

## **ISA2022 INSIGHT REPORT**

# Climate Risk

THE INTEGRATION OF CLIMATE RISK ANALYSIS WITH INVESTMENT STRATEGY



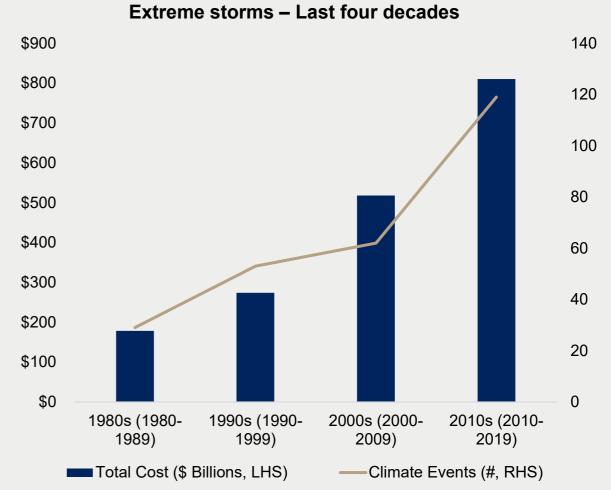
## The attention given to climate risk is accelerating around the world as more evidence of climate change becomes recognized

The attention given to climate risk is accelerating around the world as more evidence of climate change becomes recognized. The impacts of more volatile weather patterns and rising temperatures appear more frequently in the news. The United Nations Climate Change Conference (COP26) in Glasgow in early November was covered extensively by the media worldwide. Through shifting public opinion, the political process in many countries is paying closer attention to climate change. Approximately 50% of the global population (representing 80% of global GDP) reside in countries that have pledged to reduce greenhouse gas (GHG) emissions.<sup>1</sup> The cumulative costs associated with wildfires, flooding, droughts, and high winds continue to rise - up threefold since the 1990s and up 55% from the 2000s (see Figure 1). In sum, people are feeling the impacts of global warming in their households and businesses. In the future, costs will be higher in human and financial terms. Climatologists estimate that 200 million households could be displaced by climate change by 2050.<sup>2</sup>

Climate risk is a complex and nuanced issue for the real estate industry that brings with it risks and opportunities. In 2022, the real estate industry will encounter many dilemmas when it comes to understanding and responding to the threats posed by climate change. Few topics are as fraught with concern and confusion as the threats to cities and buildings posed by climate change.<sup>3</sup> The politicization and media misreporting of some aspects of the climate change policy discussion makes the process of sorting out fact from fiction especially difficult.



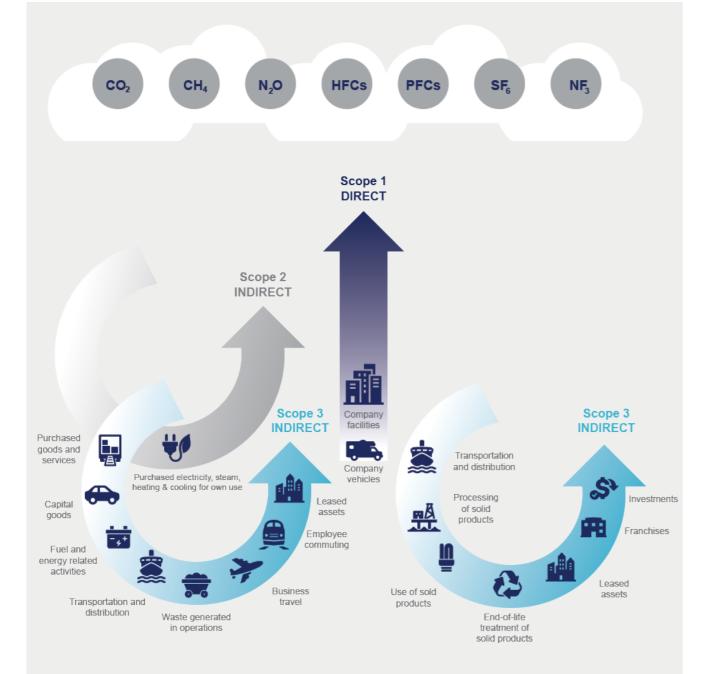
#### Figure 1



<sup>&</sup>lt;sup>1</sup> *The Economist*, "The triumph of big government," November 20, 2021.

