




Investing in *real estate impact*

From climate change and geopolitical tensions to rising inequality and a shortage of affordable housing, society faces many challenges and investors are seeking ways to be part of the solution.

Increasingly, investors are looking for strategies that go beyond traditional environmental, social and governance (ESG) and responsible investing (RI) principles. By intentionally considering the impact of our investment strategies, we can measure the full set of results and more readily pursue the stability, diversification, financial performance and positive real-world benefits that underpin long-term value growth.



“ With so many factors influencing our living and working environments, it's unsurprising that people are demanding more from their real estate. Our task as an industry is to rise to this challenge and demonstrate how we can make an enduring positive impact on the world. ”

ABIGAIL DEAN

*Head of Strategic Insights,
Nuveen Real Assets*

What is impact investing and why does it matter to real estate?

Responsible investing can incorporate ESG factors into investment processes, across both asset classes and funds. Impact investing takes this process a step further, intentionally seeking specific positive social and/or environmental impacts alongside the financial rewards of investment.

Specific outcomes from real estate impact strategies can include objectives such as affordable housing, environmentally friendly buildings, energy efficient buildings via smart technology and other avenues, and healthcare initiatives which promote improved mental and physical well-being for residents and tenants.

Impact strategies offer a more direct, active approach to real estate investments. Whether developing or refurbishing assets, an impact strategy should have clear and measurable goals which tap into social and environmental movements to deliver returns.

According to our 2023 EQuilibrium global institutional investor survey, nearly **three-quarters** (74%) of investors globally consider or plan to consider the impact of their investment decisions on society and the environment. Of this group, **61%** agree that impact investments will be an increasingly important allocation for them in the coming years. And, **70%** agree that the need for affordable housing will only continue to grow.

Why is impact investing key in real estate?

1 *Resilience*

2 *Demand*

3 *Diversification*

Impact investing offers an opportunity for the investment community to address fundamental social and/or environmental issues alongside financial returns. Impact strategies in real estate benefit from the inherent characteristics of the asset, while also tapping into the economic opportunity from addressing societal needs.

Impact strategies such as affordable housing in real estate can offer benefits such as:

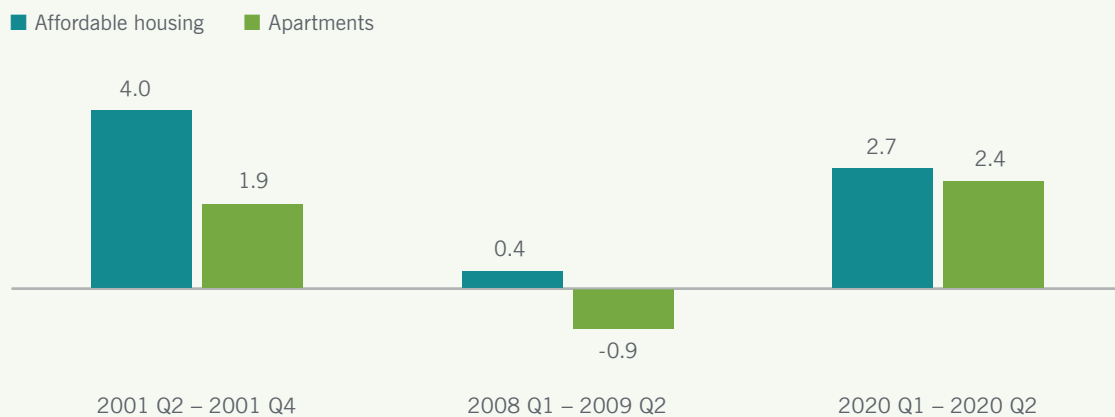
RESILIENCE

The essential nature of real estate has allowed investors to achieve a steady form of income that persists through varying states of economic and market cycles.

