

SUSTAINABILITY IN SINGLE-FAMILY RENTAL AND BUILD-TO-RENT



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THIS REPORT

The single-family rental sector is rapidly growing, especially in its build-to-rent segment. As the real estate industry is increasingly examining how to scale up progress on comprehensive sustainability, understanding the challenges and opportunities for both environmental and social goals within this attractive asset class—as well as how leading companies are advancing their sustainability programs—is key to ensuring that developers, owners, and investors in single-family rental can maximize value while supporting low-carbon, climate-resilient, equitable places. This report examines several sustainability-related themes (social equity, environmental footprint and land use, decarbonization, and climate resilience) as they apply to the single-family rental sector and presents practices companies are using to improve performance and enhance returns.

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INTRODUCTION

The single-family rental (SFR) and build-to-rent (BTR) sectors are among the fastest-growing segments of residential real estate. They accelerated during the COVID-19 pandemic and show continuing signs of growth and demand.





This primer introduces real estate professionals to the current picture of sustainability in these much-discussed asset types. With a strong business case, and both climate and biodiversity emergencies heating up and poised to drive significant industry change, real estate professionals need to know the environmental and social risks, impacts, and opportunities in the sectors, and what companies in the SFR space are doing to achieve strong outcomes.

Like any asset type, single-family rental sustainability performance has room to improve, and promising approaches are being taken to reduce the sector's environmental footprint, build more efficient homes, and provide attainable housing to more households, all while enhancing returns. A summary of sustainability challenges and opportunities is presented on the following page and explored in more depth in each section of this report.

SUMMARY OF SUSTAINABILITY CHALLENGES AND OPPORTUNITIES FOR SINGLE-FAMILY RENTAL AND BUILD-TO-RENT

	CHALLENGES	OPPORTUNITIES
Social equity	While evidence of impact on housing costs is mixed, investor purchases of existing homes have raised concerns for reduced access to homeownership for individuals.	Build-to-rent projects add units to housing supply. Impact-focused models can help preserve existing affordable rental stock, create pathways to ownership, and expand access to neighborhoods of opportunity.
Environmental footprint and land use	Single-family development (rental and owner-occupied) requires large amounts of land per housing unit, impacting ecosystems and increasing cost of infrastructure.	Aggregators of existing properties use no new land. Developers of build-to-rent homes can locate projects in developed areas with existing infrastructure, cluster homes to reduce built footprint, and integrate nature-positive site/landscape strategies.
Decarbonization	Single-family homes (rental and owner-occupied) typically use more energy than other housing types and can increase vehicle miles traveled per household. Scaling up decarbonization strategies is difficult across large, scattered portfolios. Tenant emissions remain a major data collection challenge.	Existing properties and build-to-rent homes can be upgraded or designed to low-carbon or net-zero performance and equipped with smart home technology, renewable energy, and electric vehicle infrastructure. Retrofitting existing properties saves embodied carbon. New homes can be sited near multimodal public transit. Utility management partners can assist with energy data collection and consolidation.
Climate resilience	Growth in single-family rental is fastest in hot real estate markets, which often also have high climate risk (e.g., the U.S. South and Sun Belt). Implementing protective features is difficult across large, scattered portfolios.	Leading firms can use climate risk analytics to avoid developing/acquiring high-risk assets. Protective features such as flood barriers, green infrastructure, or elevated sites can reduce risk. Hazard preparedness plans and tenant engagement can reduce disruption and financial hardship.

WHAT DOES SINGLE-FAMILY RENTAL LOOK LIKE TODAY?

The single-family rental sector has demonstrated robust demand and growth in the past few years, especially during and after the COVID-19 pandemic. In 2020, many households began searching for larger, more amenity-rich spaces in less dense settings, but were often blocked from homeownership by a red-hot seller's market underpinned by historically low interest rates.

