



Raising the bar — impact investing in a changing world

A retrospective on Nuveen’s private markets impact investing portfolio from 2009 – 2018



INTRO

- 2 A message from Vijay Advani, Nuveen
- 4 Impact by the numbers
- 6 Portfolio snapshot
- 8 Theory of change
- 10 Our impact legacy
- Straight talk:** Nicholas Liolis, TIAA

OUR APPROACH

- 11 Impact investing strategy
- Straight talk:** Rekha Unnithan, Nuveen
- 12 Optimizing for ESG and impact
- 13 **Straight talk:** Allison Spector, Nuveen

OUR RESULTS

- 14 Results: Portfolio-level
- 15 Results: Inclusive growth
- Straight talk:** Stephen Lee, Nuveen
- 16 **Case study:** Aavishkaar Group
- 17 Results: Resource Efficiency
- Straight talk:** Chris Steinbaugh, Nuveen
- 18 **Case study:** View, Inc.
- 19 Results: Affordable housing
- Straight talk:** Pamela West, Nuveen
- 20 **Case study:** Shore Hill Senior Community
- 21 **Case study:** Enterprise Homes Preservation Joint Venture

METHODOLOGY

- 23 Impact investing team



Vijay C. Advani
Chief Executive Officer
Nuveen, a TIAA company

A message from **Vijay C. Advani**

I am pleased to share Nuveen’s inaugural private markets impact investing report, which highlights our approach to impact investing and how we have put more than \$1 billion to work in our impact strategy over the last decade.



Today we are witnessing an unprecedented wave of capital that seeks to make a difference for people and the planet. Investors, for their part, increasingly strive to generate both financial and social returns. Not that long ago, a \$100 contribution to a microfinance fund was viewed as a philanthropic donation. Today, more than \$13 trillion is invested globally in responsible ways, with \$500 billion of that figure in impact investments.¹

I first experienced the power of impact investing as a World Bank analyst. Working across the Middle East, Africa, Asia and some former Soviet republics, I witnessed how small investments in people and businesses produced meaningful returns for families in developing countries. Later, I helped form Lok Capital, which raises funds for microfinance initiatives in India, such as by providing loans — as small as \$5 — to mothers in rural areas. Traveling in these regions, I observed up close the power of financial inclusion to improve the lives of families and uplift entire communities. From education to healthcare to agriculture, microfinance still plays a crucial role in areas with scarce capital.

Since then, impact investing has experienced tremendous growth, with interest surging all over the world. Nuveen has been a catalyst and accelerator for this rise in adoption, as we have been investing and refining our approach for 30 years. Our approach

demonstrates this track record: We direct capital toward high-quality investment opportunities that aim for competitive risk-adjusted returns with intentional and measurable social and environmental outcomes.

We're not doing this because it makes us feel good. We believe that investment capital presents a tremendous opportunity to solve some of the world's most pressing challenges, from providing access to basic services, to conserving natural resources, to addressing America's housing crisis. Working closely with governments and other stakeholders, asset owners and asset managers can allocate capital and expertise to help address many of these intractable problems.

How should we measure the performance of an impact portfolio? We believe that impact metrics should be tied to the business goals of a company or project, but we also advocate for consistent, transparent impact data and reporting to inform investment decisions. This report is our first step in publicly sharing the impact data for our private markets portfolio. We hope you will do the same.

I hope this report deepens your appreciation for the impressive range of impact opportunities available to investors today and of the market's potential for enormous future growth. Impact investments across sectors and asset classes in developed and emerging markets provide a wide range of diversified opportunities for income, yield and growth — while also generating positive outcomes for people, communities and the environment. We believe there are many ways to unlock the potential of this movement on a global scale and are pleased to share our thoughts with you in this report.



Vijay C. Advani



Impact *by the numbers*

Over 10 years

\$1 billion
in committed capital
since inception

30+ years as an active impact investor²
(and an eight-year track record with current team)

80+ investments broadly diversified across impact themes

46 exits since inception

45+ countries receiving impact capital

55 partners and investees enabling impact on the ground

Since Nuveen's first private-markets impact investment in 1989, our capital has enabled low-income consumers to access basic services and affordable housing and disrupted traditional production processes and supply chains to achieve resource efficiency. This report shares the impact track record of our private markets impact investing portfolio over the last decade and showcases its ability to drive sustainable development for people and the planet.

In 2018³

176
million

low-income beneficiaries reached⁴
(out of 267m total beneficiaries)

116
million

female beneficiaries reached
(out of 267m total beneficiaries)

240
thousand

jobs supported
(including 73k jobs held by women)

79,660
tons

waste recycled⁵
(equal to 10m trash bags of waste recycled)

129
million

low-income borrowers
(out of 152m total borrowers)

14
million

low-income patients treated⁶
(across 360 hospitals and clinics)

4.2
million

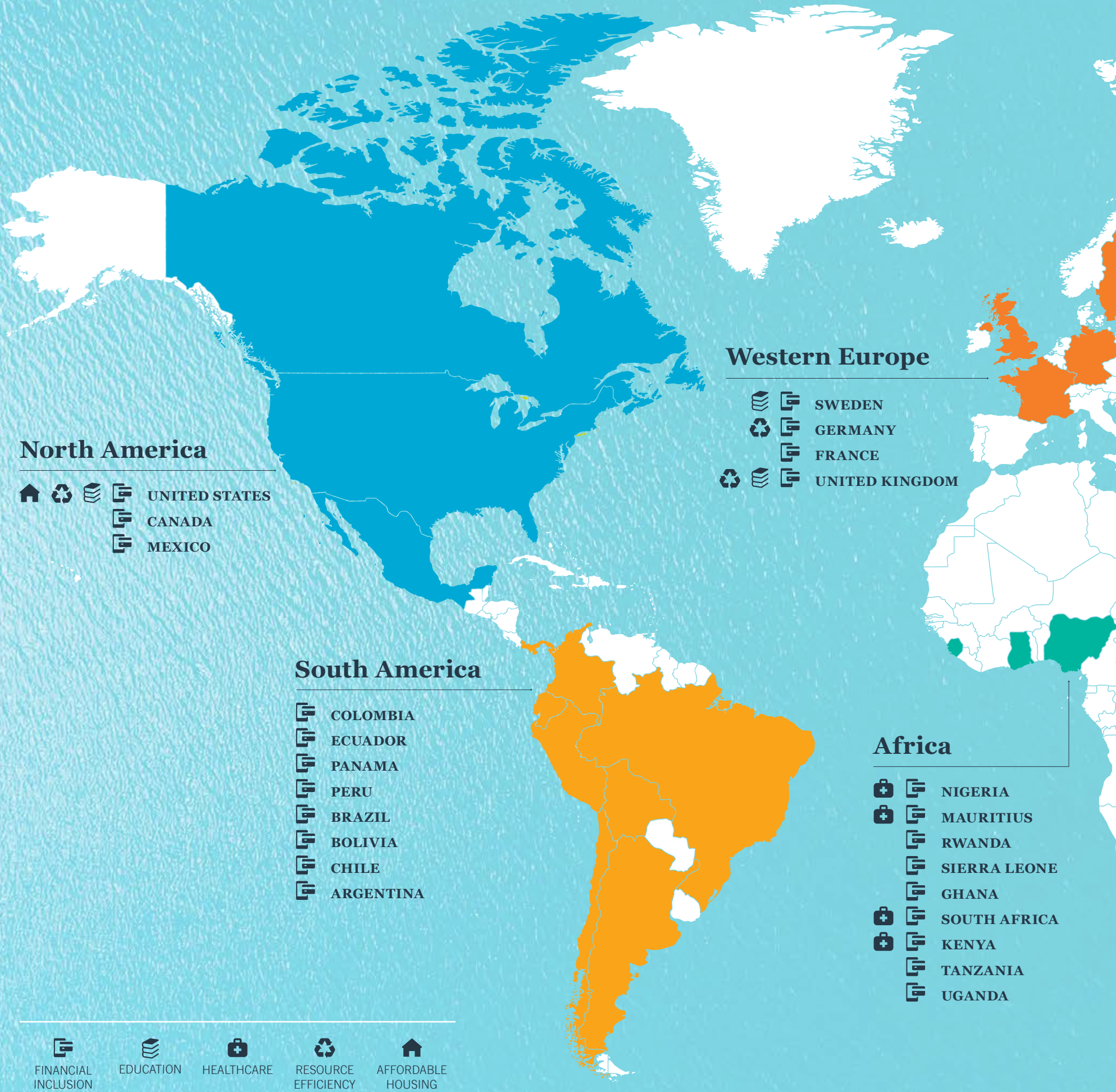
low-income students served
(across 7k schools)

20
thousand

deeply affordable⁷ housing units preserved
(out of 26k total units)

1.8
million

metric tons of CO₂e reduced⁸
(equal to 382k cars taken off the road)

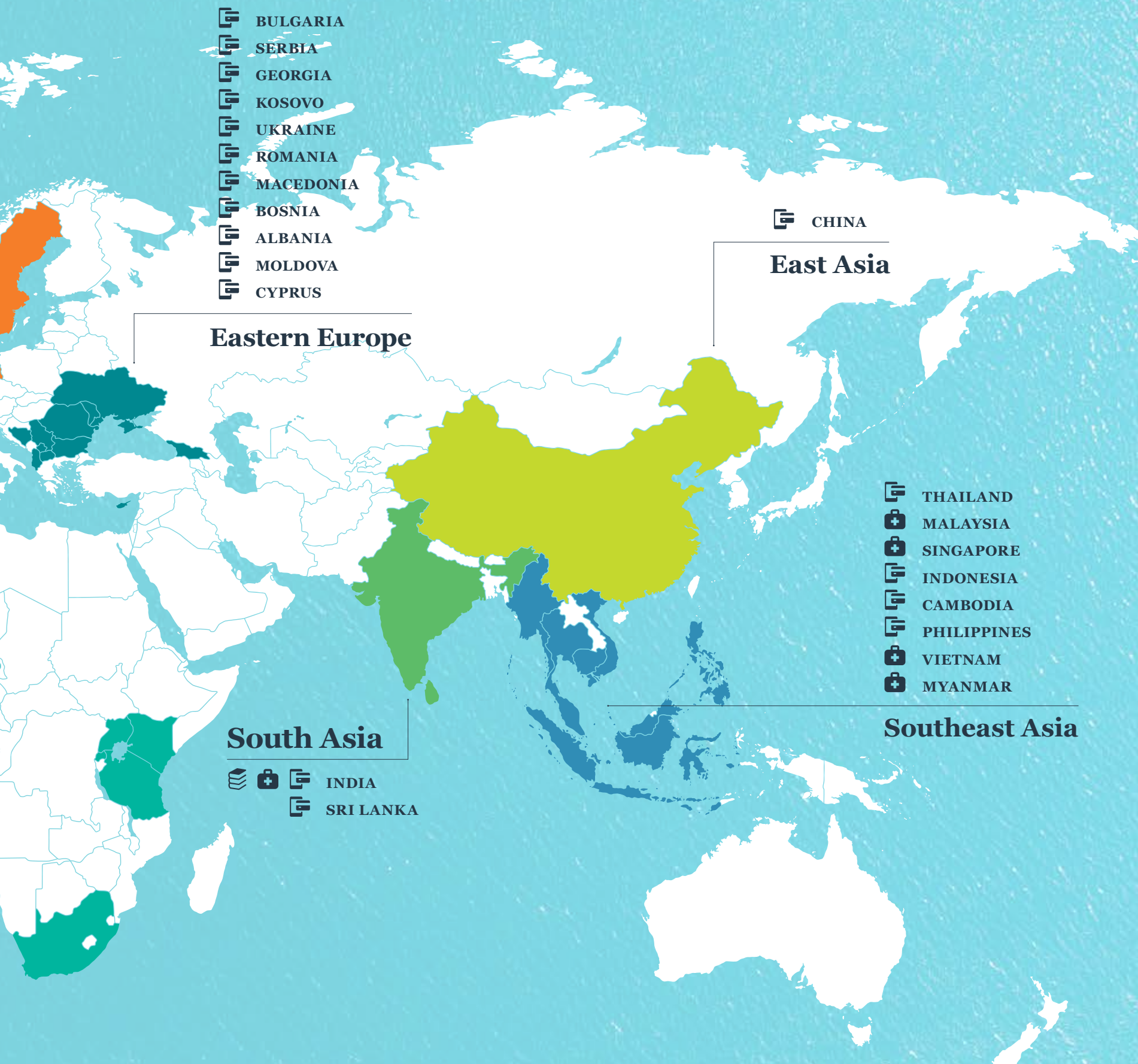


PORTFOLIO SNAPSHOT:

