

nuveen

A TIAA Company

Global fixed income impact report 2021

Intentional, direct and
measurable outcomes



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Amy O'Brien

Global Head of Responsible Investing (RI)

A message from Amy O'Brien

Nuveen's 2021 global fixed income impact report builds on our record of leadership and innovation in measuring, documenting and communicating the real-world outcomes of our global fixed income impact investing strategies.

A shared purpose to address the world's large-scale, systemic challenges

This report also represents the deep, ongoing partnership between Nuveen's responsible investing (RI) and global fixed income (GFI) teams — one that began nearly 15 years ago, when Stephen Liberatore and I initially created the fixed income team's impact framework. At the time, impact investing was widely considered viable or credible only in the private markets. Yet from the beginning, we have maintained our conviction that impact investing in public fixed income markets is not only possible but vital to addressing many of the large-scale, systemic challenges the world faces today. It will take significant capital to transition to a cleaner energy future, increase the resilience of vulnerable communities and bring clean drinking water to the more than two billion people globally who lack it today. And as our impact investment strategies grow, Nuveen's RI and GFI teams will continue working together to implement leading practices when selecting investments, measuring their direct outcomes and transparently reporting this data across our fixed income impact portfolios.

The importance of voluntary industry frameworks

As with much of the world today, impact investing is at an inflection point. Until recently, the growth of this market — fueled by client interest, current events and investment opportunity — has outpaced the widespread adoption of industry standards and clear regulation. This is one of the reasons Nuveen continues to play an active role within industry working groups focused on

credible, quantitative measurement and increased transparency between investors and clients. As the regulatory environment that governs sustainable investments, ESG and impact-labeled products continues to evolve, we believe voluntary frameworks, like the IFC's Operating Principles for Impact Management, provide a strong foundation for asset owners and asset managers deploying capital through impact strategies.

Our results

In the following pages, you will discover more about Nuveen's fixed income impact framework and case studies across our four direct and measurable impact themes: affordable housing, community and economic development, renewable energy and climate change, and natural resources. You will also learn how we are supporting a clean energy transition, and gain insight into the challenges that remain when measuring carbon emissions in the fixed income market.

We close the report with a snapshot of our participation in nine COVID-19 bonds that came to market in 2020, which are a testament to our ability to mobilize capital toward hospitals, community organizations and global institutions that serve people around the world. These investments were a critical part of the immediate response to the crisis and will continue to support the recovery and rebuilding in the years ahead.

The growth and success of Nuveen's global fixed income impact strategy reflects both our rigorous, data-driven approach and the confidence our clients continue to show in entrusting their assets to our management. I am delighted to share the results of this work with you.



Stephen M. Liberatore, CFA
Head of ESG/Impact — Global Fixed Income

A message from Stephen M. Liberatore, CFA

The investment industry has come a long way from the days when mission-driven asset owners viewed “impact” as a place to concede returns in pursuit of ambitious, benevolent goals. Today, our track record demonstrates that investors can direct capital to specific, measurable social and environmental outcomes without sacrificing performance. Looking back on my 15 years as an impact investor in public fixed income markets, I’m grateful for the many opportunities I’ve had to be a part of this industry’s remarkable evolution.

Transparent, evidence-based reporting is essential

We believe that there’s more to impact investing than allocating capital; it also requires transparent, evidence-based reporting. Such reporting is essential to holding issuers accountable and can provide insights into future free cash flow generation and further investment in successful outcomes. Clients have pushed us to expand and enhance our reports each year, with increasingly granular impact data, geographical precision and SDG alignment. This year, we’ve combined hard data with case studies and anecdotal insights.

Today, our team manages over \$7.8 billion (as of 31 Dec 2021) of securities selected using our proprietary global fixed income impact framework. That compares with less than \$1 billion at the end of 31 Dec 2012, the first calendar year-end after we launched our flagship TIAA-CREF Core Impact Bond Fund, and with \$2.9 billion at year-end 2016, when we compiled data for our inaugural impact report.

How we direct capital

From the outset, we have tied use-of-proceeds in offering documents’ language to how we direct capital — intentionally, proactively and aligned with our thematic outcomes — and measured those outcomes by requiring transparent disclosure. We don’t rely on labels or index eligibility rules to identify or select impact investments. Rather, our expertise and experience in the impact market, combined with our deep and talented research team of more than 50 analysts and trading team of 17, allows us to focus on deals and projects that others don’t consider.

Two notable examples in which our involvement and pre-issuance guidance facilitated the flow of capital are the Women’s Livelihood Bond ([p. 28](#)) and Seychelles Blue Bond ([p. 34](#)).

Among impact reporting’s most acute challenges is the misuse of enterprise-level metrics to represent subsidiary- or project-specific outcomes, especially with commercially available carbon data sets. This report includes both a Q&A on our approach to carbon data ([p. 37](#)) and a case study ([Continental Wind, LLC, p. 30](#)) involving a subsidiary issuer.

What’s next in the impact investing journey?

While the past 15 years have been rewarding, impact investing remains a journey, with continued collaboration and learning key to future success. We will incorporate feedback from other industry thought leaders like independent impact verification company BlueMark, which certified that our proprietary global fixed income impact framework and process are aligned with the International Finance Corporation’s Operating Principles of Impact Management.

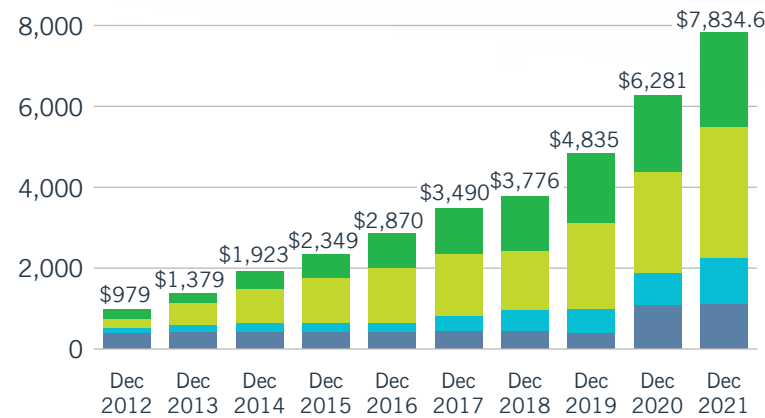
Within Nuveen, I offer my sincerest gratitude to Amy O’Brien, who kicked off this impact journey with me in 2007, and her colleagues on the responsible investing team, especially Amanda Kizer, who aggregate and help prepare our impact reports.

Lastly, I would like to thank my talented and dedicated team: Jessica Zarzycki, Adam Guerino and Alan Papier, whose expertise, determination and tireless work ethic have elevated our position as a recognized practitioner and thought leader in public fixed income impact investing.

Impact assets under management and reporting maturation

IMPACT INVESTMENTS BY THEME (\$mil)

As of 31 Dec 2021



GREEN BONDS

- Renewable energy and climate change
- Natural resources

SOCIAL BONDS

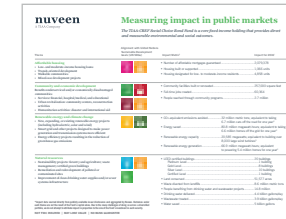
- Community and economic development
- Affordable housing

Source: Nuveen. Total overall AUM for the strategy was \$18.0 bil. as of 31 Dec 2021.

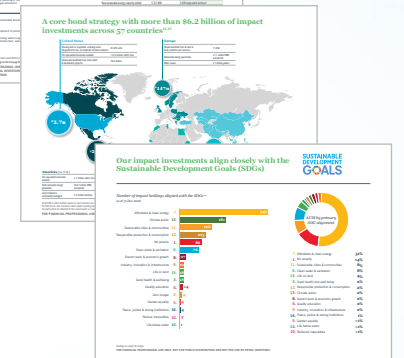
MATURATION OF IMPACT REPORTING

Since the inaugural Core Impact Bond impact report in 2016, we added additional impact metrics and equivalencies, more detail around how we invest for impact globally and our alignment to the SDGs.

2016



2020





Our results

Our impact strategy intentionally invests in securities across four specific impact themes: affordable housing, community and economic development, renewable energy and climate change, and natural resources.

Around these four themes, the Nuveen team has created a comprehensive impact framework which clearly defines the impact objective for each theme, eligible projects, and expected outputs and outcomes from these projects. Through the framework, we are able to articulate how the investments in the strategy directly lead to positive outcomes for stakeholders.

Affordable housing

Investing in direct and measurable societal outcomes



\$1,078.1
AUM \$mil

ALIGNED SDGs



Objectives

Increase the availability and access to affordable, sustainable and high-quality housing and reduce the rent burden for low- to moderate-income populations, globally.

