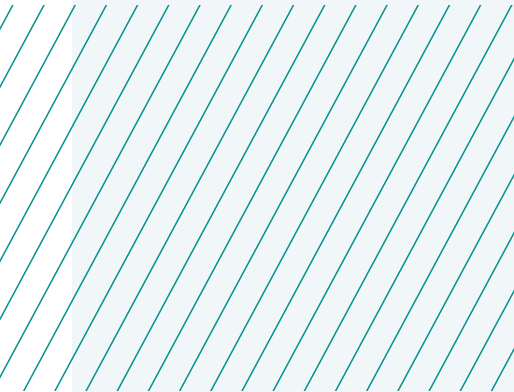




ULI Global Sustainability Outlook

2023



About the Urban Land Institute

The Urban Land Institute is a global, member-driven organization comprising more than 45,000 real estate and urban development professionals dedicated to advancing the Institute's mission to shape the future of the built environment for transformative impact in communities worldwide. ULI's interdisciplinary membership represents all aspects of the industry, including developers, property owners, investors, architects, urban planners, public officials, real estate brokers, appraisers, attorneys, engineers, financiers, and academics. Established in 1936, the Institute has a presence in the Americas, Europe, and Asia Pacific regions, with members in 80 countries. More information is available at uli.org. Follow ULI on [Twitter](#), [Facebook](#), [LinkedIn](#), and [Instagram](#).

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The ULI Randall Lewis Center for Sustainability in Real Estate is dedicated to creating healthy, resilient, and high-performance communities around the world. Through the work of its [Greenprint](#), [Building Healthy Places](#), and [Urban Resilience](#) programs, the Center provides leadership and support to real estate and land use professionals to invest in energy-efficient, healthy, resilient, and sustainable buildings and communities.

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About the ULI Americas Sustainable Development Council

The ULI Americas Sustainable Development Council (SDC) aims to accelerate the adoption and implementation of sustainability, resilience, and health across the real estate industry. The council provides a forum for the exchange of emerging best practices, including planning, financing, entitlements, design, construction, and operational aspects of projects that advance triple-bottom-line benefits while fostering more sustainable built environments.

About the ULI Asia Pacific Resilient Cities Council

ULI Asia Pacific Resilient Cities Council's mission is to share best practices and gather collective thoughts on how to decarbonize the built environment and win the fight against climate change.

About the ULI Europe Sustainability Council

ULI Europe's Sustainability Council brings together investors, occupiers, developers, public officials, and academics from across Europe to debate and explore best practices in sustainable development. The council examines a wide range of issues—from investigating new ways to measure the environmental performance or the social contribution made by individual buildings, through to the longer-term planning considerations of European cities to ensure they are both successful and sustainable.

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Ferguson Partners is the leading talent management and strategic advisory firm for the global real assets industries specializing in executive and director recruitment and business advisory services including organizational, financial, and strategic consulting. Delivering premier solutions to the real assets, infrastructure, hospitality, and health care services sectors, the global boutique has 11 offices around the world and is dedicated to personalized client services and integrated talent management solutions. For more than 30 years, Ferguson Partners has been a trusted adviser to senior leaders at companies of all sizes and across a multitude of industries.

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Contents

2

Foreword

3

Introduction

4

Adjusting ESG Strategy
for Macroeconomic
Complications

7

Embedding Transition
Risk in Transactions
and Valuations

10

Harnessing the
Power of Collaboration

14

Addressing Global
Flood Challenges

17

Responding to
Government Influence

20

Conclusion

Foreword

We are once again proud to sponsor this year's *ULI Global Sustainability Outlook*. It is an excellent opportunity to hear from experts about what to expect in 2023, as well as the drive for innovation that is clearly underway across markets.

This publication reflects the insights from roundtable gatherings of ULI member leaders from the ULI Americas Sustainable Development Council, the ULI Asia Pacific Resilience Cities Council, and the ULI Europe Sustainability Council and it highlights the key themes to focus on in 2023 as we make progress toward a more sustainable built environment.

The message evident across the five key issues addressed in this report is urgency. For instance, energy efficiency has become even more necessary given the rapid rise in energy costs brought about by the Russian invasion of Ukraine, and it has prompted the thought leaders behind this report to call for greater focus on creating energy independence.

Meanwhile, regulation is requiring greater breadth and depth of disclosures around environmental, social, and governance (ESG) strategies—for instance, as of this writing, the European Union's Sustainable Finance Disclosure Regulation is mandatory. As a result, companies are required to provide greater levels of transparency in relation to sustainability risks and adverse environmental and social effects. At the minimum, it is critical that the industry meets huge carbon-reduction targets in the coming years to curb the worst of climate change.

Contributors to this report see collaboration as vital to the creation of strategies and solutions, particularly around energy security and social sustainability, and it appears that this idea is gaining ground as sustainability now embraces topics such as health, well-being, and community resilience.

This report also urges that sustainability must also, as U.S. contributors acknowledge, be accompanied by a sense of environmental justice, especially toward the communities that live near the buildings that owners develop. This holistic approach will require long-term strategies and citywide solutions for a range of issues including food security, resourcefulness, and flood mitigation.