Over \$1b in impact

Nuveen’s reach is global, but our impact is local. Over the last decade, our capital has enabled over 200 companies and fund managers to deliver financial services, healthcare and education to underserved consumers in emerging markets and preserved 20,000 affordable housing units across America.

Our impact investing strategy and portfolio have evolved over time to reflect our own learnings, the priorities of TIAA, our parent company, and the changing dynamics of the impact investing marketplace.

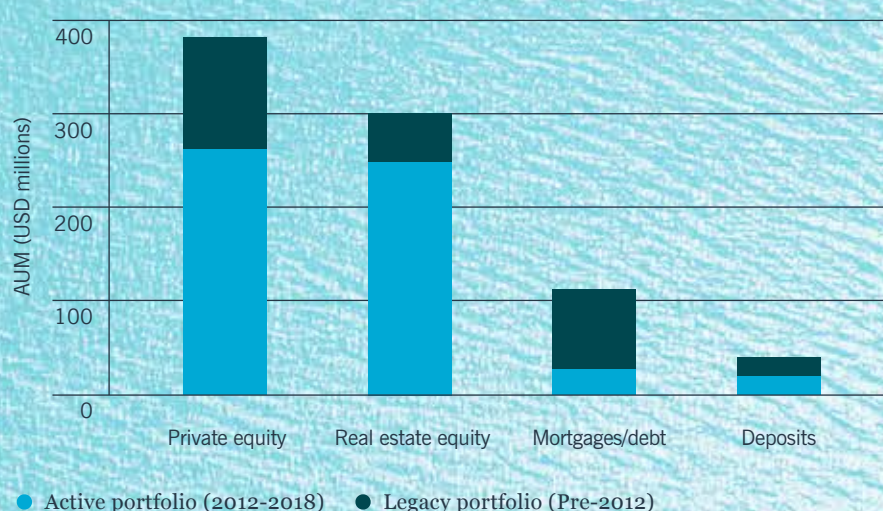


investing globally

Changing our asset mix to enable direct impact

Investing across asset classes enables us to create impact in a more nuanced way, taking into consideration the type of capital needed and the time horizon over which impact is realized. The asset class mix of our portfolio has changed over time, reflecting our desire to add value more directly as an equity holder in our investments. To this end, Nuveen makes direct investments, co-investments and some fund investments in private equity and real estate, with more than \$800m in assets under management (AUM) as of 2018.

PORTFOLIO BY ASSET CLASS



Our theory of change: Global challenges, local solutions











To alleviate poverty, tackle climate change and achieve sustainable development, trillions of dollars will have to be mobilized over the next 10 years.

Nuveen aims to take a material step toward achieving important social and environmental outcomes by investing in solutions that drive efficiency, productivity and scale in sustainable development for underserved people and the planet.

At the core of our impact investment thesis is the emerging low-income consumer and the belief that she is underserved in her access to basic products and services such as financial services, healthcare, education and housing. We finance companies that help to narrow the gap in the supply and demand for basic services.

We also recognize the need to improve resource efficiency and reduce waste if we are to sustain a growing global population. That's why we invest in companies that disrupt traditional supply chains and production processes — such as the built environment, agriculture and manufacturing — to make them more sustainable.

Technology is a cross-cutting feature of everything we do and plays an important role across our investment thesis. For example, technology can lower cost and increase scale by making it cheaper and easier to deliver financial services like credit, savings and insurance.

SECTOR	CHALLENGE	OPPORTUNITY	OUR SOLUTION
<p><i>Inclusive growth</i></p> <p>Financial inclusion</p> 	<p>1.7b people globally remain unbanked. Financial services are still not affordable for low-income consumers and small businesses.⁹</p>	<p><i>Access to financial services</i> enables people to invest in their healthcare, education and businesses.</p>	<ul style="list-style-type: none"> • Microfinance • Microinsurance • SME lending • Payments • Fintech 
<p><i>Inclusive growth</i></p> <p>Healthcare</p> 	<p>90% of the world's disease burden is borne by low- and middle-income countries, yet they compose only 12% of the world's health expenditures.¹⁰</p>	<p><i>Making healthcare more affordable and accessible</i> leads to equitable health outcomes and saves lives.</p>	<ul style="list-style-type: none"> • Hospitals & clinics • Diagnostics • Low-cost medicines • Innovative delivery 
<p><i>Inclusive growth</i></p> <p>Education</p> 	<p>250m children globally are illiterate and excluded from education.¹¹</p>	<p><i>Access to quality education</i> helps break the cycle of poverty by increasing income. Each additional year of schooling raises an individual's earnings by 10%.¹²</p>	<ul style="list-style-type: none"> • K–12 schools • EdTech • School financing 
<p>Affordable housing</p> 	<p>38m U.S. households are cost-burdened, with 18m of those spending more than 50% of income on housing.¹³</p>	<p><i>Increasing affordable housing and improving quality of life</i> gives families more discretionary income, enabling them to spend on essential services.</p>	<ul style="list-style-type: none"> • Affordable housing preservation • Social services • Green improvements • Transit services 
<p>Resource efficiency</p> 	<p>14% of the world's methane emissions come from landfills (the third largest source), yet material consumption continues to increase.¹⁴</p>	<p><i>Technological advances create opportunities to reduce the world's greenhouse gas emissions and material footprint</i> by minimizing resources used and waste generated.</p>	<ul style="list-style-type: none"> • Waste reduction • Agriculture efficiency • Green building materials • Water 

A pioneer in institutional impact investing

Nuveen’s impact investing legacy — 30 years as an active impact investor

Nuveen is among the world’s largest impact investors, with more than **\$1 billion committed in private markets** and nearly three decades of market leadership. Our recognition that value goes beyond financial returns flows from the pioneering work of our parent company, TIAA, and extends through to Nuveen’s influential role in the industry today. One look at TIAA’s client base explains why this is the case: Educators, healthcare professionals, researchers

and other workers in the non-profit sector have long expressed the desire for their investments to align with their values.

Fifty years ago, TIAA began paving the way for what is now called responsible investing and impact investing. In 1970, the company acted boldly to address social crises such as apartheid and the Vietnam War by adopting formal procedures for voting on shareholder proposals. In the late 1990s, TIAA made its first impact investments, with a focus on affordable

housing in the U.S. and microfinance in emerging markets. These investments — seizing specific opportunities with a measure of intentionality — formed the genesis of what would become the company’s impact investing philosophy.

In 2012, a strategic review of the impact investing market was conducted to determine how TIAA — with its long-term investment posture and expertise in private markets — could optimize its impact investing approach. The result was to formulate an

investment thesis that centers on improving low-income consumers’ ability to access basic products and services, such as financial services, healthcare, education and housing.

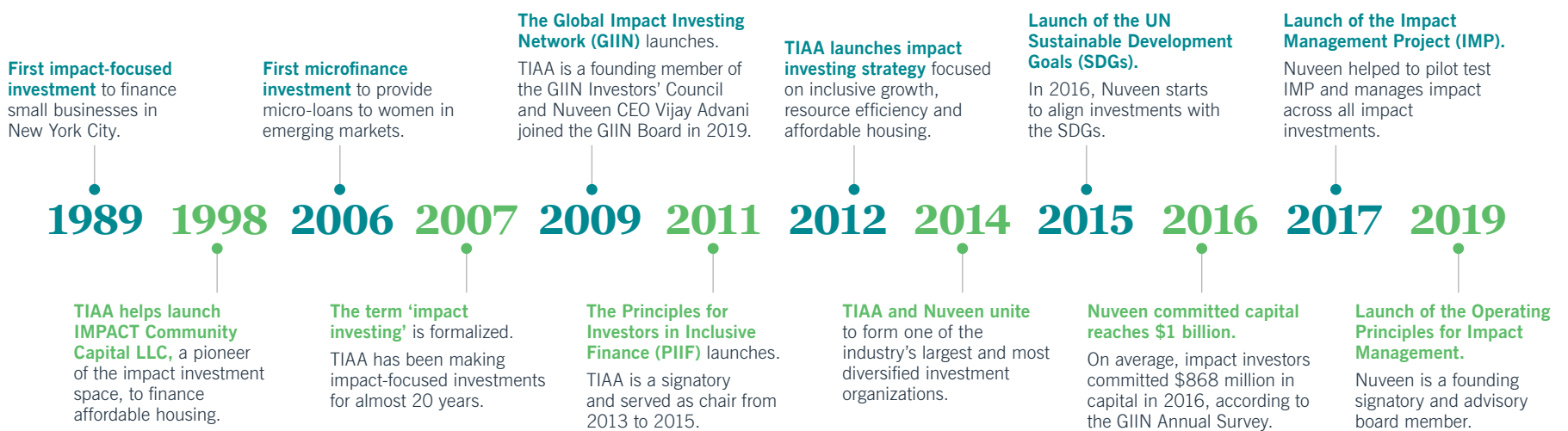
The formalization of this strategy resulted in a multi-year impact investment program funded from TIAA’s general account. Between 2012 and 2018, the firm invested upwards of \$700 million of new capital in impact investments.



“Nuveen has played a powerful and positive role in the market’s development for over a decade, both as an investor, an asset manager and a leading member of the GIIN Investors’ Council.”

— Amit Bouri, CEO, Global Impact Investing Network (GIIN), which strives to increase the scale and effectiveness of impact investing

NUVEEN’S IMPACT INVESTING HISTORY



Straight talk



Nicholas Liolis
Chief Investment Officer, TIAA General Account

In recent years, institutional investors have emerged as major providers of impact capital and an important driver of impact at scale. But this was not always the case. Insurance companies and pension funds began to announce formal commitments to impact investing starting in 2014, more than two decades after TIAA made its first impact investment. Nick Liolis reflects on TIAA’s journey into impact investing at a time when most large investors were sitting on the sidelines.