<sup>&</sup>lt;sup>2</sup> "Future of the human climate niche," Proceedings of the National Academy of Sciences, 2020. Originally cited in the World Bank 2018 "Groundswell Report. See: <u>https://www.worldbank.org/en/news/infographic/2018/03/19/groundswell---preparing-for-internal-climate-migration</u>. One of the challenges of these estimates is that they are so far in the future that it will be hard to hold the forecasters accountable for their prognostications. Another challenge is that the range of these estimates can vary so much. Another organization, the Institute for Economics and Peace, estimates that 1.2 billion people could be displaced by 2050. See: <u>https://www.theguardian.com/environment/2020/sep/09/climate-crisis-could-displace-12bn-people-by-2050-report-warns</u>. And the World Bank report estimates that human migration could be over 3 billion people by 2070, as climate change renders more places uninhabitable.

<sup>&</sup>lt;sup>3</sup> See: Steven Koonin *Unsettled: What Climate Science Tells Us, What it Doesn't, and Why it Matters,* 2021. Koonin served in the U.S. Department of Energy under President Barack Obama. He is a physicist who taught at Caltech and is now a professor at New York University. He describes how the media coverage of weather patterns sometimes mis-attribute weather extremes to "climate change" (human-induced) to "a changing climate" produced by a wide number of factors, including human-induced ones.



**Scope 1:** Scope 1 emissions are direct greenhouse (GHG) emissions that occur from sources that are controlled or owned by an organization (e.g., emissions associated with fuel combustion in boilers, furnaces, vehicles).

**Scope 2:** Scope 2 emissions are indirect GHG emissions associated with the purchase of electricity, steam, heat, or cooling.

**Scope 3:** Scope 3 emissions are the result of activities from assets not owned or controlled by the reporting organization, but that the organization indirectly impacts in its value chain.



At LaSalle, we are focusing on what scientists have to say about climate change and have begun to link these insights directly to the implications for buildings, markets, and entire countries. We have been informed by the deep resources of JLL, which has produced several detailed sustainability reports in recent years.<sup>4</sup>

LaSalle has also made two global pledges to achieve net zero carbon (NZC):

- 1) as part of the Urban Land Institute's (ULI's) Greenprint program and
- 2) by joining the Net Zero Asset Managers initiative. We have also made a national pledge to reach NZC as part of the Better Business Partnership in the UK. Net zero refers to a state in which the GHGs going into the atmosphere are balanced by their removal from the atmosphere.

LaSalle's multidisciplinary Climate Risk Task Force has engaged participants across global business lines in an effort to understand the rapidly expanding science, engineering, and economics of climate change. Their insights are passed along to investment teams and clients. In this "ISA Insight Report", we share the highlights of what we are learning on the journey to becoming better-informed investment decision makers, proficient at assessing climate change, alongside the other risks we underwrite.

<sup>&</sup>lt;sup>4</sup> In 2021, JLL added Scope 3 emissions, which track the carbon footprint of the firm's supply chain, alongside the Scope 1 and 2 emissions that the firm and LaSalle are directly responsible for. Moreover, JLL has pledged to use the Science-Based Target initiative's (SBTI's) Net Zero Standard framework to achieve GHG emission reductions of 68% by 2034 (2018 base year).

## Climate Risk Data: Selection and Integration

An important step in our journey to assess climate risk has been to identify reliable sources of climate data and then to incorporate this information into our investment decision-making. After screening many different providers of climate risk data and various consulting services, LaSalle's Climate Risk Task Force selected four firms for in-depth interviews and trial runs of their data. We found a wide variety of approaches and significant variations in each firm's outputs. We discovered that some models are designed specifically for real estate, while others are better suited to high-level industry analysis. After a thorough review, we decided to partner with several different climate risk data vendors, as we expect to get different insights from each firm's approach to modeling current and future climate risks.<sup>5</sup>