The financial environment for new development across many asset classes has since cooled substantially, but continued interest from young families seeking starter home alternatives, older adults looking to downsize, and households of many types that prefer the single-family lifestyle without the financial and maintenance burdens of ownership add to an ever-expanding sector that provides attractive returns.



The single-family rental sector has been controversial since after the financial crash of 2008, when institutional investors entered the traditionally “mom-and-pop” rental market and began buying thousands of foreclosed homes—though some experts interviewed for this resource brought up the reminder that this foray into the single-family sector was [prompted by the federal government](#) and government-sponsored enterprises (e.g., Fannie Mae), which established a pilot program in 2012 incentivizing the investment sector to step in to stem devaluation of neighborhoods and prevent blight.

However, SFR is a complex sector, composed of many types of actors and multiple products aiming to suit different market segments. In particular, a fundamental difference exists between what are known as aggregated, or scattered-site, SFR portfolios, which purchase, renovate, and rent out existing properties distributed across markets (the approach that initially sparked controversy and accusations of corporate overreach, though new models have been developed with explicit social equity goals for SFR) and what is known as BTR, where new-construction single-family homes are purpose-built with the intention to rent permanently, adding to the existing housing stock. BTR is [where most growth has been predicted](#). This primer refers to both aggregated SFR portfolios and BTR under the umbrella of SFR, but it distinguishes BTR communities from SFR where necessary.

Some forecasts estimate that with construction starts down by 30 to 50 percent in 2024, demand for SFR may outpace supply. Rental cost for build-to-rent is expected to remain above the cost of multifamily apartments, and rental growth—while lower than during the COVID-19 pandemic—is [in line with prepandemic trends](#) at nearly 3 percent as of November 2023.

Major players include large investors dedicated to the SFR sector, such as Invitation Homes, Pretium Partners, AMH (formerly American Homes 4 Rent), and Tricon Residential, each of which owns anywhere from 40,000 to nearly 100,000 homes. Tatiana Gutierrez, head of corporate impact at Pretium, notes that for comparison of scale, the top 40 SFR owners own 3 to 4 percent of all single-family homes and about 400,000 homes total; the top 40 multifamily residential owners own 14 to 15 percent of the apartment market and roughly 4 million units total.

Other large institutional investors, such as Nuveen and Brookfield Properties, have SFR product lines as part of a diversified portfolio. Finally, developer/owners such as Mill Creek Residential and many others are creating build-to-rent products, exclusively composed of new construction.

THE BUSINESS CASE FOR SUSTAINABILITY IN SINGLE-FAMILY RENTAL AND BUILD-TO-RENT

Many in the industry have already noted that the single-family rental sector has shown high demand and there is value to be captured. However, by layering on sustainability, additional value can be created and a strong business case can be made.

Enhance property value and rental income through increased resident demand. Modern, energy-efficient appliances, on-site renewable energy, electric vehicle charging, smart home technology, and other features—whether added as upgrades to existing homes or built into new construction—are viewed as desirable amenities in many markets, supporting higher rental income and greater cash flow for owners while helping attract residents interested in lower energy bills. If owners pay utility bills through a gross lease, they will also capture the cost savings from energy efficiency and renewable energy features.

Align with investor interests for social impact and environmental performance. Investors have rising corporate, legislative, and market pressure to deliver on goals around social equity, decarbonization, healthy ecosystems, and climate resilience. Single-family rental and build-to-rent companies with strong track records of sustainability performance and innovation will remain competitively positioned for ongoing investment, a critical need in a sector with growing institutional involvement.

Reduce development costs for infrastructure. Single-family home development requires higher per-unit capital outlays by developers for new infrastructure such as water, sewer, and electricity, especially if located further out from denser areas. Firms that focus on dense, compact development in infill locations (or on redeveloping existing buildings) will reduce these upfront costs and potentially win support from municipalities looking for lower long-term maintenance costs.

