



Fannie Mae Single-Family Green Bond Second Opinion

July 24, 2020

The Federal National Mortgage Association (Fannie Mae) is the largest U.S. government-sponsored enterprise (GSE), chartered in 1938 by the United States Congress. Fannie Mae’s mission is to support liquidity and stability in the secondary U.S. residential mortgage market, and to help underserved markets, such as affordable housing for low- and moderate-income families. It provides market liquidity by purchasing qualifying mortgages from lenders, which it bundles into Mortgage Backed Securities (MBS) – and sells to investors with guarantees; it does not lend directly to consumers.

Fannie Mae’s Single-Family Green MBS program is used to finance mortgage loans backed by Single-Family properties (1-4 residential units) awarded green building certifications at the time construction is completed. The minimum certification necessary to qualify under Fannie Mae’s Single-Family Green Bond Framework is ENERGY STAR® Certified Homes Version 3.0, which requires properties to be at least 29% better than the baseline home (International Energy Conservation Code 2006) and roughly comparable to the performance of IECC 2012, and nearly as stringent as IECC 2015. However, many states already adopted higher building codes than IECC 2006: 29 have adopted IECC 2009, 3 states adopted IECC 2015 and 7 states have adopted the IECC 2018. In many cases properties could qualify that comply only with the adopted state’s building code, with limited climate impacts. We encourage the issuer to consider tightening these Single-Family requirements over time after the program is established.

It is a strength that Fannie Mae has expanded from its Multifamily Green Bond program to include Single Family mortgages and raises the awareness of the global capital markets on how single-family homes across the US can contribute to mitigating climate risks. Fannie Mae informed us that while impact reporting will be published incl. several impact metrics, the issuer cannot report on actual energy consumption, fossil fuel based heating systems and GHG emissions for Single-Family MBS due to US privacy concerns. In addition, Fannie Mae’s Single-Family Green Bond Framework does not consider fossil fuel-based heating in the properties, public transportation access or building materials. Further, recent studies have found governmental flood maps (and respective flood insurances) to severely understate flood risk exposure across the US. According to the issuer, lenders screen properties against these governmental flood maps based on which properties could qualify if they have a flood insurance. This could manifest as a climate risk.

Based on the overall assessment of the activities that will be financed and the governance of the framework, Fannie Mae Single-Family Green Bond Framework receives a **CICERO Light Green** shading and a governance score of **Good**.

SHADES OF GREEN

Based on our review, we rate the Fannie Mae’s Single-Family Green Bond Framework **CICERO Light Green**.

Included in the overall shading is an assessment of the governance structure of the Single-Family Green Bond Framework. CICERO Shades of Green finds the governance procedures in Fannie Mae’s framework to be **Good**.



GREEN BOND PRINCIPLES

Based on this review, this Framework is found in alignment with the principles.





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1 Terms and methodology

This note provides CICERO Shades of Green's (CICERO Green) second opinion of the client's framework dated June 15, 2020¹. This second opinion remains relevant to all green bonds and/or loans issued under this framework for the duration of three years from publication of this second opinion, as long as the framework remains unchanged. Any amendments or updates to the framework require a revised second opinion. CICERO Green encourages the client to make this second opinion publicly available. If any part of the second opinion is quoted, the full report must be made available.

The second opinion is based on a review of the framework and documentation of the client's policies and processes, as well as information gathered during meetings, teleconferences and email correspondence.

Expressing concerns with 'shades of green'

CICERO Green second opinions are graded dark green, medium green or light green, reflecting a broad, qualitative review of the climate and environmental risks and ambitions. The shading methodology aims to provide transparency to investors that seek to understand and act upon potential exposure to climate risks and impacts. Investments in all shades of green projects are necessary in order to successfully implement the ambition of the Paris agreement. The shades are intended to communicate the following:

