

CHANGE IS COMING

CLIMATE-RISK DISCLOSURES AND THE FUTURE
OF REAL ESTATE INVESTMENT DECISION-MAKING





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Project Team

Lead Author

Maryann Haggerty

Urban Land Institute

Lindsay Brugger

Vice President, Urban Resilience

Simon Chinn

Vice President, Research and Advisory Services, Europe

Sophie Chick

Vice President, Research and Advisory Services, Europe

May Chow

Senior Vice President, ULI Asia Pacific

Billy Grayson

Executive Vice President, Centers and Initiatives

Morgan Maloney

Manager, ULI Randall Lewis Center for Sustainability in Real Estate

Marta Schantz

Co-Executive Director, ULI Randall Lewis Center for Sustainability in Real Estate

Lisette van Doorn

Chief Executive, ULI Europe

James A. Mulligan

Senior Editor

Laura Glassman

Publications Professionals LLC

Manuscript Editor

Brandon Weil

Art Director

Tom Cameron

Graphic Designer

Heitman

Laura Craft

Global Head of Portfolio Sustainability Strategies

Mary Ludgin

Senior Managing Director, Head of Global Research



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Executive Summary

As concerns about the effects of climate change mount, regulators globally are moving toward requiring companies to report climate risks, just as they have long required companies to report financial risks and results. Until recently, such reporting generally has been voluntary, often a result of investor pressure. Such regulatory mandates, if enacted, are likely to result in increased data disclosure on climate risk and emissions from much of the real estate industry, public or not, around the globe.

In this report, the Urban Land Institute and Heitman examine what new reporting requirements will mean for real estate investors, with a focus on how global real estate investors plan to use forthcoming regulator-mandated climate data. In interviews conducted by ULI, investors, asset managers, investment advisers in the private equity real estate space (as well as those that invest in publicly traded real estate), and real estate analysts said they consider climate change a material investment risk factor that needs to be measured and priced into investment decisions.

They want better data to help improve the modeling of the financial risks associated with the potential for damage to assets due to climate-related factors (physical risk) and those stemming from the shift to a low-carbon future, including higher taxes and insurance costs as well as asset value changes (transition risk). Specific to real estate assets, there is a desire for greater information regarding physical risk. They use currently available data to model

risk but see those data as inconsistent and less reliable. They said regulatory mandates that are coming into focus will be a plus, making the resulting data higher quality, more comprehensive, and more auditable. While they recognize benefits to their business from the mandates' required actions, they also recognize the costs and complexities involved in complying with new mandates.

Real estate investors work within a complex reporting environment. There are hundreds of frameworks and standards globally for reporting on environmental factors. In some jurisdictions, reporting is required on social and governance factors as well. Some clarity is emerging as multiple nations have begun to require reporting in line with a framework set out by the Task Force on Climate-related Financial Disclosures (TCFD), an industry-led group established by the international Financial Stability Board.

As of 2022, eight jurisdictions globally had official reporting requirements for certain sized companies consistent with the TCFD framework: Brazil, the European Union, Hong Kong, Japan, New Zealand, Singapore, Switzerland, and the United Kingdom.¹ The U.S. Securities and Exchange Commission (SEC) has proposed climate reporting requirements based on the TCFD framework. These rule changes for companies registered with the SEC could be made public as early as late 2023. Other countries, including Canada and India, are exploring use of a TCFD framework.

TYPES OF CLIMATE RISK



Physical risk is the risk of damage to assets due to climate-related factors. Physical risk can be short term, such as damage from extreme storms, or longer term, including threats from rising sea levels or prolonged drought.



Transition risk is a broad grouping of business risks associated with climate change and the transition to a low-carbon economy, such as changes in the regulatory backdrop, reduced resource availability, increased cost for insurance (and diminished access), higher taxes, and the potential for reputational and market shifts.

An alternative framework, the Sustainable Finance Disclosure Regulation (SFDR) has been implemented in the EU. Required designations, disclosures, and reporting under the SFDR began in 2021–2022. The International Sustainability Standards Board (ISSB) also released a set of standards, in line with TCFD recommendations, that will be effective January 1, 2024, and may serve as a baseline for future disclosures.

Investors say mandated climate data could help them better price risk, because the data on emissions and physical climate risk will be more reliable and more comparable than what is available now. The information could help determine whether assets will suffer “brown discounts”—that is, erosions in value because they cannot conform to regulations or expectations for decarbonization over time. It might affect which companies or assets are included in “green” investment funds. But mostly, it will push real estate industry participants to follow best practices for transparency regarding climate risks, to report on how they have or plan to adapt to climate impacts already apparent, and to report their progress on achieving operating targets regarding decarbonization.

To stay ahead of forthcoming regulations and best position themselves in the market, real estate market participants need to track and report emissions and physical climate-risk data. Further, it is critical to monitor climate-related disclosure and performance requirements across all levels of government as new requirements are proliferating.