Eligible projects

- Low- to moderate-income housing loans
- Transit-oriented development
- Walkable communities
- Mixed-use development projects

Measurable outcomes

Impact metric	Impact for 2020	Equivalent to:
Number of affordable mortgages guaranteed or provided	2.8 million	More housing units than the entire country of Norway ¹
Housing built or supported, including units designated for low- to moderate-income residents	94,181 units	



Community and economic development

Investing in direct and measurable societal outcomes



\$785.2
AUM \$mil

ALIGNED SDGs



Objectives

Create more inclusive and sustainable communities and increase availability of basic services for communities. Includes healthcare, education and financial services for small businesses; improving rural livelihoods; reducing food insecurity; and supporting recovery from disaster, conflict and crisis.

Eligible projects

- Benefits underserved and/or economically disadvantaged communities
- Services: financial, hospital/medical and educational
- Urban revitalization: community centers, reconstruction activities
- International development and humanitarian activities: disaster relief, economic aid and agricultural support

Measurable outcomes

Impact metric	Impact for 2020	Equivalent to:
Community facilities built	98,776 square feet	21 full-size basketball courts ²
Full-time jobs created	2.6 million FTE	
Daily riders on new public transit	3.4 million	
Farmers trained	2.5 million	
People who benefited from access to basic products and services	135.0 million	More than 1/3 of the U.S. population ³
People reached through community programs	89.2 million	More than the entire population of Germany ⁴

Renewable energy and climate change

Investing in direct and measurable environmental outcomes



\$2,483.4
AUM \$mil

ALIGNED SDGs



Objectives

Increase the share and efficiency of renewable energy in the global energy mix, improve the availability of sustainable transportation and reduce greenhouse gas emissions.

Eligible projects

- New, expanding or existing renewable energy projects (including solar, wind and small-scale hydroelectric)
- Smart grid and other projects designed to make power generation and transmission systems more efficient
- Energy efficiency projects resulting in the reduction of greenhouse gas emissions

Measurable outcomes

Impact metric	Impact for 2020	Equivalent to:
CO ₂ -equivalent emissions avoided	355.7 million metric tons	The emissions from 90 coal-fired power plants in the course of one year ⁵
Air pollutants reduced	879 metric tons	
Energy saved	8.4 billion kilowatt hours (kWh)	1.0 million homes' electricity use for one year ⁵
Total renewable energy capacity	32,781 MW	
New renewable energy capacity added	5,731 MW	1,910 large wind turbines ⁶
Renewable energy generated	455.7 million MWh annualized	38.9 million homes' energy use for one year ⁵

Natural resources

Investing in direct and measurable environmental outcomes



\$1,867.8
AUM \$mil

ALIGNED SDGs



Objectives

Conserve natural resources and habitats; reduce deforestation; sequester carbon and reduce emissions; reduce waste, water usage and pollution; improve sanitation and access to clean water; support sustainable food production; sustain rural livelihoods.

Eligible projects

- Land conservation and sustainable forestry, fishing and agriculture
- Certified green buildings
- Remediation and redevelopment of polluted or contaminated sites
- Improvement of clean drinking water supplies and/or sewer systems infrastructure, waste management projects

Measurable outcomes

Impact metric	Impact for 2020	Equivalent to:
LEED-certified buildings	151 buildings ⁷	
Land conserved	1.8 million acres	Roughly the size of Delaware ⁸
Land restored or sustainably managed	2.3 million hectares	More than the land area of New Jersey ⁸
Waste diverted from landfills	5.5 million metric tons	6.2 Golden Gate Bridges (by weight) ⁹
People who benefited from clean water and wastewater projects	48.9 million	More than the entire population of Spain ⁴
Water delivered	1.5 billion gallons/day	
Water saved	228.3 billion gallons	The volume of 345,831 Olympic-size swimming pools ¹⁰
Water treated	268.5 billion gallons	
Wastewater treated	2.1 billion gallons/day	

Measuring direct, real-world outcomes

Our impact investments finance positive social and environmental outcomes on six continents, help address critical global challenges, and transition economies and communities to a more sustainable future.

“As part of our annual data collection process, we review changes in the reported metrics from individual issuers, all impact portfolios and for the platform as a whole. This helps us understand how projects and programs are being implemented and ensure the impact we expected is being achieved.”

— Amanda Kizer, Director of Impact, Responsible Investing, Nuveen

Over the past five years, the capital invested in impact investments by Nuveen’s global fixed income impact investment strategies has nearly tripled ([see page 5](#)). As our investments have grown, so too has our global impact. As part of our annual data collection process, we review changes in the reported metrics from individual issuers and for the impact platform as a whole. This helps us understand how projects and programs are being implemented and ensure the impact we expected is being achieved.

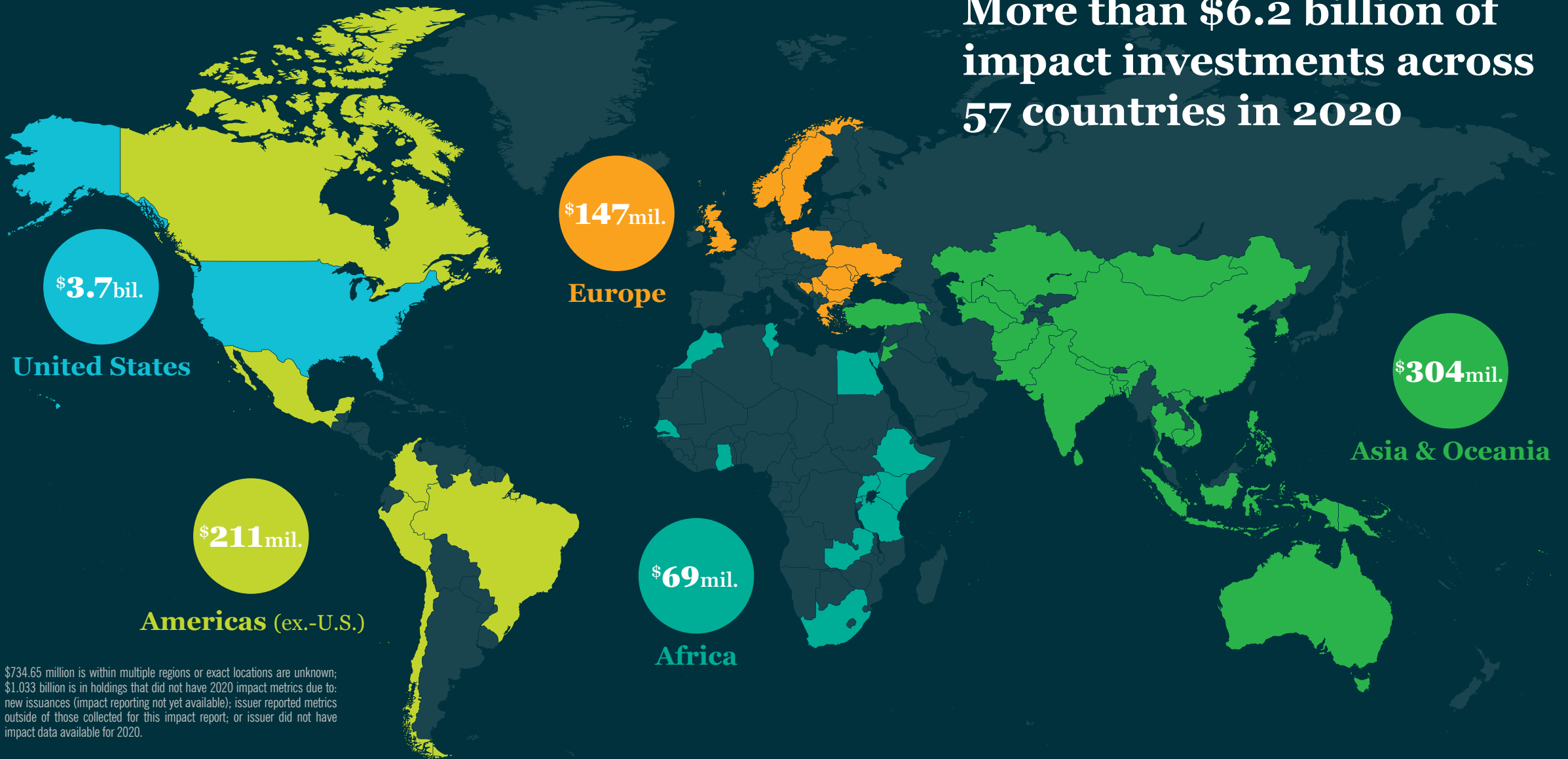
As we embarked on the reporting process this year, we were prepared to see a slowdown in implementation and reported impact as a result of the COVID-19 pandemic. This expectation turned out to be true primarily for projects and programs focused on construction and in-person training. For example, the number of affordable housing units built in 2019 was more than 300,000 but fewer than 100,000 in 2020. The primary driver of this was a decrease in units built by the Housing and Urban Development Corporation (HUDCO), an entity owned by the government of India. HUDCO reported over 300,000 units built in 2019 and just over 12,000 in 2020. Given the devastating impact of the pandemic in India in 2020, we were not surprised by the decrease in units built by this issuer. We also saw a decrease in farmers trained, a separate metric we track, which we believe reflected the reduced opportunity to provide in-person training throughout 2020.