CICERO Shades of Green	Examples
 <p>Dark green is allocated to projects and solutions that correspond to the long-term vision of a low carbon and climate resilient future. Fossil-fueled technologies that lock in long-term emissions do not qualify for financing. Ideally, exposure to transitional and physical climate risk is considered or mitigated.</p>	 <p>Wind energy projects with a strong governance structure that integrates environmental concerns</p>
 <p>Medium green is allocated to projects and solutions that represent steps towards the long-term vision, but are not quite there yet. Fossil-fueled technologies that lock in long-term emissions do not qualify for financing. Physical and transition climate risks might be considered.</p>	 <p>Bridging technologies such as plug-in hybrid buses</p>
 <p>Light green is allocated to projects and solutions that are climate friendly but do not represent or contribute to the long-term vision. These represent necessary and potentially significant short-term GHG emission reductions, but need to be managed to avoid extension of equipment lifetime that can lock-in fossil fuel elements. Projects may be exposed to the physical and transitional climate risk without appropriate strategies in place to protect them.</p>	 <p>Efficiency investments for fossil fuel technologies where clean alternatives are not available</p>
 <p>Brown is allocated to projects and solutions that are in opposition to the long-term vision of a low carbon and climate resilient future.</p>	 <p>New infrastructure for coal</p>

Sound governance and transparency processes facilitate delivery of the client's climate and environmental ambitions laid out in the framework. Hence, key governance aspects that can influence the implementation of the green bond are carefully considered and reflected in the overall shading. CICERO Green considers four factors in its review of the client's governance processes: 1) the policies and goals of relevance to the green bond framework; 2) the selection process used to identify and approve eligible projects under the framework, 3) the management of proceeds and 4) the reporting on the projects to investors. Based on these factors, we assign an overall governance grade: Fair, Good or Excellent. Please note this is not a substitute for a full evaluation of the governance of the issuing institution, and does not cover, e.g., corruption.

¹ Retroactive application of the framework is eligible as long as Fannie Mae has followed the criteria outlined in this framework.



2 Brief description of Fannie Mae's Single-Family Green Bond Framework and related policies

The Federal National Mortgage Association (Fannie Mae) is the largest U.S. government-sponsored enterprise (GSE), chartered in 1938 by the United States Congress. Fannie Mae's mission is to support liquidity and stability in the secondary U.S. residential mortgage market, and to help underserved markets, such as affordable housing for low- and moderate-income home buyers. It provides market liquidity by purchasing qualifying mortgages from lenders, which it bundles into securitized bonds – or Mortgage Backed Securities (MBS) – and sells to investors with guarantees; it does not lend directly to consumers.

Fannie Mae serves the housing market through the Single Family (1-4 residential units) and the Multifamily (5+ residential units) Mortgage Businesses. Through the single-family and multifamily business segments, Fannie Mae provided over \$650 billion in liquidity to the mortgage market in 2019, which enabled the financing of approximately three million home purchases, refinancing or rental units. The Single-Family business provides liquidity to the mortgage market primarily by acquiring single-family loans from lenders and securitizing those loans into Fannie Mae Single-Family Mortgage Backed Securities (MBS) that carry the guarantee of timely payment of principal and interest. According to the issuer, Fannie Mae Single-Family Business provides mortgage loans for owners to refinance Single-Family properties that are already built or to acquire Single-Family properties that are already built. Fannie Mae Single-Family Business does not provide mortgage loans to developers to construct new properties.

Environmental Strategies and Policies

In 2019, a new Board Committee was formed, the Community Responsibility & Sustainability Board Committee. Environmental, social and governance (ESG) strategy and its integration into Fannie Mae's core products is being overseen at the highest levels of the organization. Fannie Mae has had its Green Financing Advisory Council (now known as the Energy Advisory Council) in place since 2010, originally called the Green Rental Housing Task Force. While the Advisory Council focused on the Multifamily business in the beginning it began including single-family topics in 2017. The Advisory Council meets at least once a year in-person to discuss market transformation goals and the strategy of the Green Financing Business. In addition, Fannie Mae informed us that with the establishment of a new ESG department it is fairly likely that a Sustainability report will be published in the future.