How do you approach impact investing and why is it a priority?
As CIO of TIAA’s general account, I’m a sponsor of Nuveen’s private markets impact investing team. The general account team decides how much the TIAA general account portfolio should allocate to impact investments, as well

as how much new investment should be directed toward those investments annually. We’ve been proponents of impact investing for a very long time because of its societal benefits — but, to be clear, we’re making these investments first and foremost with the goal of delivering an appropriate, risk-adjusted return for our participants. The fact that we can do something that makes the world a better place, given our scale and ability to influence, is an additional outcome that we’re very proud of.

How has impact investing evolved at TIAA?
Many insurance companies started making one-off impact-focused investments in the 1980s and 1990s as a way to give back to the community. Back then, the benefits of such investments came mainly from tax credits for investing in community development or affordable housing.

However, what made TIAA unique was that for most of its history it was a non-taxable nonprofit, which meant that we needed to apply a different lens to our impact investing, and that helped develop our current capabilities. As our impact investing approach has evolved, it has begun to influence any number of business decisions within our organization. For example, when it came time to renovate TIAA’s New York office space, we decided to use a smart glass that adapts to changing sunlight, made by one of the companies in our impact investing portfolio, View, Inc. (see page 18). The glass is eco-friendly, saves energy and is better for employees’ work experience and health. It also adds value to the building, to our real estate and impact investing portfolios, and, ultimately, to our participants’ returns.

WE LEAD BY EXAMPLE

Nuveen is committed to harnessing the power of our investment capital to yield positive outcomes for people and planet.

We strive to contribute to the growth of the industry by sharing our own practices, data and insights, developing and adopting standard approaches and encouraging our partners to do the same.

We are honored to contribute to the following initiatives:



Nuveen’s impact investing strategy

Impact at scale. Competitive returns. Measurable impact.

Since 2012, Nuveen has managed a global diversified impact investing portfolio that focuses on private equity, private debt and real estate across three impact verticals: inclusive growth, resource efficiency, and affordable housing.

We focus on capital solutions that can create tangible and measurable social and environmental impact as well as risk-adjusted financial returns for investors. Our goal is to demonstrate an ability for mainstream finance to address some of the biggest challenges faced by people and planet, such as those set forth in the UN Sustainable Development Goals (SDGs).

Nuveen’s diversified approach to impact investing aligns with seven UN SDGs targeting poverty and inequality,

sustainable communities, resource conservation and climate change, though we have been making investments long before the global goals existed. In a rapidly growing market, the SDGs help to forge agreement among a broad group of stakeholders and mobilize capital to address the highest-priority needs determined by the UN.

- **Impact at scale:** Nuveen represents a mainstream financial services company with a sizable investor base, so the impact verticals we choose must present problems that are large enough to absorb capital at scale. An increasing number of investment opportunities are meeting this criterion by achieving both investment and impact performance.

Also, our view spans more than just one type of impact, which reflects the multi-target nature of the UN SDGs.

- **Competitive returns:** It’s equally important to validate that our capital solutions have the potential to produce appropriate risk-adjusted returns while generating the desirable impacts. There is no appetite for trade-offs of risk, return and impact. Instead, we invest only in solutions where impact and investment returns co-exist and reinforce each other. What’s more, these returns typically are not correlated to mainstream markets because we are tapping into parts of the market that are undercapitalized, and that serve

customers that have never been on the radar.

- **Measurable impact:** Impact investing at Nuveen is marked by an intentional focus on generating a positive outcome for people and planet, and evaluating such impact over time. Impact measurement is complex, and demonstrating intentionality even more so. We first think about the goal of the investment — to create a product, service or outcome — and then determine how to evaluate it. We collect and analyze relevant impact data before and after we invest, to understand our performance, report to stakeholders and inform our future investment behavior.

PORTFOLIO-LEVEL IMPACT THEORY OF CHANGE

Inputs	Activities	Outputs	Outcomes	Impact
<ul style="list-style-type: none"> • Investment capital • Specialized team, skill sets and networks 	<ul style="list-style-type: none"> • Target commercially focused sectors seeking significant capital • Invest in and grow profitable and scalable businesses and projects • Measure and manage ESG and impact performance 	<ul style="list-style-type: none"> • Portfolio investees scale impact-generating activities • Grow new or undersupplied markets • Accelerate investor demand for and capital reallocation towards the UN SDGs 	<p>Material step towards achieving important social and environmental outcomes aligned with priority SDGs:</p> <ul style="list-style-type: none"> • Improved access to basic services • Improved quality of life • Improved resource and energy efficiency • Economic and employment opportunities 	

Straight talk



Rekha Unnithan

Managing Director, Lead Impact Portfolio Manager

For Rekha Unnithan, impact investing is marked by an intentional focus on generating a certain social or environmental outcome, beyond financial returns. Impact investors can have a range of expectations, but Nuveen’s orientation is toward a strong risk-adjusted financial return, paired with an intentionality lens, and a process for managing and evaluating impact over time. We spoke with Rekha about Nuveen’s approach to impact investing and how she thinks about investor additionality.

How has your approach to impact investing evolved over the years?

We started by building high-quality fund relationships, with great emphasis on governance and earning institutional support. We needed to learn about the

market, to validate that there were deals to be done and returns to be achieved, and to understand the kind of infrastructure we would need to pursue this strategy on our own. We gained confidence, co-invested with our partners, grew and scaled deals and built out our team and our capacity to source and manage a portfolio of high-quality direct deals.

To be clear, it’s been a tough slog to actually invest in these companies, to prove out the business case and the impact thesis, and to show investment returns. Persistence is key. We did the deals, got our hands dirty and were able to learn. Meanwhile, of course, the impact investing sector grew exponentially, which expanded our universe of opportunities and turned what had been a fringe topic into something widely accepted in the industry.

How does Nuveen add value as an investor?

Nuveen thinks about our contribution as an investor in three ways: helping portfolio investees to scale impact-generating activities, growing new or undersupplied markets, and accelerating investor demand for and capital reallocation toward the UN SDGs. When we invest in companies, we typically take a board seat to influence the strategic direction to grow and scale thoughtfully and to learn from our partners.

We’re not at the table for growth at any cost but intentional growth that scales the company’s purpose and impact, leading to compelling financial returns. Investment models and new products take time to work in the market, and we invest in them at the inflection point to scale. Our portfolio is designed around our ability

to play a leadership role in terms of the types of capital we can provide — long-term in nature — the risk-adjusted investment returns we need to see — which drives sector selection — and, frankly, the expertise and resources we have in-house.

“We’re not at the table for growth at any cost but intentional growth that scales the company’s purpose and impact, leading to compelling financial returns.”

— Rekha Unnithan

Optimizing for ESG and impact

All investments affect communities and the environment, in both positive and negative ways. This understanding guides our approach to pursuing and managing the social and environmental impact of our investments.

As a **responsible investor**, it is our job to identify, monitor and manage these impacts in a way that mitigates investment risk and optimizes, where possible, positive financial, environmental and social outcomes for our clients and for people and the planet. We do this by integrating environmental, social and governance (ESG) factors into the investment management process.¹⁵

As an **impact investor**, we are committed to measuring and managing the impact of our investments. We measure impact to quantify and report on our social and environmental performance, just as we quantify and report on our financial performance. But measuring impact is no longer enough. It is important to ensure that impact considerations are integrated throughout the investment lifecycle. We've built an impact management system to complement our impact measurement practice, and we continue to refine it to stay aligned with emerging standards.

ESG Integration

At Nuveen, we believe that addressing material ESG risk and opportunity factors in the investment management process helps to reduce investment risk, may enhance long-term value and ensures that investor capital is used effectively and ethically. We partner with like-minded and reputable long-term oriented companies and managers with strong ESG practices. Our commitment to responsible investing is set out in our ESG Policy and

Nuveen's Responsible Investing Policy and reflects evolving industry best practices for integrating ESG factors throughout the investment lifecycle.

The evaluation of ESG criteria is embedded in our investment management approach and used to identify and manage material non-financial risks that could affect financial performance or impact performance (including negative impact). We believe that impact investing becomes more sustainable if investors take a holistic view that includes ESG factors.

Impact Management

Managing for impact is the core of what defines us as impact investors and drives financial return. This is an active process requiring a team of dedicated professionals working through a well-defined method to add value beyond invested principal.

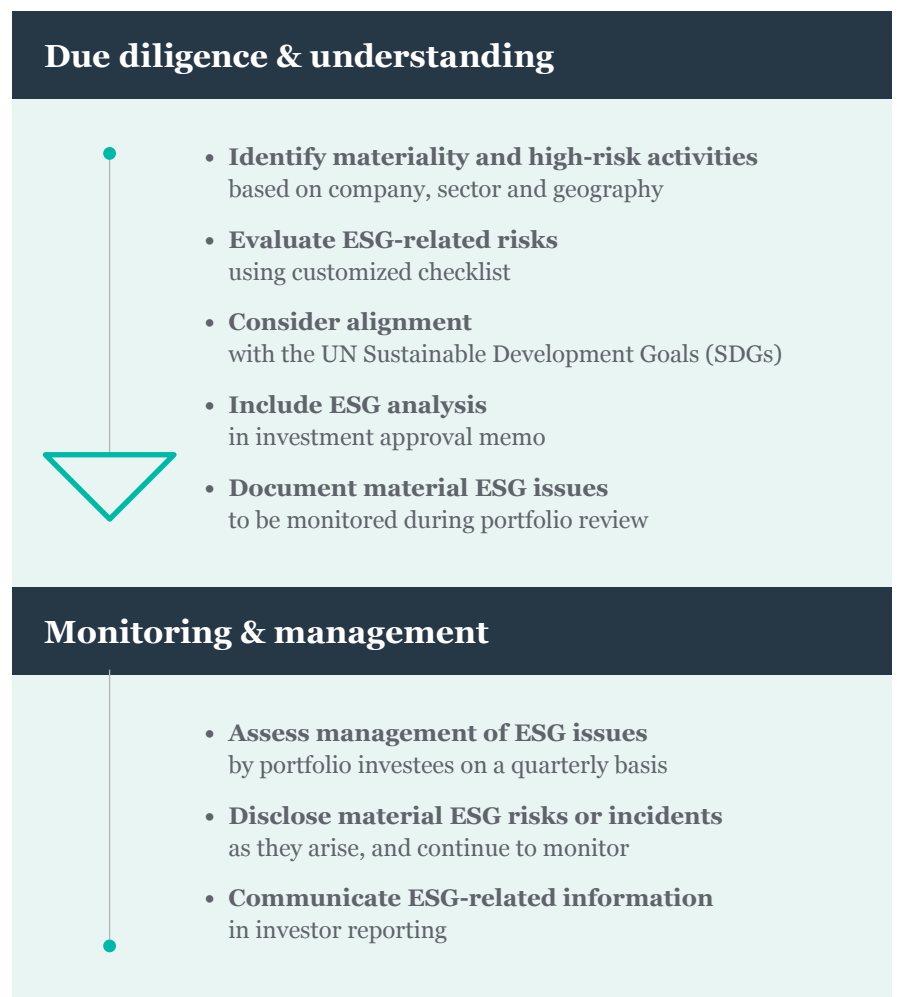
Nuveen's Impact Management System

Our in-house impact management system provides the tools, processes and resources to enable our investment teams to do this well. The system integrates impact considerations throughout the investment management process and ensures that intentionality and impact performance are baked into our approach. Our system aligns with the Operating Principles for Impact Management, an emerging standard for impact investing (Nuveen is a founding signatory to the Principles), the Impact Management Project convention and the GIIN Characteristics for Impact Investing.