Despite the implementation challenges presented by the global pandemic, we are happy to say we saw meaningful, continued progress on many of the impact metrics we track. For example, the amount of CO₂-equivalent emissions avoided or reduced and the gallons of water saved and treated increased in 2020 over the year prior. We believe there are two factors supporting this trend. The first is growth in the capital we are investing in renewable energy, climate change, and water and waste management projects. The other is the number of issuers who are tracking and reporting on these metrics, which we have seen increase over the five years since we first started reporting. The other metric that had a significant increase last year was the number of LEED (leadership in energy and environmental design) certified buildings. The difference between 2019 and 2020 comes from an investment we made in Los Angeles Community College (LACC) in the United States, which has improved the sustainability and reduced the environmental footprint of buildings across its campus. LACC alone accounts for 56 of the 151 LEED-certified buildings reported across our impact fixed income portfolios in 2020.

By directly collecting data from issuers and aggregating metrics for our annual reporting, our team is able to share detailed insight into the impact financed by our clients’ ESG/impact fixed income portfolios.

Making a global impact










More than \$6.2 billion of impact investments across 57 countries in 2020

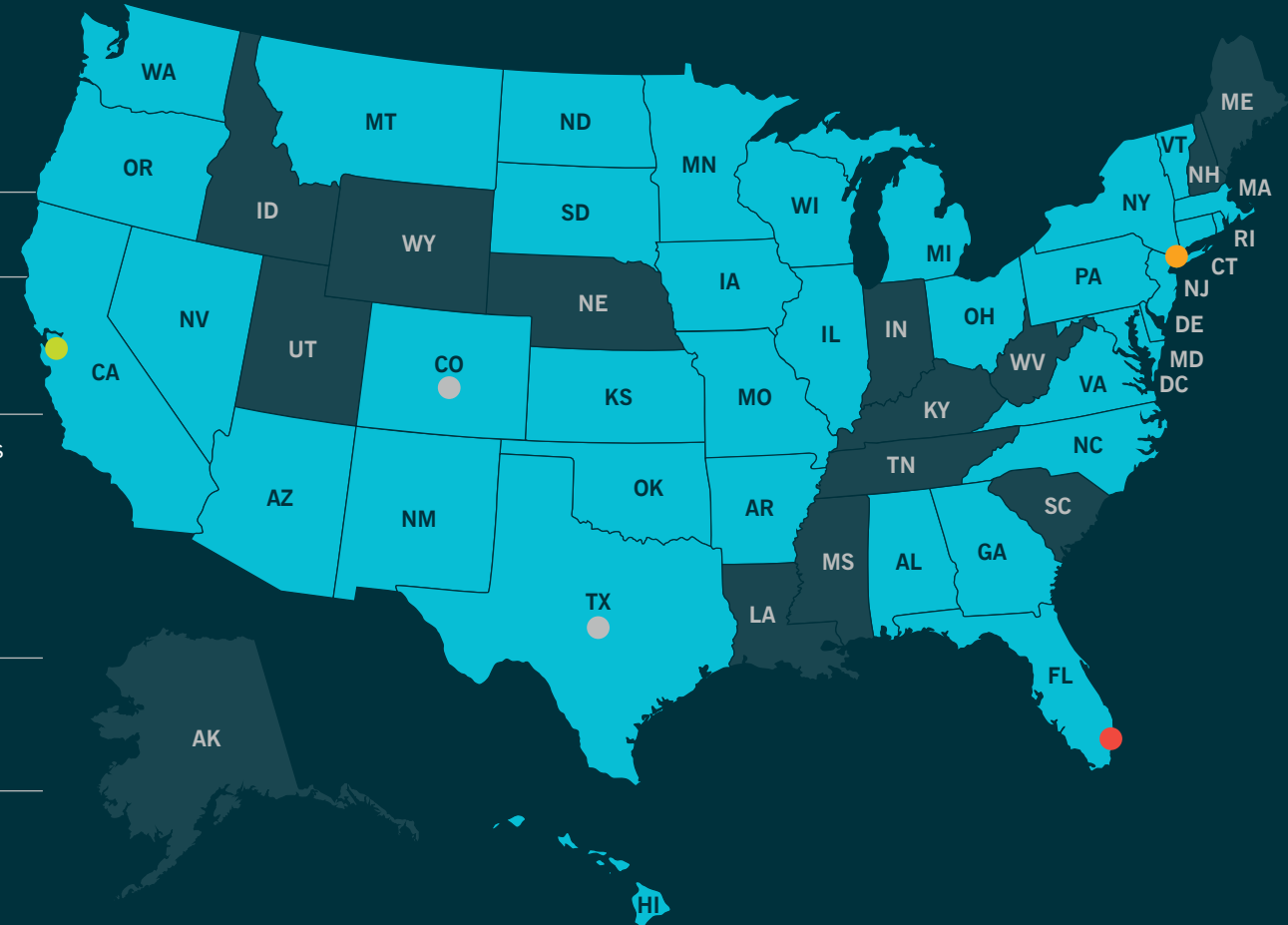


\$734.65 million is within multiple regions or exact locations are unknown; \$1.033 billion is in holdings that did not have 2020 impact metrics due to: new issuances (impact reporting not yet available); issuer reported metrics outside of those collected for this impact report; or issuer did not have impact data available for 2020.

United States: \$3.7 billion in impact investments financing projects in 36 states¹¹

EXAMPLES

Issuer	San Francisco, Office of Community Investment	NY Metropolitan Transport Authority	Xcel Energy	Miami Dade County Water & Sewer
Locations				
Theme	Affordable housing	Community and economic development	Renewable energy and climate change	Natural resources
Impact	4,959 affordable housing units for low- to moderate-income families and individuals	3.2 million daily riders	1,400 MW renewable energy capacity	<ul style="list-style-type: none"> • 226.9 billion gallons water treated • 2.3 million people benefited from clean water and wastewater projects
SDG alignment	 			



Projects are financed in shaded states.

2020 results from U.S.-based impact projects financed by the global fixed income team include the following:



Affordable housing

Affordable mortgages guaranteed	2.8 million
Housing built or supported, including units designated for low- to moderate-income residents (units)	81,693



Community and economic development

Community facilities built (square feet)	98,776
Daily riders on new public transit	3.2 million
Full-time jobs created (FTE)	23,931
People benefiting from access to basic products and services	7.1 million
People reached through community programs	5.5 million



Renewable energy and climate change

CO ₂ -equivalent emissions avoided (metric tons)	113.0 million
Energy efficiency assessments complete	12,760
Energy saved (MWh)	829.7 million
Total renewable energy capacity (MW)	17,371
New renewable energy capacity (MW)	1,050
Renewable energy generation (MWh annualized)	210.2 million










Natural resources

LEED-certified buildings (total)	149
Land conserved (acres)	227,780
Land restored or sustainably managed (hectares)	951
Waste diverted from landfills (metric tons)	1.5 million
People benefiting from clean water and wastewater projects	26.6 million
Water delivered (billion gallons per day)	1.6
Water saved (billion gallons)	165.6
Water treated (billion gallons)	231.2
Wastewater treated (billion gallons per day)	1.9

Americas (ex-U.S.): \$211 million in impact investments financing projects in six countries¹¹

EXAMPLES

Issuer	AES Andes S.A.	Klabin
Locations		
Theme	Renewable energy and climate change	Natural resources
Impact	<ul style="list-style-type: none"> • 248M metric tons CO₂-equivalent emissions avoided • 211 MW renewable energy capacity 	<ul style="list-style-type: none"> • 6,671 acres of land conserved • 1.4 million hectares of land restored or sustainably managed
SDG alignment	 	  



Projects are financed in shaded countries.

