

Dear Faculty Senate Members,

In preparation for the April 27<sup>th</sup> meeting and subsequent discussion regarding the University's retirement plan and proposed resolutions, please find attached the following two public reports.

- 2020 Farmland Report
- TIAA policy statement on responsible investing (7<sup>th</sup> Edition, amended February 2021)

The 2020 Farmland Report provides information on achieving sustainability goals across the farmland portfolio.

The TIAA policy statement on responsible investing outlines TIAA's commitment to responsible investing (RI), highlights important aspects of RI, and outlines key activities undertaken by TIAA.

Additionally, the following link provides access to an interactive map identifying farmland locations and crops.

Farmland Map - <https://www.nuveen.com/global/investment-capabilities/alternatives/farmland-map>

Thank you,  
Joni Troester

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WESTCHESTER  
from nuveen

2020  
Farmland  
report



FARM PICTURED

São Miguel Farm

BR | 1,449  
Brazil | Acres



**WHAT'S  
INSIDE**

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NEWCOMB FARM

**AR**

Arkansas

**3,804**

Acres

Farmland investments are less developed, more illiquid, and less transparent compared to traditional asset classes. Investments will be subject to risks generally associated with the ownership of real estate-related assets and foreign investing, including changes in economic conditions, currency values, environmental risks, the cost of and ability to obtain insurance, and risks related to leasing of properties.

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WELCOME

# The sustainability commitment of a leader in farmland management

Welcome to our 9th annual Farmland Report, which chronicles our progress in achieving a range of sustainability goals across our farmland portfolio, which comprises 2.2 million acres in seven countries.

For the first time, this report was written by Westchester's Environmental, Social and Governance (ESG) committee, which we formed in 2019 with members from across our organization. The committee has already risen to its expansive responsibility: to lead ESG innovation and implementation across our farmland portfolio.

Agriculture employs 2 billion people worldwide and provides the means to feed a growing global population that will demand as much as 50% more food by 2050, as compared with 2010.<sup>1</sup> Westchester is committed to helping the world meet these challenges through strong leadership, innovation and accountability. We continue to evolve our approach to ESG and to provide tools for setting and achieving goals.

This report also provides country-level maps with granular data including, for the first time, carbon footprint. These maps will make it easier to visualize our 2019 achievements and challenges. Our [interactive mapping tool](#) offers some of this data through a bird's-eye view of the locations and crop types for each of our properties.

Throughout these pages, you will find numerous examples of our sustainability initiatives, including these highlights:

- In the U.S., we played a role in creating a universal standard for agriculture sustainability called Leading Harvest, and our teams are innovating to gain efficiencies while improving sustainability.
- In Europe, we are helping our tenants optimize their business processes and lower their cost of production, while pursuing certifications and striving to enhance soil health.
- In South America, we continue to envision and implement sustainability strategies across diverse farmland holdings and have taken steps to prevent deforestation and reduce the risk of fires such as those experienced in Brazil in 2019.
- In Australia, which endured several extreme weather events during 2019, we helped our tenants innovate to face these challenges and to enhance sustainability moving forward.

We hope you enjoy this look at our extensive farmland sustainability efforts. As a reminder, this report complements another publication that offers a high-level overview of our work: [How we invest in farmland: An introduction to Nuveen's global agricultural sustainability approach](#). Taken together, these documents intend to provide our investors and other stakeholders with clear insight into what we do and how we do it.

<sup>1</sup> [Creating a Sustainable Food Future](#) (WRI, World Bank, UNDP, and UNEP 2018).



If you would like to discuss the content of this report, please contact Westchester's Sustainability Director, André Chaves, at [achaves@wgimglobal.com](mailto:achaves@wgimglobal.com).

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**MESSAGE FROM OUR PRESIDENT & CEO**

*We are publishing this report in the midst of a very difficult time for society and our economies. The coronavirus pandemic is not only claiming human lives, but it is also putting extraordinary stress on individual countries and the global political order.*

Throughout this pandemic, Westchester's top priority has been to protect our people, our clients and the capabilities that allow us to serve them. Since mid-March, our team has been working from home, social distancing and adopting other safety measures. On farms, orchards and vineyards, managers and tenants are taking similar precautions as they conduct essential agricultural activities throughout this crisis.

This crisis has highlighted the importance to society of basic industries such as agriculture. Farmland returns historically have shown low volatility because food is essential to the survival of a growing population and must be supplied by a limited land resource base. Stable supply-demand dynamics for agricultural produce in the current pandemic indicates that farmland will represent a reliable source of value through this time of economic tumult, as it has been in the past.

We believe that the pandemic will shape the future of agriculture and have identified certain factors that will drive change:

- We have seen heightened awareness of the sustainability of food production and consumers making a closer connection between nutritional quality and health benefits. This was also evident in the earlier SARS and MERS pandemics.

*ESG Tour, February  
2019, Piauí state,  
Brazil*



- Farmland consolidation will continue as producers expand their operational footprint, but it will be in a more nationalistic environment that's oriented toward food security, and emphasizes resilience and combating climate change.
- We expect greater reliance on technology as labor challenges experienced in certain agricultural sectors drive automation and robotics. Moreover, we expect researchers, agribusiness and farmers to collaborate and harness technology to shorten supply chains, making them less vulnerable to disruption and better able to return value to farmers and workers.

Our priorities remain the safety of our staff, tenants and crop managers and serving our clients. I am proud of how the Westchester team has risen to the challenge and continues to show commitment during these uncertain times. At Westchester, we hope that you and your families remain safe and healthy.



**Martin Davies**

*President and CEO, Westchester*



## FARMLAND REPORT TIMELINE

- **2012** | **First Report; 770k acres under management**
- **2013** | **First ESG KPIs; 1.2M acres under management**
- **2014** | **PRI integrates the Farmland Principles**
- **2015** | **ESG KPIs revised; third-party certifications; cover ESG audits in Brazil**
- **2016** | **First Chile investment; globally, 1.5M acres under management**
- **2017** | **Online map; UN SDGs addressed in the report; dedicated ESG staff**
- **2018** | **1.9M acres under management**
- **2019** | **ESG Committee established; Zero Deforestation policy; social assessment for emerging markets**
- **2020** | **New ESG framework and revised KPIs; imbedded climate model; Leading Harvest launch**



# Portfolio overview

*Westchester, Nuveen's farmland investment specialist, has more than 30 years of experience in acquiring, managing and marketing agricultural real estate assets around the world.*

Since our first investment in farmland, we are proud to have built an extensive portfolio on behalf of our clients, diversified by geography and crop type. These charts and maps detail our farmland holdings as of December 31, 2019.

At the end of 2019, Westchester managed nearly 2.26 million gross acres of globally diversified farmland valued at over \$8 billion USD. In 2019, we acquired 152,064 acres in the U.S., Australia and Brazil on behalf of investment structures we manage.

For the first time, we are able to present restricted carbon footprint data for our farmland assets globally. The carbon footprint across the portfolio stood at 432,098 metric tons of CO<sub>2</sub>e during the reporting year. Our study, which encompasses 16 offices and all agricultural operations, follows the Intergovernmental Panel on Climate Change (IPCC) methodology: Scope 1, direct emissions; Scope 2, indirect emissions; Scope 3, estimated emissions from agricultural operations encompassing farm contractors and tenants.

Westchester remains committed to independent, third-party verification of sustainability advancements. Around the world and across our diverse crops, we and our partner tenants and farm contractors invite respected certification organizations to look at our lands and processes. These proactive efforts are a hallmark of our investment and operational processes, and we aspire to set the industry standard in this regard.

We continue to seek both geographic and crop diversification by investing in regions that have comparative advantages for producing crops such as wine grapes, tree nuts and fruit, as well as commodity crops such as fibers, cereals and oilseeds.

## TOTAL PORTFOLIO

(as of December 2019, in USD)



**UNITED STATES** | \$4.15B AUM (52%)

**15% & 29%**

OF TOTAL ACRES (330,011) METRIC TONS OF CO<sub>2</sub>e (124,452)



**BRAZIL** | \$1.93B AUM (24%)

**38% & 40%<sup>4</sup>**

OF TOTAL ACRES (866,006) METRIC TONS OF CO<sub>2</sub>e (171,692)



**CHILE** | \$0.05B AUM (1%)

**<1% & <1%**

OF TOTAL ACRES (4,640) METRIC TONS OF CO<sub>2</sub>e (338)

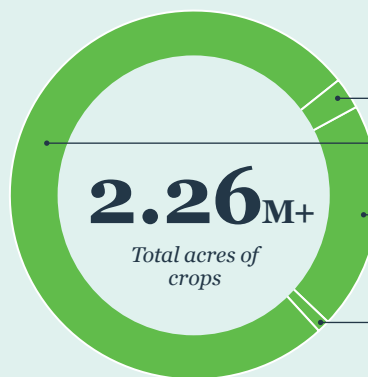


**\$8B AUM**



**432,098**

METRIC TONS OF CO<sub>2</sub>e<sup>3</sup>



**HORTICULTURE<sup>1</sup> | 2.9%**

**ROW CROPS<sup>2</sup> | 76.2%**

**SUGARCANE | 19.8%**

**WINE GRAPES | 1.1%**

1 Almonds, apples, avocados, citrus, cherries, eucalyptus, lemons, oranges, pistachios and walnuts

2 Grain, oilseeds, cotton, barley, corn, millet, peanuts, pulses, potatoes, soybeans, vegetables, sorghum, sugar beet and wheat

**POLAND | \$0.50B AUM (6%)**

**4% & 10%**

OF TOTAL ACRES  
(97,176)

METRIC TONS OF CO<sub>2</sub>e  
(41,175)

**AUSTRALIA | \$1.15B AUM (14%)**

**39% & 16%**

OF TOTAL ACRES  
(884,796)

METRIC TONS OF CO<sub>2</sub>e  
(68,997)

**NEW ZEALAND | \$0.02B AUM (<1%)**

**<1% & <1%**

OF TOTAL ACRES  
(678)

METRIC TONS OF CO<sub>2</sub>e  
(145)

**ROMANIA | \$0.20B AUM (3%)**

**3% & 6%**

OF TOTAL ACRES  
(77,823)

METRIC TONS OF CO<sub>2</sub>e  
(25,300)

<sup>3</sup> To ascertain farm efficiency, carbon footprint data should be reviewed based on CO<sub>2</sub>e Kg per metric ton of crop produced.

<sup>4</sup> This number reflects the common practice of planting two crops in a year on some land, which increases inputs and outputs (due to optimal climatic conditions throughout the year) Brazilian holdings have 36+ million metric tons of CO<sub>2</sub> stored in above-ground biomass throughout 230+ thousand acres of native and preserved forests.

# ESG monitoring and benchmarking

## BROADENING AND STRENGTHENING OUR APPROACH

Westchester has been a leader in defining how institutional investors can help to meet global agricultural goals while being valued partners with local communities. We are committed to managing and reducing the impacts of agricultural production while enhancing agriculture's capacity to shape solutions to global environmental and social challenges. This commitment has taken the form of measurable goals for addressing ESG factors, time-bound performance targets and continuous improvement.

We have been an industry innovator in measuring sustainability performance. Since 2013, we have applied Key Performance Metrics (KPIs) tied to the UN-backed Principles for Responsible Investment (PRI) Farmland Guidelines. In 2016, we introduced a code of conduct for Brazil which, combined with an audit process, addresses responsible farming practices in that country. In 2019, we created a Logic Model that linked our efforts globally to select UN Sustainable Development Goals (SDGs).

We took another important step last year when we began to evolve our existing ESG-measurement process into a comprehensive monitoring and benchmarking framework that aims to enhance how we track and evaluate sustainability performance across our global portfolio. This updated framework will let us compare and contrast performance, implement goals more effectively and give managers, investors and the public a more holistic view of our sustainability efforts. It will also improve how we collaborate with our tenants and farm contractors to take actions that can improve sustainability performance while mitigating risk.

This new framework, which is being implemented in 2020, will combine the knowledge of both internal and external resources. Our team collaborated with a global business risk and sustainability solutions firm to conduct a gap analysis of our monitoring approach and our goals. This analysis encompassed best practices from the OECD-FAO Guidance for Responsible Agricultural Supply Chains; the IFC EH&S Guidelines for Annual and Perennial Crop Production; the EU Taxonomy for Agriculture; Linking Environment and Farming (LEAF); the General Mills Regenerative Agriculture guidelines; and Leading Harvest ([see page 8](#)).

“The improvements to our ESG approach will allow us to harness the data and technology that surround us, which will strengthen the decisions we make from the standpoints of productivity, environment and resource protection. It will also enable us to make more informed choices about how we manage and steward the land. This approach should help to keep our business on stable footing and future-proof it in the face of ever-evolving environmental, economic and social challenges.”

**Eoin McDonald,**  
Senior Portfolio Manager, Westchester Group  
Investment Management



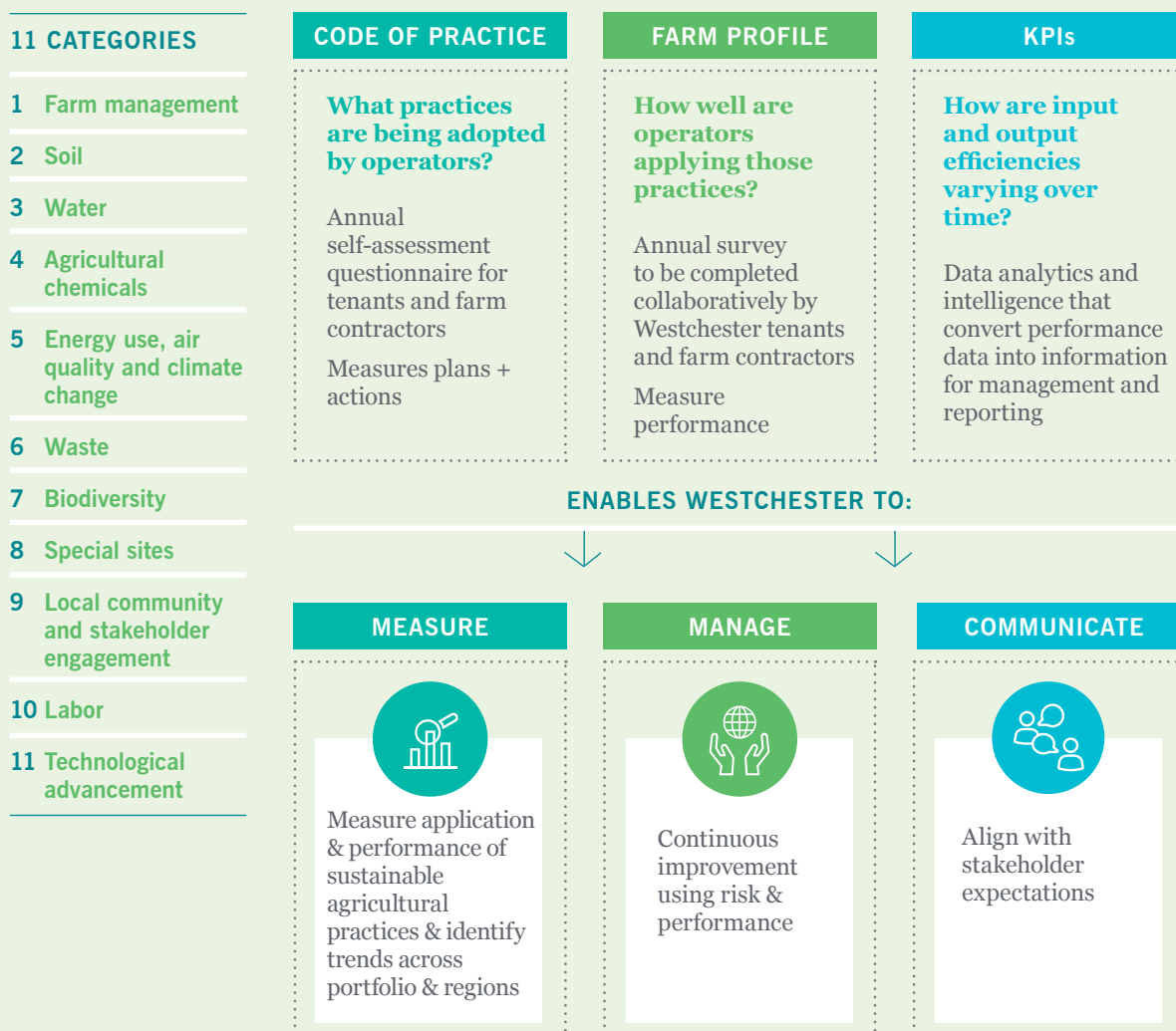
## BENCHMARKING AND MONITORING FRAMEWORK

The framework measures the application and performance of sustainable farming practices in 11 categories, shown in the infographic below. These categories encompass the impacts of agriculture as they align with sustainability issues that are most relevant to stakeholders. The framework uses three components to incorporate information relating to farms and their agricultural practices:

**1. A Code of Practice** – Implemented as a self-assessment tool, this component enables farm contractors and tenants to identify which sustainable farming practices they implement and indicate the progress in this respect.