The Single-Family Green Mortgage-Backed Security (MBS) is another important step in Fannie Mae's commitment to leading and innovating in green finance. Fannie Mae began issuing Single-Family Green MBS in April 2020 as an expansion of the company's Green Bond Program. The Single-Family green financing activities build on ten years of experience with Fannie Mae's Multifamily Green Financing Business. Through this Business, Fannie Mae seeks to create more affordable quality housing in the United States, reduce the real estate sector's impact on the environment, and create financial value by offering financing solutions for energy and water efficiency investments, green building certification, and renewable energy.

Fannie Mae launched its first Multifamily Green Mortgage Loan product in 2011, issued its first Green Multifamily MBS in 2012 and established a Multifamily Green Bond Framework in 2018 that was updated in June 2020. The company is the largest green bond issuer globally by issued volume. Since 2012, Fannie Mae has issued a total of USD 75 billion worth of green bonds and USD 22.8 billion in 2019. Fannie Mae reported GHG emissions savings through its Multifamily green bonds of 528,000 in the years 2012-2019.



Use of proceeds

The proceeds of Fannie Mae’s Single-Family Green MBS program are used to finance mortgage loans backed by Single-Family properties awarded green building certifications at the time construction is completed. The loans have originated and closed prior to the bond being issued. A Green MBS is a Green Bond, where the bond is secured by loans collateralized by existing pieces of real estate.

Fannie Mae has engaged a third-party (Integral Group, LLC) to evaluate the green building certifications available and applicable to single-family homes in the United States. The minimum certification necessary to qualify under Fannie Mae’s Single-Family Green Bond Framework is ENERGY STAR Certified Homes Version 3.0, which requires properties to be at least 29% better than the baseline home (International Energy Conservation Code 2006) according to the issuer, which is maps closely to the national median energy use. Fannie Mae does not collect information on types of heating installed and relies on the ENERGY STAR testing requirements and Independent Raters to verify that the types of heating meet or exceed the standards required by ENERGY STAR. Additional certifications listed in table 1 may be included in issuances through the Single-Family Green MBS Program as they either meet or exceed the requirements from ENERGY STAR Certified Homes Version 3.0. Fannie Mae will evaluate this list provided in Table 1 annually to determine if a certification should be removed due to failure to meet the criteria, or if a new certification should be added due to meeting the criteria.

While the Fannie Mae Single-Family business has not provided any price breaks or favorable pricing, the program is focused on leveraging partnerships with lenders who currently are making loans on homes being built and certified as ENERGY STAR. At this time, any price breaks or favorable pricing will be based on market support for the program, e.g., with the idea that should investors pay a premium for these bonds, this premium will in turn be passed through to the lenders and borrowers buying the certified properties.

Table 1: Eligible Certifications

Issuing Organization	Certification	Version	Eligibility to EU Green Bond Standard
USGBC	LEED Zero	LEED Zero Energy	Yes
ILFI	Living Building Challenge	2/3/3.1/4	Yes
ILFI	Net Zero Energy	2/3/3.1/4	Yes
Passive House Institute (PHI)	Certified Passive House	2016	Yes
Passive House Institute (PHI)	EnerPHit Certified Retrofit	2016	Yes
Passive House Institute US (PHIUS)	PHIUS+ Certified	2015	Yes
Passive House Institute US (PHIUS)	PHIUS+ Certified	2018	Yes
U.S. Environmental Protection Agency	ENERGY STAR Certified Homes	3/3.1/3.2	No
U.S. Department of Energy	Zero Energy Ready Home	Rev. 07	No
U.S. Environmental Protection Agency	ENERGY STAR Indoor Air Plus	3	No
Enterprise Green Community Partners	Enterprise Green Communities Criteria	2015	No



Enterprise Green Community Partners	Enterprise Green Communities Criteria	2011	No
Build it Green	GreenPoint Rated New Home Single-Family (California Only)	7	No
USGBC	LEED Residential	4.1	No
USGBC	LEED BD+C: Homes	4	No

Selection

The selection process is a key governance factor to consider in CICERO Green’s assessment. CICERO Green typically looks at how climate and environmental considerations are considered when evaluating whether projects can qualify for green finance funding. The broader the project categories, the more importance CICERO Green places on the governance process.

