nuveen
A TIAA Company

Private Equity Impact Report 2023 – 2024

Driving outcomes for an inclusive transition to a low carbon economy

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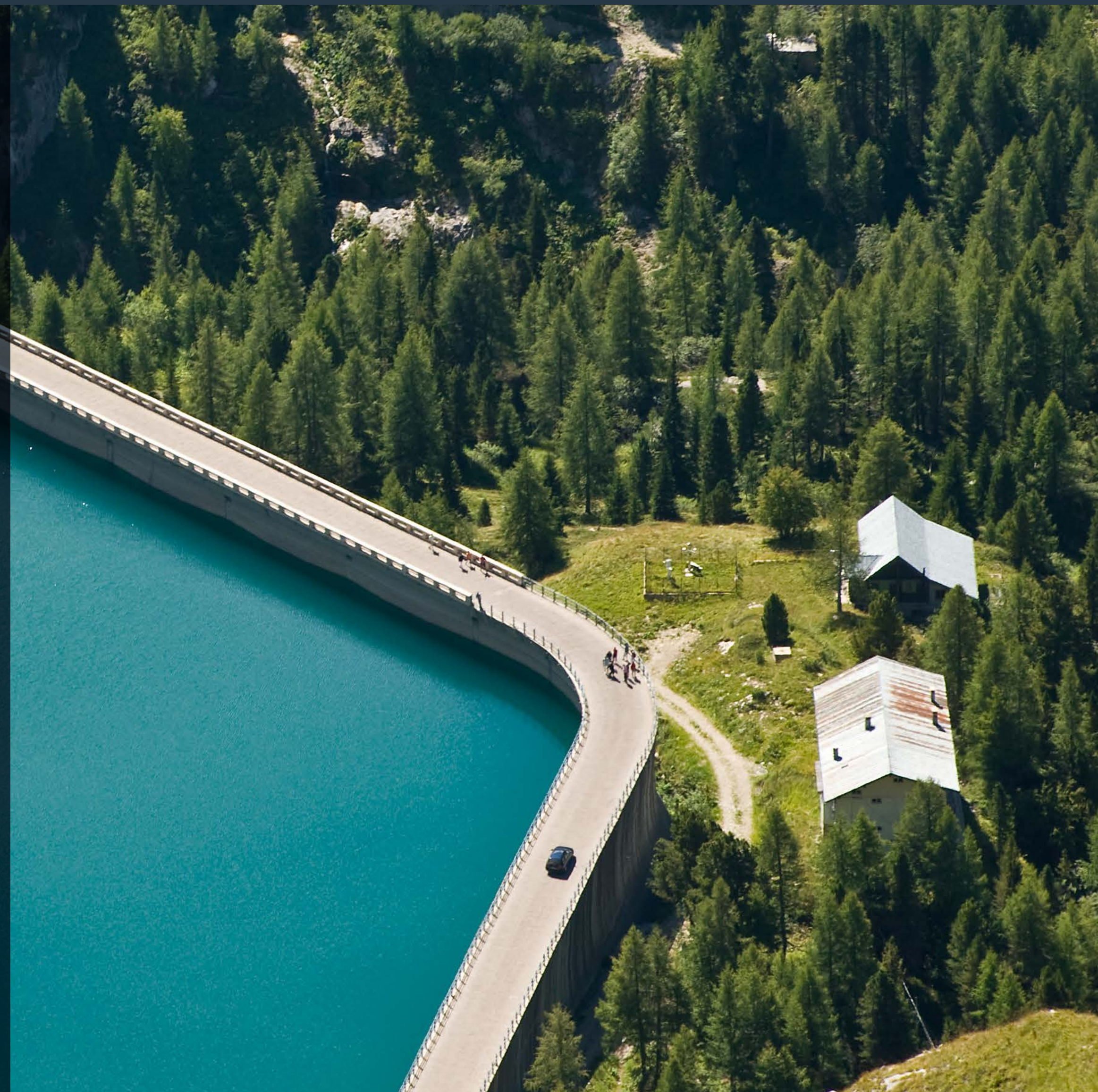

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About us

A message from Nuveen Private Equity Impact ▸

Measuring impact ▸

Aggregate impact outcomes ▸

A message from the global head of private equity impact investing

The political and regulatory landscape surrounding sustainability, impact, and ESG more broadly has never been more pronounced than it is today.