**2. A Farm Profile** – This component collects quantitative data on inputs and outputs related to the geographical, environmental, infrastructure and socioeconomic aspects of the farm.

**3. Performance Indicators** – This component translates data into meaningful KPIs to measure operators' and portfolio progress from year to year. These KPIs will be linked to the UN SDGs.



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## TURNING DATA INTO MEANINGFUL ACTION

The information collected by the framework allows us to:

- **Effectively measure** the performance of individual farms, evaluate the maturity and application of sustainable agricultural practices and identify trends across regions and our portfolio.
- **Strategically manage** the data set, align it with risk and performance metrics and harness it to help farm managers drive continuous improvement.
- **Transparently communicate** about issues most relevant to our stakeholders.

As we continue to implement this new framework, we look forward to unlocking its full value as a tool for continuous improvement in meeting our ESG goals.

### Clearer focus on regional performance

The framework allows for the adoptions of specific targets and metrics for each business unit and operating strategy. These metrics will be tailored to each region to reflect its specific geography, weather, crops, management approach and exposures. Business units will then monitor and record their own performance.

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## MULTI-STAKEHOLDER PARTNERSHIP

### Leading Harvest: Empowering the industry to address urgent global issues

Westchester is proud to be a founding member of [Leading Harvest](#), which was created over the past few years in collaboration with a group of forward-looking investors, managers, land owners, conservationists and farmers. Launched in April 2020, Leading Harvest is a newly formed nonprofit organization at the vanguard of advancing sustainable agriculture. It offers a comprehensive and credible response to increasing demands across the value chain for sustainability assurance.

Leading Harvest supports users of its program through a universal standard that is applicable across all crops and addresses stakeholder interests. The Leading Harvest Standard can be applied to farmland owned or managed by a Standard user in the United States. It may be adapted for use outside of the United States in the future.

Leading Harvest identifies sustainable farming practices based on 13 Principles, 13 Objectives, 33 Performance Measures and 71 Indicators. It considers economic, environmental, social and governance issues and includes measures related to:

- **Efficient water use**
- **Agricultural chemicals**
- **Energy to grow crops for useful agricultural products**
- **Minimizing waste**
- **Conserving soils, water resources and biodiversity**



The program also accounts for the well-being of farmland tenants, employees, contract management company employees, contract farm labor and local communities. Meeting the Leading Harvest Standard requires awareness and appropriate application of regional agricultural best management practices to advance sustainable agriculture.

***Looking ahead:** With the advancement of the new farmland management standard, Westchester will take the next step and enroll U.S. acres in Leading Harvest. Results of this application and adaptation process will be shared in our next report.*



## Portfolio in focus

# United States

### REGIONAL OVERVIEW

Our teams in the U.S. advanced a range of initiatives in 2019 that are conserving water, improving soil health, and boosting efficiency and yields.

In California, our vineyards experienced a solid year and were fortunate that the late-October wildfires on the North Coast caused no significant damage. Although lower than 2018's record-breaking yields, wine grape production levels in California's coastal regions were at or slightly above the five-year average. Grape quality in our vineyards was high and we expect a favorable reception for wines created from the 2019 vintage.

Also in California, harvests for our nut crops have largely exceeded expectations:

- **Almonds:** Portfolio-wide almond yields exceeded budget yield estimates by nearly 8%.
- **Pistachios:** In what was expected to be an "off" year in an alternate bearing crop, producing pistachios exceeded budgeted yield estimates by 47%.
- **Walnuts:** Consistent with industry results, our California walnut yields were lower in 2019, but price improvements may limit revenue impacts.

Elsewhere in the U.S., our row crop portfolio experienced significant weather challenges in 2019, with temperatures and precipitation above historical trendlines across all locations. Final yield results were flat to slightly positive compared to expectations for most row crops in 2019. Despite regional difficulties, most tenants completed their fall field work, which aided in our 2020 lease negotiations.

### ESG FRAMEWORK IN ACTION

#### WATER

##### Innovating in response to new California regulations

*Loma del Rio farm, Oasis farm and Hanni farm, all in California*



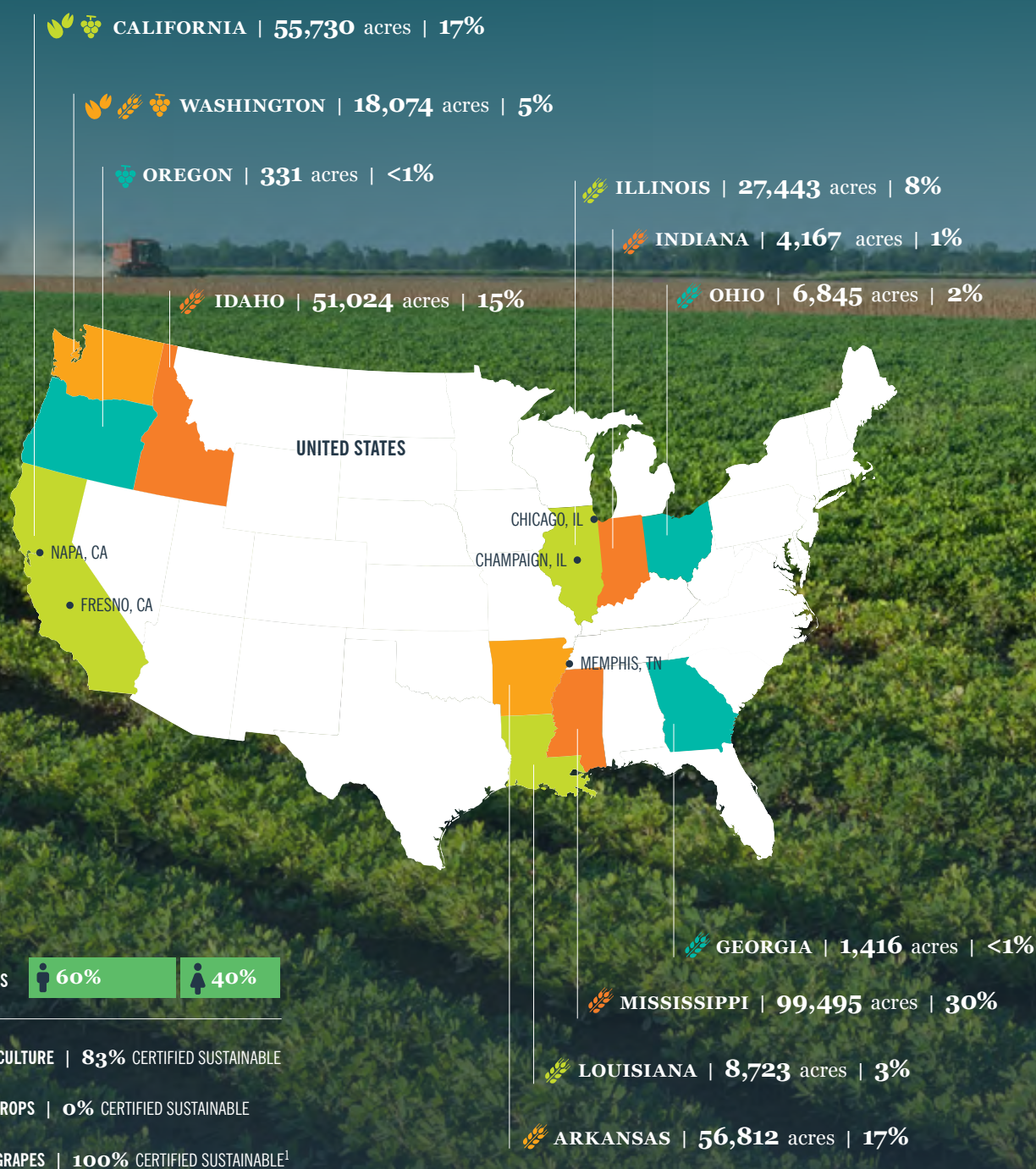
During 2019, our teams in California continued to shape effective responses to the state's implementation of its Sustainable Groundwater Management Act (SGMA).

For example, we proactively initiated water conservation strategies, such as upgrading the water conveyance systems in the Loma Del Rio vineyard (2,770 acres) and the Oasis vineyard (1,790 acres). This project involved installing canal and reservoir lining, modernizing pumping equipment and incorporating drought-tolerant planting material. Our team collected high-resolution thermal images from vineyards across California, deployed evapotranspiration sensors to precisely define vineyard water requirements and then tailored irrigation accordingly.

**“As the Lower-Tule and Pixley Irrigation Districts have pursued recharge projects to address overdraft associated with SGMA, we have appreciated the collaboration and efforts of Westchester and other individual landowners who have constructed their own recharge ponds in an effort to meet long-term sustainability.”**

**Eric Limas**, General Manager,  
Lower-Tule River and Pixley Irrigation Districts





## CERTIFICATION STANDARD MARKS<sup>2</sup>



<sup>1</sup> Includes asset in New Zealand

<sup>2</sup> Certification is granted to the farm operation and not to the crop itself. Percentages represent tillable land that falls within the certification's scope.

Meanwhile, at Hanni Farm, we also made strides in water conservation by creating a large groundwater recharge basin. This basin receives deliveries of excess surface water, which then percolates through the soil and recharges the underlying aquifer. In 2019, we finished building the 59-acre basin adjoining a 956-acre pistachio development. The project is expected to recharge about 678,000 cubic meters of water, on average, each year – enough to sustain the underlying aquifer while also meeting the crop’s irrigation needs. In addition to reducing long-term water supply risk, the investment is predicted to achieve a 20-year internal rate of return of over 14%.

## SOIL

### **Crimping cover crops for greater efficiency in Monterey County**

*Loma del Rio farm, California*



Cover crops are often planted between vine-rows to stabilize the soil and then managed through tilling and mowing. But, this approach misses opportunities to enhance soil fertility and water retention and requires extra labor to complete multiple tilling and mowing passes through the vineyard.

Crimping, a technique popularized in cereal and oil crops, may hold potential for addressing these issues in vineyards. With crimping, a specialized roller tool flattens erect cover-crop stalks and pushes them into the soil, thus catalyzing decomposition.

Recognizing the potential for crimping in vineyards, Loma del Rio initiated a 200-acre trial in 2018. Since then, data shows great promise for this technique, particularly for quickly establishing varieties such as Merced Rye. Projections show that crimping for several successive seasons may decrease labor inputs by nearly 50% as compared with traditional tilling and mowing. As we perfect this crimping technique, we anticipate adapting it to benefit other geographies and vineyards.

## AGRICULTURAL CHEMICALS

### **Inventing a better way to fight a harmful grapevine virus**

*Monterey County and Santa Barbara County, California*



Grapevine leafroll-associated viruses are responsible for yield limitations and quality reductions in wine grape vineyards throughout the world. One way to combat leafroll virus is through aggressive removal of symptomatic plants. This process is highly effective when symptoms are visible, as they are in red grape varieties. Unfortunately, these symptoms are not visible in white varieties, allowing infections to persist and perpetuating virus transmission.

Our team has developed an innovative solution to eliminate this transmission cycle. Ultimately, this solution may serve as the basis for managing the spread of leafroll viruses industry wide. The process of grafting may hold the key to detecting the presence of leafroll virus in white varieties. We will use grafting to design “signal vines.” A chardonnay scion will be grafted onto a small section of pinot noir, which will be grafted onto rootstock. Shoots and leaves growing from the small section of the red pinot noir “inter-stock” will exhibit visible symptoms if the vine becomes infected with leafroll virus.

Several experiments with this technique are planned for vineyards in Monterey County and Santa Barbara County in the coming year. We anticipate that this experiment will deliver higher yields, grape quality improvements, pesticide reductions and improved farming efficiency.



## ENERGY USE, AIR QUALITY AND CLIMATE CHANGE

### Harnessing solar to help the environment and cut energy costs in California

*Bolthouse Ranch, Rio Bravo; A&P Ranch, Lost Hills; Paul Kern Ranch, Wasco; Portwood Kern Ranch, Wasco; Sandrini Main Ranch, Delano.*



Crop irrigation in California requires significant amounts of electricity, with resulting power company charges. Since 2010 the electric rates that agricultural customers have been charged by local utility companies have risen more than 40% and are expected to rise up to 10% in 2020 due to the costs of regional wildfires in 2018.

Westchester's Horticulture team is responding by investing in five photovoltaic solar installations, which will deliver about 4,099 kW of Direct Current (DC) power. These installations will require less than 0.35% of total orchard area, but will meet up to 80% of agricultural electricity demand.

These projects, which amount to \$6.2 million, are expected to result in \$12.8 million in savings over their useful life — a highly attractive return on investment. Just as important, the project will deliver significant environmental benefits, potentially saving 167,339 tons of CO2 emissions over the next 30 years.

