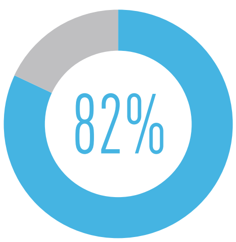
2022 ESG TRENDS

In recent years, following and prioritizing environmental, social, and governance (ESG) trends in commercial real estate has become critical. Global acceptance of climate change and the material risks associated with it has increased investment in green buildings and clean energy infrastructure. Regulators have continued to create stricter policies and standards through energy benchmarking laws. Investors searching to make informed business decisions have wanted more transparency and stakeholder engagement. All of these reasons have contributed to ESG becoming a strategic imperative for portfolios in order to create and sustain long-term value while investing in the commercial space. At this point, the climate and other environmental issues are eclipsing governance and social issues at the top of the ESG agenda in 2022.



of Emerging Trends survey respondents consider ESG elements when making operational or investment decisions

The property sector is the largest contributor to greenhouse gasses and global warming. Buildings account for upward of 40% of global energy and carbon emissions, according to PwC. Sector leaders and investors are ideally positioned to play a leading role in muting climate change's worst effects.

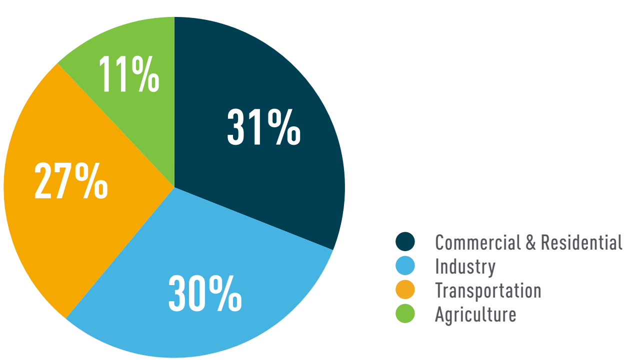
Climate change is the top risk and risk accelerant facing commercial real estate portfolios. An increase in natural disasters due to rising temperatures in the past few years presents significant threats. Western states experienced devastating wildfires, record heat, and drought. Massive flooding overwhelmed New York City, Louisiana, Yellowstone area, and other places around the globe, including China and parts of Europe. Beyond physical safety, these natural disasters endanger monetary impacts of insurance, maintenance, and repair costs.

Other environmental impacts include natural resource scarcity and pollution. Natural resource scarcity can affect supply chains which can lead to unsustainable growth and a rise in inequality as prices rise making a specific resource less affordable. Pollution and waste can cause health concerns and can potentially result in legal and regulatory consequences. Accounting for these environmental impacts can help prevent areas from becoming unlivable due to extreme temperature rises and poor air quality.

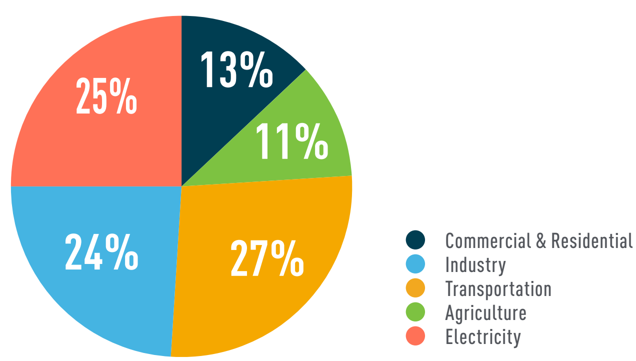
ESG trends for in 2022

Corporations are pushing towards a net-zero supply chain. The new 'Amazon Effect' aims to have large companies go net-zero in their direct and energy-use emissions, which would reduce the upstream value chain's emissions for other companies across the economy and about 0.5% of total global emissions. Shareholder activism in credible climate action plans and accountability increased in 2021 and is expected to remain a central issue in 2022. Following the 2021 COP26 Conference, more organizations

Total U.S. Greenhouse Gas Emissions by Sector with Electricity Distributed



Total U.S. Greenhouse Gas Emissions by Economic Sector in 2020



Source: The United States Environmental Proection Agency; https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions#commercial-and-residential than ever are making commitments to net zero emissions. Opportunities exist for real estate investment trusts (REITs) to serve as leaders to reduce their carbon footprint and to promote integrated ESG policies across all aspects of their operation. For example, in 2020, Hudson Pacific Properties Inc. achieved 100% net zero across all operations through a combination of energy efficiency, on-site renewables, off-site renewables, and carbon offsets.