2020 results from Americas (ex-U.S.)-based impact projects financed by the global fixed income team include the following:



Community and economic development

Daily riders on new public transit	18,000
People benefiting from access to basic products and services	5,070



Renewable energy and climate change

CO ₂ -equivalent emissions avoided (metric tons)	3.7 million
Air pollutants reduced (metric tons)	649
Total renewable energy capacity (MW)	2,636
New renewable energy capacity (MW)	205
Renewable energy generation (MWh annualized)	203.2 million









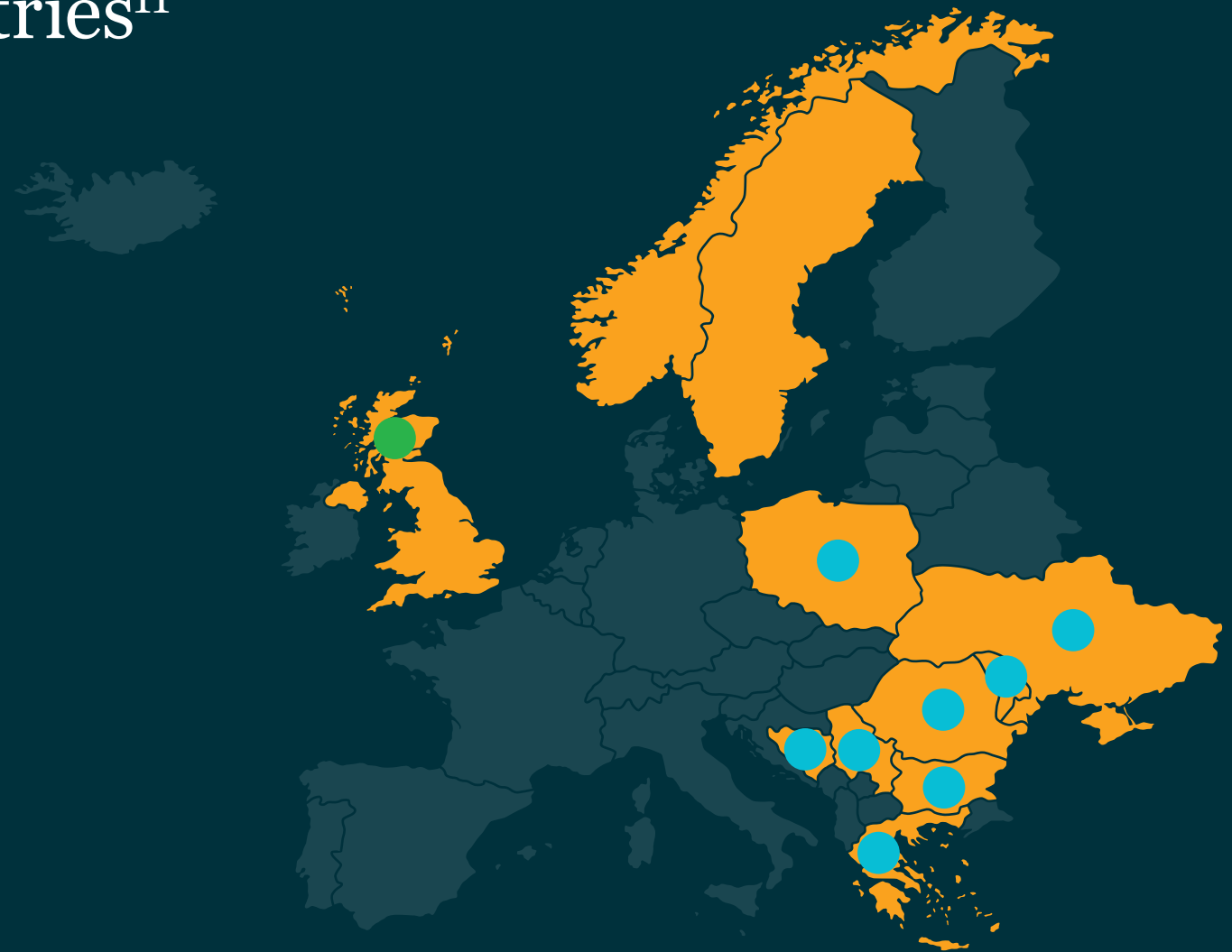
Natural resources

Land conserved (acres)	967,529
Land restored or sustainably managed (hectares)	2.3 million
Waste diverted from landfills (metric tons)	2.0 million
People benefiting from clean water and wastewater projects	3.7 million
Water delivered (million gallons per day)	6.0
Water saved (million gallons)	264.0
Water treated (billion gallons)	24.6
Wastewater treated (million gallons per day)	68.0

Europe: \$147 million in impact investments financing projects in 11 countries¹¹

EXAMPLES

Issuer	European Bank of Reconstruction & Development	Royal Bank of Scotland
Locations		
Theme	Renewable energy and climate change	Renewable energy and climate change
Impact	<ul style="list-style-type: none"> • 420,000 metric tons of CO₂-equivalent emissions avoided • 2.1 billion gallons of water saved 	<ul style="list-style-type: none"> • 2,744 MW of total renewable capacity • 623,950 MWh of renewable energy generation
SDG alignment	 	 



Projects are financed in shaded countries.

2020 results from Europe-based impact projects financed by the global fixed income team include the following:



Affordable housing

People benefiting from access to basic products and services	71,940
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Renewable energy and climate change

CO ₂ -equivalent emissions avoided (metric tons)	2.1 million
Energy saved (MWh)	12.9 million
Total renewable energy capacity (MW)	2,744
New renewable energy capacity (MW)	98
Renewable energy generation (MWh annualized)	27.7 million



Natural resources

Water saved (gallons)	2.1 billion
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Asia and Oceania: \$304 million in impact investments financing projects in 25 countries¹¹

EXAMPLES

Issuer	AID – India, Housing & Urban Development Corporation	Women's Livelihood Bond	Azure Power Solar Energy
Locations			
Theme	Affordable housing	Community and economic development	Renewable energy and climate change
Impact	12,488 housing units built or supported	31,050 people benefited from access to basic services	1.9M metric tons of CO ₂ -equivalent emissions avoided
SDG alignment	 	  	



Projects are financed in shaded countries.

2020 results from Asia- and Oceania-based impact projects financed by the global fixed income team include the following:



Affordable housing

Housing built or supported (units)	12,488
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Community and economic development

Daily riders on new public transit	145,120
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People benefiting from access to basic products and services	367,050
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Full-time jobs created (FTE)	1,244
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Renewable energy and climate change

CO ₂ -equivalent emissions avoided (metric tons)	166.2 million
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Energy saved (MWh)	363.8 million
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Total renewable energy capacity (MW)	51
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New renewable energy capacity (MW)	3,540
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Renewable energy generation (MWh annualized)	4.6 million
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Natural resources







LEED-certified buildings (total)	1
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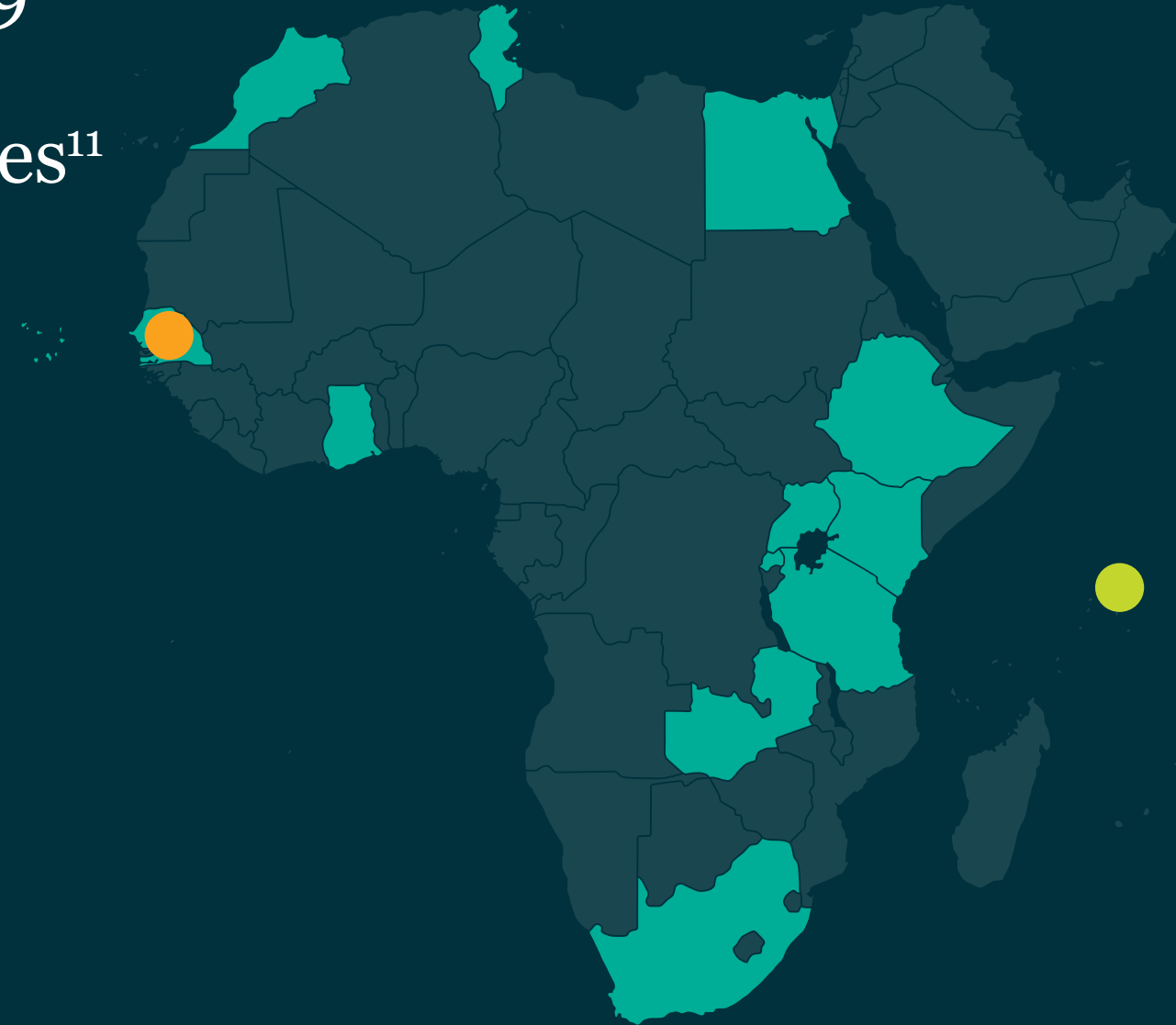
Land restored or sustainably managed (hectares)	22,676
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Water saved (billion gallons)	31.6
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Africa and the Middle East: \$69 million in impact investments financing projects in 14 countries¹¹