At Ferguson Partners, we recognize the fundamental ethical and fiduciary responsibility in today's global markets that requires a clear purpose and deliberate approach to ESG corporate strategy and leadership design and development. To these aims, we are working with organizations to identify and prioritize key leadership requirements and secure appropriate talent. At the same time, we holistically assess all ESG-related opportunities for an organization, advising across a range of areas from compensation to organizational structuring. Our goal is to help organizations develop, evolve, and manage ESG and sustainability strategies with measurable results that realize their ESG goals.

Reports such as the *ULI Global Sustainability Outlook* and the excellent work of ULI to convene experts to raise awareness and share best practices will help bring much-needed progress on all these topics amid the growing climate crisis that we face across the globe.

Matthew Hardy

Global ESG Lead
Head of Australia and New Zealand
Ferguson Partners

Gemma Burgess

Global CEO
Ferguson Partners

Introduction

The Urban Land Institute is eager to keep its members abreast of the topics and issues mounting in sustainable real estate. In late 2022, ULI's Randall Lewis Center for Sustainability in Real Estate held roundtable discussions with members of the ULI Americas Sustainable Development Council, the ULI Asia Pacific Resilient Cities Council, and the ULI Europe Sustainability Council to inform an outlook for 2023. During the discussions, members addressed: What sustainability topics and issues are on the rise, why do they matter, and what actions should the industry pursue moving forward? On the basis of expert knowledge shared by those attending, ULI identified five issues that will shape real estate decision-making in the months ahead and beyond:

- **Adjusting ESG strategy for macroeconomic complications**
- **Embedding transition risk in transactions and valuations**
- **Harnessing the power of collaboration**
- **Addressing global flood challenges**
- **Responding to government influence**

The world is in “climate chaos,” as U.N. secretary-general Antonio Guterres said at the 2022 U.N. climate summit, COP27. This means that creating a sustainable built environment is mission critical. What it also means, however, is that owners are required to think more about how to mitigate the physical risks that climate hazards and extreme weather are posing to real estate assets and the damage that has already occurred.

Today, extreme weather events are frequent, causing tangible physical damage to people and property. Energy prices have skyrocketed. Transition risks are adding pressure for climate action. Meanwhile, as ULI's *Emerging Trends in Real Estate® Europe 2023* report reflects, responsible capitalism is seen as a path real estate companies must take—not only for the sake of investors and occupiers, but for society at large.

The climate crisis is now a humanitarian crisis that the real estate industry has a role in addressing. Thus, the social dynamic of ESG poses challenges for owners, such as shifting to cleaner forms of energy so those with the lowest incomes are protected from the burden of high energy prices, and ensuring that lower-value assets are not left behind by the economics of decarbonization.

Only urgent systemwide transformation can avoid climate disaster—according to the United Nations, which stated in October 2022 that “[no credible pathway](#)” is in place to avoid global warming of 1.5 degrees Celsius this century. Accenture has found that nearly all ([93 percent](#)) of companies with net zero commitments will fail to achieve their goals if they do not double the pace of emissions reduction by 2030.

Against this backdrop, the *Global Sustainability Outlook* roundtable participants urged real estate companies to not let the short-term pressures of recession and a downward market cycle detract from these wider realities. The roundtable discussions raised concern that recession threatens to take attention away from environmental, social, and governance (ESG) efforts and to delay, for instance, the capital expenditure necessary to decarbonize buildings and work toward net zero.

For the industry, rising interest rates have created conditions for sizeable capital value declines and difficulty raising debt, meaning the year ahead is likely to be a difficult ESG landscape for many companies to navigate. But as the distinguished Canadian climate scientist Katharine Hayhoe recently said, [climate change is a “threat multiplier,”](#) meaning while it does not necessarily create new problems, it makes the problems we have much worse.

In regard to real estate, that means capital value declines owing to the debt crisis will only be exacerbated by the climate crisis. For example, to secure leverage today, a lender that is already nervous about providing finance due to the macroeconomic uncertainty will be further dissuaded if an asset has no clear path to decarbonization.

Therefore, regardless of the economic climate, transition risks remain a critical issue for 2023. These risks to an asset's value result from a shift to a lower-carbon economy and using new, non-fossil-fuel sources of energy. These risks can come, for instance, from regulatory changes, economic shifts, and the changing availability and price of resources. Lenders, insurers, buyers, and occupiers all now require more detail on where an asset stands in relation to these risks, momentum that will only accelerate, especially as there are better tools, clearer industry standards, and benchmarks to provide transparency.

1

Adjusting ESG Strategy for Macroeconomic Complications

“The big challenge is how to balance the pressure we are now feeling for short-term returns with the investment that needs to be done to achieve sustainability goals.”

— ELSA MONTEIRO
Head of Sustainability
Sonae Sierra
Lisbon, Portugal

1

Adjusting ESG Strategy for Macroeconomic Complications



Balancing the pressure to remain profitable through economic difficulties against the need to dedicate capital for long-term environmental gains will be one of the biggest challenges for real estate in 2023. Ongoing high inflation, construction costs, and energy prices, in addition to looming recessionary conditions across the globe, threaten progress around sustainability in the coming year by stealing real estate companies' focus and deteriorating the business case for any sustainability upgrades.

Contributors to this report worry that the increased finance costs that will prevail across markets in 2023 threaten to detract capital from essential retrofitting initiatives and upgrades. But this is not an excuse for inaction.

As a result, those contributors urge market participants to ring-fence capital for environmental progress and resist pressure to cut corners to save money—a coping mechanism some say is already in evidence. The temptation to limit action on sustainability is at odds—and runs parallel—with a growing sense of urgency over the need for solutions.