Avoid losses and disruption from physical climate hazards. Physically resilient single-family rental properties will help protect resident safety and will experience less property damage from hazards such as flooding, storms, and wildfires. They will also experience lower repair and maintenance costs and less disruption for residents, which can support resident satisfaction and lower turnover rates, as well as reduce lost rental income if displaced residents need assistance meeting rental obligations after a major hazard.

Meet corporate sustainability goals. Although resident emissions and utility usage are often outside owner control, landlords are more frequently being held accountable for whole-building emissions. The resulting drops in carbon emissions from more sustainable homes benefit owners looking to reduce their Scope 3 tenant emissions, especially as climate disclosures become more common.

SUSTAINABILITY CHALLENGES AND OPPORTUNITIES IN THE SINGLE-FAMILY RENTAL AND BUILD-TO-RENT SECTORS

Clearly, the single-family rental sector is here to stay and demonstrates ongoing demand. Accordingly, single-family operators and investors are increasingly curious about the potential social and environmental challenges and opportunities these assets may pose and the new models some companies are creating to improve sustainability outcomes.

These pitfalls and opportunities can be grouped by theme, including several touched on in this primer:

- **Social equity**
- **Environmental footprint and land use**
- **Decarbonization**
- **Climate resilience**

The following sections address the challenges and opportunities for each theme.



SOCIAL EQUITY

Social equity has been a key concern for SFR and BTR owners, developers, investors, and many other stakeholders, but new models from impact-focused actors aim to use the sector as a vehicle for social mobility.

CHALLENGES

The incorporation of single-family rental properties into commercial real estate after the Great Recession spurred controversy around affordability and social equity, primarily over concerns that institutional investors were blocking access to homeownership. This critique was leveraged mainly at large investors purchasing single-family homes and converting them to rentals, the so-called SFR model, rather than at companies focused on developing new BTR properties.

Companies are quite aware of ongoing social risks in the SFR sector. “It’s still a strategic risk for the industry,” notes Scott Kelly with Brookfield-owned Maymont Homes.

Though the initial umbrage against large, privately owned and funded companies in the SFR space has cooled somewhat, segments of the U.S. public opinion remain uncomfortable with large private landlords entering the “American Dream” territory of the single-family home. And the media continues to highlight concerns about poor management, loss of access to homeownership opportunities, and [aggressive rent raising or eviction tactics](#), such as in the New York Times article, [“What Happens When Wall Street Buys Most of the Homes on Your Block?”](#)

Reporting often centers on potential buyers losing out to companies with vast cash reserves, blocking entry into the generational wealth-building opportunity of homeownership. This also exacerbates a vital equity issue—the racial wealth and homeownership gap between white households and households of color, especially Black households. In 2023, Black households were [30 percentage points](#) behind white households in homeownership rates, [a wider gap than in 1960](#). The homeownership gap is an important element of the larger racial wealth gap in the United States.

However, many point to the overall [undersupply of housing](#) in the United States as [the main culprit for persistently high housing prices](#). Whether investor activity in the SFR market has driven up costs or decreased homeownership rates is a matter of ongoing debate. In addition, companies operating in the build-to-rent space within the sector emphasize [the contribution these developments make to the overall housing supply](#); others highlight the enhanced capacity of a socially focused SFR portfolio to make the single-family lifestyle and neighborhoods of opportunity more financially accessible.

As the Harvard Joint Center for Housing Studies points out, [large investors have been accused of crowding out smaller buyers and increasing rents](#), but these investors are also able to use economies of scale to pass on better value to residents and provide access to wealthier neighborhoods with higher access to opportunity. Nareit reports that in eight of the top 10 markets for large SFR investors identified by the Urban Institute, [homeownership rates have either grown or are declining more slowly than the national average](#), indicating a potentially limited impact by institutional investors on homeownership by individuals.