After gaining familiarity with several different climate forecasting methods, we then employed a multidisciplinary approach to integrating climate risk data. Many of our investment activities now include climate change elements, including:





**Target market** analysis

to estimate the influence of climate factors on entire markets and cities



as we price specific proposed investment



**Asset-specific** mitigation and adaptation strategies

for assets in our portfolios:





## Annual insurance reviews

to estimate insurance costs and coverage implications and to understand the parts of a portfolio that are more expensive to insure



Diversification/ concentration, hold/sell, and debt rollover analysis

as part of the strategic planning process for each portfolio

<sup>5</sup> Grace Dobush, "Lack of transparency and standardization bring real estate climate risk assessments into question," Urban Land, November 10, 2021. This article quotes Elena Alschuler, LaSalle's North America Head of Sustainability and Brian Klinksiek, Head of European Research and Strategy and Global Portfolio Strategies.

## **Components of Climate Risk**

Climate risk analysis providers typically look at a broad range of physical risks, including hurricane, flood (coastal and fluvial), wind, sea level rise, drought, extreme heat and cold, earthquake, and wildfire. Drawing from a variety of geographic and scientific databases, climate risk firms can provide high-level risk modeling across a wide range of potential physical risks. Many also then estimate the financial impact from climate-related weather events. The physical and financial impact metrics can be projected over time and included in scenarios depicting different global warming conditions.

LaSalle now produces portfolio-wide analyses of climate risks, and its investment committees are starting to consider such risks when reviewing proposed investments. The process of understanding the key risks is unfolding quickly. Several key challenges remain:

## Nascency of the climate risk analytics industry:

Climate risk science is evolving rapidly, and different providers use different assumptions and data sources, leading to a wide divergence in results. Each provider tends to have a different analytical approach to each risk, as well as how they define the time horizons, scale, and benchmarks for low versus high risk. We find that working with multiple providers provides insights for the various dimensions of asset risk. We are also working with the ULI on a research project (expected to be completed in Spring/Summer 2022) addressing the need for standardization and transparency among climate risk modeling providers.

# Tailoring risk assessments to assets:

Many climate risk models evaluate the potential impact to a generic property at a given location, and do not consider the building-specific attributes that could affect asset resilience, or the market-level infrastructure, such as utility grids or transportation systems that could impact sub-market resilience.

## Translating climate risk into financial assumptions:

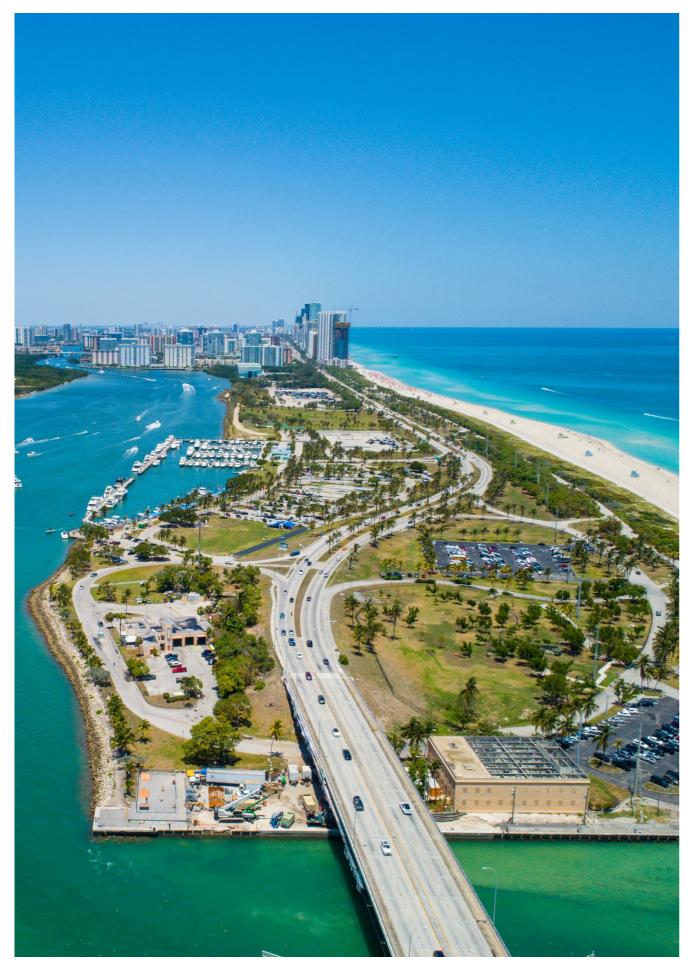
There is no consensus on the quantification of climate risk in financial models. It can appear in different places in an underwriting, such as capital expenditures, depreciation, discount rates, insurance costs, or a mixture of all of these. Investors must develop a standard approach that avoids double-counting and is understood by all team members. Consideration must also be given on how to compare climate risk to other risks (i.e., tenant or geographic concentration) and weigh it against additional financial reward.