In what will go down in history as the 'year of elections', 2024 presented a number of challenges for companies and investors to navigate. As long-term investors, we seek to cut through the noise and focus on the long-term fundamentals and unprecedented amounts of capital already in motion to finance the transition to a more sustainable world.

We are encouraged by durable investment tailwinds — including the steadily decreasing cost of renewables, business imperatives driving energy and waste reduction, and increasingly global deployment of climate technology solutions.

While the somber mood and heightened scrutiny may steer others off course, Nuveen's private equity impact team is firmly committed to its decade-long journey and mission to generate positive real-world outcomes, in tandem with robust risk-adjusted performance.

We remain focused on the intersection of people and the planet, investing in growth-stage companies driving an inclusive transition to a low-carbon economy. We are also steadfast in the belief that two of the biggest challenges we face today, climate change and inequality, are inextricably linked, and moreover, can be combated and addressed directly by commercial businesses.

Alongside continued market volatility and structural shifts in public market financing, the role that private markets have to play in driving the transition forward is more critical than ever before. Higher interest rates are also pushing capital-strapped companies to seek more private equity financing to foster future growth. This was clearly reflected in our deal pipeline in 2024, which saw a record number of opportunities coming to market with innovative technologies and business models.

Since our last report, we have launched our second third-party fund, investing in businesses across themes such as electronic waste diversion, building efficiency, and industrial recycling. In addition, we engaged our portfolio companies to create unique linkages with Nuveen's broader platform to enhance revenue opportunities, as well as make tangible asset-level progress on emissions measurement and management.

I am also pleased to share that in 2024, we received an 'Advanced' rating across all eight Impact Principles from BlueMark, a leading provider of impact verification.[1] This new rating again secures our place on the BlueMark Practice Leaderboard globally.

Read further for a summary of continuous enhancements to our ESG and impact management systems, portfolio-wide ESG and impact performance, as well as a deeper dive into our newest portfolio companies.

Rekha Unnithan, CFA
Managing Director,
Head of Private Equity Impact Investing

How we track, manage, and measure social and environmental performance

1 Cross-portfolio ESG and climate risk information

At a baseline, we collect social and environmental performance data related to the operational performance of our businesses — ESG data. We leverage industry-standard frameworks like the SASB/ISSB Standards,[3] plus our own proprietary metrics, to assess our companies' performance on key, financially material ESG factors. This analysis is integrated into both pre-investment and post-investment decisions.

2 Company-specific impact performance data

Here, we are focused on the performance of each company's product or service in delivering outcomes.

SUSTAINABLE DEVELOPMENT GOAL (SDG) TARGET[2]

We start by selecting a primary SDG target — in addition to any other SDGs to which the company is aligned or contributing.

COUNTRY-LEVEL PROBLEM STATEMENT

Then we identify the scale of that problem — at a country, regional, or global level depending on the reach of the company's products and services.

COMPANY-LEVEL KEY PERFORMANCE INDICATORS

Finally, we identify key performance indicators (KPIs) that help us track our progress toward that problem.

Aggregate impact outcomes: Calendar year 2023

938K+
tons of CO_2 avoided

as a result of products and services provided across a variety of industries, including community solar, energy efficiency, and agricultural technology.

938k tons of CO_2 is equivalent to 1 million pounds of coal burned.[4]

49 million+
pounds of waste diverted

from landfills and put to productive use in reuse or recycling end markets.

49 million pounds is equivalent to the weight of 613 fully-loaded 18-wheeler tractor trailer trucks.

6.8 million+
individuals

provided with access to basic financial services, the vast majority of whom are underserved or low-income, and more than half of whom are women.

6.8 million people is roughly the population of Paraguay.[5]