MATERIAL ESG FOCUS AREAS

E Environmental	S Social	G Governance
<ul style="list-style-type: none"> Climate change Carbon emissions Resource & energy efficiency Waste management Biodiversity 	<ul style="list-style-type: none"> Customers Employees Communities Supply chains Human rights 	<ul style="list-style-type: none"> Business ethics Board independence Corruption & bribery Data privacy

APPROACH TO ESG INTEGRATION



NUVEEN'S IMPACT MANAGEMENT SYSTEM

Disclosure & verification

- Annual public disclosure¹⁶
- Impact management audit
- Validation of reported impact (select investments)

Responsible exit

- Responsible exit strategy
- Responsible exit tracking

Measurement & reporting

- Impact measurement
- Benchmarking & ratings
- Impact reporting to clients
- Analytics and feedback loop



Impact strategy & goals

- Impact theory of change
- Strategic impact objectives
- Impact management at portfolio level

Sourcing & due diligence

- Initial screening
- SDG alignment
- ESG & impact due diligence
- Evidence-based assessment of expected impact

Portfolio management

- KPIs & performance targets
- Monitoring & engagement
- Manage risks & negative effects
- Impact value creation

“Using impact results — that’s the most exciting part — to sit down with the team, reflect on our impact and chart the path forward.” — Rekha Ummithan

Spotlight: Impact due diligence
Impact due diligence and investment due diligence should go hand-in-hand. At Nuveen, we conduct rigorous impact due diligence for all prospective impact investments to assess how they align with our own impact thesis, expected social and environmental performance, and impact risk (the chance that impact

may not occur as expected). This assessment is reviewed by our investment committee and considered in our overall investment decision. It also informs how we add value as an investor during the holding period and at exit.

Impact measurement

Measuring and reporting on impact — the non-financial social and environmental performance of a business — is what makes impact investing different from any other kind of investing.

At Nuveen, we assess impact performance before and after our investment using indicators that we agree upon with our investees and that align with industry standards.¹⁵ We strive to gather both quantitative and qualitative impact data to help us compare against similar investments while also capturing the local context.

Going forward, we are piloting an impact rating to synthesize various impact data into a single number to facilitate comparison. The impact rating will help us to understand how well an investment fits our theory of change and will enable us to consider impact alongside financial risk and return. It also will let us experiment with benchmarking investments based

on impact performance over time and vis-à-vis similar deals in our portfolio.

PUTTING IMPACT INTO PRACTICE: SAMPLE QUESTIONS RAISED BY THE INVESTMENT COMMITTEE

What does an investment committee talk about when it comes to impact? A lot, in fact. Here are some recent examples:

The hospital serves a mixed-income population, where payment is tiered to patient income levels. How do we know there will be an incentive to continue serving the low-income segment?

How much energy is consumed to manufacture the very technology that delivers energy efficiency? What is the net impact?




How do we ensure a responsible exit in affordable housing? What if the prospective buyer wants to raise the rent?

NUVEEN’S IMPACT DUE DILIGENCE CHECKLIST assesses deals on strategic alignment, outcomes and impact risk

Strategic alignment & intentionality	Expected social & environmental performance
<ul style="list-style-type: none"> Alignment with Nuveen’s impact thesis Ability to scale SDG alignment Nuveen’s additionality Impact management ESG and impact risk 	<ul style="list-style-type: none"> Expected impact rating Importance of expected outcomes Target beneficiaries and level of need Significance of intended impact (depth, scale, duration, rate) Enterprise contribution in local market context

OUR IMPACT MEASUREMENT FRAMEWORK AND KEY PERFORMANCE INDICATORS (KPIs)

For KPI definitions, see our impact reporting methodology on page 22.

	WHAT ¹⁷	WHO	HOW MUCH		
	Strategic alignment	Underserved focus	Depth	Scale	Duration/Rate
Inclusive growth 	<ul style="list-style-type: none"> Product or service type 	<ul style="list-style-type: none"> Low-income clients Female clients Rural clients 	<ul style="list-style-type: none"> Quality of service delivery 	<ul style="list-style-type: none"> Number of products or services delivered 	<ul style="list-style-type: none"> Utilization or adoption rate
Resource efficiency 	<ul style="list-style-type: none"> Technology or product type 	<ul style="list-style-type: none"> Severity of environmental challenge in business-as-usual scenario 	<ul style="list-style-type: none"> CO₂e avoided Waste reduced or recycled Water saved 	<ul style="list-style-type: none"> Number of products or services delivered 	
Affordable housing 	<ul style="list-style-type: none"> Type of housing and preservation strategy 	<ul style="list-style-type: none"> Low-income tenants Senior tenants Disabled tenants 	<ul style="list-style-type: none"> Affordability at % AMI Differential to market rent Transit Score 	<ul style="list-style-type: none"> Units preserved Properties with green improvements Properties with social services 	<ul style="list-style-type: none"> Years restricted affordable

Straight talk



Allison Spector
Director, Sustainability, Real Assets & Private Markets

Although Nuveen has been making impact investments for 30 years, this is the first year we have published an impact report for the private markets portfolio. Allison Spector reflects on what it took to produce this ten-year review.

What was the impetus for this report?
Nuveen is part of the impact investing old guard — one of the first institutional investors to enter the microfinance and affordable housing

space more than two decades ago. When I came to Nuveen last year from the Global Impact Investing Network (GIIN), all I could think about was getting my hands on 10 years of impact data. And then sharing that data with all of you.

That’s the impetus for this report — for the first time telling Nuveen’s impact story, which in many ways is the story of the impact investing market as a whole over the last decade.

What was it like collecting and analyzing data across so many years and transactions?
Hard. Aggregating data at the portfolio or strategy level — across investments and over time — is not for the faint of heart. We had a lot of the impact data already, self-reported from our investees. But each investee reports on impact in a nuanced way and uses different indicators. There is definitely a tension between the desire to aggregate data to report on big numbers at the portfolio level and the need to capture and be authentic about

how impact actually happens on the ground. Ultimately, more and better impact data — both in aggregate and on a per transaction basis — will help to drive capital, scale and efficiency in the impact investing market. Nuveen has over 10 years of impact data across multiple sectors, asset classes, geographies and transactions. This report is the first step toward sharing that data and the fascinating story it tells.

Results: Portfolio-level

Our 10-year impact track record

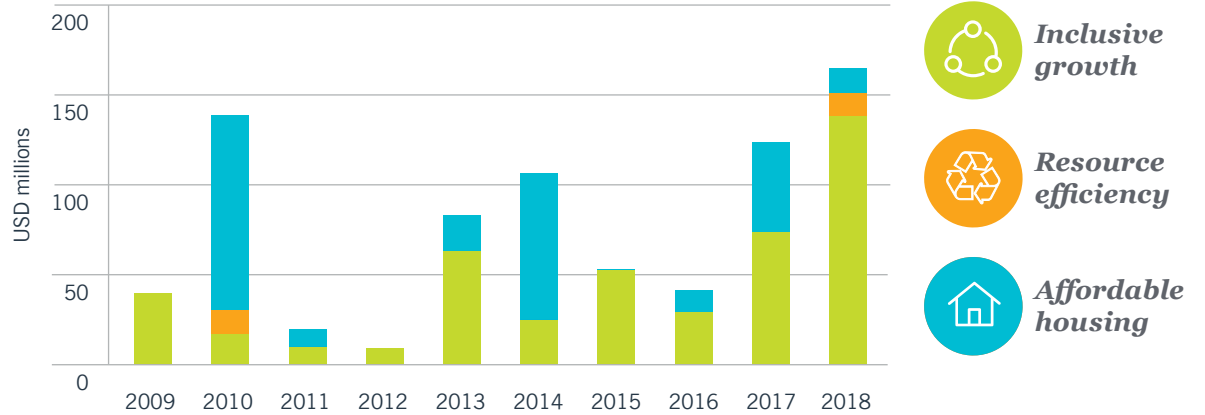
How much we've invested

Nuveen has committed over \$1 billion in fresh impact capital since inception to invest in and grow profitable and scalable businesses in high-impact sectors.

As the chart shows, we've revised our strategy several times, to reflect changes in the marketplace, our expanding capabilities, and most critically, our learnings about what works.

And we've built a robust network of impact partners along the way, including 55 portfolio companies, property managers, fund managers and co-investors, who help us to deliver impact on the ground.

CAPITAL COMMITTED EACH YEAR BY STRATEGY



How we've added value


Our contribution as an investor goes beyond the dollars we invest. We strive to be additional and catalytic in all of our deals.

For example, we often represent the first institutional capital in our deals, a big vote of confidence for our investees and a catalyst for other mainstream investors to participate.

This continues to be true despite more institutional capital entering the impact investing market in recent years.


DEALS WHERE NUVEEN REPRESENTS FIRST INSTITUTIONAL CAPITAL





We sit on 25 company boards and advisory boards across our portfolio

We have invested in 9 first-time fund managers, representing 30% of our manager relationships.



Over the last decade, we have had

46 exits in our portfolio

The lockstep nature of the businesses in which we invest — where impact growth and profits go hand-in-hand — helps to ensure that our exits are 'responsible.'

Our impact on people

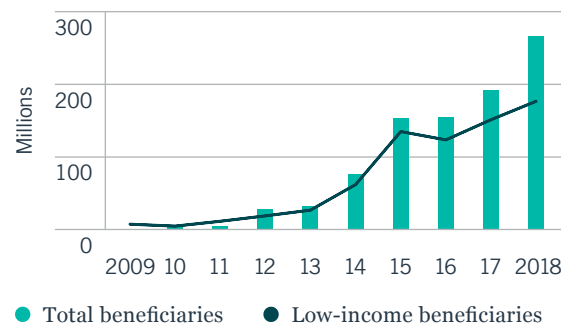
We've made a material step toward important social and environmental goals, like the UN SDGs. And despite our progress, we've only just scratched the surface. There is so much more work to do, and we're committed to demonstrating that our capital can be put to work to deliver meaningful impact for people and planet.

Our beneficiaries

Nuveen's investments have impacted the lives of millions of people around the world, by providing access to financial services, healthcare, education and housing, and by supporting livelihoods through employment opportunities.

And we've become more efficient in delivering this impact over time. In 2018, we impacted 172 beneficiaries for every \$100 invested. In 2009, when many of our investees were just starting out, that number was 2.¹⁸

LIVES IMPACTED EACH YEAR







Our impact on low-income consumers

Low-income consumers have always been at the core of our impact investment thesis. In 2018, we reached over 147 million low-income consumers, powered in large part by mobile technology, which lowers the cost of service delivery among hard-to-reach communities.

In contrast, our impact on low-income consumers through affordable housing is comparatively different in scale but no less significant.