The sustainability agenda is also being shaped by the Russian invasion of Ukraine. Disruption in the energy markets means occupiers will be hyper-focused on cutting costs. Higher gas prices are likely to increase competition for energy-efficient assets because businesses will seek to reduce costs and, during the process, they will look to collaborate with active landlords on finding ways to optimize energy costs.

The critical issue for investors to consider over the coming months will be maintaining capital provision for ESG upgrades and innovation. Roundtable participants urge the industry to consider that high energy prices mean landlords without plans to make energy upgrades could see customers seeking more energy-efficient spaces elsewhere at lease renewal. Real estate owners often cite the ability to link rents to inflation as a way to ensure income keeps pace with rising prices. But if energy prices are escalating to such an extent, then those new rents cannot be realistically met.

Therefore, the recession does not alter the urgency of decarbonizing real estate assets—which account for 39 percent of carbon emissions on a global basis. Extra effort must be made to ensure commitments to raising the energy efficiency standards of buildings remain intact to help uphold future asset values and the push for net zero carbon that will help nations meet the Paris Agreement, an internationally binding treaty that aims to limit global warming to well below 2 percent.

Already, the real estate industry is not moving fast enough. For example, according to real estate consultancy Savills, in Europe, around **85 percent of the total stock**, equivalent to more than 220 million buildings, was built before 2001 and is now considered inefficient compared with current energy efficiency standards.



To meet Europe’s 2030 climate target, €3.5 trillion (US\$3.7 trillion) of investment is needed in the coming decade to decarbonize buildings through renovation. However, the Green Finance Institute reports that today, only 1 percent of buildings undergo energy efficiency renovations each year. Public/private partnerships such as the Empire Building Challenge in New York have been positive case studies to overcome perceived barriers, but low-income, low-resourced owners will still be hard-pressed to meet the targets.

Policymakers across the globe are expected to continue to push landlords and owners to net zero carbon regardless

of macroeconomic gloom. Equally as prominent an issue is that with climate “chaos” becoming ever more apparent, it is becoming difficult for investment managers to ignore ESG as an ever-important tenet of fiduciary duty.

Investor pressure for ESG is also a driving factor. David Ironside, fund manager of Encore+ at LaSalle Investment Management, reinforces the case for action despite economic conditions, noting, “Certainly our most engaged and informed investors recognize that investment is required, otherwise properties run the risk of obsolescence. It basically comes down to a decision of short-term erosion to avoid longer-term, deeper erosion.”

Roundtable participants reflected on the frequency of extreme weather events: the damaging heatwaves in parts of Europe during the 2022 summer; the record-breaking rainfall levels in Hong Kong; and a megadrought in the United States that has led to the driest two decades in at least 1,200 years. At a property level, these incidences are exposing assets to a range of risks; physical damage; the inability to attract capital—funding or buyers, as well as tenants; and jeopardizing the affordability and availability of insurance.

Jonathan Hannam, cofounder and managing partner at Australian-based Taronga Ventures, which invests in technical innovation for the built environment, notes, “It is becoming more apparent that sustainability matters when it comes to an exit strategy, influencing values, the ability to attract funding and potential buyers. We are now seeing global institutional investors willing to pay a premium for green, clean, and connected buildings and at the same time, many tenants are demonstrating that they too are willing to pay a higher rent to be associated with these types of assets.”

Meanwhile, escalating energy costs are further increasing the cost of structural building materials such as steel, concrete, glass, and aluminum. As roundtable participants acknowledge, the energy crisis could help draw attention to issues such as the energy consumption of material production, which is a contributing factor to the total lifetime energy consumption of a typical building. This could encourage the industry at large to “dig deeper” around solutions for more sustainable materials.

As Max Walmsley, assistant portfolio manager at LaSalle Investment Management puts it: “There’s a moral hazard. You have to carefully balance your fiduciary responsibilities to investors and your ambitions to protect the planet. There is a sweet spot where decarbonization and value creation are harmonious.”

Learn more:

- [*Emerging Trends in Real Estate® United States and Canada*](#)
- [*Emerging Trends in Real Estate® Europe*](#)

2

Embedding Transition Risk in Transactions and Valuations



The idea that risk needs to be priced in and risk needs to be mitigated is growing among valuers and funders.”

—SCOTT DUNN
Chief Strategy Officer
AECOM Asia
Singapore

2

Embedding Transition Risk in Transactions and Valuations



Transition risks are business-related risks that follow societal and economic shifts toward a low-carbon and more climate-friendly future. These risks can include policy and regulatory risks, technological and resource risks, market risks, risks to reputation, and legal risks. In the coming months, real estate companies must pay greater attention to these risks, following the lead of those that are already prioritizing them.

Roundtable participants reflected that much work is underway to design mitigation and exit plans around transition risks, with the roundtable in Asia citing the example of the public sector in Hong Kong now wanting to see decarbonization strategies in bids for government facilities.

Regulation will continue to push the industry to address transition risk, the transparency of which will be reflected in transactions and valuations. The Task Force on Climate-Related Financial Disclosures (TCFD) provides a voluntary framework for reporting climate-related financial risks, and countries such as the United Kingdom have begun making it mandatory footing for certain sectors of their economies. In late 2022, the European Union adopted the Corporate Sustainability Reporting Directive, which will require businesses to report on a broad range of ESG matters; this requirement will come into effect in phases starting in 2024. In the United States, the Securities and Exchange

Commission is expected to finalize its proposal to require TCFD-aligned reporting for U.S.-listed companies in early 2023, which will come into effect in phases.