Affordable housing in the U.S., for example, has historically offered greater stability than market-rate housing during recessions and economic downturns, due to increased demand and durable revenue streams. Figure 1 highlights the durability of affordable housing cash flow compared to market-rate apartments throughout the past three recessions.

FIGURE 1: Affordable housing revenues resilient in a downturn

RevPAF (revenue per available foot) growth (%)



Source: CoStar, March 2023.

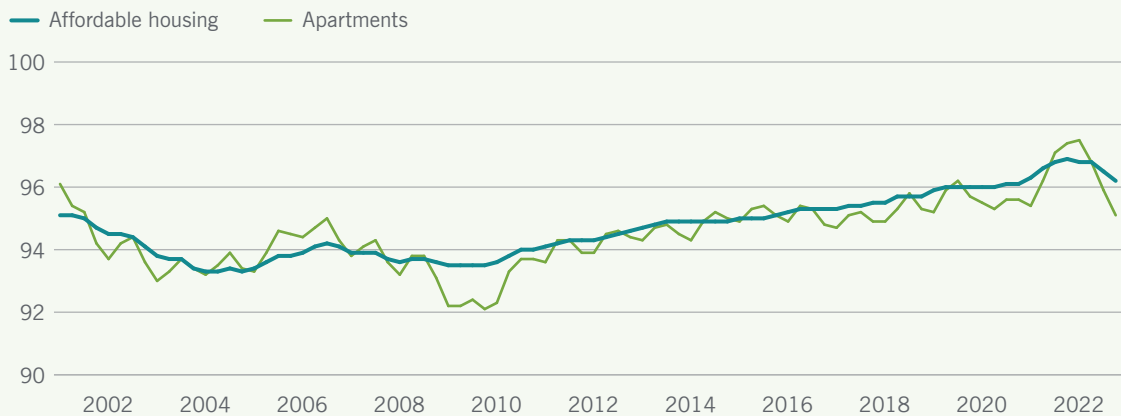
DEMAND

Historically, real estate demand has been highly inelastic. Key factors driving the long-term demand for market-rate housing are the increasing population, inequality of global wealth and limited wage growth

creating even more demand in under-supplied affordable housing. Figure 2 demonstrates the consistency of demand for affordable housing, which has overall proven less volatile than demand for market-rate apartments.

FIGURE 2: Affordable housing in the U.S. seeing consistent demand

Occupancy (%)



Source: CoStar, March 2023.

Due to the overall global effort to achieve net zero carbon by 2050 per the Paris Agreement, real estate has increasingly become an important sector focus. As a result, the demand for sustainable buildings in other asset classes, such as commercial and industrial, is also growing. In addition, investors are placing more emphasis on environmental challenges such as renewable energy, biodiversity and sustainable buildings.

Another growing component of impact investing is the intentional focus on social outcomes such job creation, access to healthcare and the preservation of housing for lower-income earners.

Shaping impact goals and investment strategies around community-based needs can

assist in asset selection and greater financial outcomes for investments when aligning beneficial environmental and social impact directly with the residents of those buildings.

DIVERSIFICATION

Real estate can be an effective portfolio diversifier. Figure 3 shows how this asset class can provide a low and even negative correlation to equities and bonds. This may provide a buffer when other asset classes are struggling.

Impact strategies can offer further diversification within real estate portfolios. Affordable housing investments have the potential to offer different sources of income streams compared to other traditional

FIGURE 3: Real estate's diversification properties (1991 – 2021)

Real estate's low and negative correlations with other asset classes

MARKET INDEXES	STOCKS		BONDS		PRIVATE REAL ESTATE	U.S. REITS
	U.S.	NON-U.S.	U.S.	GLOBAL		
U.S. stocks	1.00					
Non-U.S. stocks	0.78	1.00				
U.S. bonds	-0.10	-0.30	1.00			
Global bonds	0.05	0.04	0.71	1.00		
Private real estate	0.18	0.16	-0.25	-0.24	1.00	
U.S. REITs	0.55	0.52	0.13	0.10	0.15	1.00