# Assessing risk on all appropriate geographic scales:

Data providers are often focused on producing analytics specific to risks at a given set of coordinates. But climate risks also affect much broader geographies, including the neighborhood, metro area, or country where a property is located. Even if a given property faces low specific physical risk, it may still be challenged if located in a region that faces an elevated risk of outmigration of households and firms due to repeated climate events. LaSalle incorporates metro-level climate risk into our broader market targeting tools, weighing climate factors against our traditional metrics, such as job creation and human capital.

A climate risk assessment must go beyond the physical risks represented by floods, wind, drought, and fires. As the summary of "Climate Risk 101" (prepared for all LaSalle employees) makes clear, risk assessments are also linked to broader ESG policies through transition risk, which covers present and potential future regulatory actions. These actions include emission disclosures, taxes on GHG emissions (especially carbon dioxide), building energy performance requirements. and penalties for non-compliance. These actions are driven by various governments' attempts to reduce the chances that the world ends up in the "red zone," defined as "business as usual" leading to temperature changes of 4.5° C (8° F) and are being adopted at local and country levels.

<sup>&</sup>lt;sup>6</sup> International Panel on Climate Change (IPCC AR6) and the International Energy Agency, World Energy Outlook 2021. The reference to "business as usual" refers to a continuation of current business practices.



LaSalle's sustainability program already works to ensure that the energy and Greenhouse Gas (GHG) performance of our properties will meet regulatory, investor, and tenant requirements now and in what we know about the future. LaSalle has committed to achieve net zero carbon status by 2050 for our Scope 1 and Scope 2 emissions in directly managed assets, including a 50% reduction target by 2030. This is in line with our commitments to the Net Zero Asset Managers initiative and the ULI's net zero carbon goal.

Taken together, physical risks and transition risks cannot be ignored by real estate investors. Efforts to respond to climate risk can be viewed in two ways: **mitigation actions** and **adaptation strategies**. First, mitigation actions are undertaken to reduce CO2 and other GHG emissions to slow the rate of climate change. They are mobilized in response to voluntary pledges or regulatory strictures and are the first pillar of LaSalle's ESG policies. The second type of response, adaption strategies, focuses more narrowly on an individual building or district. These consist of "hardening" actions that are intended to help buildings or neighborhoods withstand storm surges, high winds, drought, or other climate change. These adaptation responses to climate change may or may not be part of a larger emission-reduction effort. Construction of sea walls, repositioning critical building systems out of flood-prone basements, or strengthening windows to withstand high winds do not slow down the pace of climate change, but they could protect valuable assets from climate change-induced threats.

Risk assessments that rely on specialized climate risk data are the first critical step in designing adaptation strategies. These assessments are moving ahead rapidly. Mitigation strategies, which follow from these assessments, are the next major challenge. In the span of a few years, climate risk analysis has progressed from an awareness-building phase to an implementation stage. Detailed assessments and resiliency preparation ("asset hardening") are becoming part of acquisition underwriting and portfolio strategies among institutional real estate investors.

<sup>7</sup> Over 220 investment managers representing \$57 trillion in assets under management across all asset classes are signatories. See: www.netzeroassetmanagers.org. We have also been informed by the deep resources of our parent company, JLL, which has pledged to use science-based target initiatives (SBTIs) to achieve GHG emission reductions of 68% and Scope 3 reductions of 53% by 2034, in partnership with JLL's largest 50 clients, including LaSalle. The Net Zero Asset Manager initiative expects signatories to "Take account of portfolio Scope 1 & 2 emissions and, to the extent possible, material portfolio Scope 3 emissions".