Banks are also under increasing regulatory pressure. In November 2022, the European Central Bank said it wanted banks to improve the way they assess climate-related risk and to set new targets of compliance for 2024. Insurers, meanwhile, are asking for more granular assessments around physical risk.

Among the other kinds of transition risk to consider are how well adapted an asset is to regulatory requirements. And Scope 3 emissions—which are the indirect emissions that occur in the supply chain of a reporting company—are becoming increasingly acknowledged as a crucial aspect of transition risk. In November 2022, for instance, the International Sustainability Standards Board voted unanimously to require company disclosures on [Scope 1, Scope 2, and Scope 3 greenhouse gas emissions](#).

Establishing how to assess a building's transition risk and adjusting return expectations accordingly will be a major topic of 2023. That there is currently no set way, no common standard, to incorporate that risk is a talking point in and of itself; there is also no disclosure, which is holding back progress. There are two camps: those that are informed and are doing their homework in-house, and those that are not aware or do not yet think it is important.



To date, very few in the industry have considered decarbonization costs, and even fewer have started to act on it. But awareness is growing that decarbonization comes at a price, and risks need to be reflected in the value of an asset.

However, “C Change” is a major initiative launched by ULI Europe to ensure those in the industry have access to practical solutions and education on decarbonization. In October 2022, ULI Europe launched this standard valuation methodology to help make the assessment of transition-risk costs more transparent and consistent. The organization is urging for widespread adoption of the methodology to fend off what ULI Europe chief executive Lisette van Doorn describes as a “carbon bubble” in the pricing of real estate. Current building values, she argues, are “too high” because they are largely not being valued in relation to their decarbonization status.

Max Walmsley of LaSalle Investment Management, agrees, noting, “We believe carbon-adjusted returns are the future. Put this into your underwriting model.”

One roundtable participant raised the issue of exit strategies, not only from the perspective of salability but also simply from the perspective that transition risk is being passed on to the next buyer—a reflection that the moral imperative around the climate crisis is established over the long-term outlook of assets.

Roundtable participants emphasized that 2050 is not that far away, given that those with relatively long-term hold periods could be the same owners looking to sell at—or near—that time. However, Mavis Ma, program manager, Asia, at Green Generation, notes even short-term owners need to plan ahead: “Soon, it is going to get challenging if an owner does not have [a] long-term net zero business plan in place for potential buyers. Because already that buyer will probably be taking it on near the time wider net zero targets need to be met.”

On the acquisition side, buyers’ due diligence processes are evolving to be more sophisticated around transition risk when seeking ESG information on a prospective asset. Ben Myers, vice president of sustainability at Boston Properties, explains the depth of their processes: “In acquisition due diligence we look for Energy Star Portfolio Manager accounts, LEED certification status. And now ESG compliance is quite expansive with two weeks to figure out whether an asset meets local building performance standards. This further includes physical risks of climate change with scenario analysis and tools.”

Interviews conducted for this report acknowledge that significant steps need to be taken to understand the risks at asset level, as well as how to mitigate while adapting. Pamela Thomas, managing director of U.S. real estate investments for CPP Investments, affirms and notes, “We see operational, valuation, and exit risk associated with our sustainability goals. We continue to develop the analytical capabilities, to consistently assess both physical and transition risks, that will encompass both direct effects on assets and indirect effects on the markets, systems, and societies with which assets interact. Understanding the climate risk of assets, including stranding risk, is a crucial tool for our real estate team.”

Participants are enthused about the development of technology to aid these assessments, as reliable data and analytics tools become more accessible to assist in this process. Climate modeling tools, for instance, are currently undergoing rapid transformation in terms of how accurate they are in predicting particular weather patterns. Meanwhile, building operating systems are gaining traction at the building and portfolio level to help guide decarbonization pathways. And contributors are excited about exploring the potential of artificial intelligence modeling to help the industry meet its net zero goals faster.

The hope is, however, that poor market conditions do not deter the industry from embracing the need to assess and address transition risk. As capital values fall due to higher funding costs, participants warn that it could be an uncertain time to undertake transition risk assessments.

Christina Chiu, executive vice president, chief operating officer, and chief financial officer at Empire State Realty Trust, says of the company’s strategy: “There are both short-term and long-term climate-related investments that we can make with the objective that we see a return on our investment. We build upon our longstanding leadership and commitment to reduce energy use and greenhouse gas emissions in our buildings.”

Learn more:

[*C Change: Transition Risk Assessment Guidelines for Consultation*](#)

[*Embedding Sustainability in Real Estate Transactions*](#)



3

Harnessing the Power of Collaboration

“

Saving the planet is not something
we should compete on.”

—INGER KAMMERAAT

Managing Director
MVRDV
Rotterdam, The Netherlands

3

Harnessing the Power of Collaboration

The real estate sector cannot sufficiently address climate change on its own. Individual assets are only as resilient as their communities; contributors to the report point out there is much to be done to protect cities exposed to increases in sea levels, storm activity, extreme heat, and floods and that efforts to mitigate and adapt must stay on track in 2023. Meanwhile, roundtables noted real estate practitioners must help to ensure that the transition to a low-carbon economy is just and does not leave poorer communities behind.