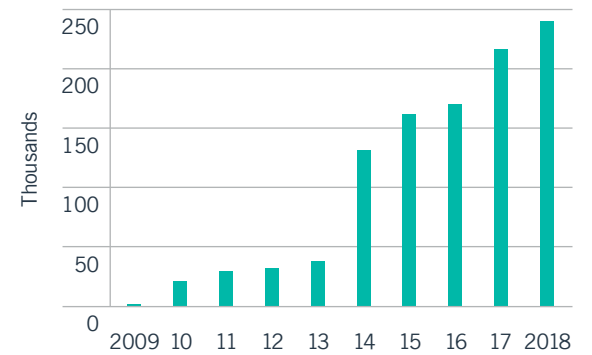
LOW-INCOME CLIENTS (2018)

 Financial services	129,307,722
 Healthcare	14,155,603
 Education	4,218,168
 Affordable housing	34,885

Supporting women and local livelihoods

Beyond providing low-income individuals with access to life-enhancing products and services, we have supported women as consumers, small business owners, loan officers and employees. In 2018, we supported jobs for 72,000+ female employees, served 900,000+ female clients and reached 116 million+ female beneficiaries.

JOBS SUPPORTED EACH YEAR




Our impact on the environment


We started measuring our environmental impact systematically in 2013, and since then we've grown our impact steadily. As we intensify our focus on resource efficiency in coming years, we expect our impact on the environment to grow significantly.

2013 vs. 2018

Metric tons of CO₂e reduced




36,000




1,886,891

Tons of waste recycled



1,995



79,660

Results: Inclusive growth

Millions of individuals and families globally lack adequate access to quality and affordable essential products and services. Nuveen seeks to bridge this demand-supply gap by supporting high-growth businesses that harness innovative and scalable solutions to improve access for underserved communities.

Nuveen’s inclusive growth strategy took shape over 10 years ago when we began investing in microfinance in emerging and frontier markets. Those early investments opened our eyes to emerging business models that aim to serve low-income populations, a segment of the market that has grown significantly over the last decade. As that demographic story continues to play out, our investment strategy has evolved to embrace other types of financial services, as well as healthcare and education offerings. What remains constant, though, is our focus on the low-income consumer and her desire to provide for herself and her family.

Financial inclusion

In emerging markets, the lack of financing for small- and medium-sized businesses is a major barrier to raising living standards. For example, **smaller enterprises account for 45% of India’s industrial output, but generally don’t qualify for traditional bank loans.**¹⁹ Many innovative finance companies are using mobile phone-based technology and other sources of data to make better underwriting decisions and deliver lower-cost financial services for e-commerce sellers, restaurant owners, manufacturers, and individuals who seek a better life.

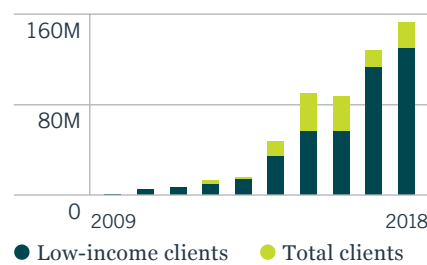
For over a decade, Nuveen has supported the growth and development of numerous microfinance and fintech

2.5m loans, \$28b+ Provided to primarily low-income borrowers in 2018

players, helping to prove the investment case for financial inclusion.

Over the years, we’ve sharpened our focus on and extended our reach among low-income and underserved borrowers. From 2009 to 2018, we grew our low-income client base by 78% CAGR, reaching over 129 million low-income borrowers in 2018.

LOW-INCOME BORROWERS SERVED EACH YEAR



Healthcare

Nuveen started investing in healthcare in 2014 to promote better access and quality of care to the underserved. Roughly half of the human population doesn’t have access to essential health services, and for nearly 100 million people health care expenses are high enough to force them into extreme poverty, according to the World Bank.²⁰

We look for disruptive business models that can deliver healthcare

25% saved Average patient savings on healthcare in 2018 representing \$55 million+ in discounts

services, medical devices and essential medicines better, faster and at lower cost to serve millions of low-income and rural customers in Asia, Africa and beyond who lack access.

From affordable hospital chains to low-cost medicines to microinsurance, **companies powered by Nuveen’s capital have enabled over 20 million patients to receive care in 2018 — 14 million of whom are low-income.**

What’s more, the number of patients and the treatments provided has grown faster than the number of health facilities or beds, which shows how efficiently these business models are reaching customers, particularly those with low incomes.

GROWTH IN KEY HEALTHCARE METRICS (2014–2018 CAGR)

- 279%** ↗ Low-income patients
- 220%** ↗ Treatments completed
- 188%** ↗ All patients
- 76%** ↗ Health facilities
- 71%** ↗ Beds

Education

According to the World Bank, hundreds of millions of children cannot read and write. Educational achievement is critical to breaking the cycle of poverty because each additional year of schooling raises an individual’s potential earnings by 10%.²¹ Since Nuveen began investing in education in 2013, our capital has made quality education more accessible and affordable to students living in underserved communities across emerging Asia and America.

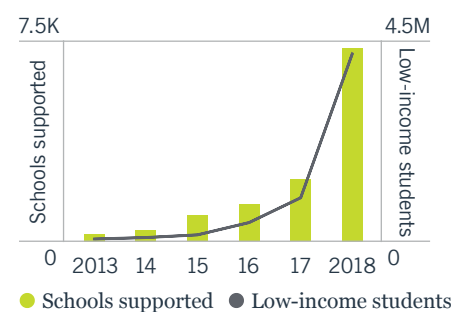
16k school seats

Placed to accommodate students in 33 charter schools in 2018

In India, for example, our capital has financed affordable private schools and innovative education delivery models aimed at students from underserved communities. **Nearly 100% of beneficiaries of these solutions are low-income students,** whose families earn \$2,000 to \$4,000 per year.

In the U.S., Nuveen has helped to accelerate the growth of best-in-class charter schools by narrowing the education funding gap between predominantly white and nonwhite districts. In 2018, we helped create over 16,000 school seats across 33 charter schools. More than 75% of students in these schools qualify for free or reduced lunch (FRL) and more than 50% are minorities.

SCHOOLS AND LOW-INCOME STUDENTS SUPPORTED EACH YEAR



From 2017 to 2018, we scaled our impact by helping our partners to reach 4,000 more schools in underserved communities in India.

Straight talk



Stephen Lee
Director, Impact Investing

Nuveen’s inclusive growth investment strategy demands that investee partners not only embrace ambitious financial and social goals, but also have the ability to convert their passion into results. For Stephen Lee, who searches for potential partners across the globe, the journey has been one of continuous learning and adaptation.

What do you look for when gauging a company’s ability to truly impact underserved people?

It comes down to three things. First, does the company really understand the people it’s aiming to serve — their needs and motivations? Second, how is the company’s product or service going

to be tailored to meet those needs? There has to be a crystal-clear connection between the population’s needs and the company’s offering or else you’re not going to create an impact. Third, of course, we look for a track record, not only in terms of revenue growth but also the ability to scale up the offering to meet the needs of increasingly larger populations. In essence, for the business models we look at, growth and impact are two sides of the same coin — when one is successful, the other will be, too.

Where does Nuveen aim to add value in this arena?

As we look at both our portfolio and the pipeline, we lean toward direct

investments in companies that have reached some level of scale and growth and have proven out a profitable model. Essentially, we try to scale businesses that have outsize potential for delivering impact even faster. We want companies that really excel — both on the business and impact side of things. One example of this is Aavishkaar Group (see page 16).

What have you learned as you’ve pursued such investments over several years?

The short answer is: I’ve learned that you have to keep on learning! You have to keep up to date with everything that’s going on. Just within our portfolio, there’s a lot of diversity of

business models and sectors, and it’s not enough to just know that a company hit its revenue targets — you have to understand what made their business model work. Then, you have to go a step further to understand why some teams can execute while others struggle.

In essence, our team’s learning has come from a combination of our evolution — seeing more and getting more experience — seeing what works and what we like out there and watching the industry evolve. You start to understand the key factors of success.


INVESTMENT CASE STUDY:

Aavishkaar Group



Fueling entrepreneurship among the world's underserved

In a world where the majority of people earn little and lack access to essential services, the Aavishkaar Group drives positive change by investing in entrepreneurs who aim to improve lives in underserved communities.

Deal dynamics	
Investment	\$31 million in private equity
Geography	India, Africa, Southeast Asia
SDG alignment	

What is the challenge?

Roughly three billion people — a majority of the world's population — earn between \$2 to \$8 per day.²² Additionally, they live their lives in communities that offer little or no access to essential products and services like savings and healthcare. In emerging markets, new business models are leveraging technology to lower the cost of providing these services to the mass market. But many of these small businesses struggle to obtain the financing and support they need to grow and scale.

How does Aavishkaar address this challenge?

The Aavishkaar Group (the "Group") supports the growth and impact of SMEs serving underserved communities in India, Africa and Southeast Asia. The Group invests in start-ups and early-stage companies operating in sectors that impact everyday lives, such as financial services, agriculture and food processing, education and waste management.

For example, Aavishkaar supports several lending businesses, such as: Arohan, East India's largest microfinance company; Tribe3, an asset-light digital lender serving the smaller end of the SME market; and Intellegrow, a lender that provides SMEs with custom

debt solutions. It also operates related advisory businesses, including Intellecip, an impact-focused consulting firm and investment advisory, which acts as the innovation engine for the Group, and a private equity fund management business, which invests in the next generation of impact enterprises across Asia and Africa.

Aavishkaar is unique in its ecosystem-based approach, which invests in businesses serving the mass market while fostering the local talent and capital needed to support these businesses. What makes this possible is the Group's holding — company structure, which enables it to promote several aspects of impact investing simultaneously (including direct ownership of lending businesses, consultancy, investment advisory and funds management).

By focusing on improving financial resilience and reducing inequalities and poverty, Aavishkaar's investments and guidance produce an exponential impact in quality of life for millions.

What role has Nuveen played?

Nuveen's relationship with Aavishkaar reached an important milestone when they invested \$31 million to acquire a 25% stake in the Group. This major investment will help the Group scale its impact investing work to even more communities around the world. As part of this investment, Nuveen CEO Vijay Advani joined the board of Aavishkaar, to help guide its growth and increase its profile globally. Nuveen itself has invested in Aavishkaar funds in the past, building a positive relationship with the organization's leaders that led to the 2018 investment commitment.

What impact has been achieved as of 2018?



93 million people provided access to essential products and services, resulting in \$307 million in savings



340k jobs and livelihoods supported



\$110 million earned by low-income households



1.4 million metric tons CO₂e emissions reduced and 43,000 tons of waste recycled

Results: Resource Efficiency

Population growth and rising consumption are accelerating the depletion of the planet’s natural resources, compelling a different, more circular approach to how we build, use and dispose of things.

Technological advances create opportunities to improve resource efficiency and reduce carbon intensity in production processes and supply chains. Nuveen’s investments in this area are varied, from using next-generation window glass, to reducing waste in the fresh produce supply chain, to investing in systems that bolster recycling efforts in India.

(~1.3 billion tons) gets lost or wasted, including up to 25% of food purchased by kitchens, caterers and hospitality companies.²³ Nuveen’s capital has helped to reduce average food waste sent to landfills — reducing greenhouse gas emissions and water use — by financing innovative solutions to minimize food waste.