## Asset-Specific Analysis, Risk Mitigation and Adaptation: Lessons Learned

Geographic risk analysis needs to be coupled with asset-specific resiliency analysis. An assessment that relies wholly on geographic analysis may miss important building-specific attributes that compound or mitigate climate risks. Here are some of the lessons learned by LaSalle's due diligence teams as they combine asset-level investigations with climate risk data:

Inputs from a global climate database should be treated as "red flags" that trigger further detailed resiliency analysis. Similar to a Phase 2 environmental study (after a Phase 1 analysis identifies a high probability of the presence of toxic substances), resiliency analysis at the property level then examines a variety of property-specific issues, along with potential mitigation strategies to help assess the severity of the identified risks.

For example, detailed asset-specific resiliency analysis might lead to decisions to move at-risk critical infrastructure (e.g., electrical switchgear, HVAC system, or emergency generators) from a vulnerable basement to the second floor of a building in a potential flood area; or a decision to add hurricane straps to rooftop mechanical equipment, or impact-resistant glass replacements for a coastal asset with high wind risk; or may lead to a decision to purchase deployable flood barriers for high flood risk properties as a means to provide temporary flood protection. Similarly, higher potential transition risk might lead to decisions to accelerate HVAC upgrades or other energy/decarbonization initiatives to stay ahead of potential regulatory changes. Property-specific resiliency analysis should provide a range of at-risk areas for potential climate impact, as well as a range of "hardening" options for owners to consider and prioritize in their underwriting and budgeting process. An asset-specific resiliency assessment should provide a range of modeling scenarios - from high to moderate to lower risk - to give

investors/owners the ability to underwrite current and potential future risk with a range of cost-benefit options to address those risks.

For assets in existing portfolios and potential acquisitions, the pairing of high-level climate risk metrics with more detailed resiliency assessments provides a complete picture for understanding current and future climate risk at both the asset and market level. This dual approach enables more informed decisions based on a more thorough understanding of overall risk/return and integrates climate impact to the wider range of overall investment criteria.

## Climate Risk and the Insurance Market

Throughout 2021, LaSalle engaged with various insurance companies and reinsurers to understand their evolving views on climate risk and their impact on the future pricing and underwriting of insurance coverage. For most investment firms, insurance remains the primary, short-term mitigation strategy for managing climate change risk.

In furthering our efforts to anticipate trends in the insurance industry, we entered into a collaboration agreement in early 2021 with Munich Re, a well-recognized thought leader and one of the largest reinsurance companies in the world. The agreement formalized a platform for the exchange of insights into the various aspects of climate risk. Much of our discussion has focused on Munich Re's Location Risk Intelligence (LRI) tool and its ability to assess physical climate risks on an individual asset level, as well as a portfolio-level evaluation of diverse assets. We are early in our assessment of the LRI tool, but it appears to have useful attributes for furthering our climate risk work, especially since the same tool is instructional for Munich Re's own risk underwriting.