Data are based on rolling one-year total returns, calculated on a quarterly basis for periods ended 31 Dec 1991 through 31 Dec 2021 unless otherwise stated. Asset classes reflect the following indexes: U.S. stocks – Russell 3000 Index; non-U.S. stocks – MSCI ACWI ex USA Index; U.S. bonds – Bloomberg Barclays U.S. Aggregate Index; global investment-grade bonds – Bloomberg Barclays Global Aggregate Index; privately held U.S. commercial real estate – NCREIF Real Estate Index; publicly traded U.S. real estate investment trusts (REITs) – FTSE Nareit U.S. Real Estate Index.

Sources: NCREIF, FactSet, Nuveen, LLC.

housing investments, such as rent paid through government subsidies.

Various types of real estate assets, although more prominently found in commercial and industrial properties, install environmentally friendly technologies such as solar panels. These panels provide access to new sources of income in the form of grants, rebates, and/or subsidies, as well as lower operational costs.

Unlocking opportunities with real estate impact

Investing in real estate can offer strong cash flows and resilience in challenging economic environments. By implementing impact strategies into real estate portfolios with an eye towards addressing important global social and environmental challenges, there is a potential to

expand market demand for more resilient and sustainable assets in non-traditional markets.

The heightened demand for affordable housing, coupled with the dwindling supply of available units results in consistently high occupancy levels relative to other rental housing subtypes. While conventional market-rate apartment demand is partially driven by economic and employment growth, wage stagnation for moderate-to-lower income earners creates a growing population of renters in great need of affordable housing units throughout the various economic cycles.

Similarly, the surging demand for sustainable and energy efficient real estate across sectors, combined with an undersupplied market, provides an opportunity to deploy impact strategies which address both these needs and achieve market-rate financial returns.

What challenges can real estate impact investing tackle?

With any impact strategy, it is vital that investments are directed to where they are most needed. The main challenges we aim to address are:

Affordability: Around 36% of low-income private renters in OECD countries, 15% in Germany and 53% in the U.K. spend at least 40% of their income on housing, which severely limits household discretionary spending¹. This is also a significant issue in the U.S., where 46% of low-income renters spent 40% or more of their income on rent. Any savings on housing spend enables families to allocate more income to essential goods and services and improve their overall quality of life.

Climate: More than 50% of the global population now reside in cities and this figure is expected to rise to 70% by 2050². This movement towards urbanization substantially increases carbon emissions, meaning investing in low-carbon and resilient urban development is key to tackling climate change. Ensuring that cities of the future are sustainable is one of the most urgent challenges we face.

Health and well-being: Affordable and accessible healthcare is crucial for positive and equitable health outcomes and improved quality of life. In the U.S., five million people are considered medically underserved, identified as having a shortage of primary care health services.

Education: Increasing access to education can improve the overall health and longevity of society and grow economies. Adequate digital skills and access is an issue in the EU, where around four

out of 10 adults and every third person who works in Europe lack basic digital skills³. Students in underserved communities are also often relegated to failing and overcrowded public school infrastructure.

To ensure that capital is being directed at the most impactful opportunities, one must carefully examine the diverse needs of the population in each region, along with the underlying regulatory environment. The industry's rapidly improving ESG metrics have allowed this review to become far more accessible.