OPPORTUNITIES

In response to concerns about the role of institutional investors in the single-family rental space, Dan Magder, CEO of Center Creek Capital, has pointed out, [“Conversations around multifamily rentals do not treat all investors the same”](#): No one puts luxury high-rise apartments in Miami into the same category as income-restricted apartments in Baltimore. The single-family housing conversation needs that same level of basic distinctions.” Similarly, as Tatiana Gutierrez puts it, “Institutional SFR is modernizing the residential real estate industry and re-imagining affordable housing as connected to social policy.”

Center Creek’s model is a prime example of a socially oriented SFR portfolio. Reversing the traditional narrative about investors flipping homes to rent out to higher-income tenants, Center Creek has developed a for-profit model that purchases deeply distressed, deeply discounted older homes (averaging a build year of 1960) at risk of aging out of the housing stock in southern markets where housing pressures are growing. As it notes that 50 percent of the U.S. rental stock is single-family, Center Creek sees this as a vital and scalable model for preserving existing affordable units.

The company performs \$35,000 in renovations per unit on average, adding insulation and sealing air leaks and incorporating a mix of Energy Star windows and efficient appliances and heating, ventilation, and air conditioning (HVAC) units, and soon it will incorporate a renewables option: “We’re on the cusp of implementing a rooftop solar array program. Our residents will pay a small monthly fee and then they’ll see their energy bills come down significantly,” according to Greg Shron, executive vice president and chief operating officer.



Center Creek’s model renovates homes in extremely poor condition, adding energy-efficient features and renting them at an attainable level for households making 60 to 80 percent of area median income.

The initial low cost of the homes allows for these preservation improvements while keeping rent low enough to serve residents at 60 to 80 percent of area median income. The efficiency improvements also drop the homes' carbon emissions and residents' energy bills. The burgeoning solar program may even provide a path to net zero, and retrofitting existing homes avoids all the embodied carbon that in a new home would go into pouring new foundations and new building materials for the walls and structure.

Critically, Magder notes, "We layer on a whole suite of resident services: financial literacy, training, credit counseling, free internet. . . . And then we have layered on a program called Pathway to Homeownership where we have a two-to-one savings match. You put in \$25, we'll give you \$50, up to a cap, all directed towards a down payment. We are trying to help turn renters into homeowners."

There's a compelling business model to note, according to Magder: "On the investor side, there's a value add. These aren't real numbers, but let's say we buy a house for \$100,000. We put in \$20,000. It'll then appraise for \$130,000 because we've made it durable, safe, and attractive. It's probably the nicest house on the street." This rent-to-own model is [growing in popularity](#).

Aggregating existing homes has attracted a bad rap, but Center Creek believes that if done with social and environmental goals in mind, its model can preserve desperately needed existing housing units and increase diversity and access to opportunity. For example, [one study](#) found that increasing the share of rentals in mostly white neighborhoods also tends to increase their share of Black residents, helping reduce housing segregation.

Gutierrez at Pretium, another affordable SFR operator of existing homes, agrees and cites Harvard economist Raj Chetty's work on [opportunity insights](#), noting that a primary determinant of generational poverty is the zip code that a child grows up in and the social aspects of that neighborhood: school quality, neighborhood safety, and income mix.

"Sustainably renovated rental homes in single-family neighborhoods broaden access for families who may not be financially ready to own a home in a single-family community, which may have higher economic opportunity than the prevalent type of rental housing, along with positive rent reporting, facilitation of credit score improvement, or the creation of new credit scores for previously rent-invisible residents," said Gutierrez. As of early 2024, Pretium's positive rent reporting services took 8,000 residents out of credit invisibility.

At scale, this model can provide lower rents and expand access to not only higher-opportunity neighborhoods but also greener homes. "Making newly renovated, environmentally friendly homes accessible to underserved cohorts, who up to this point may have had to do with older Class B or C product, we believe democratizes access to the products of the environmental revolution," Gutierrez explained.