Reduce, reuse, recycle, repeat
Landfills are the third-largest source of methane emissions in the world (14%).²⁴ Global waste is set to grow by 70% by 2050, including 20 to 50 million tons of

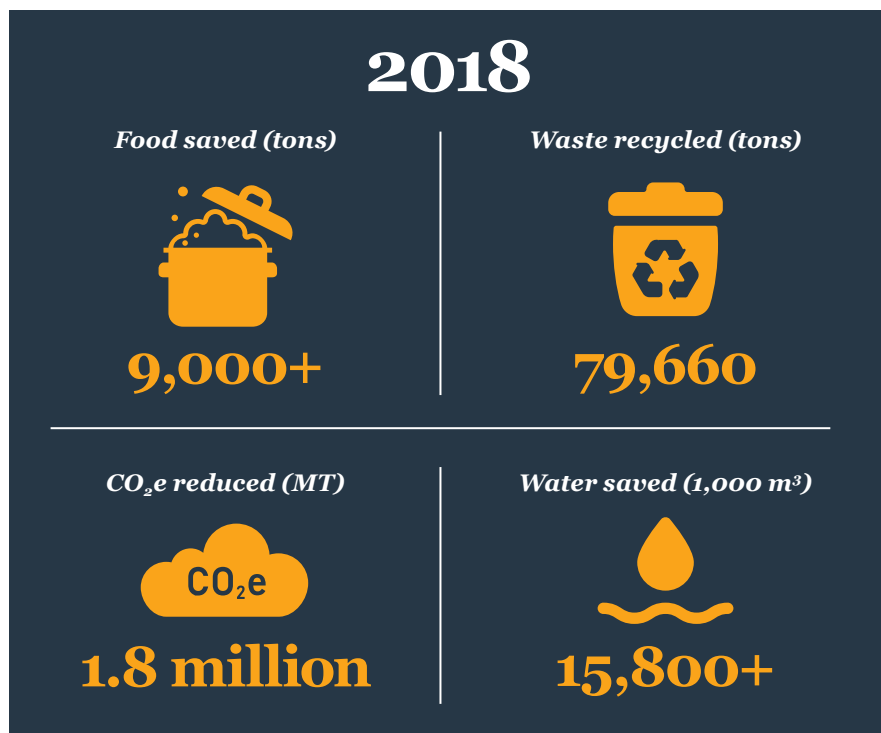


Reducing food waste
One-third of the food produced in the world annually for human consumption

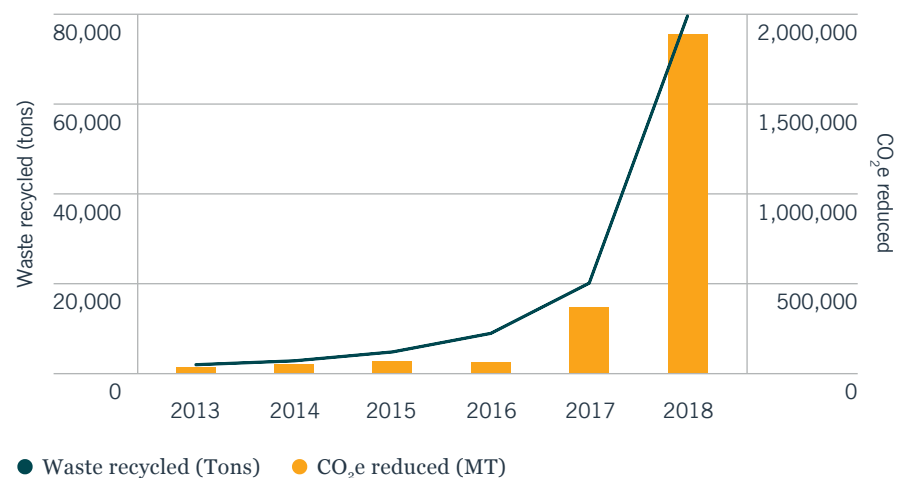
consumer electronics (e-waste) annually.²⁵ Waste reduction and management have never been more critical.

Nuveen’s capital has helped to prove out new models for sustainable consumption that avoid the manufacturing of new product units

and that cycle those products across an average of four customers instead of just one. In India, where recycling is in its infancy, our capital has supported the dry waste management supply chain and the livelihoods of more than 1,500 waste pickers, many of whom are women.



WASTE AND CO₂e REDUCED EACH YEAR



Straight talk



Chris Steinbaugh
Principal, Impact Investing

Our planet is under pressure from a rising population and growing per capita consumption of energy and materials. We must use our finite natural resources more wisely and efficiently to sustain quality of life for future generations. Chris Steinbaugh seeks out companies with innovative technologies for minimizing waste across a range of natural resource verticals, with the goal of investing in them to help accelerate and scale their efforts.

How do you decide which companies and technologies will have the most enduring impact on the environment?

In the natural resource world, measuring impact starts off as a simple math exercise but requires some imagination to see the full potential. There is usually a well-defined problem

— like a specific waste stream, or an energy-intensive industrial process — that can be improved by technology in a way that is measurably better than the status quo. The art is in making sure the business case is sustainable, so that the technology can be rolled-out widely enough to move the needle across that sector. For example, we’re invested in a company called View, which has invented a new, high-tech generation of window glass. Their windows can reduce a building’s lighting, heat and A/C energy use by 20% while also creating a healthier workplace (see page 18).

What questions do you focus on as you investigate these opportunities?

A big one is evaluating the level of development of the technology, especially for companies that are making the leap into commercial-scale operations. Is it well established, in

which case you just need to build bigger versions of it, or does it have first-of-its-kind elements that carry more risk? You also need to dig deep into potential execution risks, especially around construction, and what exactly the market is for the product, both in terms of customers and realistic pricing. And overlaying all of this we’re always asking ourselves if the management team has the right mix of people and skills to execute on its plans.

Climate change is on everyone’s minds. How do you think about that reality in your own strategy?

Directly or indirectly, climate change touches nearly everything in the resource efficiency space. First, it is causing some of the problems we’re trying to solve. To give just one example, the challenge of growing enough food to feed the world is made harder by increased weather volatility that is, in part, caused by climate

change. Second, most of the opportunities we look at reduce emissions in one way or another. Even setting aside clean energy, there are tremendous emissions benefits from repurposing waste, reducing transportation miles, making supply chains more circular, and limiting resource extraction rates.

“In the natural resource world, measuring impact starts off as a simple math exercise but requires some imagination to see the full potential....The art is in making sure the business case is sustainable, so that the technology can be rolled-out widely enough to move the needle across that sector.”

— Chris Steinbaugh



INVESTMENT CASE STUDY:

View, Inc.



Transforming building windows into a clear advantage

California-based View designs and builds an innovative new glass that changes its tint to let in the right amount of natural light, increases occupants' comfort and productivity, and significantly improves cooling and lighting efficiency.

Deal dynamics	
Investment	\$50 million in senior secured convertible note
Geography	United States
SDG alignment	 

What is the challenge?

The \$10 trillion construction industry is far behind many other industries in embracing innovations that boost efficiency and sustainability. Buildings consume 40% of the world's energy — and 70% of its electricity — a massive environmental footprint driven by inefficiencies in heating and cooling and ineffective use of space and natural light.²⁶ In fact, a recent study showed that over 75% of office windows have more than half of their area covered by blinds or shades.²⁷

How does View address this challenge?







While many companies have focused on creating more energy-efficient machines and systems inside a building, View's founders decided to revolutionize the "skin" of the building. Their invention is a smart glass with embedded technology that adjusts window tint to optimize the amount of natural light for people and offer a healthier environment, cut energy use and increase usable space.

Created in 2007, View strives to deliver a winning proposition to builders, owners and lessees of the buildings in which Smart Glass is installed. Their technology adds a mere micrometer to the thickness of glass panels that are designed to serve for 40 years.

What role has Nuveen played?

Nuveen's impact investing team believed in the philosophy and promise of Smart Glass, and in January 2017 invested \$50 million in View through a senior convertible note. Drawing on Nuveen's experience as a major \$100 billion+ investor in real estate, the team also has helped View's leaders to position themselves for success. Independently, TIAA has demonstrated its belief in this technology by planning to install View windows in its midtown Manhattan headquarters.

What impact has been achieved as of 2018?

-  **20%** reduction in HVAC and lighting energy consumption
-  **25%** savings on building energy costs
-  **63%** fewer headaches among building occupants
-  **10%** greater worker productivity
-  **10%** more people can conduct their work in the same space
-  **1000+** jobs supported

Results: Affordable housing

Housing affordability is worsening in the U.S. as rent increases exceed income growth and government subsidies fall short of demand. This has created opportunities for impact investments that preserve rent subsidies and maintain affordability through efficient management. Although 2.5 million housing units have federal tax credit subsidies, more than one million have subsidies that will expire over the next decade.²⁸

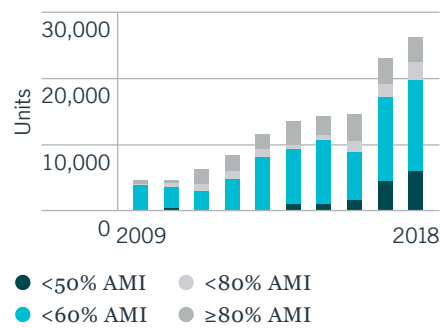
Nuveen invests in affordable housing to preserve rent subsidies that can average as much as 40% — savings that help low-income, elderly and disabled tenants spend more on food, healthcare and other essentials. Our strategy centers on regulated federal subsidy programs, such as the low-income housing tax credit (LIHTC) program and Section 8 Housing Assistance Payment contracts, as well as unregulated affordable housing. We further maintain affordable rents by reducing management fees, realizing savings in utility costs through green retrofits and reducing turnover. A critical component to improving quality of life for our tenants are the supportive services our buildings provide — like tutoring programs and financial literacy training. These services reflect a holistic approach to our impact on underserved communities.

Deep affordability

We focus on preserving housing that is affordable for those earning 30% to 60% of their area's median income (AMI). We call this *deep affordability*.

Many properties we invest in are 100% deeply affordable. Others blend deeply affordable units with other housing units priced for moderate-to-higher income tenants. This dual approach enables us to

UNITS BY AFFORDABILITY



preserve affordable units wherever they exist.

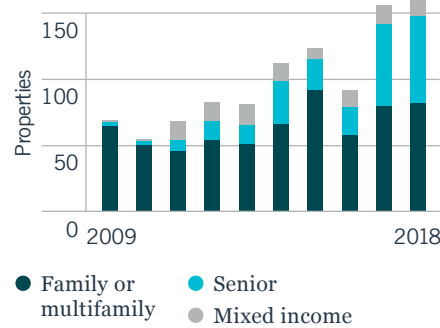
Our affordable units, on average, offer rents 25% lower than the local market rates, but tenants often pay even less thanks to rental subsidies from public housing programs like Section 8.

Underserved tenants

Over the years, our investment strategy has evolved to focus on affordable housing for families, seniors and disabled tenants. Providing housing that is affordable and close to employment nodes is an ongoing but limited part of our strategy, too.

As of 2018, more than 10,000 of our tenants (23%) are senior citizens (62+ years) and more than 33,000 are low- and very-low income (76%), earning less than 60% of AMI.