MAPPING ESG
A LANDSCAPE REVIEW OF
CERTIFICATIONS, REPORTING
FRAMEWORKS AND PRACTICES

   **Urban Land Institute**

For a global landscape review of certifications, reporting frameworks, and practices, see the ULI report *Mapping ESG: A Landscape Review of Certifications, Reporting Frameworks and Practices*.

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Introduction

As extreme weather events multiply and become more intense, countries increasingly are committing to track and reduce carbon in an effort to slow climate change and mitigate its effects. Notably, 193 countries have signed on to the Paris Climate Agreement, which includes a goal of net zero greenhouse gas (GHG) emissions by 2050 while enhancing adaptive capacity, strengthening resilience, and reducing vulnerability to climate change. Those commitments and other actions taken in response to concerns about a warming planet affect the real estate industry—developers, owners, tenants, investors, and others.

Real estate investors are also taking action, recognizing the role of the built environment as a major source of carbon emissions and the potential for asset obsolescence as building design and operating systems evolve to meet decarbonization standards. They are setting corporate net zero goals. And they are weighing the effects of climate change in their risk assessments. They evaluate both physical and transition risk and, in recent years, have pushed for more climate-related disclosure to inform their assessments. To date, that disclosure has largely been voluntary rather than a result of government regulations.

A variety of initiatives and standards have emerged. For instance, many real estate companies and investors participate in GRESB (formerly the Global Real Estate Sustainability Benchmark). Some set and track climate targets using the ULI Greenprint Net Zero Commitment, Science Based Targets initiative (SBTi), Carbon Risk Real Estate Monitor (CRREM), and other tools. For the private real estate industry specifically, NCREIF/PREA in May 2022 published a list of key performance indicators (KPIs) for real estate reporting on both transition and physical risk.²

Still, investors and regulators say reporting on physical climate risk and on building-level or portfolio-level emissions is inconsistent and often unreliable, especially when compared with audited financial data. To address these issues, regulators across the globe are moving toward mandatory disclosure of climate-related data.³ Advocates of mandates say such data will be higher quality, comparable, and auditable, in comparison with voluntary data. The European Union, the United Kingdom, Japan, and others have begun to introduce some form of mandatory reporting while other countries such as the United States and Australia have proposed similar regulations.

In this report, the Urban Land Institute and Heitman provide a brief overview of notable regulatory reporting regimes on climate data, then examine how global real estate investors plan to use forthcoming regulator-mandated climate data. In interviews, it became clear that investors, asset managers, investment advisers, and real estate analysts consider climate change a material investment risk factor. Further, they back some type of standardized, mandatory reporting scheme on climate-related risks, similar to reporting on financial data. Several interviewees cited reporting under TCFD-aligned regulations as likely to produce useful information. Finally, the report notes the ever-evolving landscape of disclosure regulations and offers strategies to stay ahead of forthcoming requirements and achieve the best market position.

This report is the fourth in a ULI/Heitman series on real estate and climate risk, the first of which was published in 2019. The report presents the perspectives of a selection of real estate investors, asset managers, investment advisers, and real estate investment trust (REIT) analysts from around the world who participated in in-depth interviews with ULI. Most of them have investments or clients in multiple nations. Their abridged and anonymized comments are supplemented by analysis from ULI and Heitman subject matter experts.

- [SECTION 1](#) discusses current disclosures and forthcoming regulatory requirements.
- [SECTION 2](#) discusses what investors say about how they plan to use mandated disclosure data.
- [SECTION 3](#) looks ahead, including how real estate owners and investors can stay ahead of regulations.

Section 1: Putting Climate-Related Data in Context

Regulators around the world are moving toward requiring companies to provide data related to the effects of climate change on their businesses. To date, investor pressure has been the prime motivation for companies to provide climate-related data. “Up to this point, companies haven’t reported emissions because the SEC told them to. They have reported emissions because investors like us are hammering them on it, because it is financially material to their operations,” said an analyst at a U.S.-based asset manager. But mostly, investors say, climate change is a risk, and they need to measure and price that risk as they do other investment risks.

The risk has become increasingly apparent in recent years, one EU-based investment adviser pointed out. For instance, that adviser said, buildings can become obsolete because they are not energy efficient and thus do not meet local regulations and cannot attract tenants.

“Those are really serious and substantial financial risks. . . . Even if we don’t care about global warming, we should care about the returns of our clients.”

Concerns about the costs of physical risk are also mounting. Events that cause a billion dollars or more in damage have become more common. For instance, losses from Hurricane Ian in September 2022 are estimated at \$100 billion, more than 2005’s Hurricane Katrina after adjusting for inflation.⁴ Costs to investors could go beyond actual damage, including revenue lost to downtime, higher insurance rates (or the prospect that insurance is not available), and lower rental demand and sales prices given possible future disasters.

Moreover, central banks and international institutions increasingly are addressing how climate change may affect financial system stability globally and how to address those risks.⁵ Stress testing of banks in the United Kingdom and European Union includes climate risk, a U.S.-based investment adviser pointed out, which could lead to “different capital charges against green versus brown lending, or potentially higher capital charges against lending to sectors that are of higher physical climate risk.”