EXAMPLES

Issuer	African Development Bank — Dakar Diamniadio AIBD Regional Express Train Project	Republic of Seychelles Blue Bond
Locations		
Theme	Renewable energy and climate change	Natural resources
Impact	<ul style="list-style-type: none"> • CO₂-equivalent emissions avoided or reduced: 1,615.78 metric tons • 4,432 FTE jobs created • 16,569 tons of coal saved per year 	By the end of 2020, 30% of the Seychelles Exclusive Economic Zone was designated sustainable-use protected areas
SDG alignment	 	 



Projects are financed in shaded countries.

2020 results from Africa- and Middle East-based impact projects financed by the global fixed income team include the following:



Community and economic development

Full-time jobs created	2.6 million
People benefiting from access to basic products and services	1.9 million



Renewable energy and climate change

CO ₂ -equivalent emissions avoided (metric tons)	37.4 million
Energy saved (MWh)	271,633
New renewable energy capacity (MW)	375



Natural resources

Land conserved (acres)	589,249
Water saved (billion gallons)	28.1



Case studies

“
Cultivating relationships with issuers early in the process is crucial to help them develop meaningful impact metrics. Century has been particularly good to work with from that perspective, and it’s been rewarding to see them become more accountable and deliberate in reporting as they increase their participation in the public markets.”

— Adam Guerino
Portfolio manager, ESG/Impact – Global Fixed Income



Affordable housing

CENTURY HOUSING CORPORATION (CENTURY)

ALIGNMENT WITH SDGS:



Mission and intended outcomes

- To finance, build and operate exceptional affordable housing so that the people Century serves may have “a dignified home, a healthy and hopeful future, and attain economic independence.”¹²
- Offer innovative financing programs in California, partnering with state and local agencies, municipalities and other community development financial institutions.

Measurable impact

Proceeds from the Century bonds in which we invested were used to refinance loans for multifamily affordable housing development, including:

- 1,952 affordable housing units
- 843 supportive housing units (combining affordability with access to coordinated physical and mental health services)
- 1,515 senior housing units
- 381 workforce housing units (allowing moderate-income workers who would otherwise be priced out of local housing markets to live closer to their jobs)



**AFFORDABLE
HOUSING**



**Watch the video
“Make your impact”**



CENTURY

Century Housing Corporation (Century) is one of more than 1,200 mission-driven financial providers in the United States that operate as certified community development financial institutions (CDFIs).

Established by the U.S. Congress in 1994, the CDFI Fund serves CDFIs with resources and programs that invest federal dollars alongside private-sector capital to support economically disadvantaged communities.¹³

Traditionally, CDFI funding has been provided by banks, largely as a way for them to comply with Community Reinvestment Act reforms implemented in the wake of redlining and other

systemic practices that had disadvantaged low-income communities. Over the past few years, Century has been at the forefront of CDFIs beginning to diversify their sources of capital by issuing public debt.

“The public fixed income markets give issuers a practical tool for refinancing, which lowers their cost of capital,” explains Stephen M. Liberatore, CFA, head of ESG/impact — Nuveen global fixed income. “In our impact portfolios, we’re directing capital to help issuers achieve scale, improve borrowing efficiency and ultimately provide greater benefits to the community — all positive attributes of a capital market solution to a myriad social and environmental problems. CDFIs are an important organizational element for doing this.”

“It can be more challenging to find impact investments in affordable housing that meet the criteria of our framework,” says Adam Guerino, a portfolio manager on Nuveen’s global fixed income – ESG/impact team. “An issuer’s willingness and ability to report direct, measurable results is critical to our decision to invest, and we’ve found that many CDFI programs tend to emphasize anecdotal impacts, which can’t be aggregated.”

After the first of two deals we participated in with Century, we engaged with management to provide feedback on their impact

reporting. Importantly, this engagement consisted of two-way dialogue in which they actively sought our guidance and were eager to listen and implement enhancements. The impact results of the two bonds are now quantified and reported on both an annual and cumulative basis and posted on a dedicated public web page.

“Cultivating relationships with issuers early in the process is crucial to help them develop meaningful impact metrics,” Adam says. “Century has been particularly good to work with from that perspective, and it’s been rewarding to see them become more accountable and deliberate in reporting as they increase their participation in the public markets.”

Ultimately, the growth of impact investing into an instrument of societal improvement will not come from passive purchasing of bonds but active engagement that connects the desires and interests of investors with the capabilities and efforts of issuers. For its part, Century aims to continue expanding beyond its typical business model of providing short-term construction financing for affordable housing development and toward building a more permanent loan portfolio in this space. Meanwhile, the investment-grade ratings that Century has received from Standard & Poor’s and Fitch may help it attract a wider investor base for future impact issuances.



Windsor is an example of a truly innovative approach that speaks to what’s possible in the world of impact investing. The issuer’s commitment to continually enhance housing affordability not only meets the needs of low-income residents but also helps sustain the cash flows investors are looking for — all while reducing the carbon footprint of the property. This is the kind of holistic forward thinking we hope and expect to see more of in the future.”

— Adam Guerino

Portfolio manager, ESG/Impact – Global Fixed Income



Affordable housing



Renewable energy and climate change

WINDSOR MOBILE COUNTRY CLUB

ALIGNMENT WITH SDGS:



Mission and intended outcomes

- To be a premier 55-plus manufactured home community offering an upscale but affordable standard of living in beautiful Sonoma County, California.
- To further lower the costs of housing and to benefit the environment by utilizing a solar power system.

Measurable impact

Of the proceeds from the 2020 taxable municipal issue in which Nuveen invested, \$3 million (roughly 17% of bond principal) were used to construct and install an 890 kilowatt (kW) solar power system for the park in the first half of 2021, leading to:

- Up to 90% lower projected annual electricity costs for residents

- Environmental benefits of generating 1.3 million kW hours of solar power, enough to:
 - Provide electricity to the park’s 336 homes for 2020
 - Displace 921 metric tons of carbon dioxide equivalents from the atmosphere
 - Achieve the comparable impact of taking 200 cars off the road for one year⁵
- 100% occupancy rate in the park
 - 44% of spaces are rented by very-low-income households (less than 50% of area median income (AMI))
 - 43% are rented to low-income households (defined as 80% of AMI)



AFFORDABLE HOUSING



RENEWABLE ENERGY AND CLIMATE CHANGE



Windsor Mobile Country Club is a mobile home park located in Windsor, California, approximately 60 miles north of San Francisco in Sonoma County.

AFFORDABLE HOUSING SCARCITY

Median household income

	Windsor, CA	California average
	\$107k	\$75k

Average rent for a two-bedroom apartment

	Windsor, CA	California average
	\$1,900	\$1,400

Encompassing 336 manufactured homes, a clubhouse, pool and other amenities, the 43-acre park bears little resemblance to the traditional image of affordable housing stock as large, multifamily facilities either directly owned by public agencies or developed through public subsidies, such as Low-Income Housing Tax Credits (LIHTCs).

Manufactured housing typically costs 50% less per square foot to build than standard homes. And while residents of mobile home parks own the units they live in, they rent the land on which their homes sit, lowering their overall cost of housing even more. According to the Manufactured Housing Institute, 60% of U.S. households who live in manufactured housing are low income, earning less than \$40,000 annually.

Manufactured homes and mobile home parks are therefore a viable affordable housing option for people who live in areas where average incomes and housing costs are high and traditional affordable housing programs are scarce.

Until Windsor Mobile Country Club, the town had been able to develop only 404 income-restricted units since 1986. With its 336 homes, the park nearly doubled the local affordable housing stock, and our investment helped lower financing costs via the municipal bond market.

To qualify for this cheaper source of credit, the mobile home park had to agree to rent at least 20% of its spaces to “very-low-income” residents (typically earning 50% of the area median income, or AMI).

Windsor Mobile Country Club also participates in a state program that provides a property tax rebate based on the percentage of low- and very-low-income residents. This financial incentive directly helps residents by reducing pressure to increase space rents.

A solar power system further lowers the cost of housing and benefits the environment

Under its current ownership since 2008, Windsor Mobile Country Club has made numerous investments in physical improvements, including replacing utility lines and transitioning to more drought-tolerant landscaping.