The Single-Family Green MBS business strategy is led by Fannie Mae’s Senior Vice-President for Capital Markets and includes a dedicated team of finance, communications and sustainability experts. The team’s expertise includes energy efficiency finance, energy and water efficiency technologies, renewable energy and energy benchmarking protocols to green building certifications. The team reports on issuance and performance of the Single-Family Green MBS business to the executive leadership of the company, including the Vice-President of Enterprise ESG and the Fannie Mae Community Responsibility & Sustainability Board Committee

Loans are considered eligible if the related properties are certified at a minimum to ENERGY START Homes Version 3.0. In addition, before the MBS is issued, Fannie Mae will independently verify the green building certification by validating the certification through a proprietary database developed to capture the approval of the Green Building Certification by the rater.

As part of the process for Fannie Mae to buy a mortgage loan from a Lender, the Lender is required to represent and warrant that the loans it is selling Fannie Mae meets general criteria described in the Fannie Mae Single-Family *Selling Guide*. Once the loan is delivered to Fannie Mae and prior to pooling, the company uses the property address to validate with an independent rater that the property did receive the certification. If the property backing the loan is found to not have a valid green building certification, the loan is not pooled into a Single-Family Green MBS. However, the loan would remain eligible for pooling into other single-family pools.

Management of proceeds

CICERO Green finds the management of proceeds of Fannie Mae to be in accordance with the Green Bond Principles. No escrow accounts will be used as the amount of proceeds from the bond issuance go to fund the purchase of mortgage loans. The management of the proceeds from these securities are consistent across Fannie Mae’s Single-Family securitization program. Once a mortgage loan is acquired from the lender, Fannie Mae securitizes the loan into a fully guaranteed MBS and sells the MBS to the general MBS investor community. The proceeds from the sale of the MBS are used to fund future loan purchases from the lender. The intention of securitizing loans with similar characteristics is to provide liquidity and enhanced value back to the lenders for new origination loans backed by green building certifications.

Fannie Mae will not have unallocated proceeds.

Reporting

Transparency, reporting, and verification of impacts are key to enable investors to follow the implementation of green finance programs. Procedures for reporting and disclosure of green finance investments are also vital to



build confidence that green finance is contributing towards a sustainable and climate-friendly future, both among investors and in society.

Fannie Mae maintains a Single-Family Green MBS website (www.fanniemae.com/GreenMBS). This page provides a high-level overview of Fannie-Mae's Single-Family Green MBS program as well as a listing of the Green MBS issued to date. Fannie Mae will also list the type of certification as soon as Fannie Mae begins receiving loans backed by properties certified with other accepted green building certifications other than ENERGY STAR. In addition, Fannie Mae's Single-Family Business publishes at-issuance and ongoing data for all Single-Family MBS through a web-based system called PoolTalk®. Through PoolTalk, investors can obtain comprehensive information about single-family securities and the underlying loans (e.g., security, loans and general property information but not yet information on certification and other impact metrics).

Fannie Mae has informed us that the company will publish an annual investor report. According to the issuer, the Single Family report will aim to be consistent with the Multifamily impact reports published and focus on kBtu of source energy saved, gallons of water saved, greenhouse gas emissions prevented, savings to the home owners, jobs created/supported by the construction of the homes, economic output per dollar invested. Fannie Mae informed us that they will mostly utilize an external party to help with impact aggregation and reporting. In addition, the issuer stated that due to US privacy concerns, they will be unable to gain access to the energy and water consumed by the individual homes, but that they will determine the best way to represent this information based on the information Fannie Mae has on the homes and locations.



3 Assessment of Fannie Mae’s Single-Family Green Bond Framework and policies

The framework and procedures for Fannie Mae’s green bond investments are assessed and their strengths and weaknesses are discussed in this section. The strengths of an investment framework with respect to environmental impact are areas where it clearly supports low-carbon projects; weaknesses are typically areas that are unclear or too general. Pitfalls are also raised in this section to note areas where Fannie Mae should be aware of potential macro-level impacts of investment projects.