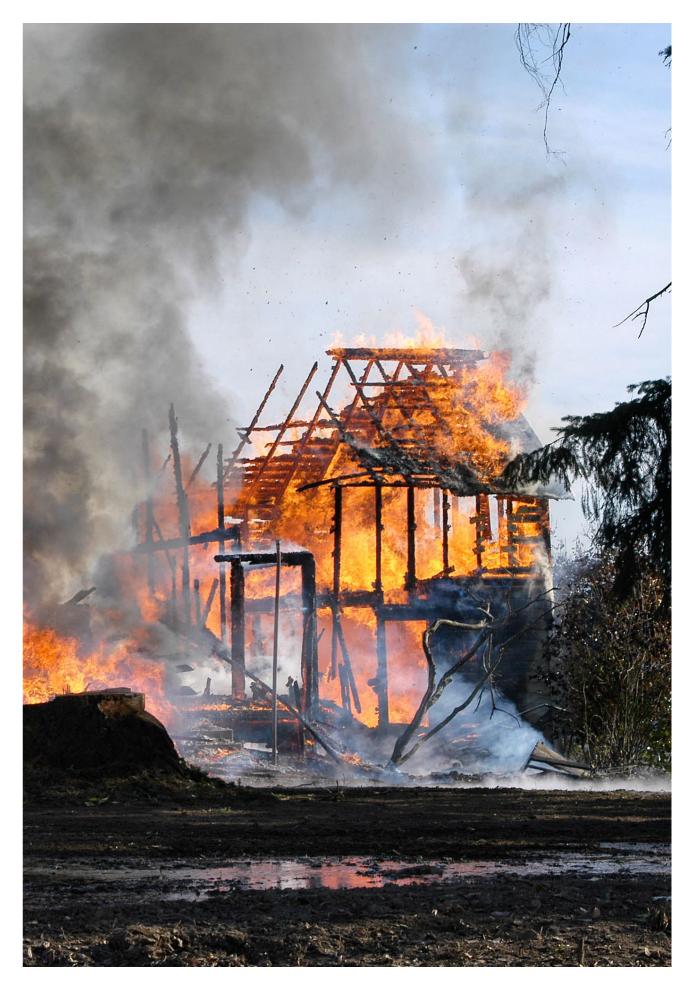


In addition, we have also benefitted from dialogue and exchange with ResCentric, a venture created by Munich Re's U.S. incubator, and Munich Re's specialty lines insurer Hartford Steam Boiler (HSB). ResCentric is a risk mitigation platform that provides a financial impact assessment, along with mitigation and adaptation strategies for real estate asset managers. Its proprietary impact models measure probable risk and create customized insights that improve asset performance and resilience. HSB has leveraged its long history of technical underwriting and coupled with new technology applications, developed early detection devices to mitigate impacts from physical risks.

The costs and availability of insurance is a critical workstream within the Global Climate Risk Taskforce. The positioning of insurance and the insurance industry summarized well in the Lloyd's paper "Insuring a Sustainable, Greener Future: A roadmap for climate action."

With a unique view of the climate crisis, through its many decades providing support to communities, businesses and economies in the face of increasingly severe and frequent weather events, Lloyd's and the global insurance industry have a critical role to play in building a more sustainable, greener future. Alongside mitigating and managing the impact of these disasters, the industry continues to provide financial support across multiple industries to build greater climate resilience and support the increased scale and speed of the transition. (September 29, 2021)

This statement demonstrates how insurers are likely ahead of asset owners in thinking through climate-related issues: When are property risks diversifiable, and when can they be "spread" in the re-insurance market? And for how many years will insurance be available? What will be the reaction of the insurance industry to the next round of weather-related catastrophic events?



## Net Zero Carbon Investment Strategies

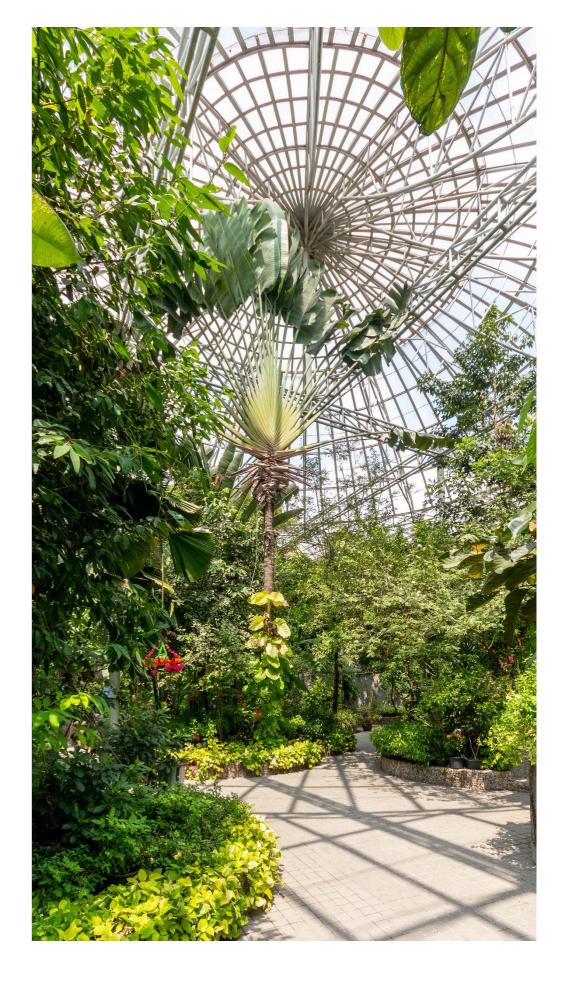
LaSalle's net zero carbon (NZC) investment strategies are influenced by several overlapping, but different factors. In the first instance, many of our institutional investor clients have made pledges to achieve NZC status within a set time frame. At the same time, the European Union's Sustainable Finance Disclosure Regulation (SFDR) and the closely-linked EU Taxonomy (Taxonomy) introduced ESG-related transparency obligations for fund managers and advisers, at both the fund and asset levels. Finally, many building occupiers all over the world want to lower the carbon footprint of their leased space<sup>8</sup>. These NZC initiatives focus on climate risk mitigation strategies, as part of global efforts by asset managers and investors to slow the rate of climate change through decarbonization.