Pretium also launched a program in early 2024 to promote partnerships with community-based nonprofits that promote affordable homeownership through its sales program. "Being able to sell homes in the ordinary course of business to promote affordable homeownership and engage with community stakeholders is a win-win for our investors and our communities," noted Gutierrez.

ENVIRONMENTAL FOOTPRINT AND LAND USE

Single-family homes can consume large amounts of land per unit, and thoughtfully siting and clustering BTR communities can reduce this impact.

CHALLENGES

Historically, the single-family home development pattern has had a significant environmental footprint. Low-density communities of single-family homes are known to use far more land and resources per dwelling compared with compact, mixed-use urban developments that are not designed around the automobile.

Average new BTR community types tend to top out at [16 units per acre](#), and low-density versions at as low as three units per acre—much lower than even medium-density [urban townhouse neighborhoods of 35–40 units](#) per acre. This means that BTR neighborhoods, and single-family neighborhoods of all ownership types, require anywhere from twice to more than 10 times as much land to provide the same amount of housing.

Low-density developments [increase per capita public spending](#) on infrastructure and public services and can [exacerbate environmental degradation](#), driving losses of biodiversity and valuable ecosystem benefits (such as safe air quality or protection from flooding and extreme heat).

While new housing is direly needed, low densities limit the contribution BTR neighborhoods can make to housing supply. However, it is important to note that it can be difficult to build at greater densities: because nearly 75 percent of land in most U.S. cities is zoned only for single-family, it is technically illegal to construct denser housing in many places, as ULI's [Reshaping the City: Zoning for a More Equitable, Sustainable, and Resilient Future](#) points out. However, many cities are beginning to reform single family–only zoning to expand the range of allowable housing to include denser options.

Homes can be designed to operate efficiently and use less materials or they can be clustered to preserve larger tracts of land to mitigate these impacts. However, the ratio of land converted versus units provided may be difficult to square with biodiversity goals and [nature-positive](#) real estate, which may soon come under increasing scrutiny as forthcoming reporting standards (such as the Taskforce on Nature-related Financial Disclosures) mature.



OPPORTUNITIES

Reducing the built environment's impacts on ecosystems must also consider real estate's social goals of increasing housing affordability. "We believe that should be balanced with the social access provided by SFR to households who didn't have access to homeownership neighborhoods and single-family home living models before," notes Gutierrez. "That balance is necessary because the households that would be most affected [without this housing] would be lower income."

She adds, "Lower-income families can also have a harder time accessing housing away from areas of nuisance or higher climate risk, something the BTR investment process puts through the rigor of a private capital investment process, factoring in marketability to prospective residents and durability of the asset."



Some companies are beginning to prioritize BTR developments with lighter land footprints. For Mill Creek Residential, a developer of multifamily and attainable rental communities as well as a new BTR line, that approach starts with density. "We wanted to make sure that we had a diversified product line that included townhomes, cottages, and detached single-family homes that would allow us to provide a high-quality suburban neighborhood experience in a variety of different settings," notes Scott Herr, president, southeast division, for Mill Creek's single-family rentals.

Ecological land planning is at the forefront. As Lucas Shires, regional director of land planning at Mill Creek, puts it, "Both the natural and built environment are necessities and must co-exist. It's how the two are juxtaposed, intertwined, and planned that will create a nature-positive industry."

To that end, at Mill Creek, "communities are thoughtfully designed by reviewing street networks, topographical challenges, stormwater control, open space distribution, and pedestrian connectivity to ensure equitable and responsible community design is achieved," says Shires. "Selecting sites with adequate and available utilities and within density-positive jurisdictions reduces overall development footprints and impacts on the environment."

Biodiversity is also integrated. "Avoiding monocultures, installing diverse and native plant materials, using pollinator species, capitalizing on existing flora, and creating miniature forests enhances biodiversity within the communities we can control," Shires adds.