Overall shading

Based on the project category shadings detailed below, and consideration of environmental ambitions and governance structure reflected in Fannie Mae’s Single-Family Green Bond Framework, we rate the framework **CICERO Light Green**.

Eligible projects under the Fannie Mae’s Single-Family Green Bond Framework

At the basic level, the selection of eligible project categories is the primary mechanism to ensure that projects deliver environmental benefits. Through selection of project categories with clear environmental benefits, green bonds aim to provide investors with certainty that their investments deliver environmental returns as well as financial returns. The Green Bonds Principles (GBP) state that the “overall environmental profile” of a project should be assessed and that the selection process should be “well defined”.

Category	Eligible project types	Green Shading and some concerns
Green Buildings	<p>Green building certifications</p> <p>Certified properties that comply with the following criteria:</p> <ul style="list-style-type: none"> Require ENERGY STAR v3 as part of the certification Have requirements equivalent to ENERGY STAR Version 3.0 Have requirements that go above and beyond ENERGY STAR v3 Meet the eligibility requirements of the EU Green Bond Standard for new construction, as these standards typically achieve 75-100% energy savings from the baseline home. 	<p>Light Green</p> <p>Voluntary environmental certifications provide varying levels of measurement of environmental footprints for a building.</p> <p>While Fannie Mae requires eligible single-family properties to be at least ENERGY STAR Version 3.0 certified, Fannie Mae does not exclude fossil fuel based direct heating in the properties (e.g., oil & gas based heating) and has no further requirements regarding public transport access and building material impacts.</p> <p>ENERGY STAR Version 3.0 certified is approximately 29% more energy efficient than the national building code IECC 2006 (which maps along the national median) and comparable to the performance of IECC 2012, and nearly as stringent as IECC 2015. Seven states already adopted IECC 2018. Currently Fannie Mae’s pools are currently comprised of 100% ENERGY STAR with no further information on which specific version. Fannie Mae informed us</p>



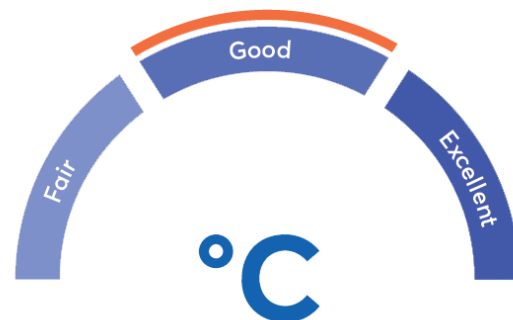
- that over the next few months the program is expected to be expanded to other lenders and builders targeting additional building certifications.
- ✓ In a low-carbon 2050 perspective, the energy performance of buildings is expected to be improved, with passive and energy-contributing housing technologies becoming more mainstream and the energy performance of existing buildings greatly improved through refurbishments. It is a strength that passive house certifications are included.

Table 1. Eligible project categories

Governance Assessment

Four aspects are studied when assessing the Fannie Mae’s governance procedures: 1) the policies and goals of relevance to the green bond framework; 2) the selection process used to identify eligible projects under the framework; 3) the management of proceeds; and 4) the reporting on the projects to investors. Based on these aspects, an overall grading is given on governance strength falling into one of three classes: Fair, Good or Excellent. Please note this is not a substitute for a full evaluation of the governance of the issuing institution, and does not cover, e.g., corruption.

Fannie Mae has well-established governance and risk management procedures from the Multifamily green finance program. While Fannie Mae indicated they would issue a sustainability report in our assessment of their Multifamily Green Bond Framework in 2018, Fannie Mae still has not put forward organizational or program-level targets for GHG reductions and has not issued a sustainability report including projected GHG emissions to be reduced by its lending portfolio. Fannie Mae informed us that with the establishment of a new ESG department it is fairly likely that a Sustainability report will be published in the future. The company has clearly defined selection criteria that rely on external, established green building certifications that require a minimum energy efficiency improvement. Fannie Mae provides an overview of Fannie-Mae’s Single-Family Green MBS program as well as a listing of the Green MBS issued to date. In addition, Fannie Mae has informed us that the company will publish an annual investor report. The Single Family report will aim to be consistent with the Multifamily impact reports. The overall assessment of Fannie Mae’s governance structure and processes gives it a rating of **Good**.