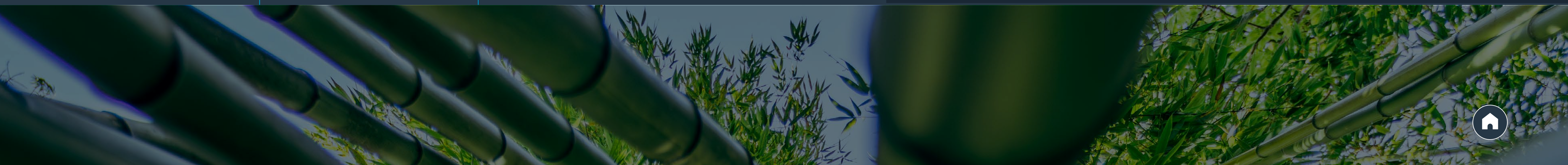
2

ESG Performance

ESG risk ratings ▸

Climate risk ratings ▸

Carbon emissions ▸



Portfolio-level data: ESG risk ratings

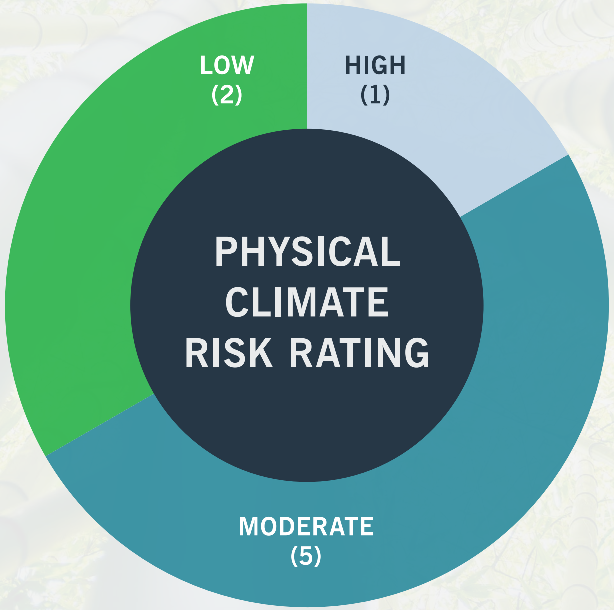
Illustrative risk assessment for potential investment

In 2023/4, we refined our approach to ESG risk ratings — leveraging an updated view of material ESG factors with more focus on the relative materiality of those factors to different business models. Informed by the Sustainability Accounting Standards Board (SASB),[6] it provides a view of:

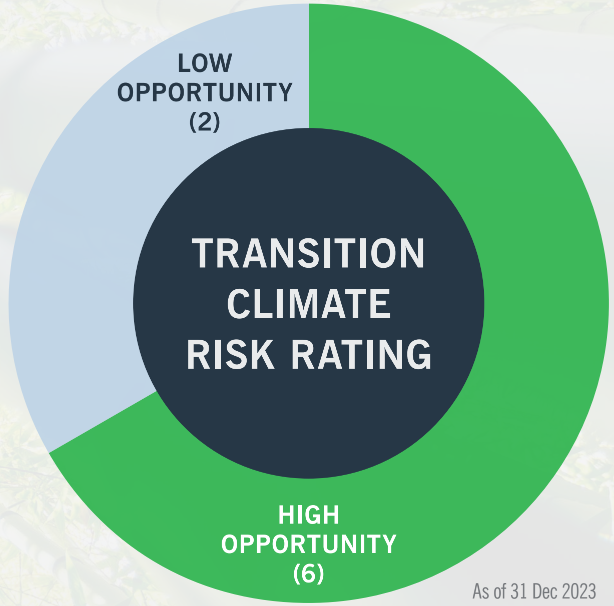
We use these ratings to guide our diligence prior to investment and engagements with our portfolio companies after we invest. Our ratings methodology scores companies quantitatively, enabling cross-portfolio comparison and prioritization.

Portfolio-level data: Climate risk ratings

Nuveen's climate risk assessments seek to understand how exposed a company is to transition and physical risks and opportunities. For these ratings, we rely on the definition of physical and transition risks provided by the Intergovernmental Panel on Climate Change.[7] To learn how we address these risks, see *"Climate engagement framework" on page 20.*



Our rating system buckets companies into risk exposure ratings, "High," "Moderate," "Low," or "Not Relevant," based on our assessment of the company's vulnerability to the physical impacts of climate change.



As of 31 Dec 2023

Our framework identifies companies with high or low transition risk, as well as companies with high or low transition opportunities: indicating their preparedness to participate and support the transition. Because of our interest in climate-mitigating companies, we primarily see companies exposed to transition opportunities rather than risks.

'Physical risks' are those 'related to risks arising from climate change impacts and climate-related hazards, while 'transition risks' typically refer to risks associated with transition to a low-carbon economy.

