in and risk of stranded assets.
Example projects					
 Solar power plants	 Energy efficient buildings	 Hybrid road vehicles	 Health care services	 Conventional steel production	 New oil exploration

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).

Related Research

- [Sustainability Insights: Behind The Shades: Real Estate](#), March 31, 2025
- [Analytical Approach: Second Party Opinions](#), March 6, 2025
- [FAQ: Applying Our Integrated Analytical Approach For Second Party Opinions](#), March 6, 2025
- [Analytical Approach: Shades Of Green Assessments](#), July 27, 2023

Analytical Contacts

Primary contact	Secondary contacts	Research contributor
Henrik Cotran San Francisco +1-415-371-5018 henrik.cotran @spglobal.com	Michael Ferguson New York michael.ferguson @spglobal.com Alán Bonilla San Francisco alan.bonilla @spglobal.com Jennifer Craft Englewood, CO jennifer.craft @spglobal.com	Tanmay Kumbharkar Mumbai

Second Party Opinion: California Housing Finance Agency's Impact Framework

Standard & Poor's Financial Services LLC or its affiliates (collectively, S&P) receives compensation for the provision of the Second Party Opinions product and the European Green Bond External Review product (separately and collectively, Product).

S&P may also receive compensation for rating the transactions covered by the Product or for rating the issuer of the transactions covered by the Product.

The purchaser of the Product may be the issuer.

The Product is not a credit rating, and does not consider credit quality or factor into our credit ratings. The Product does not consider, state or imply the likelihood of completion of any projects covered by a given financing, or the completion of a proposed financing. The Product is a statement of opinion and is neither a verification nor a certification. The Product is a point in time evaluation reflecting the information provided to us at the time that the Product was created and published, and is not surveilled. The Product is not a research report and is not intended as such. S&P's credit ratings, opinions, analyses, rating acknowledgment decisions, any views reflected in the Product and the output of the Product are not investment advice, recommendations regarding credit decisions, recommendations to purchase, hold, or sell any securities or to make any investment decisions, an offer to buy or sell or the solicitation of an offer to buy or sell any security, endorsements of the suitability of any security, endorsements of the accuracy of any data or conclusions provided in the Product, or independent verification of any information relied upon in the credit rating process. The Product and any associated presentations do not take into account any user's financial objectives, financial situation, needs or means, and should not be relied upon by users for making any investment decisions. The output of the Product is not a substitute for a user's independent judgment and expertise. The output of the Product is not professional financial, tax or legal advice, and users should obtain independent, professional advice as it is determined necessary by users.

While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives.

S&P and any third-party providers, as well as their directors, officers, shareholders, employees, or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness, or availability of the Product. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for reliance of use of information in the Product, or for the security or maintenance of any information transmitted via the Internet, or for the accuracy of the information in the Product. The Product is provided on an "AS IS" basis. S&P PARTIES MAKE NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDED BUT NOT LIMITED TO, THE ACCURACY, RESULTS, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE WITH RESPECT TO THE PRODUCT, OR FOR THE SECURITY OF THE WEBSITE FROM WHICH THE PRODUCT IS ACCESSED. S&P Parties have no responsibility to maintain or update the Product or to supply any corrections, updates, or releases in connection therewith. S&P Parties have no liability for the accuracy, timeliness, reliability, performance, continued availability, completeness or delays, omissions, or interruptions in the delivery of the Product.

To the extent permitted by law, in no event shall the S&P Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence, loss of data, cost of substitute materials, cost of capital, or claims of any third party) in connection with any use of the Product even if advised of the possibility of such damages.

Some of the Product may have been created with the assistance of an artificial intelligence (AI) tool. Published Products created or processed using AI is composed, reviewed, edited, and approved by S&P personnel.

S&P maintains a separation between commercial and analytic activities. S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain nonpublic information received in connection with each analytical process.

For PRC only: Any "Second Party Opinions" or "assessment" assigned by S&P Global Ratings: (a) does not constitute a credit rating, rating, sustainable financing framework verification, assessment, certification or evaluation as required under any relevant PRC laws or regulations, and (b) cannot be included in any offering memorandum, circular, prospectus, registration documents or any other document submitted to PRC authorities or to otherwise satisfy any PRC regulatory purposes; and (c) is not intended for use within the PRC for any purpose which is not permitted under relevant PRC laws or regulations. For the purpose of this section, "PRC" refers to the mainland of the People's Republic of China, excluding Hong Kong, Macau and Taiwan.

For India only: Any "Second Party Opinions" or "assessments" assigned by S&P Global Ratings to issuers or securities listed in the Indian securities market are not intended to be and shall not be relied upon or used by any users located in India.

Australia: S&P Global Ratings Australia Pty Ltd provides Second Party Opinions in Australia subject to the conditions of the ASIC SPO Class No Action Letter dated June 14, 2024. Accordingly, this Second Party Opinion and related research are not intended for and must not be distributed to any person in Australia other than a wholesale client (as defined in Chapter 7 of the Corporations Act).

Copyright © 2025 by Standard & Poor's Financial Services LLC. All rights reserved.