

Sustainable Core Fixed Income

SUSTAINABILITY DRIVERS PROFILE MATRIX

Fourth Quarter 2019

The Brown Advisory Sustainable Core Fixed Income strategy seeks to deliver attractive risk-adjusted returns by incorporating ESG research that strengthens bottom-up, credit-focused research, while producing positive environmental and social impacts.

SUSTAINABILITY PROFILES FOR CORPORATE PORTFOLIO HOLDINGS (AS OF 12/31/2019)

COMPANY	IMPACT THEME	SUSTAINABILITY DRIVER
Alexandria Real Estate Equities, Inc. (Green Bond)	Efficient Production & Conservation	Alexandria focuses on developing sustainable campus environments that promote health, wellness and productivity for leading life science and technology entities. Roughly 50% of total annual rental revenues come from LEED projects, and moving forward Alexandria targets minimum LEED Gold certifications for all new ground-up developments. This is bolstered by other sustainability initiatives throughout its portfolio to manage GHG emissions, waste, energy, and water use.
Allison Transmission Inc.	Sustainable Technology Innovation	Allison Transmission is a global leader in producing hybrid-propulsion systems, which use regenerative braking, converting a vehicle's kinetic energy into stored electric power to propel the vehicle or to operate auxiliaries. As of March 2018, studies have estimated that Allison electric hybrid buses have resulted in saving 41 million gallons of diesel fuel and prevented 406,465 metric tons of carbon dioxide from entering the atmosphere.
American Tower Corporation	Sustainable Technology Innovation	As one of the largest wireless tower operators, American Tower has earned a strong reputation in international markets from their strong environmental compliance track record, focus on driving alternative energy into its remote tower base, and its work to reduce carrier's dependence on highly inefficient generators. We believe that this has also helped it gain market share.
Analog Devices, Inc.	Sustainable Technology Innovation	Analog Devices capitalizes on its clean tech opportunities through integrated circuits for smart grid applications, ranging from energy meters, renewable generation systems and storage, to dynamic grid-integrated management and communications systems. Moreover, it is an industry leader in conserving water and reducing the use of toxic chemicals. Beginning in 2017, their Ireland and Philippines facilities started using 100% renewable energy.
AstraZeneca	Health & Wellness	AstraZeneca focuses on delivering pharmaceuticals to address the growing burden of non-communicable diseases, which are responsible for an estimated 70% of deaths worldwide. Through its tailored strategies across its emerging market portfolio, AstraZeneca extends access to largely underserved populations in low- and middle- income countries. Moreover, AstraZeneca understands the implications of pharmaceuticals in the environment and actively works to improve both the sustainability of its operations as well as of its products.
Bank of America (Green Bond)	Clean Energy	Bank of America has provided more than \$87bn in financing for low-carbon business activities since 2007 and has committed to reaching \$125bn by 2025 which, if fulfilled, would make Bank of America the largest provider of green financing in the world. This Green Bond's proceeds are funding renewable energy and energy efficiency projects.
Boston Properties LP	Efficient Production & Conservation	Boston Properties has very strong green building targets, operational policies and tenant engagement activities, which include minimum Silver LEED ratings for new buildings and major extensions, a LEED professional training program and triple net leasing.
Children's Hospital Corp.	Health & Wellness	This "safety net" hospital serves three important social functions: taking care of the most critically ill children, taking care of children from low-income families and making sure a system of care is in place throughout the region to serve primary and sub-specialty pediatric care needs. In 2014, Boston Children's Hospital invested over \$127mm to improve the health and well-being of children and families in its community. The hospital also trains more pediatricians and has the largest research program of any other pediatric hospital.
Cigna	Health & Wellness	Recognizing the connection between personal health and the health of the environment, Cigna manages its environmental impact through its operational goals to reduce absolute greenhouse gas emissions by 20%, energy consumption by 15%, and water consumption by 10% by 2020 (from a 2013 baseline). Additionally, Cigna has made efforts to address the opioid epidemic and has created the Health Equity Council to mitigate health disparities in underrepresented groups.
Clorox Co.	Efficient Production & Conservation	Clorox proactively phases out substances that raise consumer and regulatory concerns. The Green Works line incorporates industry-leading natural, plant-based or biodegradable ingredients in cleaning and sanitary products with the largest U.S. market share in this segment.