In one SFR community, AMAVI Madison in Alabama, Mill Creek worked around an existing gas easement bisecting the property. Shires notes, “Inspiration was drawn from Frederick Law Olmsted and a series of parklets were developed in the voids created by the gas easement, right-of-way, and property lines, each of which will provide native pollinator species to bolster biodiversity.” Additional benefits include improved air quality, and reducing noise and heat through the incorporation of a robust variety of native flora and large shade trees, as well as enhanced connectivity, livability, and spaces for healthy outdoor recreation and social connection among neighbors.

DECARBONIZATION

Decarbonizing the SFR sector is high on the list of priorities for sustainability-minded companies, including emissions from buildings and potentially from transportation to and from home.

CHALLENGES

Single-family communities without diverse land uses are frequently car dependent, which can result in [higher carbon emissions from transportation](#) than from the buildings themselves. Smaller detached structures can also be less efficient to heat and cool than denser multifamily construction, and studies of residential energy consumption in the United States consistently find that single-family detached structures [consume more energy](#) per household than multifamily units, even when controlling for house size, climate, and income levels.

A recent modeling [study](#) suggests that if federal policy in the 1970s and 1980s had not discouraged multifamily apartment building in favor of single-family homes, household energy demand could be nearly 50 percent lower than current levels. [Other studies](#) show that for the United States to meet Paris Agreement goals, significantly denser development patterns are required in addition to grid and building decarbonization.

Some of these impacts can be mitigated by locating SFR properties near multimodal transit options, providing electric vehicle (EV) charging stations, and designing highly insulated structures with efficient HVAC systems, keeping in mind that as transition risk disclosure requirements increase reporting on Scope 3 emissions (including tenant emissions and perhaps transportation), higher carbon-intensity developments will fall under increased scrutiny from investors and regulators.

In addition, for companies managing large portfolios of assets scattered across multiple markets, each with varying vendors, tenant preferences, and policy contexts, scaling up energy and decarbonization improvements is a major challenge.



Brookfield Properties' Maymont Homes purchases and renovates homes, aiming to keep costs down for renters by leveraging its large portfolio's economy of scale.

OPPORTUNITIES

Reducing carbon emissions from SFR developments is perhaps more common among environmental, social, and governance (ESG) leaders than addressing land use considerations and biodiversity concerns.

Many companies use a similar set of strategies for their BTR and aggregated properties, though as Griffin Wetmore, COO of Brookfield Properties' Maymont Homes notes, aggregators face greater hurdles in working with existing structures and potentially “thousands of units scattered across municipalities,” whereas for BTR, companies have greater homogeneity and control over building design—an essential step for achieving construction and materials efficiencies and keeping costs down.

In addition, Wetmore notes that renovating properties means finding the sweet spot between maximizing operational efficiency by bringing in all new systems and running up embodied carbon and waste by throwing away older equipment that may still have years left in its service life.



Interior of a Maymont Homes rental property.

Many companies are pursuing high-performing new and renovated homes that follow what Brittany Ryan, head of sustainability, Americas, at Nuveen, calls the “build tight and ventilate right” approach.

Envelope efficiency is typically the first step, including insulation and air sealing and efficient windows, followed by efficient appliances and HVAC systems, such as heat pumps. Incorporating LED lighting and low-flow water fixtures and irrigation systems is also a common approach.

Many companies, such as Mill Creek Residential and Brookfield Properties, are integrating smart home features as an amenity to attract tenants and help them manage energy costs, while also bringing Scope 3 emissions down for owners. For example, Pretium now has [more than 63,000 homes](#) equipped with smart hubs and thermostats that allow residents to control temperatures even when not at home and to create schedules to adjust heating and cooling as needed to reduce energy use. This function also allows owners to efficiently control their homes' climates during vacancy, which results in measurable predicted energy savings annually.

Smart home technology also enables Pretium's property management company, Progress Residential, to offer proactive guidance and support to residents when extreme temperatures are expected, linking decarbonization and resilience strategies.