## LOCAL COMMUNITY AND STAKEHOLDER ENGAGEMENT

### Engaging workers with disabilities

*West Coast*



Our Fruits of Employment initiative on the West Coast continues to give individuals with disabilities access to competitive employment. Both our Viticulture and Horticulture crop managers continue to rely on these employees for important roles.

This program serves an important dual purpose: helping individuals with disabilities to grow in the workplace and cultivating dedicated workers within a challenging labor market. During the peak harvest in 2019 we had 34 employees in the program across four different properties.

We are planning to expand the program, and will keep a team of consultants engaged to help operators launch their own workforce inclusion efforts by providing assistance in building an ongoing pipeline of qualified candidates and support for enhancing or expanding operators' current human resources practices.

*Isaac Velasquez is a participant in the Fruits of Employment initiative in California*



## Restoring health to Suscol Creek in the Napa Valley

*Suscol Mountain vineyards, California*



Himalayan blackberry, an invasive shrub introduced to North America in the late 1800s, is gradually engulfing the riparian corridor along Suscol Creek in Napa County, California. The creek bisects the Suscol Mountain vineyard, which produces highly prized wine grapes.

Himalayan blackberry forms dense thickets that stifle the growth of native tree species such as Arroyo willow and California buckeye. Without this competition, these tree species and similar plants would form a tall, shading canopy above Suscol Creek, serving to moderate water temperatures. This is important because the creek hosts Steelhead trout, a threatened native fish species requiring cool water temperatures. This blackberry species also hosts a bacterial pathogen, Pierce's disease, which is detrimental to the health of vineyards.

Fortunately, help is on the horizon for both the fish and the vineyards. The team will launch an ambitious effort to eradicate Himalayan blackberry late in 2020. They will use mechanical mulchers and goats to eliminate blackberries from the apex of Suscol Creek downstream, and then replant and nurture native species in their place.

Reestablishing ecological balance along Suscol Creek will represent a major environmental achievement that also strengthens the economics of the surrounding vineyards.

## LABOR

### Enhancing job quality while optimizing efficiency

*California*



Constraints on migrant labor continued to impact the agricultural workforce across our Viticulture and Horticulture portfolios. However, crop managers were able to expand their use of the federal H2A Program, which lets workers immigrate temporarily to the U.S. to meet seasonal labor demands. Trends indicate that workers immigrating via H2A return to the same employer season after season. This compounding experience contributes to greater labor efficiency and higher work quality.

As available hands become fewer, we are adopting technology and efficient vineyard design to close the gap. For example, in California we are experimenting with new machines to remove and mulch pruning brush. Mechanizing this process will deliver savings between \$150 and \$250 per acre.



**“Stewardship is essential to the future of agriculture. Looking beyond the fields to develop farming strategies that bolster neighboring ecosystems and benefit local communities is the surest way to sustain productivity.”**

Eric Pooler,  
VP Winery Relations, U.S. Viticulture



SUSCOL MOUNTAIN VINEYARDS

**CA | 217**  
California | Acres



## Portfolio in focus

# Australia

### REGIONAL OVERVIEW

Australia suffered extreme weather conditions in 2019. Most notable within the agricultural sector were widespread, record-setting drought conditions that impacted most broad acre cropping regions. The bushfire season was one of Australia's worst ever, but most fires were outside the major cropping zones and did not harm Westchester-managed properties.

Encouragingly, there was widespread rainfall in first quarter 2020 across most of the country's cropping regions. This has helped increase soil moisture profiles and boosted grower confidence, with the possibility of an average or above-average winter crop.

### ESG FRAMEWORK IN ACTION

#### SOIL

##### **Stabilizing soil on vulnerable land**

*Brooklyn Downs Farm, Western Australia*



At Brooklyn Downs more than 3,500 trees were planted – stretching more than two miles – to create wind breaks to protect a vulnerable section of the farm. The trees reduce wind velocity, which minimizes soil movement and crop damage. The project was funded by the investors who own the property with a contribution from the tenant.

#### WATER

##### **Mitigating salinity at the Varley Farms**

*Lake King, Western Australia*



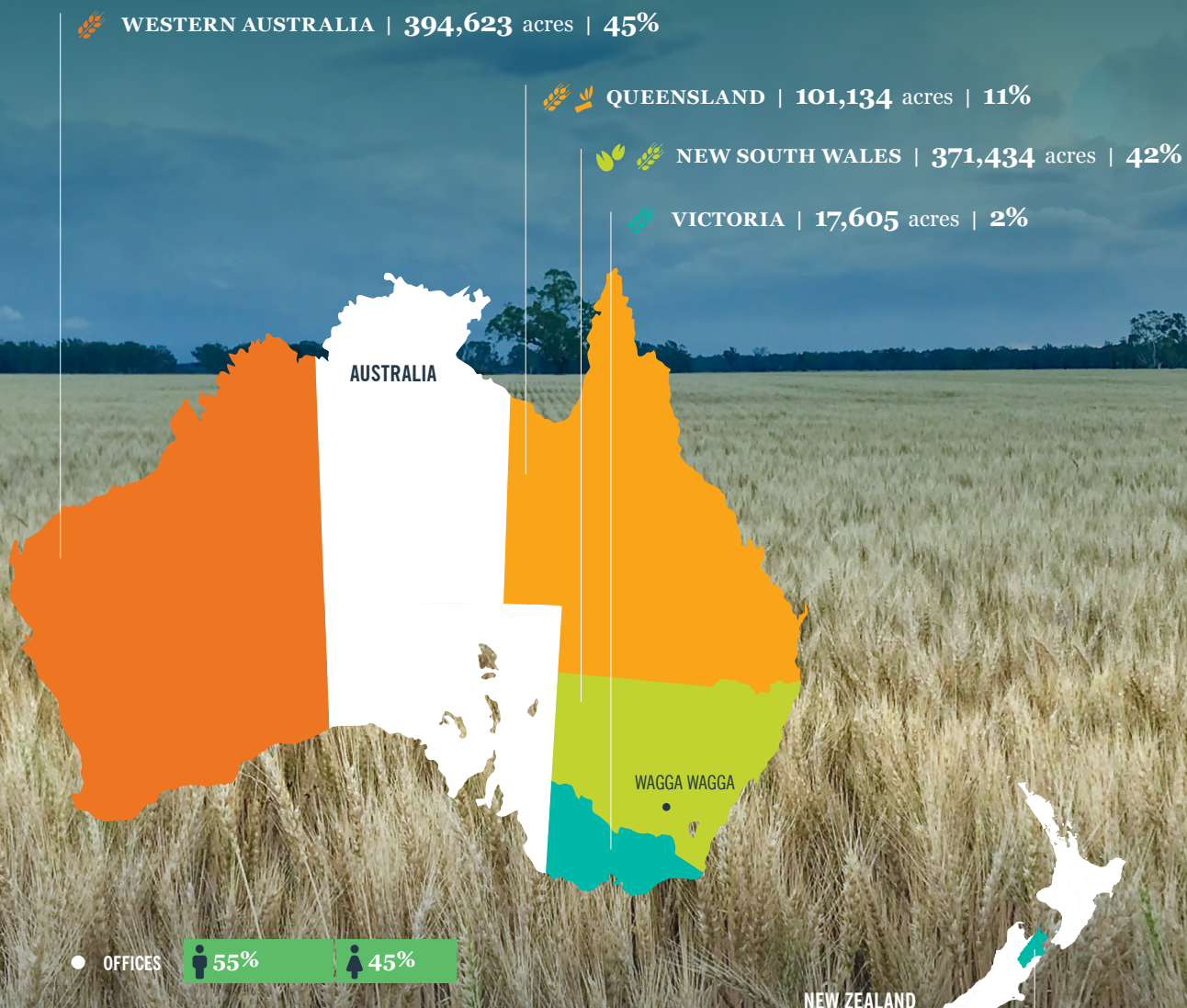
At Varley Farms, we established a 45-acre saltbush plantation which, in tandem with drainage, aims to mitigate both salinity and waterlogging. Saltbush draws water and salts from the upper layers of an area's soil profile, which helps improve soil quality and supports other plant growth.

##### **Stabilizing the Cooranga Creek banks**

*Warra, Dalby, Queensland*



At Warra on Queensland's Darling Downs, earthworks were completed to stabilize the banks of the Cooranga Creek so they can better withstand the effects of floods. The project, which involved adding soil, gravel and rock reinforcements to the banks, was funded by the farm's owners with a contribution from the tenant.



## CERTIFICATION STANDARD MARKS<sup>2</sup>



<sup>1</sup> Australia's only farm with horticulture crops is under development, and thus not eligible for third-party sustainability certification.

<sup>2</sup> Certification is granted to the farm operation and not to the crop itself. Percentages represent tillable land that falls within the certification's scope.



## Saving water through holistic farm management

Bengalala, Gunnedah, New South Wales



In Bengalala, as irrigation water becomes an increasingly precious resource in growing high-quality crops, managers are aligning water management and crop production processes to achieve greater efficiencies.

The long-term tenant of this farming asset is taking a holistic approach to conserving water. The initiative features an agreement with the local municipal council to re-use wastewater from the nearby urban area. The council pipes stringently tested re-use water to the property, where the water is incorporated with groundwater allocation to irrigate crops.

The benefit from this valuable water resource is enhanced through use of a flexible production system that incorporates raised three-meter irrigation beds. This system helps the tenant seamlessly transition from summer to winter crop production while maintaining previous crop residues, thus retaining moisture and sequestering carbon.

The council's wastewater is delivered daily throughout the year, so it is important to match supply with demand to reduce losses from evaporation and transmission. To address this challenge, the property's management team has adjusted their crop rotation plan to feature an increased area of irrigated winter cereals and chickpeas alongside the traditional summer crop rotation of irrigated cotton. This broader rotation crop plan does more than reduce water loss – it drives greater production efficiencies with fewer machinery passes, which lowers impact on the soil and ultimately reduces the farm's carbon footprint.



Wheat growing in 3-meter raised beds using recycled water in Bengalala

The tenant's general manager of farming operations continually assesses and fine tunes the production system to balance water efficiency and operational efficiency, and is proud of the soil health improvements, which have been realized without compromising production outcomes.

**“ Using our resources as efficiently as possible not only reduces the impact we have on the environment but mostly has a positive impact on the bottom line for our business. Inputs such as water and fertilizer come with a cost, and if we can reduce these through more efficient production systems, then everyone is benefiting.”**

**Sam Conway,**  
General Manager of Farming Operations,  
Bengalala



*Widespread rainfall in Australia during the first quarter of 2020 **has helped** increase soil moisture profiles and boosted grower confidence, with the possibility of an average or above-average winter crop.*



GG FARMS  
 **AU**  
Australia

**9,925**  
Acres



## Portfolio in focus

# South America

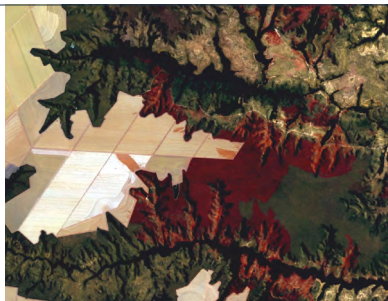
### REGIONAL OVERVIEW

South America's geographic and climatic diversity support production of an array of crops, which are exemplified in the rich output of Westchester-managed holdings in Brazil and Chile. In early 2019, both countries experienced unstable weather conditions that ultimately yielded to normalization and good performance for the cropping year.

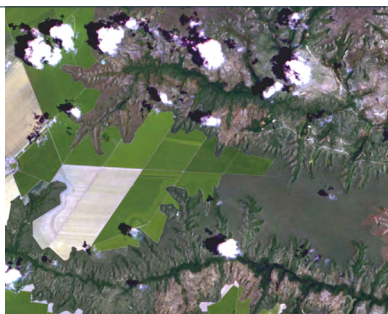
Brazilian grain production in the 2018-2019 season grew 6.4% over the previous season, totaling 242 million tons, an all-time record. Brazilian sugarcane production in 2018-2019 was 2% lower than the previous season, totaling 684 million tons. The decline stemmed from a 2% reduction in area and 1.4% decrease in productivity due to drought and temperatures that accelerated plant maturation and caused low growth and fragile stems.

Meanwhile in Chile, results for mature walnuts, lemons, navel oranges and avocados all exceeded budgeted yields. New developments of walnuts, apples and avocados all experienced their first commercial harvests in 2019.

*Satellite image from 2017 of Catuaí Norte farm showing area impacted by fire events*



*Satellite image from 2020 of same farm showing natural regeneration of fire-impacted area*



**Wildfires in the Brazilian forests** attracted global media attention in 2019. Much of the focus was on destruction in the Amazon biome, but fires also impacted the Cerrado biome, where Westchester manages farmland.

Naturally occurring fires in the Cerrado drive evolution of the region's flora and fauna, influencing community composition, soil properties and regional climate. Many plants have more biomass below ground than above, which speeds recovery. Fires also break seed dormancy and stimulate flowering of some species, boosting the biome's resilience.

However, fires caused by humans often occur during the driest periods of the year, when natural vegetation is converted to crop or pasture, or other management practices are used that employ fire. The frequency and intensity of human-led fire events in the Cerrado can harm the biome. In 2019, the number of fires in the Cerrado exceeded those in 2018, but still were below the numbers in 2017, 2015 and 2012 or in many earlier years, according to the National Institute for Space Research (IPNE).

Westchester is committed to protecting our legal reserves, areas of native vegetation that each farm is required to have in Brazil, which cannot be converted into cropland by fire or any other means. In an effort to mitigate fire risk and protect native vegetation in the biome, Westchester's tenants maintain firebreaks – areas with reduced fuel load – along property borders with native vegetation areas and surrounding productive areas. The firebreaks ease fire intensity and allow for more effective firefighting. Our tenants constantly train their employees on safety issues and maintain a qualified, well-equipped firefighting team, in line with local regulations. We also engaged a specialized third party to monitor our entire portfolio for fire events, issue fire alerts and measure the impacted area. The information collected supports our tenants and assists with creating task forces in regions with recurring fire events.

Natural regeneration gradually repairs fire damage. The images to the left show this effect in the legal reserve of Catuaí Norte farm. From top to bottom, satellite images show improvement from the early post-fire period to early 2020. When fires reduce biodiversity, Westchester monitors natural regeneration of affected areas and may conduct restoration work as required by the Brazilian Native Vegetation Protection Law.





#### CERTIFICATION STANDARD MARKS<sup>1</sup>



<sup>1</sup> Certification is granted to the farm operation and not to the crop itself. Percentages represent tillable land that falls within the certification's scope.



## ESG FRAMEWORK IN ACTION

### FARM MANAGEMENT

#### Assessing environmental, social and governance practices

*All regions in Brazil*



Since 2015, Westchester has conducted ESG assessments in all regions where it operates in Brazil. Westchester continues to strengthen the assessment process to deepen its partnership with tenants and foster their continuous improvement of ESG governance. To strengthen this approach, we have initiated a risk analysis framework that prioritizes tenants for assessment and establishes a pre-audit process to follow up and address previously identified non-compliance.