THE FUTURE OF REPORTING



BUSINESS AS USUAL

Profit and loss statements
Annual reporting
Quarterly reporting
Voluntary sustainability reporting (e.g., annual reports, TCFD, GRESB)



ON THE HORIZON

Business as usual, plus mandatory disclosure of:
Verified greenhouse gas emissions
Physical climate-risk assessments
Fund classifications

FROM FRAMEWORKS TO REGULATIONS

By one estimate, more than 1,750 sustainability reporting provisions exist across 60 countries, largely voluntary.⁶ The Task Force on Climate-related Financial Disclosures (TCFD), an industry-led group established by the Financial Stability Board, has taken up the charge to identify information needed to help investors, lenders, and insurers assess and price climate-related risk. The TCFD has laid out “material” metrics for sustainability reporting across industries, as well as standards for reporting on climate risks and opportunities. As of 2022, eight jurisdictions globally had official reporting

requirements in line with the TCFD framework: Brazil, the EU, Hong Kong, Japan, New Zealand, Singapore, Switzerland, and the United Kingdom.⁷ The requirements vary from alignment with the TCFD to official reporting for certain sized companies. A summary of TCFD-recommended corporate policies and disclosures is provided in the table below. In 2024, the International Financial Reporting Standards (IFRS) Foundation will take over the monitoring of companies’ climate-related disclosures from the TCFD.⁸

TCFD Recommendations and Recommended Disclosures

Recommendations	Recommended disclosures
<p>Governance</p> <p>Disclose the organization’s governance around climate-related risks and opportunities.</p>	<ul style="list-style-type: none"> • Describe the board’s oversight of climate-related risks and opportunities. • Describe management’s role in assessing and managing climate-related risks and opportunities.
<p>Strategy</p> <p>Disclose the actual and potential impacts of climate-related risks and opportunities on the organization’s businesses, strategies, and financial planning where such information is material.</p>	<ul style="list-style-type: none"> • Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long terms. • Describe the impact of climate-related risks and opportunities on the organization’s businesses, strategy, and financial planning. • Describe the resilience of the organization’s strategy, taking into consideration different climate-related scenarios, including a 2 degrees or lower scenario.
<p>Risk management</p> <p>Disclose how the organization identifies, assesses, and manages climate-related risks.</p>	<ul style="list-style-type: none"> • Describe the organization’s processes for identifying and assessing climate-related risks. • Describe the organization’s process for managing climate-related risks. • Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization’s overall risk management.
<p>Metrics and targets</p> <p>Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.</p>	<ul style="list-style-type: none"> • Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process. • Disclose Scope 1, Scope 2, and if appropriate, Scope 3 greenhouse gas emissions, and the related risks. • Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.

Source: Task Force on Climate-related Financial Disclosures, online content, 2022, www.fsb-tcfd.org/ (accessed Nov. 18, 2022).

Classifying Greenhouse Gas Emissions

Regulatory regimes tend to focus on disclosure of greenhouse gas emissions. Greenhouse gas emissions are described by “scopes.”

- **Scope 1 emissions**, also known as direct emissions, come from sources owned or controlled by the organization. This might include natural gas combusted in a boiler at a company’s head office to heat the property.
- **Scope 2 emissions**, also known as indirect emissions, result from the production of electricity, heat, steam or cooling consumed by the company, but generated elsewhere. Scope 2 emissions are released at the facility where the electricity is generated (i.e., the power plant). The power plant would report these emissions as Scope 1, but the organization purchasing and consuming the electricity would report these as Scope 2.
- **Scope 3 emissions**, also known as other indirect emissions, occur as a consequence of the operations of the organization, but are not directly owned or controlled by that organization. For example, emissions from waste generated due to a company’s operations are considered Scope 3 emissions. In real estate, the most material Scope 3 emissions are usually tenant-controlled greenhouse gas emissions and those associated with development, such as the production of building materials like steel, glass, or concrete, or emissions released during the construction process.

Adapted from GRESB, “Whose Carbon Is It?,” May 23, 2017, <https://www.gresb.com/nl-en/whose-carbon-is-it/> (accessed March 13, 2023).

In the United States, the SEC has proposed mandatory climate reporting for all publicly traded companies, based on the TCFD framework. According to its proposal, the SEC would require public companies that report to the agency to disclose climate-related risks that are “reasonably likely to have a material impact on their business, results of operations, or financial condition, and certain climate-related financial statement metrics.”⁹ That would include physical risk as well as Scope 1 and Scope 2 greenhouse gas emissions (described in more detail in the sidebar above). Companies would also have to report Scope 3 emissions if material or if the company has set an emissions target.

The timing of U.S. requirements remains unclear, as the SEC’s proposal for climate reporting has generated pushback in several areas, including the materiality threshold and the Scope 3 reporting requirement. If implemented, these regulations will likely prompt some private companies to follow suit in disclosing matters relating to climate risk.