Some companies, including Mill Creek, are even going 100 percent all-electric, meaning no on-site natural gas or fuel oil. This will eliminate residents' Scope 1 emissions and reduce owners' Scope 3 emissions and greatly increase indoor air quality in homes. Electrification might increase residents' electricity bills, but those costs can be offset by envelope and energy efficiency upgrades.

Integrating on-site renewable energy is less common, in part due to cost considerations, but it isn't impossible. Tricon Residential is building 1,200 homes in California that will feature solar panels, and Mill Creek is exploring applications of solar photovoltaic (PV) roof tiles. Pretium also piloted solar homes in its Phoenix, Arizona, market in 2023.

Some companies are even showcasing [net zero SFR communities](#): Pearl Homes is developing net zero homes in Florida; Man Group is using funds from European investors to build out 1,000 net zero rentals across the United States; and AMH has stated it will [eventually operate at net zero](#).

To address transportation emissions in its communities, Mill Creek is also adding EV charging capacity to all garages, and notes that siting is critical. Herr says, “We are choosing sites with high proximity to trails, parks, and other outdoor recreation areas as well as major employment centers and lifestyle retail. Ideally, our communities are in areas that encourage our residents to spend more time interacting directly with their community. . . . We’d prefer that our residents can ride their bike or walk to the grocery store and be within 30 minutes of employment centers.”

Tenant emissions remain a significant hurdle, especially in the early phase of data collection. “Data management can be very difficult in single-family rental,” says Scott Kelly with Maymont Homes. “If you think of each of these individual homes, and their water, waste, electric, some are on natural gas still, each of those are four different utility people. We’re dealing with hundreds and hundreds of utility providers. So being able to get actual usage and emissions is very, very difficult.”

The scale of larger portfolios remains daunting for data collection. “Third-party platforms are catching up on efficiently and effectively collecting and managing utility data on tens of thousands of different assets,” notes Gutierrez, so they are beginning with a third of their assets, which still poses challenges. “Reporting on 33,000 assets, let alone 100,000, on a tested platform honestly is a function without significant precedent.”

Maymont and Brookfield have turned to utility management partners who can consolidate these disparate providers’ data and have seen success at acquiring 90 percent of actual usage information, which is critical to tracking reductions.



Finally, many companies are reporting to the same standards organizations that other commercial real estate product types report to, such as GRESB, the Global Reporting Initiative, the Sustainability Accounting Standards Board, and the Task Force on Climate-Related Financial Disclosure (TCFD). Most companies also note that the green building certification ecosystem, which has become a key basis for demonstrating sustainability credentials and securing premiums for the industry, is somewhat less developed for the single-family home sector. Some turn to the Home Energy Rating System (HERS) to indicate the performance of their homes. The use of certifications is not widespread yet, but it is growing in some companies. For example, Pretium issued an environmental target in 2023 focused on meeting a threshold of 25 percent of new construction home investments to feature sustainable building design certifications or HERS ratings.

CLIMATE RESILIENCE

As physical climate risks increase in severity and frequency, SFR actors are taking steps to protect their occupants and investments.

CHALLENGES

In general, growth in SFR communities is occurring in what are also the fastest-growing markets for the [rest of U.S. real estate](#): the South and the Sun Belt. Unfortunately, these regions are also where climate risks from extreme heat, drought, and hurricanes and storms are among the [highest in the country](#), and where insurance premiums are rising quickly or becoming unavailable as insurance companies [withdraw from high-risk markets](#) in states such as California, Florida, and others.

Growth in new BTR communities in these markets means new residents of these communities are going to live in riskier areas. Accordingly, both SFR and BTR owners investing in these regions may see increases in their physical climate risk exposure, disclosure of which is also on the rise under increasing global adoption of TCFD recommendations.