In 2019, an assessment team visited nine tenants (30% of the total tenants) in the states of Bahia, Maranhão and Mato Grosso, covering a tillable area of 86,500 acres. Twenty three tenants had been assessed in 2018. Westchester partnered with the Institute for Agricultural and Forestry Management and Certification (IMAFLOA), a local NGO, to conduct the assessments. The assessments and follow-up process succeeded in improving compliance among all revisited tenants.

Highlights from this year's assessment include:

- **55% reduction** in non-compliance events observed among previously audited tenants. Most of these related to management and governance issues and local statutory regulations.
- **Zero instances** of child or bonded labor
- **100% of tenants** adhere to conservation practices
- **80% of tenants** have an active collective bargaining agreement with their employees
- **80% of fields** were observed to have amenities for workers (portable shelters with restrooms)

- **70% of tenant's employees** were up to date with health and safety training
- **Minimum wage** paid by tenants to workers were on average **20% higher** than minimum wage required by national standards (ranging from 0% to 45% higher).



*Early stage soybean development with considerable layer of corn biomass residue*

### SOIL

#### Carroll: Protecting soil fertility and harvesting better yields

*Hertz Farm, Bahia, Brazil*



Over the last 50 years, Brazil has moved from being a food importer to a major producer and exporter of agricultural products. During that time, improvements in agricultural productivity have helped to boost output while conserving natural resources. For example, between 1975 and 2019, grain production grew more than six-fold – from 38 million to 242 million tons – while the crop area only doubled.

There are many examples of sustainable agriculture innovation among Westchester's tenants in Brazil. One such tenant, Carroll, uses simplified cultivation techniques to achieve more sustainable production while conserving natural resources. Carroll manages about 25,000 tillable acres (11,000 leased from Westchester) by planting soybeans, cotton, corn and a variety of cover crops.

The company preserves the soil by using a no-tillage system that helps recover and preserve the soil's physical, chemical and biological properties.



This system involves one-pass planting and opening of narrow seeding slots, which limits soil disturbance. In addition, Carroll cultivates cover crops (typically, millet, brachiaria or crotalaria) during the post-harvest period. This helps to avoid soil compaction by maintaining a living root system during most of the year, while providing the soil with additional organic matter, protecting it from erosion and reducing leaching of nutrients.

Carroll has also adopted the practice of rotating crops with corn and planting brachiaria between rows as a companion crop. This technique covers the soil with a higher biomass layer immediately after harvest, which increases organic matter and nutrient levels, promotes enhanced soil biology, retains humidity and fosters carbon storage.

## AGRICULTURAL CHEMICALS

### Precision agriculture

*Hertz Farm, Bahia, Brazil*



As Carroll strives to produce crops more sustainably and economically, it embraces new technologies that allow for more efficient use of fertilizers and pesticides. For example, by attaching sensors to the farm sprayer, the company can identify different types of chlorophyll in weed and cultivated crop species, and selectively applying herbicides where there are undesired plants. This technology has allowed them to reduce herbicide use by 50% to 70% during pre-planting and after soybean and corn harvest.

Carroll also employs this technology to apply fungicides and insecticides during the initial growing stages of corn and cotton. This has allowed them to target the crop line specifically and has produced a 30% reduction in fungicide and insecticide use.



*Farm sprayer applying herbicide selectively only on undesired weeds*

### Biopesticide innovation

*Matopiba, Goiás and Mato Grosso, Brazil*



SLC Agrícola (SLC) is among the largest grain and fiber producers in the world and Westchester's largest tenant in the central and northeast regions of Brazil. The company is a leader in advancing the concept of biopesticides, which help to protect both crops and the natural environment.

Biopesticides are derived from natural materials such as animals, plants, bacteria and certain minerals, and are used as plant protection products. These types of pesticides are an important tool for sustainable agriculture because they effectively manage pests and diseases while avoiding negative environmental impact. Their active and inert ingredients are generally recognized as safe.

SLC's innovation and research processes have helped them develop their own "biofactories" to produce biopesticides locally at their farms. The company has found that biopesticides are more than 80% effective in managing pests and disease, and thus complement chemical use in achieving crop efficiency and productivity.

To further reduce pesticide use, SLC uses its georeferenced monitoring platform to create maps of pest and disease infestation levels across farms. Information is transmitted directly to the crop-spraying machine, which applies chemicals only where infestations can cause economic losses. Also, SLC uses the same precision spraying technology as Carroll to perform post-harvest weed control. In some situations, such as controlling weeds in cultures' post-harvest phase, there is up to a 95% reduction in the use of the inputs. This aligns with SLC's commitment to achieve a 25% reduction in greenhouse gas emission by 2030.

## BIODIVERSITY

### Protecting Brazil's forests

*All regions in Brazil*



Brazil is the most biologically diverse country in the world. Two of its six terrestrial biomes – the Atlantic Forest and the Cerrado – are classified as biodiversity hotspots. According to data from the Environmental Ministry, at least 103,870 animal species and 43,020 plant species are currently known to exist in Brazil, comprising 70% of the world's catalogued species. Biodiversity is a critical resource due to its natural capital and the broad benefits it provides to society. But, it also supports many economic sectors, such as food and agriculture, which rely on resiliency in terms of soil structure and fertility, water supplies and climate regulation.

The interdependency of biodiversity and agriculture is paramount to Westchester. This is why two of our strategic pillars involve the protection of biodiversity through our Zero Deforestation Policy. The policy highlights our commitment to ensuring investments in Brazil discourage the depletion of forested areas and native vegetation and existing protected areas inside our properties are preserved.

“The zero deforestation goal can coexist with the expansion of agriculture to meet the population's future needs. Researchers from IMAFLORA and the University of Wisconsin published a study indicating that in the Cerrado and Amazon biomes, 70 million hectares (173 million acres) already deforested are suitable for planting grains. Another study carried out by The Nature Conservancy (TNC) pointed out that in the Cerrado biome alone, 18.5 million hectares (45.7 million acres), mostly low-productivity cattle pastures, are suitable for soybean production. In order to reach the zero deforestation goal, it is essential that companies across the forestry and agricultural value chain establish policies to preserve natural habitats and convert degraded areas into productive land. Westchester took the important step in 2018 to become the first farmland investor to establish a Zero Deforestation Policy, a benchmark for the sector.”

**Luis Fernando,**  
Environmentalist and Certification  
Manager at IMAFLORA

**The Brazilian Native Vegetation Protection Law** sets forth a regulatory framework for land use and environmental conservation on rural properties. Two main types of land are protected: Permanent Protection Areas, which protect environmentally important areas, such as buffer zones around water bodies and rivers; and Legal Reserves, in which rural landowners must set aside part of their land (varying from 20% to 80%) where native vegetation is maintained.

Westchester currently protects **235,000 acres** (nearly 30% of the Brazilian portfolio it manages) across eight states in the Cerrado (74%) and Atlantic Forest biome (26%). With regards to restoration projects, a total of 1,390 acres are in an initial recovery stage (planting of seedlings), 1,705 acres are being monitored to ensure initial recovery from plantings in previous years and 1,630 acres are already in recovery and being maintained with minimal labor intervention. The total number of seedlings planted exceeds **2.4 million**.

## Avifauna resurgence: Signs of successful restoration

*Areia Branca farm, São Paulo, Brazil*



A complex of three perennial lakes is part of the Areia Branca farm, which Westchester has managed since 2010. These shallow lakes support abundant emergent vegetation that is adapted to flooded areas. Many years past, the lakes had been drained to expand sugar cane crops, but the former owner halted this practice in a commitment to public agencies. Westchester inherited this commitment 10 years ago, and since then we've planted half a million seedlings on 692 acres, reestablished the water dynamics and restored important ecological processes and ecosystem services. This is protecting soil and bodies of water, increasing carbon stocks, establishing ecological corridors and providing shelter for wildlife.

Today, this wetland area is home to a variety of species. In fact, scientists from the Federal University of São Carlos who are studying the location's bird population found that endangered species have returned and established viable breeding populations.

One such threatened species are small, neotropical finches called Capuchinos, migratory birds that only reproduce in wetlands. Researchers noted Capuchinos returning to the farm began to study the genetics of three different populations. Using DNA and paternity tests, they found that the Capuchinos were a hybrid of two genetic lineages and that these hybrids could produce viable offspring. This was the first time researchers had ever discovered this phenomenon for the two species involved.

The researchers conducted two additional bird ecology studies on the Areia Branca Farm. One study of the nest construction strategy of Chestnut-capped Blackbirds found that a male will build many nests to try to increase his reproduction success by mating with more than one female at a time. This is a rare reproductive strategy – seen in only 10 species globally – and observed for the first time here in Brazil.

*Chestnut-capped Blackbird*



*Nest with Chestnut-capped Blackbird eggs*



*Researcher spotting a Chestnut-capped Blackbird nest*





## Eucatex: Habitat protection, fauna monitoring and apiculture innovations

*Morrinhos farm, São Paulo, Brazil*



Eucatex is one of Brazil's largest producers of floors, partitions, doors, MDP and MDF panels, wood fiberboard and paints and varnishes. FSC-certified Eucatex manages more than 69,000 acres of eucalyptus plantations and preserves more than 15,000 acres of Legal Reserve and Permanent Preservation Areas in the state of São Paulo. As part of its commitment, the company has implemented programs to prevent hunting and illegal deforestation, monitor fauna and flora, and protect against forest fires.

Since 2013, the company's fauna-monitoring program has sought to identify and quantify the biodiversity of areas under preservation to gauge the company's effectiveness in maintaining healthy, viable species populations. Currently, 312 animal species have been identified, 52 mammals and 260 birds, of which 36 are endemic to the Atlantic Forest and three to the Cerrado biome. There are 38 species classified as threatened or endangered by various Brazilian environmental agencies. These results show the value of monitoring biodiversity and highlight the ecological importance of the Native Vegetation Protection Law and its thoughtful implementation.

### LOCAL COMMUNITY AND STAKEHOLDER ENGAGEMENT

#### Pre-acquisition social assessment

*MATOPIBA and other agricultural frontiers in Brazil*



The Sustainable Development Goals (SDGs) will not be achieved without private sector engagement. Moreover, knowing the potential risks to the population around the areas where the investments take place, as well as the risks

to the permanence of the investment itself is fundamental for best management.

In order to address this challenge, IMAFLORA (Institute for Agricultural and Forest Management and Certification) has developed – in cooperation with Westchester – a methodology to assess the social, environmental and economic aspects of regions in the Cerrado Biome where we have acquired and manage farmland. The analysis identified the existing social groups, their needs and specific opportunities to generate positive impact.

Such cooperation took place under the Impact Plus Program, which means the methodology can serve as an industry benchmark to be replicated by other companies.

**“ Social knowledge is also an asset. Information on social, environmental and economic issues will allow Westchester to plan focused interactions in the regions, unlocking opportunities and driving inclusive development on a larger scale in the future.”**

**Marina Piatto**, Manager of Climate and Agriculture Supply Chain Initiative

#### Good Growth Partnership

*MATOPIBA, Brazil*



The Good Growth Partnership brings together diverse initiatives and hundreds of leaders in government, farming, conservation, finance and business to put sustainability at the heart of global commodity supply chains. The Partnership focuses on Brazil and three other countries and is financed



by the Global Environment Facility (GEF) and supported by the United Nations Development Program (UNDP). The Partnership's programs are being advanced in Brazil by Conservation International (CI) and a range of strategic partners (including Westchester and a number of its tenants). Programming focuses on sustainable soybean production in 10 municipalities in the MATOPIBA<sup>1</sup> region, located in the country's Cerrado biome.

Among the Partnership's aims is to help farmers reconcile how commodities are produced with the need to protect the environment. They are pursuing this aim by supporting technical innovation, good agricultural practices and territorial intelligence, creating sector-wide and lasting change, and convening around a common vision and an agenda for action. The Partnership is facilitating dialogue between governments, academia, farmers, civil society and the private sector to define a vision for sustainable development of the MATOPIBA region.

### **Nuffield Scholars: Bringing fresh ideas to sustainable agriculture**

*All regions in Brazil*



Nuffield scholarships provide scholars with the opportunity to develop leadership skills and pursue research that can advance farming, food, horticulture or rural industries, and facilitates collaborations with like-minded researchers around the world.

Ollavo Tinoco was selected as the 2019 sponsored Nuffield scholar on behalf of TCGA I and TCGA II funds that Westchester manages. As part of his scholarship, Ollavo is researching the factors that contribute to successful generational farm transition.

During a visit to Italy, Ollavo participated in the “Youth for World Food Day: Feeding the world by investing in the future” panel at the 46th Committee on World Food Security (CFS), at the FAO. The panel explored ideas on how to minimize food waste without sacrificing consumption of fresh foods. Ollavo has also joined a youth council working group for the CFS.



<sup>1</sup> MATOPIBA is an acronym that uses the first two letters of the four states where soybean production is expanding into southern Maranhão (MA), Tocantins (TO), southern Piauí (PI), and western Bahia (BA)



## Portfolio in focus

# Europe

### REGIONAL OVERVIEW

Weather significantly impacted agricultural production in Poland and Romania in 2019, with some regional variability throughout the countries. Both countries registered 2019 as the warmest ever since weather data has been recorded.

We are seeing a trend towards higher overall farm productivity in the two countries due to consolidation and efficiency gains. Preliminary figures show a continuing trend toward larger farms, as farmers with holdings below 120 acres exit the business at a rapid pace. The larger farms can sustain their performance even in adverse weather conditions, because they benefit from more advanced farm and soil management, better technology and sufficient access to capital.

Poland and Romania have approximately 13% and 33% of all farm businesses in the EU28, while countries like Germany or France have bigger farms with 2% and 4%, respectively. We expect further productivity gains as sector consolidation continues and farm profiles move towards those in Western Europe.

### ESG FRAMEWORK IN ACTION

#### FARM MANAGEMENT

##### Focus on sustainability third-party certification

*Poland and Romania*



Independent certifications play a significant role in measuring the results of our sustainability initiatives. About 30% of Westchester's European

portfolio holds a third-party certificate from Global G.A.P. or an organic certification.

Two properties in Poland and Romania already hold an organic certificate, and we are making progress in gaining such certification for a third tenant in Europe. Typically, farms themselves drive the effort toward organic certification, and these farms entered the Westchester-managed portfolio after already being certified.

By contrast, Westchester takes a more active role in supporting a farmer's embrace of Global G.A.P. certification. Many farmers are unaware of this certification, so we educate them about it, introduce them to certification groups and assist with certification-related set-up costs, which can reach 3,000 euros or more. We anticipate that an additional 2,500 acres will be certified in 2021.

We expect that our implementation of Global G.A.P. will drive positive changes in farming practices and procedures. Farmers create a baseline view of their operations, which they can then improve upon as they adapt their practices to meet relevant criteria, such as recycling sprayer washings or reducing tire pressure to prevent soil compaction.