“

One of the most powerful aspects of these bonds is that they embed financial literacy and empowerment into community development. It's not just about individual women. There's also a multiplier effect on future generations of these historically underserved populations as they gain more understanding and agency over their financial lives.”

Jessica Zarzycki, CFA

Portfolio manager, ESG/Impact – Global Fixed Income



Community and economic development

WOMEN'S LIVELIHOOD BOND SERIES

ALIGNMENT WITH SDGs:



Impact Investment Exchange (IIX), a Singapore-based financial institution whose mission is “to create an inclusive financial system where women, the environment and disadvantaged communities are valued and have a voice,” developed an impact assessment framework that includes five primary outcomes for the bond's beneficiaries.

Mission and intended outcomes

The Women's Livelihood Bond provides private capital to microfinance institutions and social enterprises that, in turn, help low-income Southeast Asian women build credit histories and transition from subsistence to sustainable livelihoods. Long-term benefits, in addition to more successful women-owned businesses, include increased participation in the workforce, higher standards of living, and more education and health opportunities for women and children.

Measurable impact¹⁴

1. 21% more than the original target of 25,650 women have benefited
2. 27,500 women have taken advantage of micro loans to meet business-related needs
3. 21,690 have availed themselves of micro savings products
4. 2,700 have enhanced their knowledge and skills through training sessions
5. 1,775 women farmers are being sourced for agricultural goods

In addition to the number of women supported, the bond's impact is measured by a metric known as Social Return on Investment (SROI), which assigns a dollar value to the outcomes. WLB2 met its SROI goal of 3.21, or \$3.21 of social impact for every \$1 invested.

Investors in WLB2 receive both public and private credit protection, with a 50% loan portfolio guarantee from the United States Agency for International Development (USAID) and first loss capital provided by The Rockefeller Foundation.



COMMUNITY AND ECONOMIC DEVELOPMENT



The Women's Livelihood Bond (WLB) series consists of multi-country, gender-focused debt securities managed by Impact Investment Exchange (IIX). IIX believes “we are the pioneer in impact investing and the global leader in sustainability. We have transformed the financial system so that women, the environment and underserved communities are finally given a value and a voice in the global market.” IIX seeks to create a billion sustainable livelihoods by 2030.

The series was launched with the \$8.5 million WLB1 in 2017, followed in 2020 by two separate issues, WLB2 (\$12 million) and WLB3 (\$30 million). Nuveen is a leading institutional investor in both of the 2020 bonds.

WLB2: Empowering women in developing countries to transition from subsistence to sustainable livelihoods

Proceeds from WLB2 provide capital to a total of six borrowers in Cambodia, Indonesia and Sri Lanka operating in three sectors: small- and medium-sized enterprise (SME) lending, renewable energy and sustainable agriculture. These borrowers, in turn, provide capital and low-cost financing to women working in these sectors.

WLB3: Putting women at the center of COVID-19 resilience

The third bond in the series is broadly similar to the second, but there are nuanced differences in structure and features. Relative to WLB2, WLB3 has:

- 1) A larger deal size (\$30 million vs. \$12 million);
- 2) More borrowers (eight vs. six);
- 3) More countries (four vs. three, with the addition of India and the Philippines, and Sri Lanka no longer included);
- 4) More industries (five versus four, with the addition of ethical garment making);
- 5) A higher social return on investment (SROI) goal (4.0 vs. 3.21).

Additionally, WLB3 has an intentional COVID-19 focus and is expected to benefit the lives of 180,000 women and women



**Watch the video
“Make your impact”**

entrepreneurs in South and Southeast Asia as they respond, recover from and build community resilience during and after the pandemic.

Lastly, investors in WLB3 receive both public and private credit protection, with a 50% loan portfolio guarantee from the United States International Development Finance Corporation (DFC) and first loss capital provided by IIX's recently launched Women's Catalyst Fund.

The gold standard of impact reporting

Impact certification and reporting for the WLB series is aligned with the International Capital Markets Association (ICMA) and Association of Southeast Asian Nations (ASEAN) social bond principles. WLB investors receive both financial and impact reports on an annual and semiannual basis. Annual impact reports include data from the field collected directly from end beneficiaries, while ongoing monitoring of borrowers' financial and impact performance during the lifetime of the bond provides risk mitigation and accountability to bondholders.

“The scope, detail and frequency of the WLB impact reports provide remarkable clarity for investors,” says Stephen M. Liberatore, CFA, portfolio manager and Head of ESG/impact – Nuveen global fixed income. “This transparency represents the gold standard of reporting.”

With its emphasis on SROI and transparent impact data collection, the WLB series offers a model for other issuers of impact bonds to follow.



This was one of the first times we were able to make an impact investment directly in a subsidiary. That’s a critical distinction because, at the time, the parent company was not part of our eligible universe. Here we could take advantage of the fact that impact issuance in public fixed income is possible at different parts of the corporate and capital structure.”

— Stephen M. Liberatore, CFA,
Head of ESG/Impact – Global Fixed Income



Renewable energy and climate change

CONTINENTAL WIND, LLC

ALIGNMENT WITH SDGS:



Mission and intended outcomes

To help finance the wind portfolio while clearly conveying to the parent company that we will be a source of capital for renewable projects but will not invest in its general utility operations, where fossil fuel inputs, emissions, and the overall pace of transition to renewable energy sources do not match our impact criteria.

To benefit from long-term contracts as well as diversity in technology, geography and offtakers. (An “offtaker” is a purchaser of power produced by a renewable energy asset, such as a wind farm.)

Measurable impact

In 2020, the ExGen/Continental Wind portfolio generated:

- 1,985,784 MWh of electricity
- Enough energy to power 169,470 average homes for a year⁵
- Displacement of 1.6 million tons of CO₂-equivalent emissions
- The impact of taking 306,057 cars off the road⁵



Continental Wind, LLC

We invested directly in Continental Wind, LLC, a renewable energy project development company, as it aligned with our impact approach of directing capital to specific projects and outcomes.

We believe this is the optimal way to invest for impact in public fixed income markets. It allows us to determine the specific use of proceeds of our investments and exert an influence on reporting methodologies that provide transparency and accountability for science-based outcomes. This is particularly necessary in the utilities and energy industries, which are significant emitters of greenhouse gases and producers/consumers of fossil fuels. Through impact investing, we have the opportunity to finance the transition to greener energy production within these hard-to-abate sectors, even if we wouldn't lend to the general operations of the issuer or parent company via traditional corporate bonds.

Continental Wind, LLC is 100% indirectly owned by ExGen Renewables I, LLC (ExGen). ExGen itself is an indirectly wholly owned subsidiary of Exelon Corporation (EXC), a large U.S. producer and distributor of utility-scale power. Continental Wind is a diversified portfolio of 13 operating wind farms with a combined capacity of 667 megawatts (MW) located across six states (Idaho, Kansas, Michigan, New Mexico, Oregon and Texas); and Continental Wind receives 100% of the cash flows generated by these facilities. We view these cash flows to be

stable and of high quality, given that 97% of revenues are from long-term purchase agreements from nine separate offtakers. Through this investment, we help finance the wind portfolio while clearly conveying to the parent company that we will be a source of capital for renewable projects but will not invest in its general utility operations, where fossil fuel inputs, emissions and the overall pace of transition to renewable energy sources do not match our impact criteria.

“Investing in the 2013 loan that initially financed the ExGen/Continental Wind assets was one of the first opportunities we had to make an impact investment in a subsidiary,” recalls Stephen M. Liberatore, CFA, portfolio manager and Head of ESG/impact — Nuveen global fixed income. “The parent company was not part of our eligible universe.”

ExGen was also among the first issuers Nuveen engaged with that was willing to provide unambiguous renewable energy impact metrics, primarily in the form of megawatt hours (MWhs) of electricity generated from the wind portfolio. This put the issuer on the leading edge of direct, measurable impact reporting — a requirement and centerpiece of Nuveen's approach.



Conventional wisdom says adopting renewable energy sources like solar isn't economically feasible for the average person. But with asset-backed security (ABS) structures like Sunrun's helping drive down costs, we can show that it actually saves people money. As perception catches up with reality, we think securitized assets will become an increasingly effective way to deliver positive environmental outcomes. That's why we always look across fixed income asset classes for impact opportunities."

— Stephen M. Liberatore, CFA,
Head of ESG/Impact — Global Fixed Income



Renewable energy and climate change

SUNRUN, INC.

ALIGNMENT WITH SDGS:



Mission and intended outcomes

To create a planet "run by the sun" and provide distributed solar power generation, primarily through residential, rooftop solar panels.