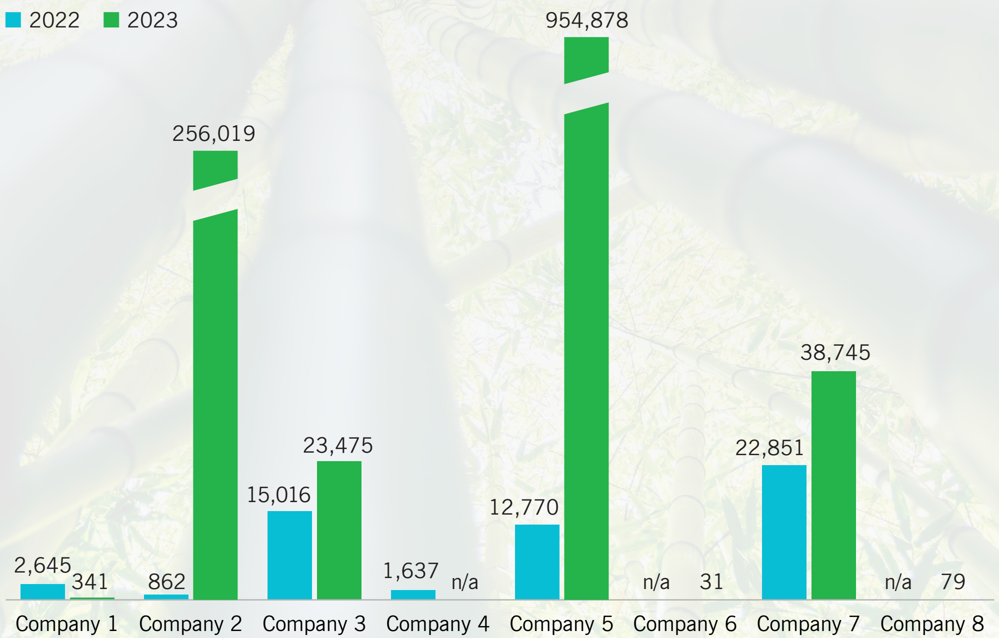
Portfolio-level data: Carbon emissions

In 2023/4, in an effort to achieve more precise bottoms-up emissions footprints of our portfolio companies, Nuveen worked with a third-party vendor to collect primary source data and select bespoke emissions factors for each business's operations. While this was a more intense process than our baseline footprinting exercise in 2022, the results have better equipped us with the precision to identify hotspots in our portfolio and engage with investees on emissions reduction opportunities.

Most of our portfolio companies saw a year-over-year increase in emissions intensity, driven in large part by underestimation during the prior year. This underestimation was driven by the relative lack of input data, especially for Scope 3 emissions, highlighting the ongoing challenges of carbon measurement in an unlisted asset class.

However, now armed with more granular data, we can support our companies in exploring "quick wins" like freight logistics optimization, electric vehicle leasing, rooftop solar installation, and power purchase agreements, among others.

Total greenhouse gas emissions



Source: Nuveen as of 31 Dec 2023.

The data and claims included in the report have not been verified by an independent third party.

Company #2 and #5 underwent their first-ever GHG inventory of Scope 3.15 — emissions from investments — in 2023, leading to a notable spike in their emissions from the prior year in the absence of material operational changes. ***For both businesses, 99% of their total emissions came from this one category.***

While most privately-owned financing institutions use high-level tools like the PCAF Standard (Partnership for Carbon Accounting Financials) to estimate financed emissions, we went deeper by matching industry-specific regional emissions factors to underlying borrower activities. ***Nuveen believes improving data quality for Scope 3 emissions is a crucial first step that opens up future opportunities for portfolio decarbonization.***

3

Portfolio case studies

The Nuveen private equity impact team is committed to investing in innovative, growth businesses which are seeking to address the biggest issues society faces today. Below is a selection of new investments during 2023 – 2024.

Onepak ▶

Perch Energy ▶

Power TakeOff ▶

Onepak

2024 investment

ALIGNMENT WITH SDGS:

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

13 CLIMATE ACTION

Onepak is a ***reverse logistics platform that facilitates the circularity of electronic devices.*** Onepak supports companies and individuals with understanding how and where to return devices to reduce electronic waste, ultimately reducing toxic leaching and greenhouse gas emissions.

Onepak

Impact considerations

Global e-waste is expected to more than double by 2050, from 50 million tons to 110 million tons.[8] Less than 20% of this is recycled properly;[9] the remainder is landfilled, creating groundwater contamination risks, and represents a missed opportunity to recover valuable metals that must otherwise be mined. Onepak's technology-enabled services are purpose-built to address this challenge.