Collaboration across the real estate value chain is proving essential to achieving global sustainability goals. This collaboration includes real estate working alongside governments, community members, tenants, and supply chains. It is an indication that the social element of ESG—protecting communities from climate crisis—is genuinely being addressed.

Increasingly, market participants are embracing the holistic approach as an important driver of change, particularly with respect to the “S” in ESG. This approach is the next level of sophistication in terms of managing assets.

Investors are aware that creating a single building that is net zero carbon amid a city where the majority of stock requires major

investment to decarbonize is too myopic in the face of current challenges; interviewees talked a lot about the need to help meet net zero obligations at the city level via public- and private-sector partnerships across the real estate value chain.

In Minnesota, for instance, such a partnership is working on the development of a 115-acre (47 ha) site into a transit-orientated, net zero district that includes a district energy plan. The project is one of seven in the ULI’s inaugural Net Zero Imperative cohort, which is a program that brings together the public and private sector to address local challenges around decarbonization to give real estate owners (and others) ideas and strategies to accelerate carbon emissions reductions.

Local authorities, such as Battery Park City Authority in New York, are exploring combined benefits to individual properties via a district energy system, shared energy purchasing, and so on.

With such cooperation, the roundtables highlighted, the industry should not ignore the necessity of mobilizing large-scale behavioral shifts—a scale equivalent to the one undertaken during the COVID-19 pandemic—to help mitigate carbon footprints in a meaningful way across neighborhoods and cities.



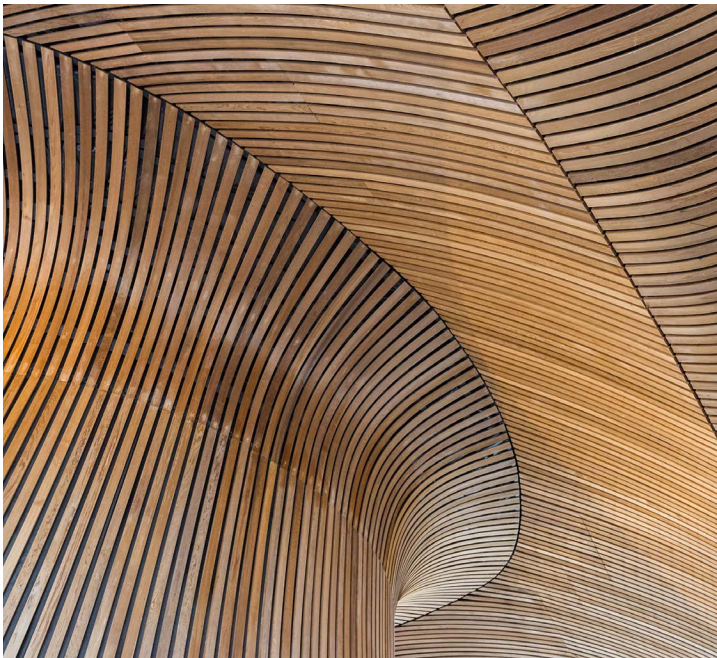
In Europe, many city governments, including those in London and Brussels, will not grant permission for new construction until all options for reuse, renovation, and repurposing have been exhausted. In the U.S. roundtable discussions, participants reflected on social and economic sustainability as an emerging issue and urged the industry to consider how buildings—particularly empty ones—are repurposed to better provide for

the surrounding community rather than build anew. “We need a major rethink of how empty or obsolete buildings should be managed and used,” urged David Cropper, a developer and investor in the San Francisco Bay area and chair of ULI’s Sustainable Development Council. Cropper also commented that this would be a topic for 2023 and beyond.

Contributors reported that one emerging topic is to view building utilization as one solution to sustainability in the built environment. One part of that vision is to explore the way the surrounding community can use spaces, for instance, not doubling up on amenities that already exist in an area and optimizing assets to help create more vibrant places. Developers are diversifying the offerings and amenities in a given area, while keeping options to adapt spaces for changing needs.

Another way that real estate actors are helping to improve community sustainability is by going beyond the boundaries of their own buildings and investigating how they can work with communities to help support food and energy security. One example is the [Hines “aer” office building](#) complex in the Munich district of Neuperlach—where a building that was vacant due to reclassification has become an interim community center, which includes a community kitchen that can serve up to 10,000 meals a day (using food that was close to its expiration date).

Healthy buildings that focus on tenants’ well-being are becoming integral to the holistic approach to sustainable buildings. Referring to the use of [healthy building certifications](#), Stephen Lawler, retail



development director at Value Retail Management summarized, “When you do that, you include everybody. You bring tenants to the table. In the end you have an optimal result and create a huge understanding of everybody involved in the process.”

“How do we create places that connect to communities and create cohesion?” asked Juli Polanco, cochair and steering committee member of the Climate Heritage Network. Polanco added that joining up with partners outside of real estate that can help translate developers’ concepts and strategies to different community groups is an important step in finding those kinds of solutions.

Julie Hiromoto, a principal and firmwide director of integration for HKS Inc., agrees and took it further. She framed the holistic approach in the context of real estate companies taking responsibility for environmental and social justice and argued that more needs to be done to mitigate the impacts of climate

change on the poorest people in society. “We need all of us to reach our collective and shared goal, not just the innovators and leading edge,” noted Hiromoto. “Our underserved and marginalized populations are less informed about the risks [of climate crisis] to their families, about the incentives available to make adaptation and resilience strategies more accessible, and then there are the systemic issues of distrust.”