The SFDR, which applies to investment managers operating in the EU and to European investors, focuses on entity or fund-level attributes. The EU Taxonomy goes further and focuses on alignment at the asset or property level. Both regulations provide a standardized way to prevent "greenwashing" and for the financial markets to ensure the comparability of decarbonization metrics across all financial products.

The SFDR has three main classifications: Articles 6, 8, and 9. These classifications are meant to distinguish the impact level of how investment products align with sustainability initiatives, as follows:

- Article 9 or "dark green" products pursue a stated sustainable investment objective;
- **Article 8** or "light green" products promote environmental or social characteristics; and
- Article 6 or "grey" products meet the minimum SFDR standards.
- Financial or "brown" investments do not meet Article 6 requirements.

LaSalle is currently developing an Article 9 fund, which aims to create a supply of NZC buildings by primarily "retrofitting-from-brown-to-green" and, on a limited basis, "building to green." In order to achieve Taxonomy alignment, the fund will aim to reduce energy use intensity (EUI) by 30% in the first three years, which implies that EUI reductions will be approached in a holistic way. This means that LaSalle can bring disciplined decarbonization practices to market through real estate value-enhancing measures, as well as employing electrical grids that have a high likelihood of "going green" (shifting from fossil fuels to renewables). The purchase of carbon offsets to address remaining residual GHG emissions are expected to be used occasionally for "bridging" transitional assets and will likely be kept to a minimum. Moreover, in light of the deep resources available at JLL, this Article 9 fund will perform as vertically integrated, such that aspects of the business plan implementation necessary to put assets onto a NZC pathway will leverage off of the resources available to LaSalle via its parent company.



<sup>&</sup>lt;sup>8</sup> JLL report - "Decarbonizing the Built Environment" June 2021.

## Climate Risk Investment Strategies "Go Mainstream"

Sustainable investing strategies in real estate are still in the relatively early stages of being tested and implemented. Decarbonization, climate risk mitigation, and climate risk adaptation are largely unproven strategies when it comes to clear, round-trip evidence that they meet or exceed financial goals, as well as meet sustainability objectives.

However, there is early evidence of successful strategies that pursue "green" credentials, achieve high GRESB scores, and meet financial objectives. Like many other "early mover" strategies, by the time there is clear evidence that climate risk is an important contributing factor to investment performance, the capital markets are likely to already be pricing these attributes. In other words, the herd mentality will eventually rush to the most obvious strategies that avoid or adapt to high levels of climate risk. While this price discovery is occurring, anomalies are likely to frequently crop up. These may include healthy returns for strategies that rely on a value-add approach by taking an asset from "brown to dark green" or that demonstrate to insurers and occupiers that climate risk management and asset hardening is working.

