United States | 2021

Research

Leading better than normal

ESG

Vision 2021

Welcome to better

At JLL Research, our mission is to generate insights that empower our people and our clients **to shape the future of real estate for a better world**. We are focused on answering the hardest questions about real estate, our markets, and our industry.

Following a year of unprecedented disruption, the one question we receive most frequently is "when will things get back to normal?"

After a year of research, surveys, interviews and analysis, we can state with confidence that we will never return to what most people considered "normal" at the beginning of 2020. The world has evolved and accelerated in ways that will alter the course of our future and there is no going back.

However, this dramatic and forced change can be interpreted as an opportunity for both commercial real estate investors and occupiers. Although many common situations were considered "'normal" in early 2020, they were far from ideal. Consider the following conditions of the office sector at the start of 2020:

- It was normal for many people to work 50 hours per week in offices that were loud, dense, impersonal and unproductive.
- It was normal for employees to commute over 90 minutes each way, every day, into big cities to work in-person, to be able to afford a home with sufficient space.
- It was normal for professionals to cram into 150 square feet of desk space, with no way to maintain privacy, health or wellness.
- It was normal for many people to show up to work when sick, under pressure to be present and to appear productive.
- And from the company perspective, it was normal for many to sign 10- or 15-year leases and spend significant sums of capital upfront, even when their headcount and business needs were uncertain beyond a few quarters.

Clearly, these office conditions were normal but not ideal in the pre-COVID-19 world. Furthermore, across other segments of commercial real estate, normal conditions left much to be desired.

- In retail, it was normal for malls to subsidize large and aging anchor department stores, while relying on smaller inline retailers to cover the majority of costs.
- In the industrial world, it was normal to locate massive logistics centers out of the range of many large population centers, despite rising demand for urban last-mile and last-minute delivery.
- In the residential space, it was normal for cities to encourage the surplus development of high-end condominiums and rental units, while providing nowhere near the necessary level of affordable housing.

These conditions, and many more, suggest that there is great potential to embrace necessary change and to improve the way we live, work, shop and play in the future. We also recognize that many of the changes we are recommending are the result of an evolving economy, one in which rapid urbanization and technological advancements of the past decade have made it possible to envision what could be next.

> So, let's not try to get back to normal. **Let's work together to achieve conditions that are better than normal in 2021**, in every aspect of how we live, work, and play.

The following report provides specific recommendations from JLL's leaders on how we can all do better—across industries, property types and regions—in the year ahead.

Christian Beaudoin
Senior Director,
Research

Leading
better in 2021: ESG

2021 presents an opportunity and an obligation to lead positive, transformative change

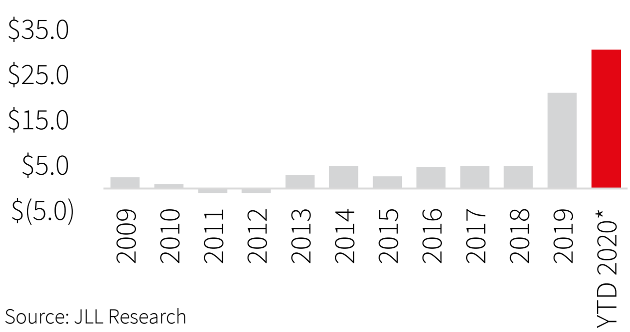
Lori Mabardi
Senior Director,
ESG Research

Build on the momentum gained in 2020 to make commitments to the future

The COVID-19 pandemic has exposed the social and economic inequities and vulnerabilities in our healthcare, education and social systems. As a result, the importance of environmental, social and governance (ESG) goals has increased, and it is with this momentum that we can increase these commitments for a better future.

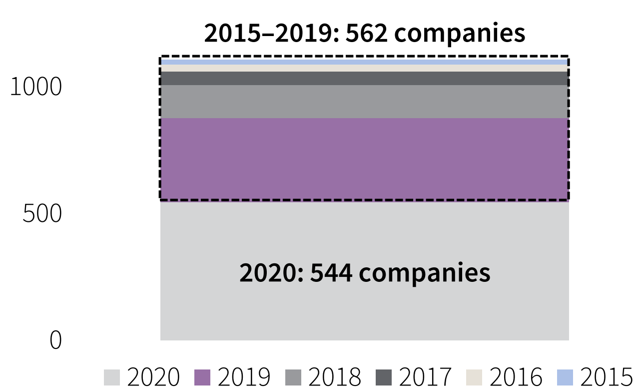
According to Morningstar, U.S. investors invested in ESG funds at a pace double 2019 levels, reaching a historic peak of $30.7 billion as of Q3 2020. This represents 14.2 percent of global ESG investments, which also reached a new high of $1.3 trillion. Additionally, to-date 1,107 corporations have committed to Science-Based Targets, with 49 percent of those new commitments made in 2020 and nearly equal to the commitments made in the previous five years.