Working with occupiers on behavior change is not only a way for owners to lower transition risk but also a way to help them meet their own ESG goals. Participants acknowledged that real estate owners need to educate tenants about how to lower carbon footprint in operation; however, they also acknowledged that hand-holding is often needed to explain the innovations in an asset. For instance, some participants reported that buyers of residential assets often do not (yet) understand the environmental value of an all-electric building. Perhaps one positive outcome of the rapid rise in energy costs is that it is a catalyst of the collaboration between occupiers and landlords to align on operating buildings more efficiently and reducing energy consumption.

Another strong theme is that work is underway by some real estate practitioners over the sustainability of their supply chains to support wider decarbonization drives. Contributors are keen to source low-carbon materials, such as mass timber, and are looking to companies to help provide information on embodied carbon. Large manufacturers, for instance, are beginning to put carbon numbers to products via environmental product declarations.

Interest in embodied carbon is still new, and, therefore, investors are beginning to think about how to measure it—although full understanding of how to do that and of the product data and tools that are needed to properly assess it remains a long way off.

Learn more:

[*Social Spaces, Resilient Communities: Social Infrastructure as a Climate Strategy for Real Estate*](#)

[*Social Impact: Investing with Purpose to Protect and Enhance Returns*](#)

[*ULI Net Zero Imperative*](#)

[*Embodied Carbon in Building Materials for Real Estate*](#)

[*Tenant Energy Optimization Program*](#)

An aerial photograph showing several houses and trees surrounded by deep floodwater. The water is a dark blue-green color, and the trees are mostly green, though some are bare. The houses are partially submerged, with only their roofs and upper floors visible. One house in the center has a grey roof, while others have white roofs. The overall scene depicts a significant flooding event.

4

Addressing Global Flood Challenges



I want to remind people that we have a great deal to do to make sure that places like Hong Kong don't drown."

—MARGARET BROOKE

Chief Executive Officer
Professional Property Services Group
Hong Kong SAR, China

4 Addressing Global Flood Challenges



Intrinsic to the work of mitigating against physical climate risk factors is understanding flood risk, and how to protect assets from inundation will be a major topic for 2023.

While sea-level rise and storm surge will threaten coastal areas, global warming is also, in many places, heightening the chances of extreme precipitation events—even for inland communities. The devastating and deadly floods in Pakistan; in Dallas, Texas, and New York City in the United States; and in parts of Western Europe are just a few recent examples of the havoc flood waters wage against people and property. Such events are becoming more regular and commonplace, and as a result market participants are realizing that the cost of repairing flood damaged buildings, or mitigating flood risk, is real.

Participants report that more skill—and data—are needed within the industry itself to help analyze and quantify such risks. Among the key tasks for the real estate sector for the immediate future is to encourage local and national authorities to establish and provide detailed and forward-looking flood risk information and updates to existing flood maps. Such data are critical to understanding asset and market-level risk. Using that data, investors can establish annual reviews for their flood risk assessments and they can plan to improve the flood resilience

of their real estate portfolios as necessary. Asset owners can also conduct enhanced flood due diligence assessments for new investments that have high flood exposure.

Many investors are already putting in place such measures. As Elsa Monteiro, of Sonae Sierra, pointed out, her company is re-viewing each asset to assess its vulnerability to flood risk (among other physical risks) so mitigation measures can be implemented.

Stan Bertram, associate director of ESG at PGGM, notes that companies are no longer simply measuring an asset’s physical climate risk—they are measuring the asset-level mitigation activities against such hazards to go from “gross risk to net risk.” This also includes considerations of local policy and government actions to mitigate such risk.

Government action—or lack thereof—to mitigate flood risk can be a deciding factor for investment. Accordingly, local authorities across the world are investing in nature-based solutions, such as green infrastructure, to mitigate the impact of flooding and to deliver a range of important cobenefits for urban residents. Urban flood park projects—which, for example, are underway in New York City, Dakar, Copenhagen, Singapore, and across China—are being tried and tested as one solution in the fight against flooding. However, participants note more work needs to be done.



Sonae Sierra's Elsa Monteiro emphasized that more collaboration with infrastructure firms and municipalities is needed to help plug gaps—for example, readying sewage systems to cope with large amounts of water.

Roundtable participants in Hong Kong, a coastal city, are acutely aware of rising water levels, as local climate groups demand government investment in flood-defense programs. As noted by Margaret Brooke, chief executive officer at Professional Property Services Group, “I want to remind people that we have a great deal to do to make sure that places like Hong Kong don't drown, because we aren't very high above sea level.”