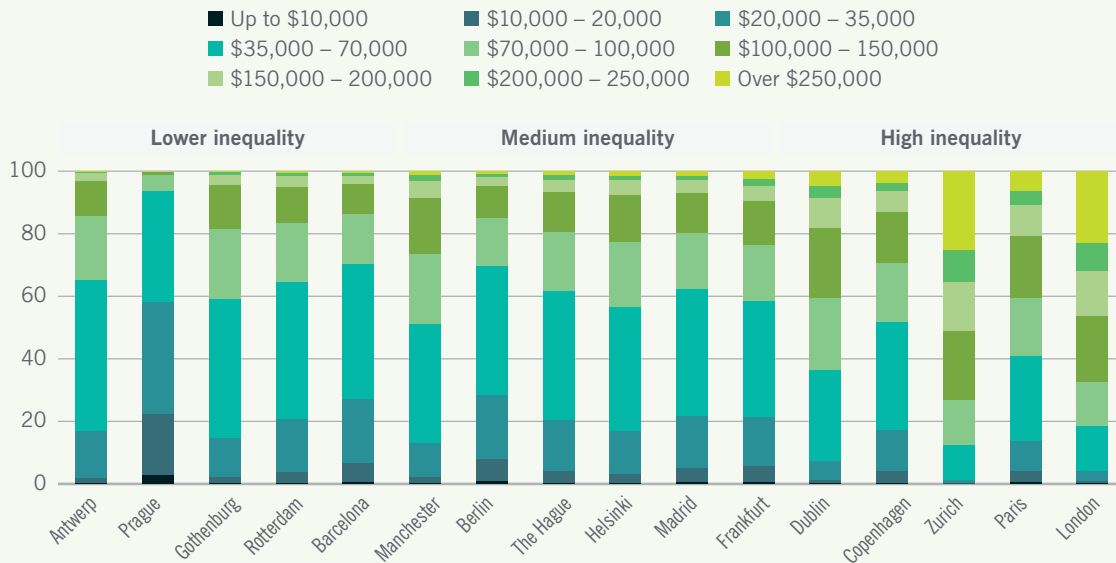
Impact investing in real estate: the case for affordable housing

Global inequality has risen sharply in the past two decades. While solutions remain contentious, there is broad agreement that sharply rising housing costs is an economic issue as much as a social one. Lower-income workers being unable to afford housing within a reasonable distance of their workplaces creates serious economic inefficiency, resulting in lost GDP growth.

The pandemic highlighted the vital role that many low-wage professions play in keeping our communities and economies functioning. Figure 4 shows that the risk of economic exclusion is prevalent and growing in the most successful European cities.

FIGURE 4: Inequality is on the rise

Risk of economic exclusion highest in most successful cities (%)

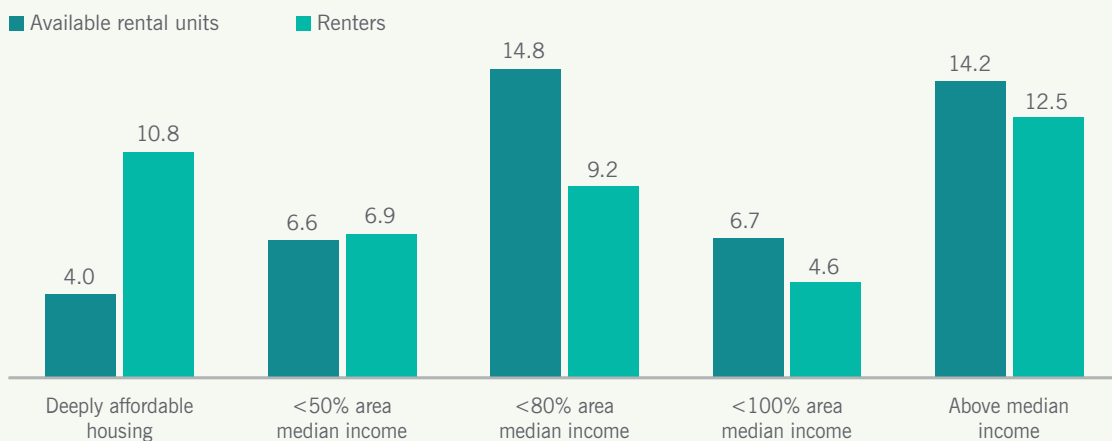


Source: Oxford Economics 2023, Nuveen calculations Q2 2023; Pestel Institut Bauen und Wohnen in der Krise 2023; empirica Wohnungsmarktprognose 2023.