In addition, Global G.A.P.-certified farmers will operate in a sustainable manner and as a result could have a more cost-effective business. Farmers also may use their Global G.A.P. status to develop premium markets for certified crops, or gain access to markets that require certified supply.



 LUBUSKIE | 13,343 acres | 14%

 ZACHODNIOPOMORSKIE | 22,257 acres | 23%

 POMORSKIE | 19,229 acres | 20%

 WARMINSKO-MAZURSKIE | 33,953 acres | 35%



 DOLNOSLASKIE | 5,205 acres | 5%

 OPOLSKIE | 3,189 acres | 3%

EUROPE



● OFFICES

 65%

 35%

 ROW CROPS – POLAND | 53% CERTIFIED SUSTAINABLE

 ROW CROPS – ROMANIA | 5% CERTIFIED SUSTAINABLE

 TIMIS | 3,718 acres | 5%

 ARAD | 12,363 acres | 16%



 BRAILA | 12,210 acres | 16%

 TULCEA | 5,036 acres | 6%

 CONSTANTA | 19,799 acres | 25%

 IALOMITA | 1,504 acres | 2%

 TELEORMAN | 1,606 acres | 2%

 DOLJ | 14,207 acres | 18%

 MEHEDINTI | 7,381 acres | 9%

## CERTIFICATION STANDARD MARKS<sup>1</sup>



<sup>1</sup> Certification is granted to the farm operation and not to the crop itself. Percentages represent tillable land that falls within the certification's scope.



## SOIL

### Soil health and carbon sink projects

*Poland*



Westchester's team in Europe carefully monitors the impact of production on the farmland it manages, which includes regular checks on soil nutrient levels to avoid nutrient and organic matter depletion. Westchester works with its tenants and contractors to achieve good soil health through crop rotation, farming techniques, and fertilization.

Westchester incorporates a defined list of approved crops into farmland lease contracts and conducts environmental checks and soil testing both at acquisition and regularly thereafter. Substantial areas of our Polish farms had a lime deficit resulting from lack of investment at the end of the communist era, resulting in soil that was too acidic for many crops. During 2019, Westchester arranged for about 5,500 tons of lime to be distributed on a variety of farms, with the target of increasing pH levels to 6.5 – optimal for most common European row crop rotations.

The team is reviewing or conducting a variety of projects to improve carbon sequestration of soil and enhance soil health. One such project, being conducted in partnership with and supported by multilateral institutions, is pursuing these soil sustainability goals by adjusting operational techniques on two farm locations in Poland. The project seeks to broaden the scope of our soil monitoring, going beyond measuring main nutrients and pH levels, to include organic matter, carbon sequestration and additional soil health factors.

Additionally, Westchester Europe allows tree planting on farmland with low agricultural productivity. Where such farmland exists, we are reviewing it to gauge its suitability for long-term afforestation.

## ENERGY, AIR QUALITY AND CLIMATE CHANGE

### Capturing benefits of photo-voltaic electricity generation

*Poland*



Photo voltaic (PV) electricity generation is gaining greater attention as companies move to comply with European Union targets for renewable energy. PV developers search for land near existing electrical grid infrastructure. Such land sometimes includes marginal agricultural land. Leasing such land for PV installations provides the opportunity to generate a new revenue stream and helps increase production of renewable energy.

Westchester has acted on this opportunity in Poland over the past 12 months, signing 20 optional PV lease agreements covering about 4,400 acres (2.5% of the managed portfolio in Europe). The partner companies who have taken up these options are moving the agreements through the permitting and concession processes. If we are able to successfully install these facilities on 50% of this acreage, the theoretical power generation capacity would be about 440MW.

Farms that consume large amounts of energy (e.g., those with silo storage infrastructure, grain drying and cleaning equipment) may have PV roof panels installed on farm buildings in the coming year as part of overall farm improvement projects. Such investments reduce both energy costs and the carbon footprint.



## BIODIVERSITY

### Creating a home for bees and boosting crop success

*Poland*



In spring 2020, Westchester arranged with a number of tenants to create flower strips at a variety of locations in Poland. This project aims to encourage cooperation between beekeepers and farmers to enhance crop pollination and preserve bee populations. Westchester provided tenants with appropriate wildflower seed mixes for the project and reimbursed them for the seeding work.

Flowers are being planted on areas of the farms that would otherwise not be cultivated, due to lower-quality soil or an awkward field shape. In addition to creating a habitat for bees, which will remain in place once surrounding crops have been harvested, the wildflower mix lends a pleasant aesthetic. Academic research shows that flower strips positively contribute to biodiversity, providing habitat for wildlife and plants in areas predominantly used for crop farming.

## LOCAL COMMUNITY AND STAKEHOLDER ENGAGEMENT

### Transforming marginal land into community treasures

*Poland*



The Westchester team in Poland is working with local community leaders and authorities to identify options for potential “land swaps” that could enhance local quality of life. In such swaps, non-farm, fallow land would be exchanged with the on-farm roads owned by the local Gminas (communities) to optimize the farmland structure.

Our team is assessing select projects that could exchange on-farm roads with marginal plots of land that ultimately will serve the community as playgrounds or recreation areas.

## LABOR

### Advancing health and safety

*Poland*



Westchester continues to enhance its ESG initiatives in Europe by monitoring health and safety issues related to the environment and employees. Many of the farms in Poland have farm bases, buildings and storage facilities which are a legacy of the State Farm Structure that have deteriorated due to inadequate investment by the previous owners.

Westchester has now removed all underground oil tanks across the Westchester-managed portfolio in Europe, which avoids any risk of groundwater or soil contamination. More than 18,000 tons of oil-contaminated soil also has been removed. Additionally, Westchester has arranged for removal and safe disposal of 908 tons of asbestos-containing material from farm buildings.

# Looking ahead

*As part of Nuveen, Westchester embraces core values of acting with integrity and delivering excellence. One facet of our commitment to these values is to pursue continuous improvement, which is reflected in the ongoing refinement of our sustainability approach.*

## ESG Framework

This new decade will be pivotal in dealing with the myriad of ESG challenges we face. We are excited about implementing our new ESG Framework and look forward to introducing new KPIs that will replace the set developed in 2013. Our next report will focus on results of our ESG framework in action.

## Leading Harvest

With the advancement of the new farmland management standard, Westchester will take the next step and enroll U.S. acres in *Leading Harvest*. Results of this application and adaptation process will be shared in our next report.

## Carbon and climate change

Category number 5 in our ESG framework expresses our commitment to climate change mitigation. This year's report represents a first endeavor to display our carbon footprint, including scopes 1, 2 and 3. Moving forward we will seek to convert inputs and outputs data to offer valuable

information to our stakeholders as well as material to calibrate our commitments.

## Stakeholder engagement

Westchester is working with leading organizations to ensure a viable way to keep up with the world's growing demand for food. In 2019, we made great strides to engage with organizations concerned with our operations, particularly those scrutinizing our investment in such regions as Brazil. We will seek to partner with NGOs to pursue shared objectives, such as protecting and restoring natural ecosystems, testing and scaling new technologies to improve yields and reduce emissions, or consulting with affected communities.

These initiatives represent just a few ways we are innovating to make our sustainability practices stronger, our measurement techniques more accurate and our management capabilities more effective in this important aspect of what we do.

## ESG Advisory Council improvements

Westchester will add external experts to its ESG Advisory Council. The council's scope is to monitor developments and emerging themes on environmental and social issues. The council's work also raises awareness of points of policy and anticipates potential future issues.





## Conclusion

*We are pleased with the progress we have made in our sustainability efforts in the past year. In addition to efforts to upgrade our ESG framework, we are proud to be expanding how we monitor and benchmark our portfolio. As our portfolio grows, and we expand into new geographies, we will continue to uphold high standards for the local partners with whom we work.*

*We thank Nuveen's responsible investing and marketing teams, and Mills Global for their assistance with creating this report.*

*We thank you for reading this report.*

*ESG Committee*

ŁOZICE  
**PL** | **2,982**  
Poland | Acres

**For more information, please visit [nuveen.com](https://nuveen.com).**

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Farmland investments are less developed, more illiquid and less transparent compared to traditional asset classes. Investments will be subject to risks generally associated with the ownership of real estate-related assets and foreign investing, including changes in economic conditions, currency values, environmental risks, the cost of and ability to obtain insurance and risks related to leasing of properties.

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OPINION PIECE: PLEASE SEE IMPORTANT DISCLOSURES IN THE ENDNOTES.



# nuveen

A TIAA Company



Responsible  
investing

# TIAA policy statement on responsible investing

*7th Edition, amended February 2021*





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# Preamble

## I. Purpose and applicability

The purpose of the seventh edition of the TIAA Policy Statement on Responsible Investing (“Policy Statement”) is to publicly express our commitment to responsible investing (RI), highlight the benefits RI approaches bring to our clients and outline the key activities we use to put our aspiration into action.

This document also serves to communicate the expectations that Teachers Insurance and Annuity Association of America (“TIAA”) and College Retirement Equities Fund (“CREF”), TIAA-CREF Funds (“TCF”), TIAA-CREF Life Funds (“TCLF”) and TIAA Separate Account VA-1 (and together with CREF, TCF and TCLF, the “TIAA-CREF Fund Complex”) have for the environmental, social and corporate governance (ESG) policies and practices of their respective investment portfolios.

Previous versions of our Policy Statement, whose first edition was published in 1993, focused on publicly traded operating companies. Due to its increasing relevance across all asset classes, including real estate, private markets, and real assets, our RI commitment and program has expanded over time. Recognizing that implementation will vary across asset classes, we strive to extend and connect our core RI principles across our portfolios.

“Since 1970 we have been a leader in what is now called responsible investing.”

## II. Why we focus on responsible investing

Since 1970, TIAA has been a leader in what we now call responsible investing, a constantly evolving discipline that incorporates the consideration of environmental, social and governance (ESG) factors into investment research, due diligence, portfolio construction and ongoing monitoring.

Our participants and clients expect us to be good stewards of their investments as we help them achieve financial well-being at all stages of life. We seek to implement a set of principles that support well-functioning markets in order to preserve financial, social and environmental capital. We believe this philosophy and our approach contributes to long-term performance and helps reduce risk in our investments.

Specifically, we aim to promote good governance practices and monitor issues that may affect a company’s ability to create long-term, sustainable value. To ensure that investors have a broad range of information about the effects of their investments on key stakeholders, we encourage the substantive consideration of a broader stakeholder lens, including customers, employees, suppliers and the larger community.

We are proud of the leadership role we have played for decades and of our track record of achieving beneficial outcomes related to ESG practices throughout the investment value chain. We believe that by driving transparency, innovation and global adoption of RI best practices across all asset classes, we have the opportunity to provide enduring benefits for portfolio companies, investors, society, our communities and the planet. We have spearheaded efforts to systematically integrate material ESG and sustainability factors into the investment decision process and going forward we expect our conviction and approaches to responsible investing to continue to evolve and take new forms.





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## I. Oversight

The TIAA and TIAA-CREF Funds Boards respectively oversee the TIAA-CREF Fund Complex's and TIAA General Account's responsible investing programs, including management's role in developing and implementing core programmatic activities.

The RI program is administered by the Nuveen Responsible Investing team ("RI team"). Nuveen is the investment management arm of TIAA. The RI team works collaboratively with investment management colleagues throughout Nuveen and key stakeholders within TIAA to continuously enhance and advance the investment activity of TIAA and the TIAA-CREF Fund Complex's activities across asset classes.

The program activities and core principles of the responsible investing program may be inapplicable in some cases, depending on company type, underlying assets, and local market regulations. While specific activities and principles are most relevant to publicly traded operating companies, the spirit of the included policies can be applied to all companies in which TIAA invests throughout the world, and, to the extent practicable, also guide TIAA's internal governance practices.

## II. Program activities

As global institutional investors, we believe that responsible investing provides enduring benefits for our clients and our communities. We believe responsible business practices lower risk, improve financial performance and drive positive social and environmental outcomes.

We implement our RI commitment through activities underlying a set of core principles across Nuveen: (1) engagement, (2) ESG integration and (3) driving positive impact across our portfolios. While each of our investment affiliates takes a unique investment approach to pursuing competitive risk-adjusted returns on behalf of its clients, we believe that our core principles are increasingly relevant and applicable across all asset classes. Our principles will continue to evolve over time to ensure alignment with market trends and business needs.

### A LEGACY OF RESPONSIBLE INVESTING

Nearly

**5 decades**

*of leadership in responsible investing*

*Began engaging with companies  
on product and social issues in the*

**1970s**

*Launched one of the industry's  
first dedicated ESG products in*

**1990**



[nuveen.com/responsible-investing-timeline](https://nuveen.com/responsible-investing-timeline)

## III. Core principles

### (1) ENGAGEMENT

Engaging with management and boards of directors of public and private companies to improve their ESG performance is in our clients' economic interest. Individually and in collaboration with other investors, we use our influence, relationships and formal channels to address issues and engage in public policy discussions that may affect the sustainability of long-term profits.

Through constructive dialogue with regulators, public policy makers and other industry bodies, we help enable responsible investment globally. Advocating for relevant, consistent and comparable ESG disclosure from companies and other investees supports informed investment decisions. By prioritizing this transparency, we strive to fill the existing information gap that can otherwise hinder rigorous investment analysis.

Our key engagement activities include:

- **Proxy voting:** We execute thoughtful, case-by-case voting on management and shareholder proposals for publicly traded companies.
- **Dialogue:** We engage in direct and constructive dialogue with CEOs, senior management, boards of directors, tenants and operators as well as other appropriate stakeholders to promote value-enhancing outcomes through encouraging relevant ESG disclosure and adoption of best practices.
- **Targeted initiatives:** We aim to drive measureable outcomes with company, industry, thematic and country-specific initiatives.
- **Market initiatives:** We collaborate with peers, interdisciplinary experts and industry stakeholders to create best practices and drive more effective outcomes.
- **Policy influence:** We actively help to shape legislation, public policy and global standards related to RI best practices.

We are fundamentally committed to engaging with issuers. In our experience, long-term engagement is the most effective and appropriate means of promoting responsible behavior. As a matter of general investment policy, we may consider divesting or underweighting an investment from our accounts in cases where we conclude that the financial or reputational risks from an issuer's policies or activities are so great that continued investment is no longer prudent. In the rarest of circumstances and consistent with the policies outlined below, we may, as a last resort, consider divesting from issuers we judge to be complicit in genocide and crimes against humanity, the most serious human rights violations, after sustained efforts at dialogue have failed and divestment can be undertaken in a manner consistent with our fiduciary duties.

Our policy of engagement over divestment is a matter of principle that is based on several considerations: (i) divestment would eliminate our standing and rights as an investor and foreclose further engagement; (ii) divestment would be likely to have negligible impact on portfolio holdings or the market; (iii) divestment could result in increased costs and short-term losses; and (iv) divestment could compromise our investment strategies and negatively affect our performance. For these reasons, we believe that divestment does not offer TIAA an optimal strategy for changing the policies and practices of issuers we invest in, nor is it the best means to produce long-term value for our participants and shareholders.