In addition, the SEC has proposed changes to rules for fund managers in the environmental, social, and governance (ESG) realm. The least-stringent SEC classification proposed is an ESG Integration Fund. These funds must describe how management integrates ESG factors into their investment selection process. Investment advisers seeking an ESG-focused fund designation must comply with the requirements for an ESG integration fund while also disclosing governance processes and responsible investment activities. Impact funds must comply with the requirements for ESG-focused funds, and they must describe the impact(s) the fund is seeking to achieve, how management will track progress toward these impacts, the timeline for achieving progress, and the relationship between the impact of the fund and financial returns.

Key Elements of the SEC’s Proposed Rule on Climate-Related Disclosures for Investors

Material physical climate risks	Greenhouse gas emissions	Climate targets and transition plans
<p>Companies must report on how physical climate risks might affect their profitability today and over time. They must disclose their governance and risk-management processes to manage these risks. This includes the following:</p> <ul style="list-style-type: none"> • Percentage of buildings located in flood hazard areas • Amount of assets (e.g., book value and as a percentage of total assets) in regions of “high” or “extremely high” water stress and scarcity • How any identified climate-related risks have affected or are likely to affect business strategy, model, and outlook • The processes for identifying, assessing, and managing climate-related risks and whether any such processes are integrated into the overall risk management systems or processes 	<p>Companies must report the extent of their greenhouse gas emissions and their source.</p> <ul style="list-style-type: none"> • Audited direct Scope 1 emissions and audited indirect Scope 2 emissions from purchased electricity and other forms of energy • Scope 1 and Scope 2 separately disclosed, expressed both by disaggregated constituent greenhouse gases and in the aggregate, and in absolute terms, not including offsets, and in terms of intensity (per unit of economic value or production) • Scope 3 emissions, if material in absolute terms 	<p>Companies need to disclose any climate-related targets, along with detailed transition plans, including their use of carbon offsets and renewable-energy certificates (RECs).</p> <ul style="list-style-type: none"> • A description of the scenarios used to assess the resilience of business strategies, as well as the assumptions behind projected principal financial impacts. • How climate-related targets or goals are to be met. • Relevant data indicating progress toward meeting targets and how it has been achieved, updated annually. If carbon offsets or RECs have been used to achieve targets, the amount of carbon reduction represented by the offsets or the amount of generated renewable energy represented by the RECs must be disclosed.

Adapted from McKinsey & Company, “Proposed Climate Rule Signals New Era for Real Estate,” Aug. 10, 2022, <https://www.mckinsey.com/industries/real-estate/our-insights/proposed-climate-rule-signals-new-era-for-real-estate> (accessed Feb. 9, 2023), and SEC, “The Enhancement and Standardization of Climate-Related Disclosures for Investors,” Mar. 21, 2022, <https://www.sec.gov/rules/proposed/2022/33-11042.pdf> (accessed Feb. 9, 2023).

Key Elements of the SEC’s Proposed ESG Fund Disclosure Rules

ESG integration funds	ESG-focused funds	Impact funds
<ul style="list-style-type: none"> • Describe how the fund incorporates ESG factors into its investment selection process • Disclose the fund’s emissions, if the fund considers GHG emissions 	<ul style="list-style-type: none"> • Disclose which responsible investment activities the fund engages in (e.g., tracks an ESG index, applies an exclusionary or inclusionary screen, seeks to achieve a specific impact, engages with issuers) • Describe how the fund votes proxies and/or engages with companies on ESG issues 	<ul style="list-style-type: none"> • Provide all disclosures required of ESG-focused funds as well as an overview of the impact(s) the fund seeks to achieve • Describe how the fund measures progress toward specific impact, including KPIs and the time horizon used to measure progress • Describe the relationship between the impact the fund is seeking and financial returns

Adapted from ESG Global Advisors, “Regulation without Borders: How Local ESG Standards Impact Investors Globally,” Jan. 10, 2023, <https://www.esglobaladvisors.com/news-views/regulation-without-borders-how-local-esg-standards-impact-investors-globally-2/> (accessed Apr. 17, 2023).

As of April 2021, EU-based companies must now consider existing climate reporting frameworks such as TCFD in their climate disclosures. In addition, a second reporting framework has been developed, the Sustainable Finance Disclosure Regulation (SFDR), which requires financial market participants such as investment advisers marketing their products to EU-based entities to disclose the environmental and/or social attributes of their products as well as any possible adverse effects. The SFDR comes out of the EU Action Plan on Sustainable Finance, which was created to direct private investment to support the transition to a sustainable economy. As of 2021, public and private investment managers raising capital in the European Union have been mandated to categorize investment products using Article 6, 8, and 9 classifications, as described in the table below.

Alongside the SFDR, the EU Taxonomy lists environmentally sustainable economic activities, and it provides specific calculations to guide investment managers in categorizing their investments. Moreover, under the Corporate Sustainability Reporting Directive (CSRD), any EU Taxonomy-aligned investment, which includes all Article 9 products and those Article 8 products aligned with the EU Taxonomy, must also adhere to Principal Adverse Impact (PAI) reporting.