Similar issues are being seen in the U.S., where the number of renters is outnumbering the supply of rental properties available in low-income areas (Figure 5). In 2020, 23% of renters were spending more than half of their monthly income on rent. In the last five years, renters in the U.S. have experienced an average rent rise of 18%, outpacing inflation and underlining the need and opportunity within affordable housing (Pew Research Centre).

FIGURE 5: Housing affordability is worsening in the U.S.

Available rental units vs. renters (%)



Rent is considered affordable if housing costs are <30% of income.
Source: NLIHC tabulations of 2020 5 year ACS PUMS data.

At Nuveen Real Estate, we have real estate impact strategies that target affordable housing across Europe and the U.S. Our focus is to invest in solutions that create and preserve quality affordable housing while generating returns for investors. These solutions include:

Regulated or restricted affordable housing
(social housing for the lower-middle class)

Mixed-income housing/inclusive housing

Other solutions appropriate for specific underserved or vulnerable populations
(e.g., seniors, students, those with diverse abilities, immigrants and people earning <100% of the area's median income)

Our strategy combines clear impact themes alongside the Sustainability Development Goals, providing a transparent framework that seeks to target:

Affordable housing

Access to basic services

Community development and regeneration

Energy efficiency/climate change

Nuveen Real Estate impact outcomes are aligned to the following SDG goals



Our research indicates that investing to increase access to affordable, adequate and sustainable housing can lead to a higher share of the population in adequate housing, improved community health and well-being, and improved environmental sustainability.

We are aware that a top-down, one-size-fits-all strategy is insufficient for such complex issues. Each country and region has its own unique set of challenges and is experimenting with a wide range of possible solutions. Even within one country, each state, province and/or city may have distinctive local requirements and housing policies.

Successful projects need to skillfully navigate the bureaucratic national and regional regulations, as well as engage with local stakeholders.

The same is true for carbon reduction and other environmental issues. While our broad goals are globally relevant, the path to reach those goals is varied and local.

Working towards a healthier lifestyle through affordable housing

Considerable research has established the link between substandard housing and medical conditions, such as asthma. Preserving affordability is only one part of how we support resident well-being.

Nuveen Real Estate incorporates health-focused services in its properties, such as hot meals, health fairs/educational workshops and vaccination clinics. We also invest in greening buildings, these refurbishment programs can save energy and utility costs while improving the quality of the living environments.

Providing a safe environment with access to social and transit services helps ensure our residents can focus on building livelihoods, while we focus on managing quality living spaces. We strive to make all our buildings healthy, pleasant and sustainable places to live.