PORTFOLIO MIX BY HOUSING TYPE



Supporting healthy communities

Preserving affordability is only one part of how we support tenant well being and health. We invest in “greening” buildings to save energy and utility costs while improving the quality of the living environments. And providing a safe environment with access to social and transit services helps to ensure our tenants can focus on building livelihoods, while we focus on managing quality living spaces.



62%
of properties offered services in 2018



73%
of properties have green improvements in 2018

WHO QUALIFIES FOR AFFORDABLE HOUSING?

Qualification for affordable housing subsidies is determined through a formula that uses the Area Median Income (AMI) for a specific geographic area and the Fair Market Rent (FMR) for that area (i.e., base rent plus essential utilities). Subsidies help ensure that very low-income households don't spend more than 30% of their income on housing.

Here are the qualification thresholds for a very low-income family of three (earning 50% of AMI) in three U.S. cities where Nuveen invests:

- **New York City:**^{29,30,31} Very low-income tenants earn <\$46,950 per year and spend <\$1,291 per month on rent, compared to average market rents of \$2,785 per month.
- **Baltimore:**^{32,33,34} Very low-income tenants earn <\$42,750 per year and spend <\$1,069 per month on rent, compared to average market rents of \$1,317 per month.
- **Los Angeles:**^{35,36,37} Very low-income tenants earn <\$43,650 per year and spend <\$1,200 per month on rent, compared to average market rents of \$2,785 per month.

Straight talk



Pamela West

Senior Director, Impact Investing

Nuveen's impact investing team seeks real estate investment opportunities that can pursue both positive social and environmental outcomes and sound market returns. Pamela West leads the team's affordable housing investment strategy and personally visits every property before she invests. She starts at the roof and works her way down to the boiler room, checking for strong fundamentals, such as structural integrity, as well as features that impact a tenant's quality of life, such as the attractiveness of living spaces and the availability of social services.

Why has Nuveen chosen to make affordable housing a part of its impact investment strategy?

The short answer is immediate impact. TIAA started investing in assets where

rents are affordable because we want better outcomes for residents. Tenants should feel safe, have an opportunity to lead healthier lives and, most importantly, use discretionary income to pay for essentials, not rent. It's not just about better buildings, we can provide “real” resources to tenants. We try to understand the tenants' needs in order to bring the right services to the property, such as free transportation, hot lunches, healthy cooking classes, financial empowerment seminars — resources that might make a difference in other areas of a tenant's wellbeing. For example, by providing an after-school tutoring program, students can get support with homework in a safe environment and parents can extend their work day. We often will add these services and underwrite them as part of the deal. That's one of the ways we add value as an investor.

How do you select partners to ensure there is alignment with your mission of preservation?

We look for strong partners with an existing portfolio to see which types of affordable housing programs their properties are utilizing and any other strategies they are implementing, such as lowering energy costs, improving waste management and conserving water. Their actions tell us a lot. We know partners are committed to preserving affordability when we get positive responses to questions like, “Would you support adding a social service at the property if it were an additional expense?” Those who are aligned with our philosophy understand that having satisfied residents and low turnover in our properties is positively correlated with housing stability and overall property performance.

Where do you think your investments are delivering the greatest impact?

Far and away, we make our greatest impact in our efforts to truly implement ESG throughout our affordable housing portfolio. We are implementing green retrofits in most of our units and tracking our ability to find the right systems to reduce energy and water consumption — an audit that starts prior to our ownership. The level of social services we provide almost always exceeds services-in-place before we acquire an asset. And, the sometimes-forgotten governance is heavily scrutinized at the partnership and property levels, which lowers the risk of compliance issues in our regulated portfolio. Providing an affordable unit to a resident is one aspect of our mission, but with a long-term view in mind we strive to provide more.

INVESTMENT CASE STUDY:

Shore Hill Senior Community



Going beyond affordability to offer seniors a higher quality of life

Brooklyn’s rent prices are among the nation’s highest, but a partnership between Nuveen and an impact-focused property manager is providing attractive, affordable housing to nearly 700 low-income seniors.

Deal dynamics

Investment Up to \$15 million in real estate + \$14.5 million in fund investment

Geography Bay Ridge, Brooklyn, NY

SDG alignment



What is the challenge?

In the high-cost New York City borough of Brooklyn, the growth of the over-65 population continues to outpace the availability of affordable housing options. What’s more, future increases in the number of seniors will mean a substantial rise in low-income households in Brooklyn. The result: even seniors who can afford rent often have little money for other essentials, such as food and medical care.

How does Shore Hill address this challenge?

Built in 1977 and renovated in 2008, Shore Hill is an affordable, senior housing community located in the Bay Ridge area of Brooklyn. The complex includes 558 studio and one-bedroom rental units within two towers, which are connected by a one-story

building and two retail spaces. All of the units are covered by a Housing and Urban Development (HUD) Section 8 Housing Assistance Contract, which means that tenants pay no more than 30% of their income towards rent. As a consequence, residents pay on average \$303 towards monthly contract rents of \$1,500 (studio) and \$1,700 (1-bedroom), with the Section 8 Contract covering the remainder. This is roughly 45% below Brooklyn’s market rents.

Importantly, Shore Hill’s affordability is just one aspect of its positive impact on seniors’ lives. Overlooking the Upper Bay and Verrazano Bridge, the property has community rooms, a dining room and a full-time social services staff. Tenants can take advantage of on-site language, computer and exercise classes, crafts and activities, and daytime care services. Shuttles provide easy connections to transit hubs and shopping.


What role has Nuveen played?


In 2018, Nuveen invested \$15 million in the property as a co-investment with a fund led by Jonathan Rose Companies, a mission-backed real estate company that pursues social and environmental strategies that are accretive to its bottom line. This deal, combined with Nuveen’s existing stake through a separate limited partnership, made Nuveen a 41% owner of this high-quality, affordable housing community.


Nuveen and its co-investment partner will seek to renew the property’s affordability restrictions, which are set to expire in 2023, to ensure that all units remain deeply affordable for another 40 years. The property will also undergo a green retrofit, including lighting upgrades, air sealing and water-efficient toilets that will reduce water use by 21% and energy use by at least 11%.

What impact has been achieved as of 2018?

 **558** units of deeply affordable housing

 **45%** below-market rent costs

 **666** senior tenants, more than half of whom are women, all of whom are low-income

 **42%** of property management team are women — and over 64% are racially diverse (self-reported)






INVESTMENT CASE STUDY:

Enterprise Homes Preservation Joint Venture



Creating affordable places for people to call home

Driven by their shared conviction that homes are the foundation for personal opportunity and social resiliency, Nuveen and Enterprise Homes are partnering to build and preserve affordable housing in mid-Atlantic communities.

Deal dynamics	
Investment	\$50 million in real estate equity
Geography	Mid-Atlantic, U.S.
SDG alignment	  

What is the challenge?

Housing insecurity is pervasive in the U.S., with nearly 18 million low-income families living their lives homeless or paying at least half of their monthly income on housing.³⁸ For such families, having a safe, healthy, affordable home represents much more than just shelter: it is the foundation for access to jobs, good schools, public transit, health care and other essential elements of a successful life.

Yet, there is a shortage of 7.2 million affordable and available rental homes for extremely low-income renter households, according to an April 2019 report from the National Low Income Housing Coalition, which found that no state has a sufficient supply of such housing options.




How do Nuveen and Enterprise address this challenge?

In 2017, Nuveen formed a joint venture with Enterprise Homes, a non-profit affordable housing developer, to purchase and preserve the affordability of a 3,400+ unit housing portfolio in America's mid-Atlantic region. Built and renovated under the LIHTC program, the properties include 27 senior housing communities and eight family properties across Maryland, Pennsylvania and Virginia. The properties' 4,300+ low-income tenants earn less than 50% to 60% of their area's median income and typically pay no more than 30% of their income on rent. All properties offer social services and many have received quality and energy efficiency upgrades based on the Enterprise Green Community Standards, which promote the health and well-being of affordable housing tenants.

What role has Nuveen played?

Nuveen contributed \$50 million (a 70% stake) to fund the joint venture with Enterprise Homes, sustaining a relationship that stretches back to 1994, when TIAA invested in an Enterprise-created LIHTC fund. The new joint venture represents a rare opportunity for scale in high-quality affordable assets, including a high concentration of senior properties.

What impact has been achieved as of 2018?

-  **3,472** deeply affordable units preserved
-  **4,308** tenants housed, all of whom are underserved
-  **40** year extension of affordability restrictions



Our impact reporting methodology

This report provides an overview of the social and environmental performance of our private markets impact investing portfolio, covering a 10-year period from 2009 – 2018.

We collected over 5,000 self-reported data points at the company or property level from impact reports, investor reports and other sources provided by our investees. Raw data was converted into common indicators (aligned with IRIS where possible) and annualized by measuring the incremental value as of the calendar year-end. This enabled aggregation and analysis by year and over time. We report on the absolute impact achieved by our investees (instead of discounting for Nuveen's pro rata share of the investment), **starting from the vintage year of each investment** and ending the year of exit or 2018, whichever comes sooner.

The unique nature of this report – a 10-year look back – presents complex challenges for data collection and measurement. For example, data was not consistently available for all investments across all years. In other cases, our investees changed what indicators they collect from year to year to reflect the changing operating environment, making it difficult to chart performance accurately over time for some investments. Nevertheless, we feel that our overall impact results are significant, robust and conservative, representing about 85% of our portfolio since 2009.

***Core indicator definitions:**
Unless noted otherwise, all indicators relate to an organization's activities over a one-year reporting period.