### (2) ESG INTEGRATION

Environmental, social and governance (ESG) information provides an additional lens to use when assessing company and issuer performance beyond traditional financial analysis. Continuing improvements in the quality, disclosure and accessibility of ESG information have enabled greater applications for incorporation into investment portfolios.

We believe that the consideration of relevant ESG factors in investment analysis, due diligence and portfolio construction can enhance long-term investment value and manage downside risk. Through ESG integration, we seek to expand our investment research and portfolio construction lens to include ESG risks, opportunities and megatrends that can inform investment decision-making. The ability to accurately forecast long-term industry and issuer trends also requires an understanding of relevant ESG factors and their potential impact.

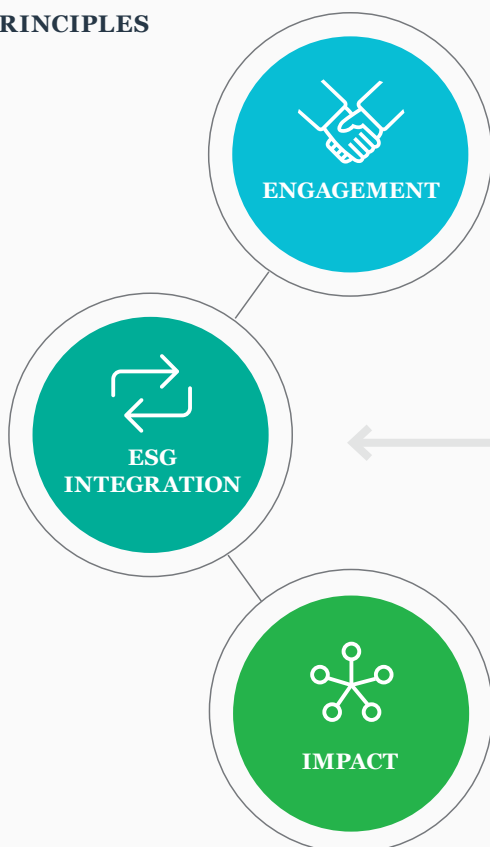


Our ESG integration activities, implemented in partnership with our investment teams, focus on building out the financial relevance of material ESG themes and factors, and facilitating systematic access to and uptake of quality ESG information in the investment process. In a mutually reinforcing manner, market-related insights gained through our engagement activities provide our analysts and portfolio managers with additional information for decision making at the security, sector and portfolio management levels.

### (3) IMPACT

We believe that all investments have impacts on society and the environment. We aim to assess these effects and, where possible, promote the positive and mitigate the negative. Across asset classes, a growing number of opportunities exist for pursuing specific, positive and measureable social and environmental results while delivering robust long-term financial returns. We are dedicated to identifying such opportunities and measuring the impact of those investments.

#### OUR PRINCIPLES



#### Engagement

We influence companies and issuers to help them innovate and operate more effectively. We partner with stakeholders across the market to set and follow RI best practices.

#### ESG Integration

We incorporate material ESG factors into our investment process across funds and asset classes.

#### Impact

We measure, manage, and drive positive environmental and social impact through our investing practices.



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A photograph of three Indigenous Australian children standing on a rocky shore. The child on the left is a girl wearing a red jacket over a black top with a colorful beaded necklace. The child in the middle is a girl wearing a pink long-sleeved top and a red skirt with a wide white belt. The child on the right is a girl wearing a red top with a blue and white patterned strap. They are all smiling and looking towards the camera. The background is a blurred natural setting with rocks and water.

# Environmental, social and governance issues

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## I. Introduction

As investors, we believe that issuers should demonstrate that they have carefully considered the strategic implications of relevant environmental, social and governance (ESG) issues on long-term performance. In our view, issuers that exercise diligence in their consideration of ESG issues are more competitive and can take better advantage of operational efficiencies, advance product innovation and reduce reputational risk. Failure to proactively address these issues can negatively affect individual businesses, investor returns and the market as a whole.

As a matter of good governance, we believe that issuers should carefully consider the strategic impact of environmental and social responsibility on long-term shareholder value. Therefore, we believe that issuers should apply a broader stakeholder lens when analyzing the key decisions they face in sustaining their own competitiveness, relevance, and growth potential: the environment, customers, employees and suppliers, and communities.

The sections below detail specific environmental, social and governance recommendations for publicly traded operating companies, but we encourage other issuers to assess how these topics are relevant for their specific contexts.

“We believe that issuers should carefully consider the strategic impact of environmental and social responsibility on long-term shareholder value.”

## II. Business ethics, transparency and accountability

Corporate governance practices that promote accountability and transparency create a framework to ensure companies operate in an ethical manner. Ethical business practices can mitigate against fraud, breaches of integrity, and abuses of authority, and can reduce a company's overall risk profile. Ethics, transparency and accountability are relevant across all geographies, industries and asset classes and enable investors, creditors and other stakeholders to effectively evaluate corporate behavior that can impact company performance.

**Risk:** Failure by boards and management to be accountable for their actions and transparent with their strategic decisions can negatively impact investors. As investors and other stakeholders begin demanding a deeper understanding of the factors that influence board decision making, companies must provide adequate disclosure to ensure that mechanisms are in place to promote accountability and maintain the appropriate checks and balances.

**Opportunity:** We believe that board quality and shareholder accountability can positively impact firm performance. Additionally, markets tend to give higher valuations to firms that are more transparent with investors. We believe that robust corporate governance practices ensure board and management accountability, sustain a culture of integrity, and safeguard our rights as investors.

### Board of Directors

Investors rely primarily on a corporation's board of directors to fulfill a fiduciary duty to protect their assets and ensure they receive an appropriate return on investment. Boards are responsible for setting the ethical tone and culture for the company, assuring the corporation's financial integrity, developing compensation and succession planning policies, and ensuring management accountability.

### BOARD STRUCTURE AND OPERATION

We believe that boards should establish a structure that credibly demonstrates effective oversight of management, while also ensuring efficient use of the board's time and resources. Boards should explain how the selected structure aligns with the company's strategy, and disclose and enforce a meaningful set of governance principles.

- **Board Leadership.** We believe that an independent board chair or the appointment of a lead independent director can provide the structural foundation for independent oversight. When the CEO and chair roles are combined, a company should disclose how the lead independent director's role is structured to provide an appropriate counterbalance to the CEO/chair. We believe that companies must clearly demonstrate how their chosen board leadership structure contributes to the effective exchange of diverse views between independent and non-independent directors.
- **Board Committees.** Boards should establish at least three primary standing committees: an audit committee, a compensation committee and a nominating and governance committee. Each committee should be composed exclusively of independent directors to mitigate any perceived conflicts of interest. In addition to the three primary standing committees, boards should also establish additional committees as needed to fulfill their duties.
- **CEO Selection, Evaluation and Succession Planning.** Management is entrusted with acting in the best interests of shareholders and ensuring the company operates in an ethical manner. Strong, stable leadership with proper values is critical to the success of the corporate enterprise. The board should continuously monitor and evaluate the performance of the CEO and senior executives, and disclose the succession planning process generally.
- **Board Evaluation.** A board should conduct an annual evaluation of its performance and that of its key committees and disclose the process in general terms. We expect the board evaluation process to be robust, identifying both quantitative and qualitative factors of board structure and dynamics, as well as individual director skills and experience and how they support the strategy of the company.
- **Director Compensation.** Directors should have a direct, personal and meaningful investment in the company. We believe this helps align board members' interests with those of shareholders.

## BOARD QUALITY

Boards must hold themselves to ethical standards and professional behavior of the highest quality. A high-quality board effectively oversees the management of material risks to ensure long-term sustainable shareholder value creation. We view the following as key indicators of board quality:

- **Independence.** The board should be composed of a substantial majority of independent directors to ensure the protection of shareholders' interests. The definition of independence should be interpreted broadly to ensure there is no conflict of interest, in fact or in appearance, that might compromise a director's objectivity and loyalty to shareholders.
- **Skills and Qualifications.** Boards should be composed of individuals who can contribute expertise and judgment, based on their professional qualifications and business experience. Companies should provide disclosure concerning how the board's collective expertise aligns with the company's strategic direction and effective oversight of management. Board composition should be reviewed annually to ensure alignment with a company's strategy.
- **Board Refreshment.** Boards that have not added new members for several years may become complacent and can pose risks to long-term performance and effective oversight of management. Additionally, many international governance codes view excessive director tenure as a factor that could compromise independence. Although we do not support arbitrary limits on the length of director service, we believe boards should establish a formal director retirement or tenure policy that can contribute to board stability, vitality and renewal.
- **Board Diversity and Inclusion.** Boards require a diverse range of skills and experiences to fulfill their strategy and oversight responsibilities. In addition to relevant skills and expertise, board nomination policies and refreshment practices should take into account the board's composition in terms of gender, race, ethnicity and age. Boardroom culture should ensure that those diverse voices are proactively sought and valued, providing a counterbalance to potential board entrenchment and groupthink. Enrichment practices such as director training and rotating board leadership provide mechanisms that help foster inclusivity in the boardroom.





## Shareholder Rights

As providers of capital, shareholders are entitled to certain basic rights that should govern the conduct of every company to ensure accountability of the board and well-functioning markets. We believe that robust shareholder rights are the foundation of a company's overall approach to corporate governance, and, in turn, shareholders have a duty to exercise their rights responsibly.

- **One Share, One Vote.** Shareholders should have the right to vote in proportion to their economic stake in the company. The board should not create multiple classes of common stock with disparate or "super" voting rights, nor should it give itself the discretion to cap voting rights that reduce the proportional representation of larger shareholdings. Companies that do not have a one-share-one-vote structure should periodically assess the efficacy of such a structure and provide shareholders with a rationale for maintaining such a structure.
- **Director Election Process.** A publicly traded operating company's charter or bylaws should dictate that directors be elected annually by a majority of votes cast.
- **Fair and Transparent Vote Process.** The board should not impose supermajority vote requirements, except in unusual cases where necessary to protect the interests of minority shareholders. The board should not combine or bundle disparate issues and present them for a single vote. Shareholders should be able to vote all their shares without impediments such as share blocking, beneficial owner registration, voting by show of hands, late notification of agenda items or other unreasonable requests. Shareholders should have the ability to confirm that their votes have been received and tabulated.
- **Bylaw and Charter Amendments.** Shareholders should have the right to approve any provisions that alter fundamental shareholder rights and powers. This includes poison pills and other antitakeover devices. We believe that antitakeover measures should be limited by reasonable expiration periods.
- **Proxy Access.** Shareholders should have the right to place their director nominees on the company's proxy and ballot in accordance with applicable law, or, absent such law, if reasonable conditions are met. The board should not take actions designed to prevent the full execution of this right.

- **IPO Governance.** When companies access the public markets for capital, they should adopt governance provisions that protect shareholders' rights equally. Practices that compromise accountability to shareholders include classified boards, plurality vote standards, multi-class equity structures with unequal voting rights, and supermajority vote requirements. Newly public companies that have these provisions should commit to review their governance practices over a reasonable period of time.

## Executive Compensation

Executive compensation should be used as a tool to drive and reward long-term sustainable value creation while also attracting and retaining top talent. We expect boards of directors, who are in the best position to take all of the relevant factors into consideration, to establish executive compensation programs that appropriately incentivize executive management.

### COMPENSATION PHILOSOPHY

We are mindful that each company's situation is unique, and encourage boards to craft compensation programs that are appropriately tailored to the company's business strategy. Compensation plans should generally:

- Be reasonable by prevailing industry standards, appropriate to the company's size and complexity, and fair relative to pay practices throughout the company
- Align interests of directors and executives with interests of shareholders, such as through minimum stock ownership requirements and minimum vesting requirements and holding periods for equity-based plans that are commensurate with pay level and seniority
- Objectively link to appropriate company-specific metrics that drive long-term sustainable value
- Ensure employment contracts (if in place) balance the need to attract and retain executives with the obligation to avoid exposing the company to liability and unintended costs, especially in the event of terminations for misconduct, gross mismanagement or other reasons constituting a for-cause termination
- Establish policies to recoup, or claw back, variable compensation paid to senior executives for fraudulent activities, defective financial reporting, and creating undue reputational risk

- Prohibit any direct or indirect change to the strike price or value of options without the approval of shareholders (for equity-based plans)
- Prohibit executives from hedging or otherwise reducing their exposure to changes in the company's stock price, and contain policies governing the pledging of company stock, including the process used by the board to oversee related risks

## PAY DISCLOSURE

A company's disclosure should clearly articulate the rationale for incentives created by the compensation program and how it aligns with long-term strategy in order to mitigate compensation-related risks. In particular, disclosure should include:

- Performance metrics, weights and targets, including why they are appropriate given the company's business objectives and how they drive long-term sustainable value
- The rationale for peer group selection, including differences between the company peers used for strategic and business purposes versus the group used for compensation decisions
- Non-GAAP financial performance measures alongside their GAAP counterparts with an explanation of why non-GAAP measures better capture and incentivize long-term performance
- Employment contracts and tax gross-up arrangements
- Explanations of any inconsistencies in compensation decisions with these guidelines and generally accepted practices
- Rationale for any significant changes to the compensation program from year to year, including special one-off awards, changes to peer group selection, performance metrics, and award vehicles

The principles described above form a foundation that enables investors and creditors to hold companies accountable for their impact on key stakeholders, as described in the following sections: the environment, customers, employees and suppliers, and communities.

## III. Environment

Environmental sustainability is a critical strategic issue for businesses across sectors. How well a company manages its impacts on the natural environment can support longer-term sustainable growth, or present unmitigated costs and risks. As investors, it is imperative that we weigh certain material risks and opportunities related to two areas: climate change and natural resource management. The extent to which these risks and opportunities are material to company performance varies by sector, industry and geography.

### Climate Change

Scientific consensus indicates that elevated concentration of greenhouse gas emissions in the atmosphere is contributing to climate change. Impacts from climate change may include significant risks to global financial assets and economic growth. We support measures that mitigate the risks associated with climate change and provide greater market certainty regarding the transition to a sustainable, low-carbon economy.

**Risks:** Climate change poses long-term risks to investments that should be assessed and mitigated. Risks fall into two primary categories, as outlined within the Task Force on Climate Related Financial Disclosure (TCFD):

- **Physical risk:** Assets are exposed to physical risks related to specific events or longer-term shifts in climate patterns, such as changes in rainfall patterns, rising sea levels, or increased frequency of extreme weather events. While real assets such as farmland, timber, real estate, energy and infrastructure are particularly vulnerable to this type of risk, a much broader spectrum of businesses may be exposed depending on the location of their physical property. Health risks due to malnutrition, mortality, and population migration may also contribute to physical risk of climate change.
- **Transition risk:** Transitioning to a low-carbon economy may entail extensive policy, legal, regulatory, technology and market changes to mitigate and adapt to climate change. Depending on the nature, speed and focus of these changes, transition risks may pose varying levels of financial and reputational risk to organizations and, by definition, also to their investors. While transition risk is relevant across sectors, it is likely to be especially severe for carbon-intensive industries.