Why Onepak is attractive:

1. Serves a wide variety of ecosystem players

Onepak's model is highly flexible and can serve a range of customers (small businesses, large corporates, and individual consumers) and use cases, all of which support the goal of extending asset usefulness, increasing recycling rates, improving transparency, and decreasing waste and emissions. As Onepak uses the proceeds of Nuveen's investment to invest in further platform expansion, its network of partners and customers will only grow.

2. Provides a high degree of transparency and traceability

The company can provide valuable data to customers, allowing the tracking of end-of-life equipment – which can expose customers to data breach risks if not appropriately handled – as well as the avoided waste and emissions generated by sustainably disposing the asset. Existing reverse logistics providers tend to lack modern front-end interfaces.

Metrics preview

Our investment in Onepak closed in 2024, but we collected baseline impact data for calendar year 2023 to help us assess performance over time.

KPI 1: E-waste diversion from landfills			
Metric 1.a	—	Amount of commercial IT waste avoided	5,222,302 lbs
Metric 1.b	—	Amount of copier waste avoided	1,236,117 lbs
Metric 1.c	—	Amount of consumer e-waste avoided	13,808,718 lbs
Metric 1.d	—	Amount of parcel IT waste avoided	251,149 lbs
Metric 1.e	IRIS+ OI7920	Total waste reduction	20,518,285 lbs
KPI 2: Avoided emissions via e-waste diversion			
Metric 2.a	IRIS+ PI2764	Greenhouse gas emissions avoided	Reporting in development
KPI 3: Logistics optimization			
Metric 3.a	—	Average distance traveled for commercial IT devices	864 mi
Metric 3.b	—	Average distance traveled for copier devices	258 mi
Metric 3.c	—	Average distance traveled for consumer devices	365 mi
Metric 3.d	—	Average distance traveled for parcel IT devices	821 mi
KPI 4: Device donations			
Metric 4.a	—	Total value or weight of assets donated to providers of technology to low income/ underserved groups	Reporting in development

Power TakeOff

2023 investment

ALIGNMENT WITH SDGS:

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

13 CLIMATE ACTION

Fueling access to energy efficiency

Power TakeOff (PTO) provides energy efficiency services to utilities by using a ***proprietary AI/ML software engine*** leveraging smart meter data to drive energy savings for small and mid-size businesses and institutions in North America.

Power TakeOff

Impact considerations

Buildings account for more than 40% of global GHG emissions and energy efficiency is an essential component of the transition to a low-carbon economy.[10]

Why Power TakeOff is attractive:

Energy efficiency is widely considered the 'low hanging fruit' of the path to net zero, as behavioral adjustments and building retrofits are less costly to implement than new solar panels or electric vehicle infrastructure.

At the same time, SMBs, public institutions (e.g., schools), and communities of color have been underserved by traditional energy efficiency programs that require the underlying customers to make capex-heavy investments.

PTO enables those institutions to achieve savings on their energy bills and reduce their emissions footprints via a service effectively paid for by their utilities. Power TakeOff has delivered average energy savings of 15-17% compared to historical power usage. This verified reduction in energy consumption directly translates into lower greenhouse gas emissions for the end customer.

This also allows utilities to delay or avoid the need for new generation and transmission infrastructure while fostering a more resilient and flexible grid.

Savings are concretely tied to the Company's top line, resulting in verified and defensible impact metrics. On the education front alone, PTO has worked with 158 schools to help them conserve 12,253,605 kWh of energy which amounts to an estimated $1.1 million in savings over the past three years.

What is Nuveen's contribution?

As an investor and board member of the Company, we drive a continued focus on ESG and impact, including supporting the development of an enterprise ESG policy and the operationalization of reporting infrastructure around workforce diversity and operational carbon footprint.

In addition, Nuveen's private equity impact team has begun working with Nuveen's real estate team to identify significant energy efficiency savings opportunities.

As a commercial real estate investor with concrete net zero goals, Nuveen has introduced PTO to its national footprint of properties that can benefit from PTO's ability to identify possible energy waste and recommend low- to no-cost solutions.

PTO can also benefit from this opportunity to explore collaboration with real estate investors as an additional go-to-market channel, learning from this experience with Nuveen to optimize its service model for large real estate portfolios.