How Nuveen Real Estate delivers on impact

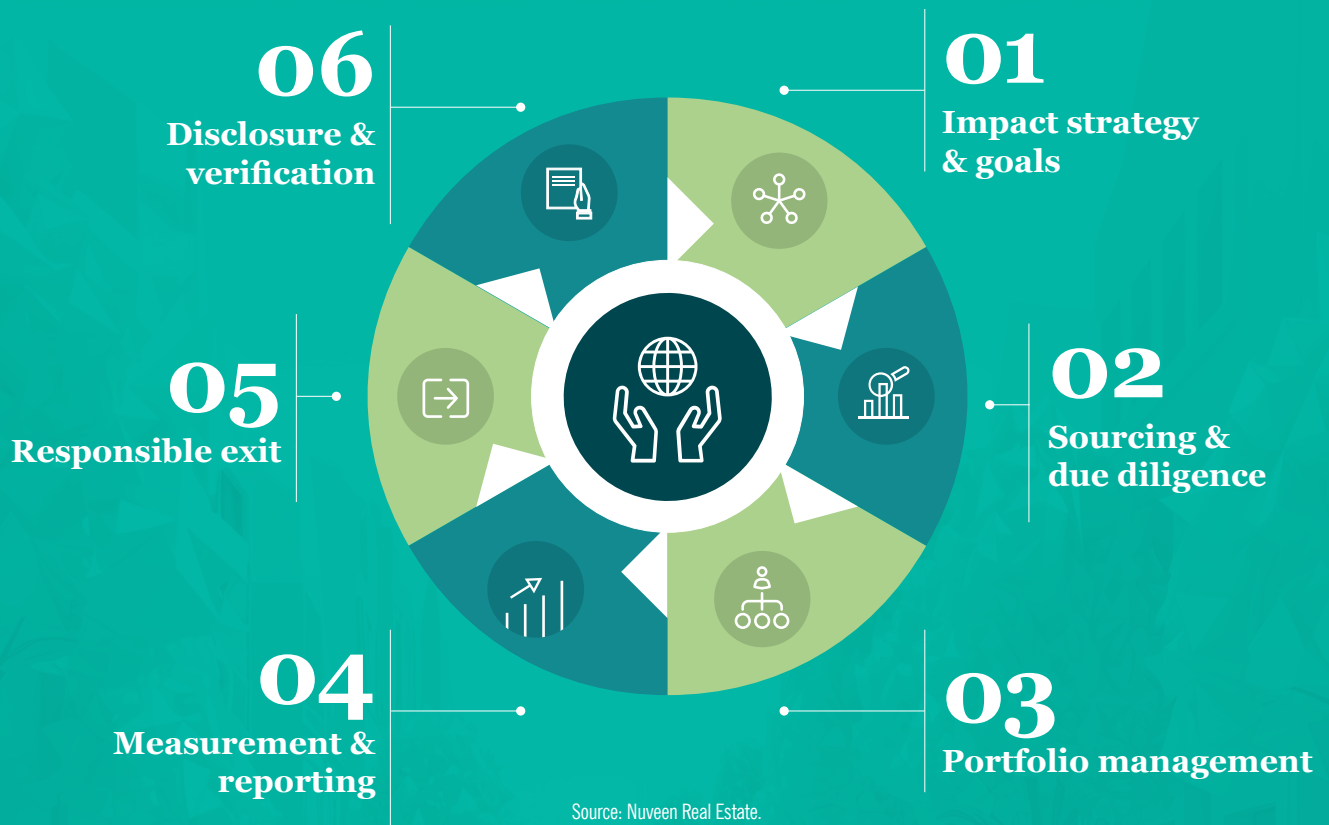
For impact investing to be effective, it is crucial for real estate impact strategies to clearly define what they aim to achieve, how they plan to achieve it and how to measure success.

Traditional investment management methods will require the addition of a comprehensive impact measurement and management system. This involves articulating impact objectives from the outset, adding key performance indicators specific

to those objectives and distilling the metrics and targets to improve efficiency over time.

At Nuveen Real Estate, we developed a six-step process for real estate impact investing which integrates impact theory with investment analysis and management (Figure 6). As a result, our investment teams have a clear view of what needs to be achieved from both a financial and impact perspective throughout the investment process, from due diligence and even past the responsible exit.

FIGURE 6: Nuveen Real Estate impact management system: Complete integration of impact theory into the investment cycle



Source: Nuveen Real Estate.

A selection of our impact case studies



The Jamison

Originated: 2020

Property Type: 236-unit affordable housing

Location: Fort Lincoln, Washington D.C., U.S.

Preserving affordability and enhancing resident satisfaction with access to targeted social services (exercise, career workshops, language translations services, nutritionists, etc.), which supports our objective of investing for the enduring impact of our clients and society



Mühlacker

Originated: 2023 completion

Property Type: Affordable housing

Location: Baden-Württemberg, Germany

Providing sustainable and affordable homes for underserved people, offering long-term affordability with rent 33% below the market average for 30 years. This is a partnership between our German Living Impact strategy and the Hopebearer Foundation



Riverstone

Originated: 2021

Property Type: 789-unit affordable housing

Location: Bolingbrook, Illinois, U.S.