Strengths

It is a strength that Fannie Mae has now expanded its Green Bond program to include Single-Family properties. While Fannie Mae Single-Family does not provide any price breaks or favorable pricing, the program is focused on leveraging partnerships with lenders who currently are making loans on homes being built and certified as ENERGY STAR. The idea is, should investors pay a premium for these bonds, this premium will in turn be passed through to the lenders and borrowers buying the certified properties. Through this process Fannie Mae encourages and raises awareness of green buildings and their climate impacts. Through this initiative and Fannie Mae’s considerable market presence, this is expected to raise the floor on environmental performance of properties in this market. Furthermore, it is a strength that Fannie Mae has an explicit energy efficiency requirement that goes



beyond the national building baseline. All eligible green building certifications undergo an additional external analysis and have to meet or exceed the energy efficiency criteria from ENERGY STAR Homes Version 3.0.

Fannie Mae also reviews exposure to flood risk, which is an effective first assessment of physical climate change risk. Fannie Mae's lenders are required to review properties' exposure to flood risk, which is based on the latest available flood zone maps according to the issuer. Fannie Mae generally will not purchase a loan backed by a property in a flood risk area that is not participating in the National Flood Insurance Program (NFIP).

Weaknesses

It is a weakness that in many cases properties could qualify that comply only with the adopted state's building code, with limited climate impacts compared to what is necessary for a low carbon future. Fannie Mae chose the International Energy Conservation Code (IECC) 2006 as a baseline as it maps closely to the national median EUI from the Residential Energy Consumption Survey (RECS) database and most states in the country have adopted codes either comparable to or better than IECC 2006. While ENERGY STAR v3 certification represents a 29% savings in site energy use compared to the IECC 2006 baseline, the resulting performance is roughly comparable to the performance of IECC 2012, and nearly as stringent as IECC 2015. However, 29 states already adopted IECC 2009, 3 states adopted IECC 2015 and 7 states have adopted the IECC 2018.² We encourage the issuer to tighten these requirements over time, after the program is established.

Pitfalls

Voluntary green building certifications do not guarantee reduced emissions or other environmental benefits. This is countered by Fannie Mae's ambition on building certifications that requires eligible buildings to be at least certified at an ENERGY STAR Version 3.0 level (at least 29% better than the national baseline). Fannie Mae analyzes the significant degree of variation in requirements from the certification programs and excludes voluntary green building certifications that do not guarantee sufficiently reduced emissions or other environmental benefits. However, the Single-Family Green Bond Framework does not distinguish between different certification groups yet, as is done in Fannie Mae's Multifamily Green Bond Framework. This results in the lowest level of eligible certifications forming the basis for eligibility. Fannie Mae informed us that they will finalize the completion of the buildout of the database in August/September 2020 and that they will have the ability to distinguish and analyze information regarding the different certifications and versions. In addition, the resulting emission reductions from the varying levels and scores within the certification programs can vary greatly. Currently the pools are comprised of 100% ENERGY STAR Certified properties without further information on which specific version. When Fannie Mae begins receiving loans backed by properties certified with the other accepted green building certifications, they will report on the type of certifications awarded.

Further, GHG emissions of the buildings and the related transportation and supply chain emissions are not explicitly targeted or reported on by Fannie Mae. Fannie Mae informed us that public transportation is not a consideration for certification. In addition, building materials are only considered in terms of quantity. ENERGY STAR requires advanced framing which reduces the amount of material being used in framed construction. According to the issuer, Fannie Mae will be unable to gain access to and report on the actual energy and water consumed by the individual homes due to US privacy concerns, but they will determine the best way to represent this information based on the information on the homes and locations which Fannie Mae will collect through a tool estimating emissions and energy use. The issuer is encouraged to consider GHG emission consideration at an aggregate level for transparency on, and management of, climate impact and to set dedicated targets to manage the estimated emissions.