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The Conservation Fund (Green Bond)	Sustainable Agriculture & Natural Resource Management	The Conservation Fund works with public, private and non-profit partners to protect land and promote sustainable economic development across the U.S. Since 1985, TCF has conserved more than 8 million acres of land and protected approximately 643,000 acres of critical forests. Green Bond proceeds will be used for acquisition and management of land for conservation and working forest protection purposes.
CVS Health	Health & Wellness	CVS is a key player in the health care space and provides millions of Americans access to essential health care services. For instance, more than 50% of the U.S. population lives within 10 miles of a CVS MinuteClinic and in 2018, they had 5.2 million patient visits. Services provided by the MinuteClinics can cost as much as 90% less than urgent-care centers and hospital emergency departments. Moreover, CVS continues to broaden the scope and reach of its services offerings with a strong focus on helping patients manage chronic diseases and improve medication adherence.
Digital Realty Trust, LP (Green Bond)	Efficient Production & Conservation	Digital Realty is a leading global provider of data center, colocation and interconnection solutions and is committed to driving sustainable energy consumption within its data centers. It was the first REIT to issue a green bond and the proceeds were used to support the development of nine sustainable projects to achieve energy efficiencies in their data centers located in four countries that have received LEED, BREEAM or CEEDA certification.
Graphic Packaging International	Sustainable Technology Innovation	Graphic packaging manufactures and sells paperboard, which is inherently more sustainable than many other alternatives due to its recyclability and to the fact that it is made of renewable materials, tree fibers. Over 75% of all paper-based packaging is recycled and it can be recycled multiple times. To further enhance the sustainability of its products, GPK uses a "design for environment" process that considers the full life cycle of the package and the product that it protects in order to develop new, more environmentally friendly packaging solutions.
Hasbro, Inc.	Efficient Production & Conservation	Hasbro achieved 100% renewable energy use and carbon neutrality across its U.S. operations for two consecutive years (2015-2016) and continues to implement energy saving initiatives. Additionally, it has phased out the use of PVC in its packaging and replaced it with bio-PET, a plant-based material derived from agricultural byproduct.
Hexcel	Sustainable Technology Innovation	Hexcel develops and manufactures lightweight, high performance composites for industries such as Commercial Aerospace and Wind Energy. Composites are lighter, stronger, and more durable than other metals with the highest strength-to-weight ratio of any known material. For instance, carbon fiber is five times stronger and 30% lighter than aluminum. This leads to meaningful fuel savings in the aerospace markets, and makes it an ideal material for wind turbine blades.
J.B. Hunt Transport Services, Inc.	Efficient Production & Conservation	A leader in intermodal transportation services (i.e. moving freight via a combination of railroad and trucking), J.B. Hunt helps its customers achieve significant fuel-cost savings and reduced carbon emissions compared to trucking-only shipping solutions.
KeHe Distributors	Sustainable Agriculture & Natural Resource Management	As a lead distributor of natural and organic products, sustainability is core to KeHE's business. In addition to the environmental and health benefits that come from organic farming, KeHE promotes suppliers that are actively working to make a positive environmental or social impact. KeHE's business was built on a foundation of empowering employees and serving the community, and has more recently began to focus on how it can improve the environmental sustainability of its operations, recognizing that protecting the environment was core to its mission to "make lives better".
Keysight Technologies, Inc.	Sustainable Technology Innovation	Keysight Technologies provides electronic design and test solutions to communications and electronics industries, and has capitalized on opportunities to grow in the clean tech market. Keysight provides power management technologies (e.g., batteries, power supplies, power meters and sensors) that enable energy that is normally consumed to be returned to the grid cleanly, saving costs from energy consumption and cooling, while not interfering with the grid.
Land O Lakes Inc.	Sustainable Agriculture & Natural Resource Management	Land O Lakes' extensive sustainability efforts are driven by the need for productivity improvements to feed a growing population, desire to increase efficiency and increasing demand for more sustainable farming practices. It touches half of the harvested acres of row crops in the U.S. and recently partnered with the Environmental Defense Fund to launch a new business unit, SUSTAIN. This new endeavor focuses on using ag-tech to turn a decision agriculture skill set to precision conservation to help farmers increase efficiency while improving soil health and water quality.
Marvell Technology Group	Sustainable Technology Innovation	Marvell is a leading fabless semiconductor provider of high-performance, application-specific products in storage, networking and connectivity. The company is a pioneer in designing low-power, low-cost Ethernet transceivers and storage controllers, and has been an early adopter of energy efficient ARM-based systems.