Learn more:

[*Harvesting the Value of Water: Stormwater, Green Infrastructure, and Real Estate*](#)

[*Nature Positive and Net Zero*](#)

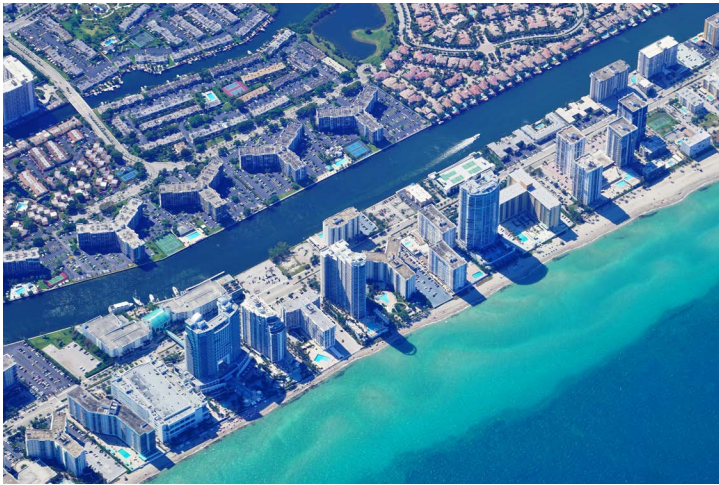
[*Cloudburst infrastructure lookbook*](#)

[*How to Choose, Use, and Better Understand Climate-Risk Analytics*](#)

[*Climate Risk and Real Estate Investment*](#)

[*Water Wise: Strategies for Drought-Resilient Development*](#)

[*Mitigating Climate Risk Impact to Real Estate Value in the Greater Bay Area*](#)



5

Responding to Government Influence



It is time to choose the target, then take action on that.
It is about choosing the right indicator and really engaging on it.”

—JI WON DAUNIS

Senior Manager of South & West Europe Portfolio
Allianz Real Estate
Paris, France

5

Responding to Government Influence



The industry is still dealing with an alphabet soup of regulations and policy, which can hamper progress. But waiting for consistency is not an option.

The matter is being complicated by regulators at various levels within markets and across markets increasingly focusing on sustainability. Peter Cosmetatos, CEO of CREFC Europe, a trade association for real estate lenders, stated, “There needs to be economic rationale for ESG strategy . . . it is hard to build [this] unless regulation, and its future trajectory, set clear compliance requirements for buildings, from which valuations can be inferred.”

Ji Won Daunis, senior manager, south & west Europe portfolio, at Allianz Real Estate, pointed out, “I see a lot of labels treating sustainability topics and it is creating a lot of confusion among market participants. For us it is about reducing carbon footprint. We set a short-term target to reduce our carbon footprint by 25 percent by 2025 and aim to reach net zero emissions by 2050. For example, we assess carbon emissions against 1.5 degrees Celsius CRREM GHG [Carbon Risk Real Estate Monitor greenhouse gas] pathway. It is time to choose the target that make[s] an impact and

build the structured framework to measure the performance to assess and improve the portfolio, and engage partners and tenants to make a difference.”

One worry in all of this, however, is that despite the confusion, it appears regulators are becoming more exacting over green claims. Regulators—from the U.K. Financial Conduct Authority to the U.S. Securities and Exchange Commission—are cracking down on companies over greenwashing claims. But the real estate industry in Europe, for instance, is concerned that current requirements in frameworks (such as the E.U. Taxonomy), are not necessarily well designed for most real estate companies.

For example, despite an urgent need to improve existing buildings, such policy is resulting in an unintended consequence, that is, capital is being directed toward assets with the highest level of green standards—net zero new builds. In addition, market pressures from the U.S. federal government are rising due to the new requirement that suppliers must disclose climate risk and resilience data to protect the government’s supply chains from climate-related financial risks.



Beyond reporting requirements at the company level, governments are also enacting performance requirements at the operational building level. The European Union's EPC regulations, which vary by country, require certain energy grades to lease a building; in the United States, building performance standards in localities across the country set fines and other penalties for not complying with certain thresholds of building energy or carbon performance.

It is perhaps no surprise then, given the wealth of policy, that participants report that keeping track of regulation around sustainability is a huge draw on human resource, and that participants note they are hiring people to focus entirely on this issue, including hiring people to follow procedures across different countries.

In the United States, the roundtable participants recognized a strong push around sustainability at a local level, including incentives to improve attractiveness of new builds and retrofit. In Asia, contributors mentioned the increasing recognition of sustainability within the public sector, as bidding for key government land sites must be driven by sustainability to succeed.

Also in Asia, the Hong Kong government is looking to position itself as an issuer of green bonds, which have been well received by the public. The Government Green Bond Programme is an initiative to promote the development of green finance, with proceeds raised being used to finance government projects with environmental benefits. Some of the capital is being channeled to fund green buildings and energy efficiency projects as Hong Kong pivots to a low-carbon economy.

During the U.S. roundtable, environmental justice as an integral feature of sustainability was a discussion point and reference was made to the Biden administration's establishment (of the first ever) [White House Environmental Justice Advisory Council](#). The aim of the council is to bring greater visibility regarding how certain communities in America bear the brunt of climate change, with sustainable infrastructure in the built environment being one of the council's key areas of focus. This area will continue to rise as an important issue in sustainability and the built environment, with real estate being part of the solution.

Learn more:

[*Decarbonizing the Built Environment: 10 Principles for Climate Mitigation Policies*](#)

[*Environmental Justice and Real Estate*](#)

Conclusion

During the European roundtable, Charlotte Jacques, head of real estate sustainability and impact investment at Schroders, reflected, “There are so many things [that] so many people have to do. How do we achieve this at scale, and how do we mobilize? There’s a huge amount of skills-building and behavioral change needed. How do you communicate all of this so that people understand their role and responsibility? How do we touch all the right people with one building, and how do we replicate that across all buildings?”