Sustainable Finance Disclosure Regulation Investment Classifications

Article	Description
Article 6 funds	Funds that do not promote sustainability.
Article 8 funds (sometimes termed “light green” funds)	Funds that promote environmental and/or social attributes, among other characteristics. Must disclose if any investments are aligned with the EU Taxonomy and, if so, report on Principal Adverse Impacts (described in following table).
Article 9 funds (sometimes termed “dark green” funds)	Funds that have sustainable investment as an objective, as defined by the EU Taxonomy. Must report on Principal Adverse Impacts.

SFDR Principal Adverse Impact Indicators for Direct Real Estate Investors

Mandatory PAI indicators	Voluntary PAI indicators
<ul style="list-style-type: none"> • Exposure to fossil fuels through real estate assets • Exposure to energy-inefficient real estate assets 	<ul style="list-style-type: none"> • GHG emissions • Energy consumption intensity • Waste production in operations • Raw materials consumption for new construction and major renovations • Land artificialization

Adapted from VIBE, “Navigating ESG Reporting Frameworks,” Aug. 1, 2022, https://www.verdani-institute.org/_files/ugd/5850df_cc344d5d8b474492bafd1e4727906a7e.pdf (accessed Feb. 9, 2023).

LOCAL AND REGIONAL REGULATIONS

As various jurisdictions around the globe try to reduce carbon emissions and promote enhancements to the energy efficiency of buildings, they have instituted local and regional regulations such as asset-level Energy Performance Certificates (EPCs) in Europe and Building Performance Standards (BPSs) in the United States.¹⁰

EPCs rate the energy efficiency of a building, including how costly it is to heat and light, what its carbon emissions are, and what rating could be achieved if recommended improvements were made. The Netherlands, France, Germany, the United Kingdom, and other European countries have incorporated EPCs into their local regulations to promote energy efficiency investments and to allow prospective tenants to compare building options. Buildings must meet a minimum energy standard, or they cannot be rented. An unintended consequence of this provision is the emergence of “stranded assets,” or properties that require more investment to meet the minimum energy efficiency threshold than can be recouped by owners through rental rates or increased asset value in sale.

In the United States, carbon reduction regulations take the form of BPSs, which require existing buildings to meet energy and/or GHG emissions-based performance targets. New York City’s Local Law 97 is one example of a BPS. This law sets carbon caps for buildings over 25,000 square feet beginning in 2024, imposed as part of the city’s goal of net zero emissions by 2050. Building owners will be fined if total building emissions exceed specified caps. Boston’s version of a BPS includes the requirement that all nonresidential buildings 20,000 square feet or greater and all residential building with 15 units or more must get on a path to net zero emissions by 2050, with emissions-reduction benchmarks to be met in 2025 and 2030. Fines for nonperformance range from \$300 to \$1,000 per day.

Some U.S. jurisdictions are using their building codes to encourage electrification and a switch from fossil fuels to renewables. Chicago’s Energy Code, rewritten in 2022, requires that all new commercial buildings have roofs built to allow for a solar array. And all new or substantially renovated residential buildings must be electric ready, with the capacity and the wiring to allow a conversion from gas to electric. California has imposed a ban on gas appliances set to take effect in 2030.

Both EPCs and BPSs will become more relevant as they require hefty fines on carbon emissions or begin to affect an owner’s ability to lease a property. Further, countries and localities are likely to progressively increase the minimum performance levels and performance targets for buildings. Building owners will need to closely monitor—and improve—the performance of their assets to ensure they do not become obsolete or uninsurable.



Explore ULI’s Global Green Building Policy Dashboard to learn more about climate-risk disclosure and local and regional regulations.

[CLICK HERE](#)

Section 2: Using Mandated Data



Voluntary disclosure of climate risk has resulted in data on physical climate risk and emissions that are incomplete and inconsistent. Mandatory disclosure, by contrast, could create clarity. How will investors use the data on emissions and physical risk reported as a result of new mandates? Importantly, such data could help them better price risk, interviewees say. Furthermore, these disclosures are likely to push the real estate industry to follow best practices for transparency, decarbonization, and mitigation of physical climate risk, where feasible.

CURRENT CLIMATE-RISK ASSESSMENT PROCESSES

Physical risk data often come from specialized consultants, who have developed models that provide climate forecasts by location. These models typically calculate value at risk to a hazard event or to long-term climate-related events like sea-level rise. Emissions data come from property owners or managers and their tenants, the utilities that generate and sell power, or third parties in instances where owners do not have access to whole-building emissions data.

But data on physical risk and emissions can be wildly inconsistent. “Number one, not all companies disclose data,” said an interviewee at a U.S.-based global investment adviser. “Number two, they don’t disclose it in a comparable way. So, the methodologies are all different. And then the third thing that we’re really worried about is that in lieu of having data from companies, you have third-party data providers who are doing estimates of companies and their climate risks. That to us is problematic, because it’s just an estimate, it’s not something that’s grounded in reality.”