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Mauser Packaging Solutions (BWAY Holding Co.)	Sustainable Technology Innovation	Mauser Packaging Solutions brings sustainable packaging solutions to a variety of industries around the globe. By maximizing the use of recycled content in its new packaging and reconditioning old packaging, Mauser actively reduces the environmental impacts throughout the complete lifecycle of its products.
NextEra Energy Capital	Clean Energy	NextEra Energy is the world's largest producer of wind and solar energy with approximately 16% U.S. market share in onshore wind and 11% in solar. Benefiting from its first-mover's advantage and regulatory tailwinds, the NextEra Energy Resources business unit (29% of revenues) helps utilities and corporations across the U.S. increase their exposure to renewable energy. Moreover, the utility portion of its business, Florida Power and Light, has demonstrated a commitment to increasing its solar power generation capacity while keeping costs to customers down.
Northwell Health	Efficient Production & Conservation	Northwell Health has weaved sustainability and social responsibility into the fabric of their health network. It partnered with the EPA in 2010 to establish far-reaching, environmentally responsible programs and business practices at their facilities, as well as created a Sustainability and Social Responsibility Council to focus on improving the health and well-being of the communities they serve by protecting and enhancing the environment and improving quality of life. Additionally, it has reduced its carbon footprint by 9.2%, since 2009, and has completed 16 LEED certified projects.
NXP Semiconductors	Sustainable Technology Innovation	NXP Semiconductors is a supplier of high-performance mixed-signal semiconductor solutions that has expertise in security, connectivity and low-power capability. They help make the world smarter, safer and more efficient. Specifically, they enable LED lighting application, safer and more efficient cars, low-power notebook computers and secure payments. Additionally, they have internal initiatives to improve operational efficiencies to further drive sustainability within its business.
Regency Centers (Green Bond)	Efficient Production & Conservation	Regency has a green leasing scheme to decrease operations and maintenance costs and targets using LEED as the standard in all current and new developments. This Green Bond's proceeds are financing their existing and new properties to ensure LEED certification.
Thermo Fisher Scientific	Health & Wellness	Thermo Fisher is a leading life science company, manufacturing scientific instruments, consumables, and chemicals that are helping its customers accelerate life sciences research, improve patient diagnostics, deliver medicines to market, and increase laboratory productivity. As a key supplier to pharmaceutical and biotech companies, hospitals and clinical diagnostic labs, universities, research institutions and government agencies, Thermo Fisher is enabling innovation in the healthcare space.
Trimble	Sustainable Agriculture & Natural Resource Management	Trimble uses technology to help customers increase productivity, lower operational costs, enhance compliance, boost safety, and reduce environmental impact in industries including agriculture, transportation, and construction. For example, Trimble's technology enables an estimated ~30% reduction in agricultural water usage, ~20% increase in fuel efficiency within the transportation sector, and up to 50% less re-work and resulting waste from construction.
Verisk Analytics, Inc.	Sustainable Technology Innovation	Verisk is a leading provider of climate and environmental-risk data to the insurance and reinsurance industries. Once a small sideline providing data to the government, climate-data provision is now a thriving business for Verisk fueled by strong demand from insurers around the world. Verisk has also recently become a leading provider of commercial intelligence to the renewable energy sector.
Verizon Communications (Green Bond)	Efficient Production & Conservation	Through its IoT solutions, Verizon has committed to saving more than two times the amount of global emissions from its operations by helping customers become more energy efficient and sustainable. In 2017, Verizon's solutions enabled the avoidance of at least 7.7 million metric tons of CO2e, representing approximately 138% of emissions associated with its operations. At the same time, Verizon reduced its carbon intensity by 28%. Green Bond proceeds will finance investments in renewable energy, energy efficiency, green buildings, sustainable water management, and biodiversity and conservation.
West Fraser Timber Co.	Sustainable Agriculture & Natural Resource Management	Wood is a renewable resource with a low carbon footprint compared to other common building materials. To ensure the long-run availability of this important resource, West Fraser certifies 100% of its land to Sustainable Forestry Initiative (SFI) standards. Moreover, its investments in alternative energy further reduce its environmental impacts while also reducing operating costs. Over 50% of its energy requirements are currently met from its own biomass.

DESCRIPTIONS OF IMPACT THEMES

Economic Development and Social Inclusion

Affordable Housing	Offering housing options to low- and moderate-income families.
Economic Mobility and Community Development	Increasing employment opportunities and financial inclusion for underserved communities.
Education	Reducing barriers to education for underserved groups.
Diversity, Inclusion, Equality	Supporting race and gender equity; empowering marginalized populations.

We at Brown Advisory worked to build unified themes for our sustainable and impact portfolios that were applicable across equity and fixed income securities alike. In our pursuit, we worked closely to align our goals with the goals of the U.N. Sustainable Development Goals (SDGs). We believe that our framework aligns with the goals and spirit of the SDGs, but also relies on our proprietary ESG research capabilities that impact our investment decisions.

Health and Well-Being

Health and Wellness	Promoting health and well-being, and improving access to and quality of health care.
Clean Water and Sanitation	Improving access to clean drinking water and sanitation services; solving infrastructure challenges; managing freshwater ecosystems.

Environment

Sustainable Technology Innovation	Innovating products and services that deliver sustainability results (e.g., energy-efficient products, sustainable transportation).
Efficient Production and Conservation	Reducing use of energy or raw materials, increasing use of renewables, etc., through internal operations.
Clean Energy	Developing, operating or delivering clean energy from wind, solar and other renewable sources.
Sustainable Agriculture and Natural Resource Management	Responsibly managing natural resources, minimizing or reversing land degradation, and protecting biodiversity.



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