Many companies, such as Mill Creek Residential and Nuveen, screen for physical risk as part of due diligence and, in some cases, add resilience features in homes to mitigate these risks. However, studies by [Swiss Re in Florida](#) suggest that at the market level, hardening buildings has not been sufficient to mitigate spiraling insurance and property losses caused by rapid population growth in the highest-risk areas.



Exterior of a Pretium rental property in Florida. In addition to providing financial support to renters after record-setting Hurricane Ian, Pretium is assessing physical risk in a portion of its portfolio to prepare for worsening climate hazards.

OPPORTUNITIES

Climate hazards in many of the hottest markets for SFR growth may be increasing in magnitude, but given the ongoing demand for single-family properties, some leading companies in the single-family rental market are turning to design and operations methods to mitigate risk.

For example, as Mill Creek’s vice president of ESG Kelly Vickers says, “Our strategy for managing climate-related risks begins with our investment management analysis processes and continues through operations. In 2021, we began supplementing traditional insurance data with physical risk data from Moody’s Climate on Demand tool, which assesses each location’s risk exposure to floods, heat stress, hurricanes/typhoons, sea level rise, water stress, wildfires, and earthquakes. . . . We include these reports in every investment committee memo, and incorporate measures to address high and red flag risks into design, where feasible.”



Exterior of a Pretium property in Arizona.

After the screening and risk assessment process in acquisitions, if Mill Creek moves forward with the development, the company is turning to a variety of measures to protect their properties. “Heat stress is one of the higher exposure areas most of us are grappling with today, so our teams strive to cluster homes, utilize robust landscape packages (including large maturing trees), and minimize paved surfaces as much as possible,” says Vickers.

Brookfield also aims to avoid development in the highest-risk areas, such as mapped floodplains, to keep insurance premiums down and protect residents. Implementing other protective measures, such as flood barriers or hurricane wind-resistant designs, remains a challenge because of the sheer number of structures in question. However, some companies, such as AMH, go as far as [raising land elevations](#) above 50- or 100-year floodplains to mitigate flood risk when needed.

Maymont Homes’ Scott Kelly highlights the role of preparation and working with tenants, pre- and postdisaster. The company tracks the progress of major storms and sends out communications, including preparation steps, to residents; it then uses its large staff to quickly check on residents and assess and repair poststorm damage.

Progress Residential, Pretium’s property manager, pursues a similar strategy: [after Hurricane Ian](#), it used rent concessions and expedited the return of security deposits to residents to minimize financial hardship. Pretium is also using S&P Global climate risk scenario data to assess a portion of its standing investment portfolio, with the hope that the engagement can ultimately have utility for operations and investments.

Climate resilience strategies have become critical not only to protect residents but also, as investors have become more climate-savvy, “as we’ve transitioned more into this space, we want to be able to address the risk to the asset for our investors as well,” Kelly notes.

THE SINGLE-FAMILY RENTAL OUTLOOK

The SFR sector still has significant fundamental questions to address regarding land use, biodiversity, emissions, and social equity, as well as plans to increase development in areas at high risk for extreme heat, drought, wildfire, and storms and floods. However, progress on sustainability in single-family rental, as in commercial real estate, is accelerating, particularly in the push for building decarbonization.





Although challenges remain to scaling up, many SFR owners, developers, and investors have discovered a compelling business case to providing more sustainable homes, such as reduced operating costs and risk of disruption, demonstrating that sustainability is better for business, end users, and the environment. In addition, companies that are taking strides to center social impact as a successful business model have laid out a road map for SFR to become a net-positive force for socioeconomic mobility.

Therefore, assessing the long-term sustainability prospects in the sector means avoiding tunnel vision on a specific element of performance and looking at investments in the context of all aspects of sustainability, from environmental to social and economic, and understanding what single-family rental “done well” means in that context: an impact-focused approach, dedicated to building generational wealth, addressing systemic barriers to opportunity, preserving affordable housing, and improving access to greener homes and communities, all while enhancing the bottom line.

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