Learn more about evaluating the effects of climate change on the long-term viability of real estate assets in:

[CLIMATE RISK AND REAL ESTATE INVESTMENT DECISION-MAKING](#)

[CLIMATE RISK AND REAL ESTATE: EMERGING PRACTICES FOR MARKET ASSESSMENT](#)

HOW MANDATED DATA COULD BE USED



Determine where capital is deployed



Establish a green premium



Classify properties into green investment funds



Compare companies



Anticipate stranded/obsolete assets



Identify upfront mitigation needs



Establish a brown discount

INCREASING DATA DISCLOSURE FOR BETTER DECISIONS

Interviewees think data generated because of new regulations will be more trustworthy because regulators have enforcement authority. As a result, the forthcoming data will be considered “investment quality”—that is, verifiable information that can support investment decisions. “If we want transparency, we do need to trust the data provided. Some level of government oversight and regulation is exceedingly helpful for investor knowledge and for establishing a measurable baseline,” said one U.S. institutional investor.

Investment quality data could streamline investment analysis. One EU-based investment manager said that the firm considers currently available climate-risk ratings from third-party data providers “a black box, with a lack of definition,” so the firm’s analysts amass their own data. “If there’s better regulation and more clarity on the quality of the data and the definition of the data, we can go to a data [provider] and buy their rating, because we will know that the data is of high quality, and we no longer need to do the work ourselves.”

Such high-quality information could help determine whether assets will suffer “brown discounts”—that is, erosions in value because they cannot conform to regulations, meet expectations for decarbonization over time, or be protected from physical climate risks. Climate-risk disclosures might also affect which companies or assets can be appropriately included in “green” investment funds.

Access to trustworthy physical risk metrics could help shape real estate investors’ decisions on where capital is deployed and whether to move investment away from riskier assets or riskier markets. Interviewees said that when they assess climate risks to investments, real estate is different from other sectors because of the relative importance of physical risk. Buildings are in fixed locations that may face increasing exposure to acute physical risks, such as extreme weather events, or chronic physical risks, such as threats from rising sea levels. As one participant said, a company may choose to move its headquarters, but the building where it used to rent office space will not move.

The SEC’s proposed rule is an attempt to address physical risk. Other regulatory frameworks, such as SFDR, do not require disclosure of matters relating to physical risk. “This could mean SFDR needs modification, or it could mean greater industry reliance on TCFD reporting even if that isn’t a regulatory requirement,” a U.S.-based global real estate investment manager pointed out.

COMPARING AND ANALYZING TRANSITION AND PHYSICAL RISK

For investors reviewing listed real estate companies, having data “to understand and to compare companies’ emissions to one another within a sector,” would be useful, said an interviewee at a U.S.-based global investment adviser. “We will be able to look at companies in the same sector, and say, how carbon intensive are they?”

Better data will also support analysis of company climate strategies. One U.S.-based investment adviser will use the data to review carbon-transition plans. “You can no longer just say, ‘I’m going to be net zero by 2050.’ You have to give some indication on how you plan to get there. And that is interesting, because it allows us to analyze a company’s strategy,” that interviewee said. Another U.S.-based global investment adviser who works in the private space echoed this sentiment, stating that when partners make sustainability claims, “My next question is, ‘Prove it?’”

In addition, mandatory reporting could help investors understand whether building owners have moved to mitigate specific risks—for instance, installing flood barriers in locations liable to flood. One EU-based asset manager explained, “Companies know much more about individual assets” than do investors or outside research firms. “They know what they have done” to mitigate physical climate-risk exposure.

Investors could also use physical risk disclosures to determine whether a fund or a company is overexposed relative to its peers. If a portfolio has a higher exposure to physical risk, investors could choose to apply a discount for the additional risk exposure or choose not to invest. Physical risk disclosures could also reveal whether the underlying assets’ locational exposure has been mitigated through hardening. Furthermore, as investor awareness of the risks associated with owning property in locations vulnerable to physical risk rises, investors could pull back from investments that could be affected by population loss, higher insurance and operating costs, drought, or weather that changes everyday life. This dynamic has been observed in the single-family housing market in the United States, with some online listing services now providing property-specific risk assessments to physical climate risks such as flooding and wildfire.¹¹

Learn more about how to incorporate the value of sustainability in transactions in the following reports:

[EMBEDDING SUSTAINABILITY IN REAL ESTATE TRANSACTIONS](#)

Learn more about hazard mitigation measures for existing buildings:

[RESILIENT RETROFITS: CLIMATE UPGRADES FOR EXISTING BUILDINGS](#)

ASSESSING SFDR CLASSIFICATION

Although the proposed SEC ESG-related fund categories have yet to take effect, interviewees active in Europe said they are beginning to see how investors are approaching Article 6, 8, and 9 classifications required under SFDR. For instance, pension funds operating with their own environmental mandates often prefer to put their money into funds classified as green, said one EU-based global investment adviser. “We are already seeing that if we put forward a proposal to invest in Article 9 or Article 8 funds, they’re much happier than if you come up with Article 6 funds.”