Core indicator* Definition and IRIS alignment³⁹

	Core indicator*	Definition and IRIS alignment ³⁹
Investor contribution	Board participation	Number of investments where Nuveen participates as a company board or advisory board member (cumulative since inception)
	First institutional capital	Number of investments where Nuveen represented the first institutional capital in the transaction (cumulative since inception). We define institutional capital as capital from any of the largest money managers in the world as defined by Pensions & Investments in 2019. ⁴⁰
	First-time managers	Number of investments into first-time fund managers (cumulative since inception)
	Number of exits	Number of exits (full or partial) in the portfolio (cumulative since inception). We consider successful exits as an indicator of investor contribution because they help companies, as well as the broader industry, to attract more capital, grow and create more impact
Beneficiaries & clients	Number of beneficiaries (lives touched)	Number of unique individuals who benefitted from the investments defined by the investee. This, which may include clients, employees, or others depending on the theory of change
	Number of clients (borrowers, patients, students, tenants, users)	<ul style="list-style-type: none"> Number of unique individuals who were clients of the organization Where financial services organizations report both borrowers and depositors, we only account for borrowers (active) to avoid double counting the same customer (IRIS PI4060)
Client demographics	Disabled	Number of unique individuals with disabilities who were clients of the organization (IRIS PI6266)
	Female	Number of unique women who were clients of the organization (IRIS PI8330)
	Low-income	<ul style="list-style-type: none"> Number of unique low-income individuals who were clients of the organization. (IRIS PI7098) For clients in emerging markets, low-income is defined by our investees based on the market(s) of operation For students in the U.S., low-income is defined as students qualifying for free and reduced price school meals (IRIS PI4555) For tenants in the U.S., we define low-income as tenants earning <60% of area median income. This is based on HUD's definition of low-income as <80% AMI and very-low-income as <50% AMI
	Minority	School enrollment: Number of students who belong to minority groups and are enrolled as of the end of the reporting period (IRIS PI7774)
	Rural	Number of unique individuals residing in rural areas and were clients of the organization (IRIS PI8163)
	Senior	Number of unique individuals who are age 62 and older who were clients of the organization, in line with HUD regulations for senior age-restricted housing (IRIS PD5752)
	Underserved	Clients who are underserved in relation to the target outcome(s), which may include any of the demographics described above and will depend on the context of the investment. We use this metric as a descriptor but do not report in aggregate to avoid double counting (IRIS PD5752)
Jobs	Jobs supported <ul style="list-style-type: none"> Number of full-time equivalent employees working for enterprises financed or supported (IRIS PI4874) Also disaggregated by gender 	
Facilities	Schools	Number of schools created, financed or served
	Healthcare facilities	Number of healthcare units/facilities under management (IRIS PI1017)
	Branches	Number of bank branches under management (IRIS PD7356)
Products & services	Products/services	Amount of the product/service sold (IRIS PI1263)
	Loans	Number of loans disbursed (IRIS PI8381)
	Loan volume	Value of disbursed loans remaining on the organization's balance sheet (IRIS PI7569)
	Housing units	Number of housing units constructed or preserved (IRIS PI2491)
	Social services	Number of housing properties offering social services to tenants (e.g., tutoring)
	Transit services (housing)	Average Transit Score for the property. Transit Score is a measure of how well a location is served by public transit on a scale from 0 to 100
	Deeply affordable housing units	Housing units that are affordable for tenants earning <60% of the area median income, as defined by the U.S. Department of Housing and Urban Development (IRIS PD5833)
Affordability	Client savings	Value of client savings as a result of purchasing a discounted or subsidized product/service
	Client savings premium	Ratio of the price savings obtained by the client from purchasing a product/service from the organization compared to the average price that would be otherwise paid for a similar product/service in the local market (IRIS PI1748)
	CO ₂ e reduced	Amount of reductions in greenhouse gas (GHG) emissions (metric tons) over the lifetime of products or services sold (IRIS PI5376)
Resource efficiency	Food saved	Amount of food waste reduced (tons) (IRIS OI7920)
	Green improvements	Number of housing properties with green improvements completed (e.g., LED lightbulbs)
	Water saved	Volume of water savings (1000 m ³) over the lifetime of the organization's products/services for products/services that were sold during the reporting period (IRIS PD5786)
	Waste recycled	Amount of waste recycled (tons) through programs for substitution, recycling or recovery (IRIS OI7920)

Impact investing team

Promoting diversity from within



Rekha Unnithan
Managing Director,
Lead Impact Portfolio Manager



Justin "Biff" Ourso
Senior Managing Director,
Head of Nuveen Real Assets



Pamela West
Senior Director



Stephen Lee
Director



Chris Steinbaugh
Principal



Allison Spector
Director, Sustainability
Impact Management Lead
Real Assets & Private Markets



Sanaz Raczynski
Managing Director,
Head of Sustainability,
Real Assets & Private Markets



Stephen Pawlak
Associate



Benjamin Kalter
Associate



Michelle Zhang
Analyst



Cristina DiMeglio
Senior Administrative
Assistant



Thank you to our investees, partners, co-investors and supporters

for being a part of our team. It takes a village — a whole ecosystem — to generate a positive impact on people and our planet. We could not have done it without you.

This report was developed in consultation with Nuveen staff responsible for private markets impact investments, as well as stakeholders that provided insight and context on key issues. We thank Vijay Advani, Chris Herrmann, Nicholas Liolis, Rao Mulpuri, P. Pradeep, Vineet Rai, Jonathan Rose, Kirsten Tobey, Mills Global, Sivani Gullapalli, Hannah Schiff and Nuveen's marketing professionals — especially Wil Cruz, Kristen Brady and Elizabeth Sansone — for their assistance with creating this report.

For more information, please visit nuveen.com.

Endnotes

1 https://thegiin.org/assets/Sizing%20the%20Impact%20Investing%20Market_webfile.pdf **2** Nuveen defines impact investing according to the Global Impact Investing Network (GIIN) definition: Impact investments are investments made with the intention to generate positive, measurable social and environmental impact alongside a financial return. <https://thegiin.org/impact-investing/> **3** The figures stated below are absolute at an investee level and have not been adjusted to reflect Nuveen's pro rata ownership share. **4** Low income defined and reported by each investee, based on geography and operating context. **5** <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator> **6** Excludes patients reached through mobile health services. **7** Defined as affordable for people earning less than 60% of area median income (AMI). **8** <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator> **9** <https://globalfindex.worldbank.org/> **10** Annals of the New York Academy of Sciences, 2008. **11** Steer L, van Fleet JW, Sacks G, Burnett N, Isenman P, King E, Wils A, et al. The Learning Generation: Investing in Education for a Changing World. New York: International Commission on Financing Global Education Opportunity, 2016. **12** UNICEF. Education Cannot Wait: A Fund for Education in Emergencies. London: UNICEF, 2016. **13** Joint Center for Housing Studies (JCHS) State of the Nation's Housing 2019. Cost burdened is defined as households spending more than 30 percent of income on housing, with severely cost burdened defined as spending more than half of its income on housing. <https://www.jchs.harvard.edu/state-nations-housing-2019> **14** <https://www.epa.gov/lmop/basic-information-about-landfill-gas#methane> **15** e.g., IRIS+, Impact Management Project (IMP) and the UN SDGs. **16** Nuveen plans to issue its first annual public disclosure on its impact management practices in 2020. **17** Impact Management Project <https://impactmanagementproject.com/impact-management/what-is-impact/what/> **18** Calculation does not take attribution into account (i.e., Nuveen's pro rata share of the investment). **19** https://www.business-standard.com/content/specials/sme-landscape-in-india-growth-challenges-and-opportunities-119062100357_1.html **20** World Bank 2019: <https://www.worldbank.org/en/topic/health/overview> **21** <https://www.worldbank.org/en/topic/education/overview> **22** <https://www.worldbank.org/en/news/press-release/2018/10/17/nearly-half-the-world-lives-on-less-than-550-a-day> **23** <http://www.fao.org/save-food/resources/keyfindings/en/> **24** <https://www.epa.gov/lmop/basic-information-about-landfill-gas#methane> **25** <https://www.worldbank.org/en/news/press-release/2018/09/20/global-waste-to-grow-by-70-percent-by-2050-unless-urgent-action-is-taken-world-bank-report> **26** <https://www.eia.gov/tools/faqs/faq.php?id=86&t=1> **27** <https://www.6sqft.com/study-finds-that-most-people-who-live-in-glass-buildings-keep-the-shades-drawn/> **28** Joint Center for Housing Studies of Harvard University, The State of the Nation's Housing 2018. **29** New York, NY HUD Metro FMR Area — Includes Bergen, Hudson and Passaic counties in New Jersey and Bronx, Kings, New York, Putnam, Queens, Richmond, Rockland and Westchester counties in New York. **30** U.S. Department of Housing and Urban Development — 2018. **31** CBRE Apartment Outlook New York 2018. **32** Baltimore PMSA: Includes Baltimore City and Anne Arundel, Baltimore, Carroll, Harford, Howard and Queen Anne's counties. **33** https://dhcd.maryland.gov/HousingDevelopment/Documents/prhp/2018_MD_Income_Limits.pdf **34** CBRE Apartment Outlook Baltimore 2018. **35** Los Angeles County. **36** U.S. Department of Housing and Urban Development — 2018. **37** CBRE Apartment Outlook Los Angeles 2018. **38** <https://homeforallsmc.org/wp-content/uploads/2017/05/Impact-of-Affordable-Housing-on-Families-and-Communities.pdf> **39** IRIS is a set of standardized metrics provided by the GIIN that can be used to measure and describe the social, environmental, and financial performance of organizations and businesses receiving impact investment capital. **40** <https://www.pionline.com/specialreports/money-managers/20190527>

This information does not constitute investment research as defined under MiFID. In Europe this document is issued by the offices and branches of Nuveen Real Estate Management Limited (reg. no. 2137726) or Nuveen UK Limited (reg. no. 08921833); (incorporated and registered in England and Wales with registered office at 201 Bishopsgate, London EC2M 3BN), both of which entities are authorized and regulated by the Financial Conduct Authority to provide investment products and services. Please note that branches of Nuveen Real Estate Management Limited or Nuveen UK Limited are subject to limited regulatory supervision by the responsible financial regulator in the country of the branch.

Risks and other important considerations

This material is provided for informational or educational purposes only and does not constitute a solicitation in any jurisdiction. Moreover, it neither constitutes an offer to enter into an investment agreement with the recipient of this document nor an invitation to respond to it by making an offer to enter into an investment agreement.

This material may contain "forward-looking" information that is not purely historical in nature. Such information may include, among other things, projections, forecasts, estimates of yields or returns, and proposed or expected portfolio composition. Moreover, certain historical performance information of other investment vehicles or composite accounts managed by Nuveen has been included in this material and such performance information is presented by way of example only. No representation is made that the performance presented will be achieved by any Nuveen funds, or that every assumption made in achieving, calculating or presenting either the forward-looking information or the historical performance information herein has been considered or stated in preparing this material. Any changes to assumptions that may have been made in preparing this material could have a material impact on the investment returns that are presented herein by way of example.

This material is not intended to be relied upon as a forecast, research or investment advice, and is not a recommendation, offer or solicitation to buy or sell any securities or to adopt any investment strategy. The information and opinions contained in this material are derived from proprietary and non-proprietary sources deemed by Nuveen to be reliable, and not necessarily all-inclusive and are not guaranteed as to accuracy. There is no guarantee that any forecasts made will come to pass. Company name is only for explanatory purposes and does not constitute as investment advice and is subject to change. Any investments named within this material may not necessarily be held in any funds/accounts managed by Nuveen. Reliance upon information in this material is at the sole discretion of the reader. They do not necessarily reflect the views of any company in the Nuveen Group or any part thereof and no assurances are made as to their accuracy.

Past performance is not a guide to future performance. Investment involves risk, including loss of principal. The value of investments and the income from them can fall as well as rise and is not guaranteed. Changes in the rates of exchange between currencies may cause the value of investments to fluctuate.

Nothing set out in these materials is or shall be relied upon as a promise or representation as to the past or future.

This material is presented for informational purposes only and may change in response to changing economic and market conditions. This material is not intended to be a recommendation or investment advice, does not constitute a solicitation to buy or sell securities and is not provided in a fiduciary capacity. The information provided does not take into account the specific objectives or circumstances of any particular investor, or suggest any specific course of action. Financial professionals should independently evaluate the risks associated with products or services and exercise independent judgment with respect to their clients. Certain products and services may not be available to all entities or persons. Past performance is not indicative of future results.

Selection for securities based on **environmental, social, and governance (ESG)** criteria, an investor may forgo some market opportunities available to portfolios that don't use these criteria.

Nuveen provides investment advisory solutions through its investment specialists.

©2019 Nuveen, LLC. All rights reserved.

nuveen

A TIAA Company