Company Name	Total Points	Overall Grade
Microsoft Corporation	17	A
PepsiCo Inc.	16	A
Ecolab Inc.	15	A-
Alphabet Inc.	13	B
Apple Inc.	12	B-

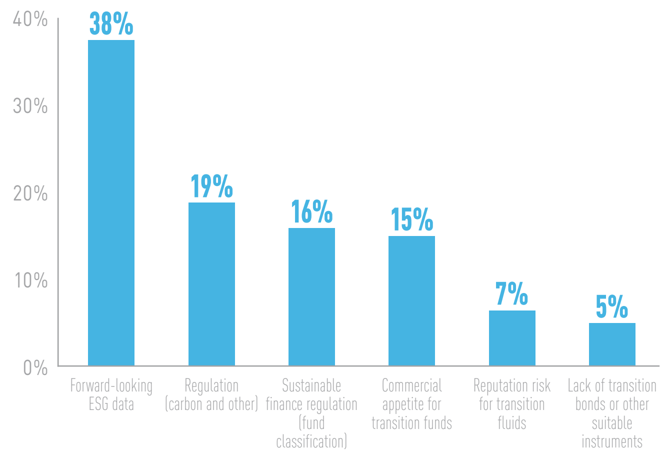
*Emissions scored and graded by You Sow

Yet, at the end of June 2022, The U.S. Supreme Court ruling in West Virginia v Environmental Protection Agency (EPA) set back climate-change-progressives' high hopes for a system-wide regulation plan. The Court ruled that the EPA must regulate emissions from power plants individually without the federal government's environmental powers to solve climate change.

Though a mass regulation law did not pass, it does not mean regulation will cease to exist. New regulations and reporting standards will demand more credible corporate disclosures. Many large companies have set sustainability goals and published ESG-related data in 2021, yet investors, regulators, and the broader public are skeptical of these efforts, perceiving them as greenwashing. The concern is that these companies are using disclosures and sustainability-related labels on products and services as a marketing ploy, appearing more "green" and proactive than what is happening behind closed doors. Part of the ambiguity of these disclosures is the ever-changing ESG terminology, definitions, and labels. For example, asking 10 portfolio managers to define "green investments" would likely result in 10 differently explained answers. A "climate" fund could be either trying to engage big emitters to decarbonize, avoid fossil-fuel producers, actively finance clean energy, or some combination of the three.

To avoid these discrepancies, there has been an increased focus on data driven ESG reporting. When ESG is actively and holistically measured, managed, and disclosed, it can ensure sustainable business performance, and accountability for commercial real estate owners, investors, tenants, the workforce, and communities. There has been an increase in data-driven solutions within the ESG space that allows for more concrete reporting and comparisons between companies in recent years. For example, the Carbon Disclosure Project (CDP) is an international nonprofit that runs the global disclosure system for investors, companies, cities, states, and regions to manage their environmental impacts. GRESB is a leading ESG benchmark for real estate and infrastructure investments across the world and provides standardized and validated ESG data to the capital markets. The ability to harness better quality data has enabled REIT leaders to benchmark and compare their studies in ESG to the industry as a whole and explore new options that advance their practices. ESG is no longer a "nice to have" add on, but a "must have" that is becoming an integral part of all businesses. The demand and urgency for verified and assured high quality data is expected to increase in the coming years.

2021 Barclays ESG investor survey: What are the biggest challenges for investors to support the transition to a more sustainable economy?



In 2021, companies became acutely aware of their dependency on and the delicacy of their supply chains. As the global economy continues to recover from the pandemic and as management teams focus on heightened supply chain cost and risk of disruption, social issues in supply chains will garner greater attention in 2022. Existing and proposed legislation will make supply chain traceability and social risk management more important throughout the rest of the year. Despite the delays in the EU Sustainable Corporate Governance directive in 2021, mandatory human rights due diligence legislation at the national level in member states such as Germany, the Netherlands, and France will move a larger swath of companies to identify and act against human rights violations in their supply chains. Additionally, continued action in the U.S. and other key markets to restrict imports based on forced labor in supply chains will push companies to evidence credible human rights monitoring efforts up the chain.