Under SFDR, funds are permitted to consider their investments as sustainable, to the extent they promote either environmental or social factors. Also, with Article 8 funds, investment managers can determine what environmental or social goal a fund will promote, which makes direct comparison of how a fund maintains compliance under Article 8 to another fund almost impossible. Another interviewee at an EU-based investment manager expressed concern that the EU Taxonomy definitions support investing in properties that are already well rated for sustainability, rather than investing in those that need improvement. “It doesn’t help to exclude companies from your investment universe, because the real estate is still there. It doesn’t help to only sell your crappy assets and only keep the best buildings that you have. . . . The buildings are still there; it doesn’t help the planet.”

Investors who focus on different regions may assess climate impact differently. An interviewee at a U.S.-based global real estate investment manager said that U.S. investors tend to “focus on the business case of using environmental, social, and/or governance data to drive enhanced investment returns.” In contrast, some European investors weigh environmental or social aspects just as heavily as financial metrics.

“That means they are willing to prioritize an environmental or social outcome over purely financial outcomes.”

TRACKING SCOPE 3 EMISSIONS

In the United States, the proposed SEC climate data rule would require Scope 1 and 2 disclosures and Scope 3 disclosures if material. Scope 3 emissions are usually tenant-controlled greenhouse gas emissions and emissions associated with development. In Europe, many investors push for disclosure on Scope 3 even though occupant privacy laws often stand in the way of tracking tenant emissions, and data on the embodied carbon of building materials are difficult to obtain. “Measuring Scope 3 specifically is a hard thing to do, because . . . you need to know what the tenants inside your building are consuming in terms of energy, and quite often these tenants don’t tell you,” said an interviewee at one EU-based investment manager. A global real estate investment manager went further, pointing out that a building owner’s Scope 3 emissions could be a tenant’s Scope 2 emissions.

“There’s a risk of double counting.”

Interviewees believe that without a system in place to adequately capture tenant energy data, meaningful reporting of Scope 3 emissions will remain out of reach. For buildings in which a landlord controls operations and prorates usage and costs to tenants, such as an office building, collection of Scope 3 tenant emissions is easier. Conversely, if the landlord does not control the energy system and does not pay the bill, as is the case with many apartment properties, data collection is more difficult. However, such tracking is not always impossible. Some utilities have systems in place to aggregate whole-building data for owners of multitenant buildings, particularly in localities that require energy benchmarking and disclosure.

Scope 3 emissions also include the carbon that comes from the production, transportation, and disposal of building materials. Like tenant emissions, owners are often challenged to obtain these data. In some cases, the data do not yet exist: much of the supply chain does not yet follow standard processes or protocols for measuring and declaring emissions associated with materials. As one EU-based global investment manager interviewee stated, reducing embodied carbon in construction is “crucial and also a hard thing to do. . . . It’s not impossible, but it requires a revolution in the way that the building construction companies operate and [how] they are regulated.”

Section 3: Looking Ahead

The world of climate reporting is quickly evolving. To stay ahead of forthcoming regulations, real estate owners and investors should develop business practices to measure and report on climate factors affecting their business.

HOW INVESTMENT MANAGERS CAN LEAD ON CLIMATE



MEASURE, REPORT, AND INCORPORATE CLIMATE DATA INTO STANDARD BUSINESS PRACTICES

Measuring emissions and hazard exposure is critical to managing climate-related risk. As noted in section 2 of this report, physical risk data must be assessed at the asset level as well as across a portfolio and can be done with the help of consultants specializing in physical climate-risk assessments. When quantifying emissions, engagement with property owners or managers and tenants is key, particularly for Scope 3 tenant emissions. Tools like utility links, metering technology, and green leases can help an owner get whole-building emissions data. To obtain and analyze the embodied carbon emissions associated with Scope 3, owners and investment managers can look to manufacturer-reported Environmental Product Declarations (EPDs) in databases like mindfulMATERIALS and Madaster, and calculators like the EC3 tool, Tally, and OneClickLCA.

Reporting frameworks such as TCFD and GRESB include both emissions and physical climate-risk metrics and can support the adoption of climate-informed governance strategies. To manage emissions and related transition risks, ULI Greenprint Net Zero Commitment, SBTi, CRREM, and other tools can be used to set and track progress toward climate targets. Additional guidance is available from real estate associations such as ULI (see sidebar at right), the National Council of Real Estate Investment Fiduciaries (NCREIF), the Pension Real Estate Association (PREA), and the European Association for Investors in Non-Listed Real Estate Vehicles (INREV).¹²

Savvy investors are also adopting key performance indicators (KPIs) to guide their decision making. For the private real estate industry, NCREIF/PREA in May 2022 published a list of KPIs for real estate across all areas of ESG. It pulls from a range of industry benchmarks and due diligence questionnaires and addresses both transition and physical risk.¹³



Decarbonization and Net Zero

Developing a path to net zero carbon is a priority for many entities, including governmental bodies, investors, developers, and tenants. ULI supports the industry in achieving net zero goals and mitigating transition risk through three key programs as part of its net zero mission priority:

- **ULI'S NET ZERO IMPERATIVE** is a multiyear initiative sponsoring technical assistance panels in select global cities that bring together public and private sectors to overcome local net zero challenges and accelerate decarbonization in the built environment.
- **The ULI Greenprint Center for Building Performance** is a worldwide alliance of leading real estate owners, investors, and strategic partners committed to improving the environmental performance of the global real estate industry. ULI Greenprint members can align to the [ULI GREENPRINT NET ZERO GOAL](#) to reduce the carbon emissions under their operational control to net zero by the year 2050.
- **ULI'S C CHANGE PROGRAM** aims to harness the collective expertise of the European real estate industry across two main intervention points: a common industry methodology to assess transitional climate risks as part of property valuations and practical ways to improve alignment between tenants and landlords to create common goals for decarbonizing and retrofitting.