**Opportunities:** Companies that proactively plan for climate risks in business strategy may be better able to manage and support a transition to a low-carbon economy that may include increased energy costs, shifts in consumer demand, and greater regulatory requirements, while avoiding stakeholder concern and reputational risk. Businesses and projects may be able to capture cost savings associated with increased energy efficiency. Across sectors, these can present attractive opportunities for investors to participate in supporting this transition.

## Natural Resources

Rising populations and consumption levels are putting increased pressure on natural resources including fertile land, forests, clean air and water. Resource scarcity and ecosystem degradation pose several types of risks to businesses, while efficient use of natural resources may provide opportunities for cost savings and the introduction of new products or services. Sustainable stewardship of natural assets such as farmland and timberland safeguards long-term investments.

**Risks:** Companies that do not proactively manage risks related to water scarcity, biodiversity, land use, waste, and pollution may face financial impacts related to their licenses to operate, higher cost of raw materials or inputs, regulatory compliance costs, litigation from affected stakeholders (e.g., communities and landowners), and reputational risk. For example, companies in the agriculture, energy and mining sectors tend to have operations that are dependent on fragile land and ocean ecosystems and that can lead to harmful environmental pollution. Such companies need to be cognizant of how their operations affect and draw on natural resources to manage these risks.

**Opportunities:** Proactive strategies for improving natural resource efficiency can lead to cost savings for businesses and environmental benefits, which may better position companies with regulators, communities, customers and other stakeholders. A wide range of companies can benefit from technologies and solutions that minimize natural resources and toxic materials used, and the waste and pollutants generated, in production processes. Sustainable practices in the management of forestry, farmland and real estate can also enhance biodiversity while contributing to long-term investment success.

## RECOMMENDED ACTIONS RELATED TO THE ENVIRONMENT

- **Company management** should assess material climate-related risks and resource efficiency in operations, production processes, and supply chain management, and should publicly disclose relevant data related to both. Companies that are especially exposed to physical or transition risk should disclose the results of forward-looking climate risk scenario analysis, such as a scenario in which global average temperature rise is limited to two degrees Celsius or less above pre-industrial levels. Disclosure should capture how climate change may impact the company's long term business outlook, strategic planning and capital allocation decisions. All companies should also consider setting targets for reducing greenhouse gas (GHG) emissions and improving resource efficiency.
- **Boards** should guide the development of a strategic, long-term approach to addressing environmental risks and opportunities and hold management accountable for its implementation.

“Sustainable stewardship of natural assets such as farmland and timberland safeguards long-term investments.”



## IV. Customers

Customers are a critical stakeholder for businesses, as they are the purchasers of the products and services that a company provides. Companies must continually innovate, ensure quality processes, and understand evolving consumer preferences to stay relevant and competitive. By providing better products and services, companies can build and maintain customer loyalty and trust while avoiding financial risks and reputational harm, which are crucial for growing the business and enhancing the consumer base. The point at which risks and opportunities related to customers become material to company performance varies by sector and industry.

### Product Responsibility

Companies can impact customers at multiple points along the product lifecycle, including production, quality assurance, marketing and sales, and end use.

- **Production:** Products that are sourced and produced in ways that aim to minimize negative impacts on society, customers and the environment can capture emerging consumer preferences for sustainable products. Companies that actively consider more responsible sourcing methods and less resource-intensive materials may also mitigate regulatory and reputational risks.
- **Product Quality and Safety:**
  - **Quality Assurance:** Ensuring high-quality and safe products that minimize harm to society and the environment can lower reputational risk and financial costs from recalls, write-offs, warranty payments, fines, or lost sales. Product quality and safety extends beyond tangible products to services such as electronic data capture, where new risks are emerging for industries that collect and store large amounts of personal customer information.
  - **End Use:** Even high-quality and safe products can have unintended consequences if used improperly. Promoting the responsible and safe use of products and services to safeguard communities and consumers avoids potential reputational risk and loss of consumer confidence.
- **Marketing and Sales:** Companies that provide incomplete or misleading claims about their products and services are at greater risk of regulatory and reputational damage. Accurate and transparent disclosure can facilitate increased customer engagement opportunities.
- **Access and Affordability:** Companies can face reputational risks and loss of consumer goodwill if perceived as engaging in discriminatory business practices with the intent or appearance of reducing access and affordability to essential goods and services.
- Risks:** Companies' failure to manage the potential hazards created by their products, services and marketing claims can create long-term financial risks. Product quality issues can negatively impact brand reputation and sales if they undermine customer trust, or they can result in unanticipated costs for companies through penalties, lawsuits or fines. Companies unprepared for new or emerging regulations related to consumer well-being (e.g., ingredients, labeling or privacy) may incur unexpected costs through required reformulations, operational investments and upgrades, or new protocols to be developed and implemented.
- Opportunities:** Customer trust is critical for enhancing brand and growing business. Companies that demonstrate ethical behavior and diligence with regard to product manufacturing, safety, marketing, pricing and end use can avoid reputational and liability risks while strengthening their competitive position. As customers become more aware of the social and environmental impacts of their products, companies that can quickly and efficiently respond to changing consumer preferences for sustainable goods can improve their ability to take advantage of a growing consumer market. Providing access to affordable products and services for underserved markets and vulnerable communities can also capture growing market segments for new sources of revenue and increase goodwill.

### RECOMMENDED ACTIONS RELATED TO CUSTOMERS:

- **Company management** should strive to create a culture of safety and sustainability at all levels of the firm. Further, management should carefully analyze the potential material risks to their business related to customer impacts at each point of the product lifecycle described above, develop policies and procedures to manage any potential concerns, and disclose those policies and practices to shareholders. Companies should adopt policies designed to prevent predatory or discriminatory consumer practices.
- **Boards** should provide appropriate oversight and accountability over management to implement those policies in a manner that upholds transparency and integrity with their customers.



## V. Employees and suppliers

Successful management of human capital — defined as the skills, talent and experience of individuals who carry out work — is critical to sustainable business growth. In particular, maintaining high standards of fairness, safety and inclusiveness in the workplace and supply chain can help a company protect its reputation, increase productivity, reduce liability and gain a competitive advantage.

### Talent Management

Talent management is critical to firms' ability to execute effectively and compete successfully over the long term. Specific talent needs and risks vary by industry and company. Robust talent management practices typically comprise a range of human resource (HR) policies and practices, including recruiting, retaining and compensating workers; ensuring workforce well-being; developing workforce skills and training; safeguarding worker health and safety; and managing people and labor relations. Beyond HR policies, talent management encompasses broader elements related to engaging and developing employees for strategic and long-term alignment with corporate goals and culture.

Employee satisfaction, engagement, and professional development are important factors for cultivating optimal performance within a firm's workforce and throughout its supply chain. Wages and other compensation are important contributors to satisfaction. In addition, investments in training, mentoring, incentives, knowledge-sharing and shared decision-making can bolster workforce quality and productivity outcomes, especially when implemented in combination. Furthermore, productivity gains have been linked to managerial approaches that foster employee engagement and motivation, such as involving frontline workers in operational decisions (e.g., problem-solving and performance enhancements) and adopting partnership-style approaches to labor relations.

**Risks:** Gaps in internal talent management systems or supply chain oversight can exacerbate human capital risks including safety concerns, discrimination, harassment and misconduct, which can result in litigation, fines and reputational damages. Companies that lack competitive approaches to talent management may face difficulty attracting and retaining high-quality staff. Low levels of employee engagement and negative worker sentiment can result in lowered productivity, work stoppages and failures in ethical conduct. Additionally, companies that do not monitor or audit suppliers' talent management systems can face

talent management failures, non-compliance with codes of conduct, and risks in the supply chain.

**Opportunities:** Proactive talent management strategies can enable companies to derive value from employees' knowledge, innovative capacity and ability to work productively together and with technology. In addition, cost savings may result from lower employee and supplier turnover and more productive supplier relations. Positive employee perceptions also contribute to broader corporate reputation.

### Health and Safety

A healthy workforce is a key driver of company productivity, retention and reputation. Companies should endeavor to safeguard the health, safety and welfare of their employees and those engaged in their supply chain. This involves several aspects, including mitigation of short- and long-term occupational health and safety risks, efforts to support health and well-being, adherence to fair labor practices, enforcement of anti-harassment policies, and avoidance of forced labor and human trafficking.

Firms with complex supply chain relationships should assess and monitor labor-related health and safety risks embedded in their direct and indirect supplier relationships, in order to assure investors and stakeholders of suppliers' compliance with code of conduct standards and respect for human rights.

**Risks:** Companies can face various financial, legal, regulatory, reputational and operational risks related to worker health and safety. Industries involving jobs of a physical nature that produce or manufacture goods, extractive industries, or those that involve handling of chemicals are especially exposed to health and safety risks. These companies may face financial impacts due to loss of employee productivity, production disruptions stemming from labor unrest, declining product quality, and increased spending on healthcare benefit payouts. They may also face legal liabilities, difficulty recruiting and retaining employees and suppliers, and reputational damage.

**Opportunities:** Companies that ensure safe working conditions and provide robust employee health and well-being programs may be better able to attract and retain talent, increase worker productivity and enhance supply chain performance.

## Diversity and Inclusion

The term diversity refers to the broad set of differences in skills, experiences, views and demographics associated with individuals in the workforce. Inclusion refers to actions intended to foster a work environment where differences among individuals are valued and effectively employed to achieve good business outcomes. Diversity and inclusion are fundamental elements of corporate culture that can be enhanced through talent recruitment and development programs, and policies and procedures that embed diversity and promote inclusion in corporate culture. For example, companies can demonstrate commitment to inclusive approaches through benefits and programs such as paid parental leave and flexible workplace policies.

As companies grapple with competition for talent in increasingly diverse domestic and global labor markets, effective management of diverse talent pipelines and an inclusive corporate culture have been linked to significant benefits that can drive competitive advantage. Research has shown that firms that demonstrate racial, ethnic or gender diversity in management ranks are associated with higher likelihood of financial outperformance over time. In order to reap the rewards of talent diversity, firms and boards should strive to foster a work environment that promotes personal safety, mutual respect, and substantive inclusion of diverse individuals in growth or leadership opportunities aligned with business objectives.

Additionally, firms have an opportunity to generate a range of added-value benefits by engaging diverse suppliers. As with managing diversity directly in their own workforce, companies that apply intentional objectives and track key indicators regarding supplier diversity are likely to generate greater returns on such investments.

**Risks:** Unconscious biases or acts of discrimination based on demographic and other personal characteristics such as race or gender can undermine the ability of diverse talent to contribute productively, and potentially lead to high turnover rates among diverse employees and suppliers. Systemic discrimination or harassment among workers can pose a threat to a firm's reputation and increase the risk of labor disputes, litigation and regulatory enforcement actions.

**Opportunities:** Promoting diversity and inclusion among employees and suppliers can help companies improve decision making, attract and retain a talented and diverse workforce and compete more effectively. Firms that foster a diverse talent pipeline at all levels of the workforce, including among executives, senior management, and recruitment pools, tend to be well positioned to generate high-performing teams

and an attractive corporate culture. Teams that embody a diverse range of backgrounds, skills and views can also fuel innovation and more effective problem-solving. Potential benefits related to a diverse supplier base include multiple procurement channels (which increase contingencies and competition), positive community relations, and market expansion through exposure to wider and more diverse business networks.

## RECOMMENDED ACTIONS RELATED TO EMPLOYEES AND SUPPLIERS:

- **Company management** should develop and implement policies designed both to mitigate and adapt to challenges in regards to human capital management.
  - We encourage the establishment of global labor policies based upon internationally recognized standards. Management should also establish policies or strategies to promote talent development and foster diversity and inclusion among employees and suppliers, as well as disclose relevant outcomes.
  - Companies should be aware of any potential failures to provide equal opportunities and develop policies and initiatives to address any concerns (for example, by conducting pay equity risk assessments to spot potential biases in wage rates). Companies should reference gender identity and sexual orientation in corporate nondiscrimination policies, even when not specifically required by law.
  - Companies with complex supply chains — especially those operating in industries or regions with high risk for violations of decent workplace standards — should explain efforts and outcomes related to supply chain oversight, monitoring and risk mitigation.
- **Boards** should provide oversight of, and independent perspective on, the quality of management performance, compensation and succession planning, the overall talent pipeline and recruitment strategies, and other qualitative and quantitative performance characteristics associated with the company's talent management strategies. Furthermore, boards should monitor risks associated with wage strategies employed at varying levels, the behaviors they aim to incentivize, and their impacts, especially those tied to workforce sustainability and long-term financial results.
- **Boards and management** should each foster a culture of inclusiveness and acceptance of differences at all levels of the corporation. We encourage boards to foster diversity within the talent pipeline for management succession, as well as within their own board refreshment practices.



## VI. Communities

Companies are increasingly scrutinized for their potential impacts on the communities in which they operate. While governments have a duty to protect human rights, businesses are increasingly recognized as having a role in ensuring they are neither undermining those rights nor otherwise contributing to harm in communities affected by their direct and indirect operations. Beyond avoiding harm, companies may also have opportunities to advance human rights and other benefits for communities by meeting basic needs for goods, services and livelihoods, which can in turn build goodwill, improve customer loyalty and enhance market share.

**Risks:** Failure to mitigate or address adverse impacts caused by company operations, products and services or business relationships, including perceived or indirect violations, could lead to operational, legal, reputational and financial threats and could weaken a company's social license to operate.

Impacts on specific human rights (such as the right to water, health, personal security, freedom of expression and indigenous rights) vary depending on context, industry or size of the company. It is important for companies to conduct ongoing due diligence, and to remediate negative impacts when they arise. Certain contexts require companies to heighten their focus and responsibility:

- Operations in certain sectors (e.g., extractives) and in communities where land or natural resource rights are obscure or obsolete may face increased threats to their license to operate, regulatory enforcement actions, or litigation by public and private entities if they fail to adequately engage with affected stakeholders.
- In contexts of conflict, there is greater risk of direct or indirect complicity in crimes against humanity or genocide, which constitute gross violations of international human rights law.

In addition to monitoring direct impacts, companies should also consider the potential indirect impacts of their business operations. For example, significant public health impacts may result from company operations (such as toxic emissions), or products (such as addictive substances or defective products), which could lead to penalties, legal liability, diminished reputation or disruptions to company operations and long-term growth.

**Opportunities:** Companies can have positive impacts on the communities in which they operate by contributing to the fulfillment of basic needs and rights. While activities to support communities should not replace or offset the failure

to mitigate adverse impacts, they can strengthen business relationships and trust with stakeholders within a community. Examples of such activities include public advocacy of human rights and innovative product and service provision in markets that lack access to basic amenities.

Firms that consult with key community stakeholders — including civil society and local community groups — on their environmental and social risk management activities demonstrate willingness to understand and collaborate with communities they affect. By building trust with community stakeholders, a company can reinforce its social license to operate and create new opportunities, such as improved sourcing of talent and inputs, reputational benefits and customer loyalty.