Leaders in the field understand that while urgency is critical to actionable solutions, so, too, is cooperation. No one benefits from competition in this arena. Gone are the days when it was enough to hang a green certificate on a building and move on. One net zero building amid a city of brown assets will neither provide a basis for thriving cities nor will it move the needle on decarbonization.

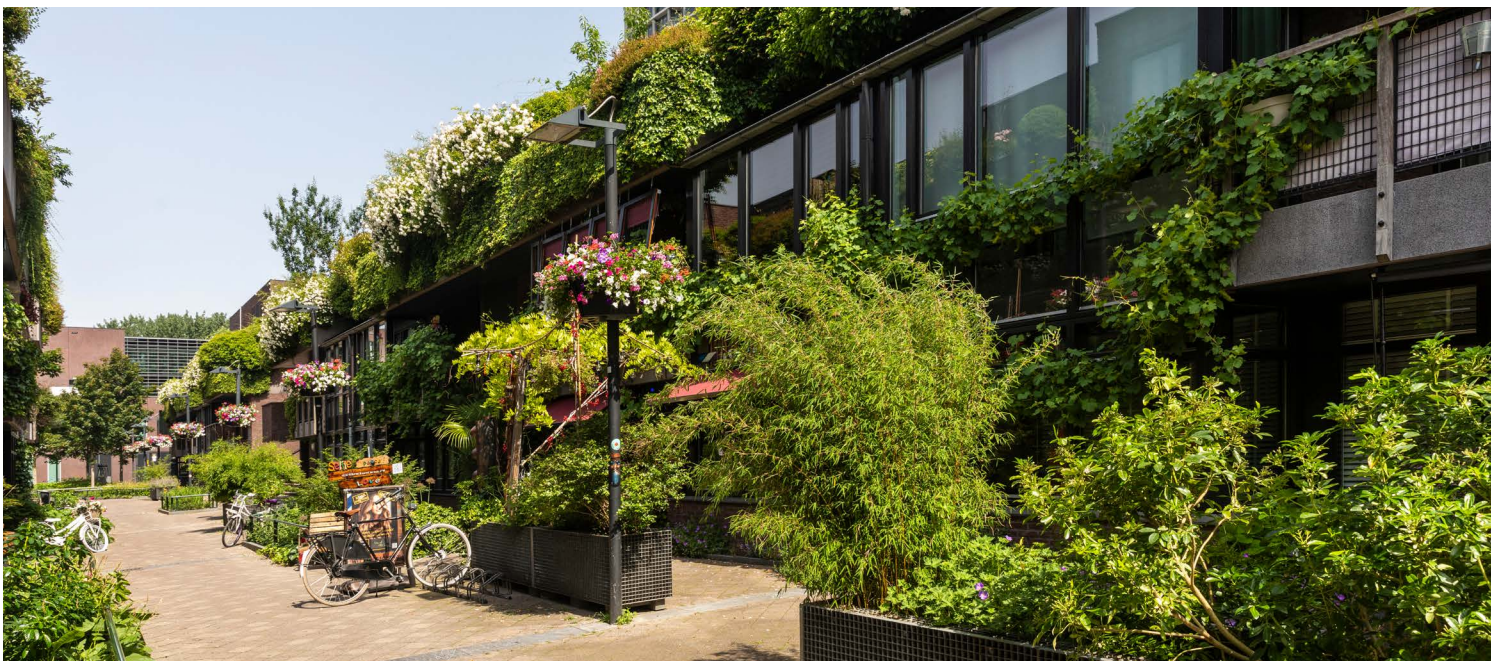
As we head into 2023, sustainability is a collective issue, as Jacques’s comments reflect—be it at an occupier/landlord, supply chain, community, or city level. It is this approach that perhaps represents how the most mature and innovative real estate companies interact with sustainability challenges. There is an increasing convergence of the “E” and “S” elements of ESG in the market, in part due to the stress of higher energy prices disproportionately

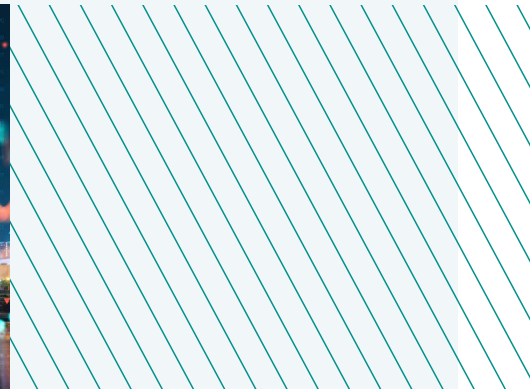
affecting lower-income communities, as well as the necessity to decarbonize all assets no matter their value.

In the months ahead, it will be imperative to retain this growing commitment to action through collaboration as financial headwinds threaten to pull companies’ focus inwards to the exclusion of all else—particularly the (arguably) long-term picture because the benefits of environmental investment might take a while to pay off.

At the same time, 2023 will require real estate companies to gain greater, granular insights into the risks contained within their own assets. Currently, only a handful of market players have started to consider the costs of decarbonization. The problem is that decarbonization activity is mainly focused on high-value assets owned by the best-resourced companies, predominantly in higher value locations—prime offices and high-end residential where the cost-to-value of retrofitting is lower. What happens to the rest?

To remove transition risks as a point of competitive advantage for the market requires sharing knowledge and information on how to account for the cost of raising standards, to help all owners, lenders, and valuers create a framework for understanding a building’s worth through the lens of carbon reduction.





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