Climate-Related Risk Disclosure Moving Forward: Heitman's Perspective

As real estate market participants increasingly recognize climate risk as a financial and investment risk, the pressure to disclose climate risk will grow regardless of whether or not regulations require it. As Laura Craft, global head of portfolio sustainability strategies at Heitman, says, "Climate disclosures will become the norm."

But what shape will that disclosure take? Craft believes that, given its international acceptance and focus on climate-related financial risks, "TCFD is a strong candidate as the official or unofficial standard on climate metrics." The market appears headed in that direction. Some 83 of the world's largest 100 companies now support or report in line with TCFD's recommendations while the Intergovernmental Panel on Climate Change has called the TCFD "the most significant governance development" to date regarding finance and climate change.¹⁴ Companies already reporting using TCFD would largely be in compliance with the proposed U.S. SEC climate disclosure.

Craft further notes that the goal of a TCFD report is to shed light on financially linked climate risks, which is what investors care most about. The TCFD framework is organized under four broad categories—Governance, Strategy, Risk Management, and Metrics and Targets—that firms can use to assess and report on climate risks and opportunities. TCFD does provide guidance on assessing climate indicators, tracking metrics, and developing targets. Many organizations are publishing TCFD reports, so examples and templates exist to follow. Craft explains that this specificity makes the framework easy to use.

Investors want transparency of risks and opportunities that could affect investment portfolios and returns. In 2018, Heitman began analyzing portfolios in alignment with TCFD, seeing the framework as a way to assess a portfolio on climate-related financial risks. Craft believes that if investors push for climate-related financial risks, the TCFD framework could become the de facto climate standard—regardless of regulator action.

STAY INFORMED ON REGULATIONS AFFECTING REAL ESTATE MARKET PARTICIPANTS

The pace of regulation requires consistent attention to evolving and emerging requirements for all real estate market participants. From regulations such as SFDR and the proposed SEC regulations to local energy reporting requirements (e.g., BPS) and carbon reduction ordinances (e.g., New York City's Local Law 97), following government announcements about climate-risk reporting regulations will help firms understand how proposed regulations will affect business practices and will illuminate trends managers need to address. Furthermore, tracking emerging regulations provides the opportunity for managers to assess potential future implications for their investment portfolios. Proactively mitigating physical climate risk and improving energy and carbon performance will help limit risk within a portfolio and comply with regulations.

As regulations evolve, real estate market participants can look to industry groups to stay abreast of new and changing regulations. Industry groups can help decipher how rules might affect investment portfolios and provide an opportunity to connect with peers on how to navigate new requirements. Despite the unknowns of emerging regulations, it is clear that climate-risk disclosure will be an increasingly important barometer of financial stability and, as an industry, real estate must work together to properly manage climate risks across portfolios.

The ULI–Heitman Climate Risk Series

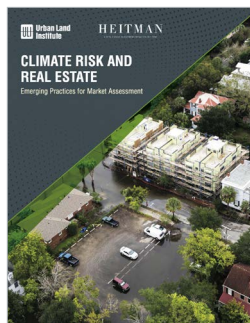


2019

Climate Risk and Real Estate Investment Decision-Making

This agenda-setting report introduces the key links between climate risk and real estate investment and focuses on how real estate investors incorporate asset-level climate risks in their investment decision-making processes.

[READ MORE](#)



2020

Climate Risk and Real Estate: Emerging Practices for Market Assessment

This report shows how leading investors are developing approaches to better understand climate risk at the city or market scale, rather than focusing primarily on risk at the asset level.

[READ MORE](#)



2022

Climate Migration and Real Estate Investment Decision-Making

This report examines how investors are assessing broader patterns of climate-related population migration in relation to their market- and asset-level climate-risk management approaches.

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2023

Change Is Coming: Climate-Risk Disclosures and the Future of Real Estate Investment Decision-Making

This report examines what new climate reporting requirements will mean for real estate investors, with a focus on how global real estate investors plan to use forthcoming regulator-mandated climate data.

Contributing Partners

Almazara Real Estate Advisory

APG (Algemene Pension Group)

Calvert

Jefferies

Kempen Capital Management N.V.

Mizuho Securities

Morningstar

Oregon State Treasury

StepStone Group

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CHANGE IS COMING

CLIMATE-RISK DISCLOSURES AND THE FUTURE OF
REAL ESTATE INVESTMENT DECISION-MAKING



Urban Land Institute
2001 L Street, NW
Suite 200
Washington, DC 20036-4948
uli.org