Measurable impact

In 2020, Sunrun's systems generated 4 billion kWh of solar power — enough to:

- Provide electricity to 514,908 homes for one year
- Displace 3.1 million tons of carbon dioxide equivalents from the atmosphere
- Achieve the comparable impact of taking 616,000,497 cars off the road for one year⁵

Since 2007, Sunrun has cumulatively generated 11.4 billion kWh of solar power



SUNRUN

Guided by its mission to create a planet “run by the sun,” Sunrun Inc. is a provider of distributed solar power generation, primarily through residential, rooftop solar panels.

The San Francisco-based Sunrun has well over half a million customers and sells its solar service in 22 states, the District of Columbia and Puerto Rico. Unlike some residential solar companies, Sunrun owns the solar assets it installs. Instead of homeowners paying the capital costs upfront, the residential units hosting the solar system enter into lease agreements with Sunrun to purchase the solar power generated, with the excess generation net-metered to the grid.

The proceeds of the asset-backed securities (ABS) series in which Nuveen invested were used to finance Sunrun installations on more than 14,000 homes.

Total system size nearly	88 MW
Average per home	6.14 kW
Number of homes capable of powering annually	19K
Annual electricity generation	154,176 MWh

Traditional solar residential installers are typically able to provide only estimates of impact because, once the systems are installed, they no longer own or have access to the solar asset. Sunrun, however, owns, meters and monitors the assets, so it is able to provide updates on actual power generation. This includes an annual impact report detailing both yearly and cumulative totals. Sunrun’s 2020 report listed 550,000 customers and 3,885 MW of installed

capacity. That’s significantly more than the current installed capacity (245 MW) of the world’s largest single solar farm, Bhadla Solar Park in India.¹⁵

“The potential impact of investments like Sunrun’s is even more compelling when you think about extrapolating the approach on a larger scale,” says Stephen M. Liberatore, CFA, portfolio manager and Head of ESG/Impact – Nuveen global fixed income. “With California now requiring solar installations on all new home construction, we could start to see a broader acceleration of the transition from fossil fuels to renewable energy sources. Not only would that be good for the environment, but it would also lower the cost of distributed solar as advances in technology and greater scale lead to new efficiencies.”

The ABS market provides an ideal source of funding for this type of impact investment, Stephen adds. “Securitization is one of the primary reasons people can afford to buy houses and cars and have credit cards,” he explains. “And now that model is making it more cost-effective for issuers — and individuals — to install solar technology in homes.”

“

What really stands out about the Seychelles bond is not only the direct, measurable impact it delivers, but also that it can serve as a template for future deals, helping to develop the fledgling blue bond market.”

*Stephen M. Liberatore, CFA,
Head of ESG/Impact – Global Fixed Income*



Natural resources

REPUBLIC OF SEYCHELLES BLUE BOND

ALIGNMENT WITH SDGS:



Mission and intended outcomes

- Part of a larger World Bank program known as SWIOFish3, designed to support a transition to sustainable fisheries in Seychelles.
- The largest portion (\$12 million) of the \$15 million in bond proceeds will go toward the Blue Investment Fund, a revolving loan fund for commercial projects with a specific focus on developing the country’s “blue economy” through diversification and sustainability activities that can generate a return.
 - Example: refitting vessels for longline tuna fishing, considered a more sustainable method than deep-sea trawling.

- The other \$3 million in proceeds will be used to fund expanded sustainable use of marine-protected areas (\$1.5 million) and to improve governance of priority fisheries (\$1.5 million).

Measurable impact

- By the end of 2020, 30% of the Seychelles Exclusive Economic Zone was designated sustainable-use protected areas, with SWIOFish3 and the blue bond funding research and development plans for sustainable fisheries in these areas
- Ongoing related projects and studies include capacity building for small-scale fishing operators, assessing employment needs and developing a Seychelles seafood brand, among other priorities



NATURAL RESOURCES

Republic of Seychelles Blue Bond

Issued by the Republic of Seychelles, an island nation off the coast of East Africa, this debt offering was the world's first sovereign “blue” bond — a pioneering financial instrument designed to support sustainable fisheries and other marine projects in countries whose economies depend primarily on the health of the ocean.

This issuance, a unique collaboration between the Seychelles government, the World Bank and the private sector, raised \$15 million. It is supported by a \$5 million guarantee from the World Bank and a further \$5 million from the Global Environment Facility (GEF) that can be used only to cover the bond's coupon payments.

“The World Bank contacted us early in the development process, and we worked closely with a team of experts to structure the transaction,” explains Stephen M. Liberatore, CFA, portfolio manager and head of ESG/impact – Nuveen global fixed income. “The bond's relative valuation, along with its partial backing from the World Bank and the GEF, make it an attractive investment opportunity. At the same time, its direct and measurable impact is exactly what we look for in our proprietary impact framework.”

SWIOFish3, which is implementing the projects funded by the bond, provides both a quarterly report, which benchmarks progress against measurable outcomes and deadlines for the entire program, and an annual report focused on blue bond-supported impact. The most recent report documented the funding of four large and eight small grants to date.

Additionally, the SWIOFish3 project manager meets annually with Nuveen to review the overall program and the progress of blue bond-funded activities in particular.

“What really stands out about the Seychelles bond is not only the direct, measurable impact it delivers, but also that it can serve as a template for future deals, helping to develop the fledgling blue bond market,” explains Stephen Liberatore, who in addition to his role at Nuveen serves on the blue economy investor advisory group of the UN's Joint Sustainable Development Goals Fund. “Whether the guarantor is the World Bank, the IFC, the Asian Development Bank or some other entity, there are many stakeholders with whom governments and investors can partner to structure, finance and issue blue bonds.”

Nuveen's approach demonstrates to both potential issuers and large institutional investors — who otherwise might be hesitant to participate in smaller, less-liquid, non-index-eligible issues — that accessing public fixed income markets can be a powerful way to finance these innovative impact opportunities, he adds.

How we invest in a changing world



Measuring carbon intensity: Q&A on Nuveen's approach

Reducing carbon dioxide and other greenhouse gas (GHG) emissions is a primary goal of climate-focused impact investing.

At Nuveen, the proceeds of all bonds that qualify for our renewable energy and climate change category are used to fund projects that either lower GHG emissions directly (for example, by replacing fossil fuel power generation with solar) or target related objectives (such as increasing the availability and use of sustainable transportation).

Despite the prominence of GHG reduction as an impact investing theme at Nuveen and across the industry, data availability remains lacking. At present, carbon data is mainly captured at the parent issuer level, not at the project or use-of-proceeds level. Green projects typically report carbon emissions avoided or reduced, but not emitted — which makes it challenging to fully understand the carbon footprint of an impact portfolio. Using issuer/parent-level data leads to an overrepresentation of actual GHG emissions associated with green projects and assets, and thus to inaccurate portfolio-level carbon footprint analysis.

Jessica Zarzycki, portfolio manager on Nuveen's ESG/impact fixed income team, explains this data challenge and why we require every issuer of impact bonds held in our portfolios to report direct, measurable outcomes at the security or project level.

Q Do you rely on commercially available data to assess the carbon intensity of your impact holdings and portfolios?

No. Currently, such carbon “scores” reflect the emissions of the issuing entity (or parent) as a whole and are not available for specific underlying projects that the issuer funds with impact bonds. Using enterprise-level data as a proxy for a single issuance/CUSIP results in investors drawing incorrect conclusions about the carbon intensity of a given security, as the project being funded by that security will have far lower emissions than its issuing parent.

Consider impact holdings that meet the requirements of Nuveen's renewable energy and climate change theme. Many of these bonds support solar and wind projects that help drive the transition to greener sources of power. But because they tend to be issued by companies in the utilities and energy sectors — among the largest emitters of carbon dioxide and other GHGs — their positive impact on climate change isn't captured by currently available carbon data.

Meanwhile, a portfolio that avoids impact bonds issued by high GHG-producing sectors might receive a “better” (lower) emissions score but in fact will not have made a meaningful contribution to addressing climate change.

Q Are you engaging with external vendors on solutions to this data gap?

Yes. Specifically, we are seeking the creation of custom carbon datasets at the security level for project bonds and at the issuer level for general obligation (GO) bonds issued by an entity other than the ultimate parent (a common practice in the utilities industry). The process is ongoing and challenges remain.

At the same time, our proprietary impact framework continues to require rigorous reporting by issuers based on key performance indicators (KPIs) for each project funded, with reporting to occur on at least an annual basis. This enables us to verify that all of our impact holdings are producing direct, measurable outcomes aligned with their use of proceeds.

Within the theme of renewable energy and climate change, Nuveen's impact investments averted 355.7 million metric tons of carbon dioxide emissions in 2020, up from 144.7 million metric tons in 2019.

We are pleased to see the recent guidance from the Partnership for Carbon Accounting Financials (PCAF) on carbon accounting for green bonds, which encourages issuers to start reporting emissions associated with green bonds. Guidance from partners like PCAF and our engagement with issuers can be key drivers in solving this data challenge.

We invested nearly \$200 million in COVID-19 response in 2020

In 2020, our team directed capital toward COVID-19 response and recovery efforts. Collectively, we participated in nine deals (totaling more than \$183 million of client assets) that helped raise \$5.5 billion via the public bond market for communities, small businesses and individuals affected and disrupted by the pandemic.