Estimated annual flows in sustainable funds U.S. investors ($billions)



Source: JLL Research

Number of firms committing to Science-based targets (as of Dec. 13, 2020)



Sources: JLL Research

Moving forward, the global community must maintain this momentum and remain focused on positive change; the workforce will demand it. By 2025, 30 percent of the workforce will be composed of Gen Z, a generation of which 72 percent believe that racial equality is the most critical issue of the day, followed by the environment. Without clearly outlined ESG commitments, employers will be hard pressed to compete for talent in the global economy.

Gen Z

(Born between 1997 and 2012)

30%

of the workforce by 2025

Most diverse:

48%

non-white

Purpose seeking:

75%

believe that work should have a greater purpose than just pay

Care about equality & environment:

72%

believe racial equality is the most critical issue of the day, followed by the environment

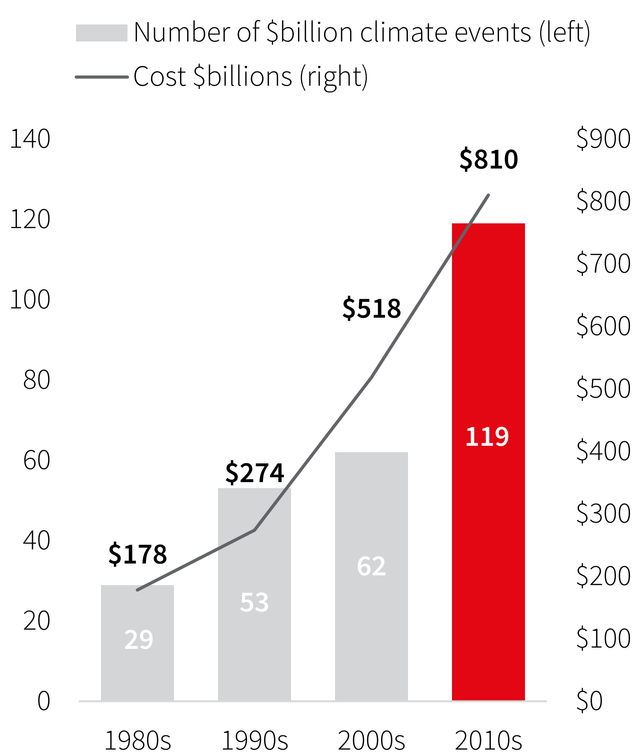
Source: wespire

This is the most critical decade in the fight against climate change

In November 2019, the Alliance of World Scientists, issued a new warning that the earth is facing a climate emergency and bold actions must be taken to cut emissions and avoid the worst impacts of climate change. According to climate scientists and Paris Agreement guidance, global greenhouse gas emissions must be cut in half by 2030, and we should have a net-zero carbon economy by 2050 to prevent global temperatures from rising more than 1.5 degrees Fahrenheit over pre-industrial levels.

These ambitions will likely result in federal regulations regarding climate risk disclosure. France, New Zealand and the U.K. have established legislation making climate-related risk disclosure mandatory for large institutions. Additionally, lenders are indicating that they will increasingly evaluate the carbon footprint of their investments. In July 2020, Morgan Stanley announced it had joined the Global Carbon Accounting Partnership, committing to measuring the carbon footprint of its investments and lending business, and in October 2020 the firm committed to net-zero financed emissions by 2050.

Storms causing at least $1 billion in damage: Last 4 decades (NOAA)



Sources: JLL Research

It is imperative that real estate owners and developers also make these commitments. According to data through October 7, the United States experienced 16 billion-dollar extreme weather events that caused $47 billion in property damage. In the last decade, the U.S. has experienced more than $1 trillion in damages from extreme storms. In comparison, only 2.5 such events occurred on average each year in the 1980s.

Adopt transformative technology solutions to drive value and lower carbon emissions

According to Ceres's Roadmap to 2030 report, we consume resources equivalent to an astounding 1.6 planets per year. Smart building technology, machine learning and predictive analytics can be powerful tools to enable greater building efficiency, predict maintenance needs and optimize performance for a reduced environmental impact, a healthier human experience and reduced operating expenses.