2023 impact performance

KPI 1: Verified energy savings for utilities and their underlying SMB customers			
Metric 1.a	IRIS+ OI6697	Energy conserved via demand-side management programs	57,396,796 kWh
Metric 1.b	IRIS+ PI2764	Emissions reduced or avoided via demand-side management programs	40,097 tonnes
KPI 2: Increasing access to demand-side management programs			
Metric 2.a	—	Verified energy savings by ZIP code (kWh)	Proprietary utility data
Metric 2.b	—	Total number of customers who are qualified as low- to moderate-income	Reporting in development
KPI 3: Client satisfaction			
Metric 3.a	IRIS+ PI7163	Customer satisfaction ratio (underlying SMBs)	Reporting in development
Metric 3.b	IRIS+ PI1748	Customer savings premium (underlying SMBs)	$5,460,000

All KPIs are first reporting period

Perch Energy

2023 investment

ALIGNMENT WITH SDGS:

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

13 CLIMATE ACTION

Perch Energy is a community solar servicing platform that acquires and manages subscribers on behalf of developers, ***increasing access to affordable renewable energy for residential and commercial*** customers. Perch helps low-and moderate-income customers reduce utility bills by 10% to 20%.

perch ENERGY

Impact considerations

The building sector accounts for an estimated 40% of global greenhouse gas (GHG) emissions. Rapid reduction in the carbon intensity of buildings will require both reducing their energy consumption and shifting the mix of energy sources that power them towards renewables (and away from fossil fuels).[11]

Our portfolio has exposure to both solutions: PowerTakeOff addresses the former while Perch Energy tackles the latter.

Why Perch is attractive:

Many project developers are not equipped to acquire or service electricity customers themselves; Perch was founded to address key needs for subscriber customers and developer clients. The company enables the avoidance of emissions via community solar replacing grid-based electricity (which is, by varying degrees, less renewable and more carbon-intensive than solar) for their subscribers. In 2023 alone, Perch's service:

- Avoided 318,915 tonnes of GHG emissions via community solar projects
- Saved underlying customers $10.5 million in energy bills
- Increased access to affordable renewable energy for 1,586 low-to-moderate income customers

What is Nuveen's contribution?

As an investor with two board seats, we offer further ways to drive impact. Post-closing, we spearheaded a partnership between Perch and Nuveen's real estate team to provide its market-leading affordable housing platform access to community solar. As a result, Perch was able to offer 10 – 20% utility bill savings to hundreds of low-income tenants in 3 properties in Massachusetts and 7 buildings in New York.

2023 impact performance

KPI 1: Greenhouse gas emissions reduction		
Metric 1.a	Emissions reduced or avoided via community solar projects	318,915 tonnes
KPI 2: Access to affordable renewable energy		
Metric 2.a	Total energy bill savings for underlying customers	$10,489,935
Metric 2.b	Number of customers who are qualified as low- to moderate-income	1,586
KPI 3: Client satisfaction		
Metric 3.a	Employee net promoter score	12

All KPIs are first reporting period

4

Impact management

- Approach to impact management ▸
- Climate engagement framework ▸
- Inequality engagement framework ▸
- Practice leader designation ▸
- Nonprofit partnership in impact ▸

Our approach to impact management

Each year, *we update our process to continue* pushing the boundaries of best practice, keeping in mind several key questions that we seek to consistently answer.

KEY QUESTIONS

1 What social and environmental problems are we investing to solve?

2 How is our investment process structured to ensure our companies address those problems?

3 How can we demonstrate outcomes and progress?

4 How can we drive industry best practice and constantly improve?

Impact objectives and governing framework

A fund-level framework governs (1) the types of impacts we seek to achieve as part of driving an inclusive transition to a low-carbon economy, (2) the minimum ESG and impact performance thresholds, and (3) the practices we engage in to ensure that these are met.

Deal screening and approval

During sourcing and diligence, all companies are evaluated for their fit with the impact thesis, achievement of minimum ESG thresholds (including SFDR), and ex-ante assessments of expected impact.

Portfolio engagement

Post-investment, we engage companies, accelerating their focus on an inclusive transition – through improved environmental and social performance management, updated practices, or new product lines.

Impact at exit

Our focus on impact after exit begins before we invest, but we also work to ensure that social and environmental performance management is embedded into the company's processes prior to exit.

Measurement and reporting

Impact data is collected annually (more frequently where possible and appropriate), assessed relative to the targets set internally, and reported to LPs as part of standard quarterly LP reporting. Performance is compared to peers via industry benchmarks, (e.g., GIIN Impact Performance studies and benchmarks).