2020 investments

March

IFC

\$17 million: to support private sector and jobs in developing countries affected by COVID-19

April

African Development Bank

\$30 million: to provide support for countries and businesses impacted by COVID-19

Government of Guatemala

\$8 million: to address needs driven by the pandemic (the first issued by a government in Latin America)

May

Bank of America

\$0.5 million: to fund nonprofit hospitals, skilled nursing facilities, healthcare equipment and supplies

June

Ford Foundation

\$33 million: to support organizations fighting inequality in communities hardest hit by COVID-19

July

NonHunyg Bank

\$25 million: to support the South Korean government's COVID-19 pandemic response and renewable energy

October

Rockefeller Foundation

\$41 million: to increase access to tests, treatments and vaccines in hardest hit communities and to fund a global platform to prevent future pandemics

November

KD Kookmin Bank

\$23 million: COVID-19 response bond; second issued by bank in 2020

The Bush Foundation

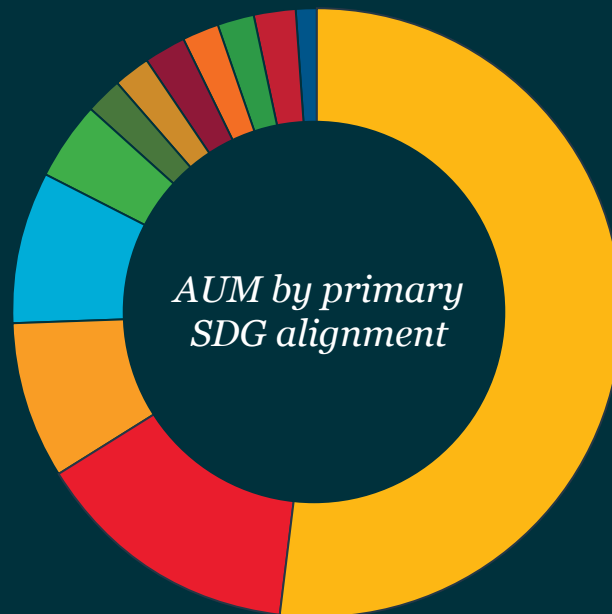
\$7 million: to support home ownership, education and economic development in communities hardest hit by COVID-19

Aligning closely with the Sustainable Development Goals (SDGs)

In 2015, the Sustainable Development Goals were developed and agreed to by all 193 member states of the United Nations. The 17 goals outline a collective and shared vision of what is needed for sustainable growth and development globally by 2030.

The impact objectives and four impact themes of our global fixed income strategies predate the development and adoption of the SDGs. However, given the global relevance and increasing interest by stakeholders to understand investors' contribution and alignment to these global goals, we expanded our impact framework in 2016 to clearly communicate and demonstrate how our approach aligns to the SDGs.

To do this, we developed a set of evidence-based logic models for the four impact objectives, expected outputs and outcomes — and how they map to specific SDG targets underlying the 17 goals. The logic models focus on the most direct impacts of the investments. For example, we hold bonds that expand access to financial services for underserved people. SDG targets 8.3 and 9.3 explicitly address access to finance, so in our reporting we identify those bonds as contributing to SDGs 8 and 9. While there may be additional, indirect outcomes that result from an individual or community having increased access to high-quality financial services; we do not claim contribution to additional SDGs for those bonds.



Primary SDG alignment

	AUM	Number of impact holdings ¹⁶
7 Affordable and clean energy	51%	347
1 No poverty	14%	86
11 Sustainable cities and communities	8%	126
6 Clean water and sanitation	8%	76
15 Life on land	4%	18
13 Climate action	2%	181
12 Responsible consumption and production	2%	103
8 Decent work and economic growth	2%	27
9 Industry, innovation and infrastructure	2%	19
3 Good health and well-being	2%	18
4 Quality education	2%	14
16 Peace, justice and strong institutions	1%	4
2 Zero hunger	<1%	9
5 Gender equality	<1%	4
10 Reduce inequalities	<1%	3
14 Life below water	<1%	1

As of 31 Dec 2020. Holdings are subject to change.

Measuring impact: methodology and data collection

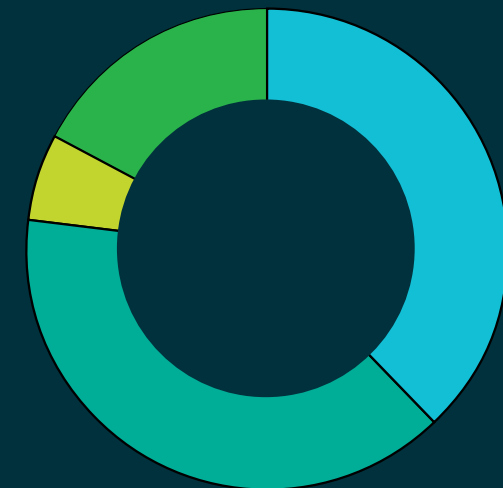
We collect social and environmental impact data annually directly from issuer disclosures. Our goal is to collect the most relevant and specific impact data related to the activities financed directly or indirectly by the investments. To that end, we use four types of issuer disclosures (listed in order from most preferred to least):

- 1. Security-level data**
sourced from bond-level impact reports for specific securities; most preferred
- 2. Project-level data**
sourced from project factsheets or other reports tied to a single project
- 3. Program-level data**
sourced from annual reports for specific programs run by the issuer
- 4. Issuer-level data**
sourced from annual reports covering all activities of the issuer; least preferred

From these disclosures, we extract and aggregate the most commonly reported metrics related to each impact theme for activities in the prior year.

It is important to note that we collect and report on impact for the entirety of the investments and/or the related project, not just the impact associated with Nuveen clients' capital alone. The reason we take this approach is because we do not consistently have access to total project costs relative to each bond issue. We know the percentage of each issuance we hold, but that may not reflect the total capital required to fund a specific project or program.

SOURCES OF 2020 IMPACT DATA BY DISCLOSURE TYPE



Security level	38%
Project level	39%
Program level	6%
Issuer level	17%

Source: Nuveen

Endnotes

- 1 Country housing unit estimates: <https://www.statista.com/statistics/898238/housing-stock-in-european-countries-in-total/>.
- 2 Regulation size basketball court is 94x50 ft.
- 3 U.S. census data. <https://www.census.gov/library/visualizations/interactive/2020-population-and-housing-state-data.html>.
- 4 <https://www.worldometers.info/world-population/population-by-country/>, which references the UN Population Division estimates.
- 5 <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>.
- 6 Assuming an average utility-scale wind turbine with a three megawatt generation capacity.
- 7 LEED-certified buildings by level: 21 platinum, 72 gold, 41 silver and 17 certified (undisclosed level).
- 8 U.S. census data. Converted hectares to square miles, and reviewed state size by square miles with Census data (total area). <https://www.census.gov/geographies/reference-files/2010/geo/state-area.html>.
- 9 Golden Gate Bridge equivalency: <https://www.goldengate.org/bridge/history-research/statistics-data/design-construction-stats/>.
- 10 Olympic swimming pool: surface area of 13,454.72 square feet and a volume of 88,263 cubic feet. The pool has 660,253.09 gallons of water, which equals about 5,511,556 lbs.
- 11 Countries and states highlighted indicate where country or state project-level information was provided by the issuer as part of calendar-year 2020 reporting. Holdings with no metrics available include new projects with no results yet, projects in development, and issuers with misaligned reporting timelines or with metrics that did not align with Nuveen's.
- 12 Century Housing Corporation, <https://century.org>.
- 13 Community Development Financial Institutions Fund, <https://www.cdfifund.gov>.
- 14 Impact Investment Exchange, Women's Livelihood Bond 2 ("WLB 2") Summary Semi-Annual Impact Report Q1 – Q2 2020.
- 15 Mercom India – Clean Energy News and Insights, March 2020.
- 16 Impact holdings are tagged based on the types of projects financed, using an evidence-based approach to align with SDG targets. An individual holding could be aligned with up to three SDGs.

For more information, please visit us at nuveen.com

The Nuveen Responsible Investing team developed this report to provide an indication of the aggregate social and environmental impact created by the projects and organizations financed in part by the Strategy. Given the difficulty of attributing impact in proportion to the size of the Strategy's share of each bond issuance (which ranges from 0.015% to 100%), the data reflect total impact generated by the project, program, or issuer rather than the Strategy's share alone.

The report represents bonds that are classified under the Strategy's proprietary impact framework and for which relevant data are available. All impact data are sourced from publicly available issuer disclosures at the bond or project level when possible, or the program or issuer level if not. Metrics selected for each impact theme reflect the information most commonly reported by issuers and each metric includes data from between 2 and 46 issuers. In cases where the Strategy has a large position in a certain issuer, we prioritize selecting metrics reported by that issuer.

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