Solutions vary across the spectrum, but building owners are seeing an average 25 percent reduction in energy costs paired with increased tenant comfort and equity value resulting from sustainability strategies.

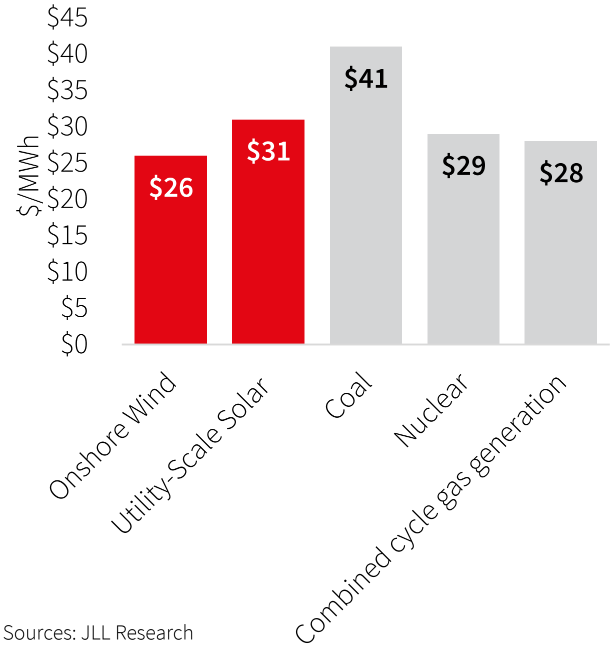
MetLife Investment Management invested in efficiency upgrades at its 910,000-square-foot Class A asset, District Center, in Washington, DC. The smart building technology collects building data that runs through more than 2,000 analytics rules established to find efficiencies, maximize occupant comfort and predict equipment failures. These investments have lowered energy use by 33 percent over District Center's 2014 baseline.

Renewable energy also offers the opportunity to generate revenue. In July 2020, with the help of JLL, DC Metro entered into an agreement with SunPower and Goldman Sachs Renewable Power to create 17 acres of solar power across its portfolio. This will generate power for over 1,500 nearby homes and offer commuters shaded parking. This structure will generate $50 million for DC Metro over 25 years.

These technology solutions arrive at the right time to meet the challenges of today.

In June 2020, the International Renewable Energy Agency (IRENA) reported that, for the first time, new solar photovoltaic (PV) and onshore wind power cost less than maintaining operations at many existing coal plants. According to IRENA, this is a tipping point in the energy transition, indicating that the case for new coal and much of existing coal power generation is environmentally and economically unjustifiable. In addition, according to Lazard 2020 Levelized Cost of Energy Report, the cost of unsubsidized wind and solar PV has declined over the last decade by 71 and 90 percent, respectively, bringing them much closer to traditional energy costs. There remain areas for improvement, like storage and intermittency, but many states currently offer attractive incentives that should not be overlooked, and renewables will only increase in prominence and importance.

Lazard levelized cost of energy comparison (Unsubsidized)



Sources: JLL Research

Conclusion

In 2021, the real estate industry has the opportunity for transformative change in the areas of emissions, climate change, social justice and equality. Whether you are an employer, investor, developer or lender, real estate can play a critical role on this journey toward sustainability and equality. For our industry, it is imperative that we all play a part in these solutions.

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About JLL

JLL (NYSE: JLL) is a leading professional services firm that specializes in real estate and investment management. JLL shapes the future of real estate for a better world by using the most advanced technology to create rewarding opportunities, amazing spaces and sustainable real estate solutions for our clients, our people and our communities. JLL is a Fortune 500 company with annual revenue of $18.0 billion, operations in over 80 countries and a global workforce of over 92,000 as of September 30, 2020. JLL is the brand name, and a registered trademark, of Jones Lang LaSalle Incorporated. For further information, visit jll.com.

About JLL Research

JLL's research team delivers intelligence, analysis and insight through market-leading reports and services that illuminate today's commercial real estate dynamics and identify tomorrow's challenges and opportunities. Our more than 400 global research professionals track and analyze economic and property trends and forecast future conditions in over 60 countries, producing unrivalled local and global perspectives. Our research and expertise, fueled by real-time information and innovative thinking around the world, creates a competitive advantage for our clients and drives successful strategies and optimal real estate decisions.