External collaboration

Engagement with third-party consultants, verifiers, and other vendors encourages continuous improvement of our impact management systems. For example, as an early client of an ESG software provider, we were well positioned to meet the rigorous data requirements of Article 9 for our funds.

COMPONENTS OF OUR APPROACH

We engage with our companies to drive an inclusive transition to a low-carbon economy

Our *climate engagement framework* is the qualitative tool used to help our portfolio companies better manage climate change risks and opportunities, and to drive an equitable transition to a low-carbon economy.

BASELINE ← → **ADVANCED**

Carbon footprinting

We require all portfolio companies to assess and report their carbon footprints.

Climate risk assessment

We complete climate risk assessments for all investments, identifying any necessary mitigants during diligence.

Physical impacts of climate change

Integration of physical climate risks into company operations

For example, supporting Fund I financial inclusion companies to access physical climate risk information about their borrowers.

Developing strategies for resilience and adaptation

For example, helping Annapurna share information with their clients about the physical climate risks they face, including around extreme weather events.

Transition impacts of climate change

Integration of transition risks into company operations

For example, supporting Advanced Battery Concepts to create a system for measuring material efficiency and wastewater treatment, in advance of climate disclosure regulations.

Developing carbon mitigation strategies and net-zero targets

For example, supporting Annapurna's development of a dedicated rooftop solar financing product for their MSME clients.

We support every company in addressing inequality

Our ***inequality engagement framework*** is the qualitative tool used to help portfolio companies build better solutions and manage risks from systemic inequality.

BASELINE ← → **ADVANCED**

Employee-level inequality

Consumer-level inequality

Workforce wage equity analysis

For all investments, we perform wage equity audits (in alignment with the EU Sustainable Finance Disclosure Regulation) as part of confirmatory diligence, and continue to collect that data annually during the holding period.

Income and impact studies

For example, Annapurna's participation in the microfinance index allowed us to understand the long term income and well-being impact on clients of their loan products.

Assessment of quality jobs provided by the company

For example, with America's Thrift Stores, we assess the quality of jobs offered, and require regular reporting on the percentage of employees paid a living wage. We use this analysis to support ATS to improve the quality of the jobs provided and drive down employee turnover.

Structure employee incentives to allow for profit sharing

In certain instances, it may be possible to engage with portfolio companies to encourage profit-sharing with a broad subset of the employee base.

We are a founding signatory of the Operating Principles for Impact Management,[12] with verified top-decile practices

Every two years, we engage BlueMark, an independent provider of impact verification services. In 2024, we received top scores for all eight operating principles, ***earning us the designation of practice leaders in the top echelon of verified impact managers.***