² <https://www.energycodes.gov/status-state-energy-code-adoption>



While Fannie Mae has a minimum energy efficiency requirement for certified buildings, some of the buildings obtaining certification might include fossil fuel elements, such as direct fossil fuel-based heating (e.g., oil & gas-based heating). This is of particular concern as Fannie Mae does not collect information on types of heating installed and relies on the ENERGY STAR testing requirements and Independent Raters to verify that the types of heating meet or exceed the standards required by ENERGY STAR. CICERO Shades of Green encourages Fannie Mae to consider the possible lock-in risks via extension of the lifetime of fossil fuel-based equipment and possible rebound effects that result in increased energy use.

While it is a strength that Fannie Mae screens for flood risks according to governmental flood maps it nevertheless constitutes a pitfall that the actual risk exposure might be severely understated and, e.g., do not account flooding caused by intense rainfall and sea-level rise.³ Stronger hurricanes in combination with sea level rise in coastal areas, in addition to increases in heavy precipitation and flooding in urban areas, have already been observed and are expected to increase in the US by mid-century across the range of climate scenarios explored in the IPCC 4th Assessment Report.^{4,5} Meanwhile, increased water stress is expected in the southern region of the US. These physical impacts of climate change can cause property damage, discount property value, increase operational costs, and increase insurance premiums or change insurance coverage for coastal and urban communities in North America. We encourage Fannie Mae to expand its climate resilience screening regarding flooding as well as other physical climate risks such as, e.g., heat stress.

³ <https://riskybusiness.org/report/national/>

⁴ Shades of Climate Risk, CICERO 2017 (<https://cicero.oslo.no/en/climateriskreport>)

⁵ Flood Risk for Investors, CICERO 2018 (<https://www.cicero.oslo.no/en/posts/news/half-of-flooding-damage-left-uninsured>)



Appendix 1: Referenced Documents List

Document Number	Document Name	Description
1	Fannie Mae Single-Family Green Bond Framework June, 2020	Fannie Mae's green bond framework with detailed descriptions of products and governance products for quality control, monitoring, reporting, and verification.
2	Fannie Mae Code of Conduct	Policy manual and guidance for staff conduct and business ethics
3	Fannie Mae 10k_2017	Public financial disclosure form with detailed information about performance and structure
4	Fannie Mae: America's Housing Partner – 2017 Progress Report	Report reviewing organizational targets and performance in market share, portfolio make up, product development, and initiatives such as green financing and the Sustainable Communities Challenge.
5	Multifamily Green Bond Impact Report 2019	Fannie Mae's impact report for 2019
6	Excel file for all Green Bond issuances	Fannie Mae's Green Bond issuances downloaded as an excel file from its website
7	FannieMae Impact Calculator	Excel document for impact calculation



Appendix 2: About CICERO Shades of Green

CICERO Green is a subsidiary of the climate research institute CICERO. CICERO is Norway's foremost institute for interdisciplinary climate research. We deliver new insight that helps solve the climate challenge and strengthen international cooperation. CICERO has garnered attention for its work on the effects of manmade emissions on the climate and has played an active role in the UN's IPCC since 1995. CICERO staff provide quality control and methodological development for CICERO Green.

CICERO Green provides second opinions on institutions' frameworks and guidance for assessing and selecting eligible projects for green bond investments. CICERO Green is internationally recognized as a leading provider of independent reviews of green bonds, since the market's inception in 2008. CICERO Green is independent of the entity issuing the bond, its directors, senior management and advisers, and is remunerated in a way that prevents any conflicts of interests arising as a result of the fee structure. CICERO Green operates independently from the financial sector and other stakeholders to preserve the unbiased nature and high quality of second opinions.

We work with both international and domestic issuers, drawing on the global expertise of the Expert Network on Second Opinions (ENSO). Led by CICERO Green, ENSO contributes expertise to the second opinions, and is comprised of a network of trusted, independent research institutions and reputable experts on climate change and other environmental issues, including the Basque Center for Climate Change (BC3), the Stockholm Environment Institute, the Institute of Energy, Environment and Economy at Tsinghua University and the International Institute for Sustainable Development (IISD).