### RECOMMENDED ACTIONS RELATED TO COMMUNITIES:

- **Company management** should develop a robust and transparent human rights due diligence framework that allows for continuous assessment to prevent and mitigate negative impacts. This framework should include applicable policies (or codes of conduct) and monitoring procedures to ensure compliance by employees and business partners. The framework should be developed and refined on an ongoing basis through meaningful dialogue and consultation with business partners, external experts and affected stakeholders to ensure existing and new risks are mitigated and addressed. Companies engaging in resource use impacting indigenous communities should strive to align with internationally recognized standards for corporate human rights performance. When rights violations occur, companies should be prepared to address and remediate.
- **Boards** should approve and oversee companies' human rights policies and management implementation frameworks. Management of human rights risks and opportunities should be addressed at board meetings. Boards should also account for the company's commitment to respecting human rights and the effectiveness of its risk frameworks through its oversight and management disclosures.

# Proxy voting guidelines

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## I. Introduction

### THE POLICY APPLIES TO TIAA'S GENERAL ACCOUNT AND THE TIAA-CREF FUND COMPLEX.

Our voting practices are guided by our mission and obligations to our participants and shareholders. As indicated in this Policy Statement, we monitor portfolio companies' environmental, social and governance (ESG) practices to ensure that boards consider these factors in the context of their strategic deliberations.

The following guidelines are intended to assist portfolio companies, participants and shareholders and other stakeholders in understanding how we are likely to vote on various issues. The list is not exhaustive and does not necessarily represent how we will vote on any particular proposal. We vote proxies in accordance with what we believe is in the best interest of our participants and shareholders. In making those decisions, we take into account many factors, including input from our investment teams and third-party research. We consider specific company context, including ESG practices and financial performance. It is our belief that a one-size-fits-all approach to proxy voting is not appropriate.

Our proxy voting decisions with respect to shareholder resolutions may be influenced by several additional factors: (i) whether the shareholder resolution process is the appropriate means of addressing the issue; (ii) whether the resolution promotes best ESG practices and is related to economic performance and shareholder value; and (iii) whether the information and actions recommended by the resolution are reasonable and practical.

Voting decisions for other clients of Teachers Advisors, LLC and TIAA-CREF Investment Management, LLC will also be undertaken using these proxy voting guidelines unless other proxy voting arrangements have been made on behalf of a client.

“We believe that a one-size-fits-all approach to proxy voting is not appropriate.”

## II. Accountability and transparency

### Board of Directors

#### ELECT DIRECTORS

**General Policy:** We generally vote in favor of the board's nominees but will consider withholding or voting against some or all directors in the following circumstances:

- When we conclude that the actions of directors are unlawful, unethical, negligent, or do not meet fiduciary standards of care and loyalty, or are otherwise not in the best interest of shareholders. Such actions would include:
  - Egregious compensation practices
  - Lack of responsiveness to a failed vote
  - Unequal treatment of shareholders
  - Adoption of inappropriate antitakeover devices
  - When a director has consistently failed to attend board and committee meetings without an appropriate rationale being provided
- **Independence**
  - When board independence is not in line with local market regulations or best practices
  - When a member of executive management sits on a key board committee that should be composed of only independent directors
  - When directors have failed to disclose, resolve or eliminate conflicts of interest that affect their decisions
- **Board Refreshment**
  - When there is insufficient diversity on the board and the company has not demonstrated its commitment to adding diverse candidates
  - When we determine that director tenure is excessive and there has been no recent board refreshment

#### CONTESTED ELECTIONS

**General Policy:** We will support the candidates we believe will best represent the interests of long-term shareholders.

## MAJORITY VOTE FOR THE ELECTION OF DIRECTORS

**General Policy:** We generally support shareholder resolutions asking that companies amend their governance documents to provide for director election by majority vote.

## ESTABLISH SPECIFIC BOARD COMMITTEES

**General Policy:** We generally vote against shareholder resolutions asking the company to establish specific board committees unless we believe specific circumstances dictate otherwise.

## ANNUAL ELECTION OF DIRECTORS

**General Policy:** We generally support shareholder resolutions asking that each member of the board of a publicly traded operating company stand for re-election annually.

## CUMULATIVE VOTING

**General Policy:** We generally do not support proposals asking that shareholders be allowed to cumulate votes in director elections, as this practice may encourage the election of special interest directors.

## SEPARATION OF CHAIRMAN AND CHIEF EXECUTIVE OFFICER

**General Policy:** We will consider supporting shareholder resolutions asking that the roles of chairman and CEO be separated when we believe the company's board structure and operation has insufficient features of independent board leadership, such as the lack of a lead independent director. In addition, we may also support resolutions on a case-by-case basis where we believe, in practice, that there is not a bona-fide lead independent director acting with robust responsibilities or the company's ESG practices or business performance suggest a material deficiency in independent influence into the company's strategy and oversight.

## Shareholder Rights

### PROXY ACCESS

**General Policy:** We will consider on a case-by-case basis shareholder proposals asking that the company implement a form of proxy access. In making our voting decision, we will consider several factors, including, but not limited to: current performance of the company, minimum filing thresholds, holding periods, number of director nominees that can be elected, existing governance issues and board/management responsiveness to material shareholder concerns.

## RATIFICATION OF AUDITOR

**General Policy:** We will generally support the board's choice of auditor and believe that the auditor should be elected annually. However, we will consider voting against the ratification of an audit firm where non-audit fees are excessive, where the firm has been involved in conflict of interest or fraudulent activities in connection with the company's audit, where there has been a material restatement of financials or where the auditor's independence is questionable.

## SUPERMAJORITY VOTE REQUIREMENTS

**General Policy:** We will generally support shareholder resolutions asking for the elimination of supermajority vote requirements.

## DUAL-CLASS COMMON STOCK AND UNEQUAL VOTING RIGHTS

**General Policy:** We will generally support shareholder resolutions asking for the elimination of dual classes of common stock or other forms of equity with unequal voting rights or special privileges.

## RIGHT TO CALL A SPECIAL MEETING

**General Policy:** We will generally support shareholder resolutions asking for the right to call a special meeting. However, we believe a 25% ownership level is reasonable and generally would not be supportive of proposals to lower the threshold if it is already at that level.

## RIGHT TO ACT BY WRITTEN CONSENT

**General Policy:** We will consider on a case-by-case basis shareholder resolutions requesting the right to act by written consent.

## ANTITAKEOVER DEVICES (POISON PILLS)

**General Policy:** We will consider on a case-by-case basis proposals relating to the adoption or rescission of antitakeover devices with attention to the following criteria:

- Whether the company has demonstrated a need for antitakeover protection
- Whether the provisions of the device are in line with generally accepted governance principles
- Whether the company has submitted the device for shareholder approval
- Whether the proposal arises in the context of a takeover bid or contest for control





We will generally support shareholder resolutions asking to rescind or put to a shareholder vote antitakeover devices that were adopted without shareholder approval.

## REINCORPORATION

**General Policy:** We will evaluate on a case-by-case basis proposals for reincorporation taking into account the intention of the proposal, established laws of the new domicile and jurisprudence of the target domicile. We will not support the proposal if we believe the intention is to take advantage of laws or judicial interpretations that provide antitakeover protection or otherwise reduce shareholder rights.

## CORPORATE POLITICAL INFLUENCE

**General Policies:**

- We will generally support reasonable shareholder resolutions seeking disclosure or reports relating to a company's direct political contributions, including board oversight procedures.
- We will generally support reasonable shareholder resolutions seeking disclosure or reports relating to a company's charitable contributions and other philanthropic activities.
- We may consider not supporting shareholder resolutions that appear to promote a political agenda that is contrary to the mission or values of TIAA or the long-term health of the corporation.
- We will evaluate on a case-by-case basis shareholder resolutions seeking disclosure of a company's lobbying expenditures.

## Compensation Issues

### ADVISORY VOTES ON EXECUTIVE COMPENSATION (SAY ON PAY)

**General Policy:** We will consider on a case-by-case basis the advisory vote on executive compensation (say on pay). We expect well-designed plans that clearly demonstrate the alignment between pay and performance, and we encourage companies to be responsive to low levels of support by engaging with shareholders. We also prefer that companies offer an annual non-binding vote on executive compensation. In absence of an annual vote, companies should clearly articulate the rationale behind offering the vote less frequently.

We generally note the following red flags when evaluating executive compensation plans:

- **Undisclosed or Inadequate Performance Metrics:** We believe that performance goals for compensation plans should be disclosed meaningfully. Performance hurdles should not be too easily attainable. Disclosure of these metrics should enable shareholders to assess whether the plan will drive long-term value creation.
- **Excessive Equity Grants:** We will examine a company's past grants to determine the rate at which shares are being issued. We will also seek to ensure that equity is being offered to more than just the top executives at the company. A pattern of excessive grants can indicate failure by the board to properly monitor executive compensation and its costs.
- **Lack of Minimum Vesting Requirements:** We believe that companies should establish minimum vesting guidelines for senior executives who receive stock grants. Vesting requirements help influence executives to focus on maximizing the company's long-term performance rather than managing for short-term gain.
- **Misalignment of Interests:** We support equity ownership requirements for senior executives and directors to align their interests with those of shareholders.
- **Special Award Grants:** We will generally not support mega-grants. A company's history of such excessive grant practices may prompt us to vote against the stock plans and the directors who approve them. Mega-grants include equity grants that are excessive in relation to other forms of compensation or to the compensation of other employees and grants that transfer disproportionate value to senior executives without relation to their performance. We also expect companies to provide a rationale for any other one-time awards such as a guaranteed bonus or a retention award.
- **Excess Discretion:** We will generally not support plans where significant terms of awards — such as coverage, option price, or type of awards — are unspecified, or where the board has too much discretion to override minimum vesting or performance requirements.
- **Lack of Clawback Policy:** We believe companies should establish clawback policies that permit recoupment from any senior executive who received compensation as a result of defective financial reporting, or whose behavior caused financial harm to shareholders or reputational risk to the company.

## EQUITY-BASED COMPENSATION PLANS

**General Policy:** We will review equity-based compensation plans on a case-by-case basis, giving closer scrutiny to companies where plans include features that are not performance-based or where potential dilution or burn rate total is excessive. As a practical matter, we recognize that more dilutive broad-based plans may be appropriate for human-capital intensive industries and for small- or mid-capitalization firms and start-up companies.

We generally note the following red flags when evaluating equity incentive plans:

- **Evergreen Features:** We will generally not support option plans that contain evergreen features, which reserve a specified percentage of outstanding shares for award each year and lack a termination date.
- **Reload Options:** We will generally not support reload options that are automatically replaced at market price following exercise of initial grants.
- **Repricing Options:** We will generally not support plans that authorize repricing. However, we will consider on a case-by-case basis management proposals seeking shareholder approval to reprice options. We are likely to vote in favor of repricing in cases where the company excludes named executive officers and board members and ties the repricing to a significant reduction in the number of options.
- **Undisclosed or Inappropriate Option Pricing:** We will generally not support plans that fail to specify exercise prices or that establish exercise prices below fair market value on the date of grant.

## GOLDEN PARACHUTES

**General Policy:** We will vote on a case-by-case basis on golden parachute proposals, taking into account the structure of the agreement and the circumstances of the situation. However, we would prefer to see a double trigger on all change-of-control agreements and no excise tax gross-up.

## SHAREHOLDER RESOLUTIONS ON EXECUTIVE COMPENSATION

**General Policy:** We will consider on a case-by-case basis shareholder resolutions related to specific compensation practices. Generally, we believe specific practices are the purview of the board.

# III. Guidelines for ESG shareholder resolutions

We generally support shareholder resolutions seeking reasonable disclosure of the environmental or social impact of a company's policies, operations or products. We believe that a company's management and directors should determine the strategic impact of environmental and social issues and disclose how they are dealing with these issues to mitigate risk.

## Environmental Issues

### GLOBAL CLIMATE CHANGE

**General Policy:** We will generally support reasonable shareholder resolutions seeking disclosure of greenhouse gas emissions, the impact of climate change on a company's business activities and products and strategies designed to reduce the company's long-term impact on the global climate.

### USE OF NATURAL RESOURCES

**General Policy:** We will generally support reasonable shareholder resolutions seeking disclosure or reports relating to a company's use of natural resources, the impact on its business of declining resources and its plans to improve the efficiency of its use of natural resources.

### IMPACT ON ECOSYSTEMS

**General Policy:** We will generally support reasonable shareholder resolutions seeking disclosure or reports relating to a company's initiatives to reduce any harmful impacts or other hazards to local, regional or global ecosystems that result from its operations or activities.

### ANIMAL WELFARE

**General Policy:** We will generally support reasonable shareholder resolutions asking for reports on the company's impact on animal welfare.



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## Issues Related to Customers

### PRODUCT RESPONSIBILITY

**General Policy:** We will generally support reasonable shareholder resolutions seeking disclosure relating to the quality, safety and impact of a company's goods and services on the customers and communities it serves.

### PREDATORY LENDING

**General Policy:** We will generally support reasonable shareholder resolutions asking companies for disclosure about the impact of lending activities on borrowers and about policies designed to prevent predatory lending practices.

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## Issues Related to Employees and Suppliers

### DIVERSITY AND NONDISCRIMINATION

**General Policies:**

- We will generally support reasonable shareholder resolutions seeking disclosure or reports relating to a company's nondiscrimination policies and practices, or seeking to implement such policies, including equal employment opportunity standards.
- We will generally support reasonable shareholder resolutions seeking disclosure or reports relating to a company's workforce, board diversity, and gender pay equity policies and practices.

### GLOBAL LABOR STANDARDS

**General Policy:** We will generally support reasonable shareholder resolutions seeking a review of a company's labor standards and enforcement practices, as well as the establishment of global labor policies based upon internationally recognized standards.

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## Issues Related to Communities

### CORPORATE RESPONSE TO GLOBAL HEALTH RISKS

**General Policy:** We will generally support reasonable shareholder resolutions seeking disclosure or reports relating to significant public health impacts resulting from company operations and products, as well as the impact of global health pandemics on the company's operations and long-term growth.

### GLOBAL HUMAN RIGHTS CODES OF CONDUCT

**General Policy:** We will generally support reasonable shareholder resolutions seeking a review of a company's human rights standards and the establishment of global human rights policies, especially regarding company operations in conflict zones or areas of weak governance.

“We believe that a company's management and directors should determine the strategic impact of environmental and social issues...”

**For more information about RI, visit us at [nuveen.com/responsible-investing](https://nuveen.com/responsible-investing).**

#### **Glossary**

**Poison pill:** A defense tactic utilized by a target company to prevent or discourage hostile takeover attempts.

Responsible investing incorporates Environmental Social Governance (ESG) factors that may affect exposure to issuers, sectors, industries, limiting the type and number of investment opportunities available, which could result in excluding investments that perform well.

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