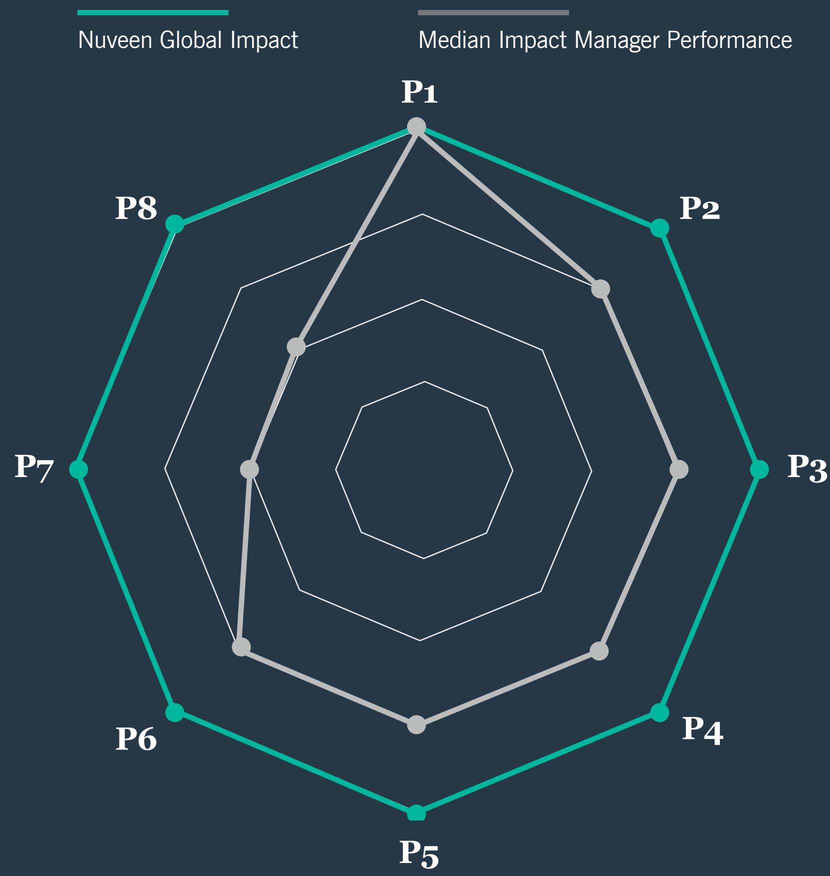
NUVEEN'S 2024 PERFORMANCE RATING

Advanced ●●●● High ●●● Moderate ●● Low ●

Operating principle	Nuveen's score	
Set and manage a strategic impact intent in line with investment objectives.	P1	●●●●
	P2	●●●●
Assess the expected impacts of each investment, monitor those impacts, and contribute to growing those impacts over time.	P3	●●●●
	P4	●●●●
	P5	●●●●
Monitor the performance of each investment, adjust appropriately.	P6	●●●●
Ensure impact post-exit; review, document, and improve impact processes.	P7	●●●●
	P8	●●●●

Source: Nuveen as of 28 Aug 2024

NUVEEN'S PERFORMANCE COMPARED TO BLUEMARK DATASET



We actively implement industry standards and advocate for their adoption

Impact management is an evolving discipline, and as investors, we leverage industry best practices. We ***actively engage*** with market builders, and generate annual impact investing reports detailing our ***process and performance.***

COMMITMENTS, NORMS, DISCLOSURE FRAMEWORKS

Principles for Responsible Investment

We are a signatory to the UNPRI, and integrate standard ESG templates and questionnaires throughout the investment process.

Operating Principles for Impact Management

Nuveen is a founding signatory and advisory board member, and has completed three verifications of our alignment.

Impact Management Project

Nuveen uses IMP in diligence and assessment; supported development as pilot testers of the framework in 2017.

TaskForce on Climate-Related Financial Disclosure

Supporter via TIAA since 2017, released our first stand-alone climate risk disclosure statement in 2021.

METRIC STANDARDS

IRIS+ Metrics Catalog and Standard

Nuveen adheres to IRIS+ metric sets, reports data to impact performance studies, and contributes to IRIS+ initiatives.

International Sustainability Standards Board (ISSB) / SASB

Nuveen licenses the SASB standards, part of the ISSB, to assess material ESG factors in our investments during diligence.

INTERNATIONAL GOALS

UN Sustainable Development Goals

Nuveen aligns our approach to the SDGs at the investment level.

INDUSTRY LEADERSHIP GROUPS

Global Impact Investing Network

Nuveen is a founding member of the Investors' Council, an industry-leading, invitation-only group of impact investors.

Impact Capital Managers

Nuveen is a member of Impact Capital Managers, a network of U.S.-based, market-rate private fund managers

ACADEMIC INSTITUTIONS

Yale School of the Environment

We partner with YSE's capstone program to research decarbonization policies relevant to our portfolio.

Stanford Graduate School of Business

Nuveen regularly contributes case studies for GSB's impact investing curriculum.

Endnotes

1 Nuveen PE-BlueMark_OPIM Alignment Detail Presentation_08.28.24.pdf
2 Based on the market value of impact holdings by their primary SDG alignment. Each holding has one "primary" SDG. https://sdgs.un.org/goals
3 SASB/ISSB Standards https://sasb.ifrs.org/sasb-your-pathway-to-issb/
4 https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator#results
5 https://www.worldometers.info/world-population/population-by-country/
6 The SASB Standards identify the sustainability-related risks and opportunities most relevant to investor decision-making in 77 industries. SASB was developed using a rigorous and transparent standard-setting process that included evidence-based research and broad participation from companies, investors, and subject matter experts. https://sasb.ifrs.org/ https://sasb.ifrs.org/standards/download/results/
7 https://www.ipcc.ch/
8 https://ewastemonitor.info/e-waste-will-double-by-2050
9 https://www.unep.org/news-and-stories/press-release/un-report-time-seize-opportunity-tackle-challenge-e-waste
10 https://www.iea.org/commentaries/how-energy-efficiency-will-power-net-zero-climate-goals
11 https://www.iea.org/energy-system/buildings
12 https://www.impactprinciples.org/

For more information, please visit us at nuveen.com

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