Aims to preserve existing affordability (rents are priced for residents earning at or below 60% of area median income) and improve resident experience through green retrofits, common area upgrades and services (e.g. Amazon lockers, maintenance sheds, creation of additional parking lots by repurposing underused areas)



Foundry Square II

Originated: 2014

Property Type: 10-story, 521,000+ sq ft office/workplace building

Location: San Francisco, California, U.S.

Supporting occupant health and wellness, the property scored well in the Fitwel health impact categories such as promoting occupant safety, providing healthy food options, instilling feelings of well-being and positively impacting community health

The asset earned the Fitwel Multi-Tenant Base Building and Fitwel Viral Response certifications in 2020 and 2021



Conclusion

The myth that impact strategies sacrifice returns for social or environmental objectives is quickly losing any legitimacy. Real estate impact strategies have the potential to explore new and growing target markets in historically stable sectors, capitalizing on a growing demand to deliver real estate across industries that provide positive social and environmental outcomes.

Impact in real estate builds on what makes the asset class attractive to investors. Tapping into an inelastic demand, resiliency through various macroeconomic environments, and the diversification benefits the asset offers, impact strategies have the potential to unlock new growth areas for investors.

With the increasing demand for affordable housing, sustainable construction, energy efficient buildings and improved access to the internet, digital amenities, healthcare, education, and mental and physical well-being facilities, there is no shortage of impact-related goals.

To address these challenges, clear and intentional impact themes are essential from the earliest stages of an investment process.



Leading the way in affordable housing

Amid the national shortage of quality affordable housing and with our deep bench of expertise within the impact investing sector, Nuveen Real Estate has expanded its capabilities through the acquisition of an affordable housing portfolio. Doubling the size of its portfolio and now with an end-to-end business model, Nuveen has capabilities in investment management, property management, construction management, safety and security, and development with a 550+ team of dedicated individuals. Managing assets directly creates a better experience for our residents and better financial outcome for our clients.

By scaling its portfolio, Nuveen is able to advance its commitment to social and environmental change while focusing on preserving and increasing the supply of affordable housing with an emphasis on building resilience.

Partnering with Nuveen Real Estate

Partnering with Nuveen Real Estate provides you with an experienced impact investor. Our investment process capitalizes on our diverse investment team, which brings local expertise to European and U.S. markets. This allows us to identify the optimal investment opportunities in real estate depending on the needs of the communities we invest in, giving us the potential to maximize the impact we can have from both social and environmental angles, as well as from the returns.

About Nuveen

Nuveen is the global asset management arm of TIAA. We manage \$1.1 trillion in assets across fixed-income, equities, alternatives and solutions-based strategies for over 950 institutional clients in 30 countries worldwide.

With more than 775 employees¹ located in over 30 cities throughout the United States, Europe, and the Asia Pacific region, Nuveen Real Estate offers a global platform with extensive geographic reach and depth of sector expertise. The breadth, scale and deep real estate expertise of our platform enable us to deliver strong investment returns while working closely with our clients to develop bespoke and customized long-term strategies that meet our clients' risk appetites and return objectives.

As of 31 Dec 2022

¹ Includes 385+ real estate investment professionals, supported by a further 390+ Nuveen employees.

For more information about investing in impact, visit us at nuveen.com/global/investment-capabilities/real-estate/sectors/impact

Endnotes

1 Source: <https://www.oecd.org/housing/data/affordable-housing-database/housing-conditions.htm>, 2020.

2 Source: <https://www.un.org/development/desa/en/news/population/2018-revision-of-world-urbanization-prospects.html>, May 2018.

3 Source: <https://digital-strategy.ec.europa.eu/en/policies/digital-skills-and-jobs>, July 2022.

Important notes

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