If climate risk mitigation/adaptation follows the "going mainstream" pattern of alternative property types, it may take five to ten years of capital with higher return requirements dominating the market before lower-return core money moves in to focus on future-proofed (climate de-risked) assets. Countering this delayed process, some investors may need to prioritize their allocations toward sustainability strategies immediately. Government policies may accelerate transitional risks and shorten the time frame for adoptions. These investors may tolerate a degree of experimentation with unproven strategies until net operating income-enhancing methods and building technology practices become more proven and commoditized. As more data become available about the tactics that achieve the highest returns on investment while simultaneously contributing to the greatest reductions in  $CO_2$  emissions, investors will quickly become more comfortable moving into the market for assets that demonstrate both mitigation and adaptation to climate risk. Further impetus could be provided to retrofit strategies (versus new-build strategies) as embodied carbon<sup>8</sup> becomes an ever-growing aspect of the overall calculus.

In the early stages of the institutionalization of real estate, investors made financial investment decisions despite the opacity of the financial metrics (capitalization rates and discount rates) used by the broader market. At this stage, the arbitrage opportunities were greatest, because there was less transparency around comparable trades. This is roughly where NZC and climate risk-related investing is in its evolution today. As evidence of both successes and failures are disclosed, we expect that investing that takes climate risk fully into account will become part of the mainstream of real estate investment practices.



<sup>&</sup>lt;sup>8</sup> Embodied carbon refers to the CO2 emissions associated with both materials and construction processes throughout the whole life cycle of a building. This includes any CO2 created during the manufacturing of building materials, the transportation of those materials, and the construction practices used.

# Climate 101 Presentation



## Physical & Transition Risk

## **Impact Categories**

Climate Value at Risk (VaR)

Key terms

#### **PHYSICAL RISK**

Risks Related to the Physical Impacts of Climate Change

#### Acute

 Extreme weather events such as hurricanes, floods & wildfire

#### Chronic

- Rising temperatures
- Rising sea levels
- Drought & water stress
- Changes in precipitation patterns and extreme variability in weather patterns

### TRANSITIONAL RISK

Risks Related to the Transition to a Lower-Carbon Economy

## Policy & Legal

- Carbon Pricing
- Regulatory Compliance Costs
- Insurance Premiums
- Litigation risk
- Greenwashing

## Technology

- Substitution of products and services with lower emission options
- Costs to transition to new technologies

### Market

- Changing tenant & investor demand
- Increased cost of materials

#### Reputation

 Increased stakeholder concern and feedback

## Physical & Transition Risk

## **Impact Categories**

Climate Value at Risk (VaR)

Key terms

#### **DIRECT IMPACTS**

- Property damages
- Inventory losses
- Loss of business revenues
- Personal property losses
- Displacement costs
- Loss of life

### **INDIRECT IMPACTS**

- Personal debt or bankruptcy
- Reduced home values
- Higher insurance rates
- Job losses
- Loss of employee wages
- Costs associated with lost services, such as water or electrical infrastructure
- Long-term depression of local economy
- Damaged reputation of city or neighborhood leading to less
   long-term investment

## Physical & Transition Risk

**Impact Categories** 

Climate Value at Risk (VaR)

Key terms

#### CLIMATE VALUE AT RISK

Climate Value-at-Risk (Climate VaR) provides investors with assessments of the potential impact of climate change on properties' or companies' valuations.

#### FACTORS



Vulnerability



**Cost function** 

Exposure





**Real Estate Asset** 



Hazard



## Physical & Transition Risk

## **Impact Categories**

Climate Value at Risk (VaR)

## Key terms

#### **CLIMATE ADAPTATION**

Strategies that focus on combating actual or expected physical impacts of climate change, including adjustments to natural or human systems or both

#### **CLIMATE CHANGE**

Large-scale change in the climate system that causes substantial disruptions in human and natural systems.

#### **CLIMATE MITIGATION**

Strategies that focus on preventing the causes of climate change, specifically reducing or capturing anthropogenic emissions of greenhouse gases

#### **CLIMATE RISK**

The exposure or potential for negative consequences caused by hazards related to climate change

#### RESILIENCE

The ability to prepare and plan for, absorb, recover from and more successfully adapt to adverse events "Buildings represent nearly 40% of global energy-related carbon-dioxide emissions, far more than the entire transport sector.

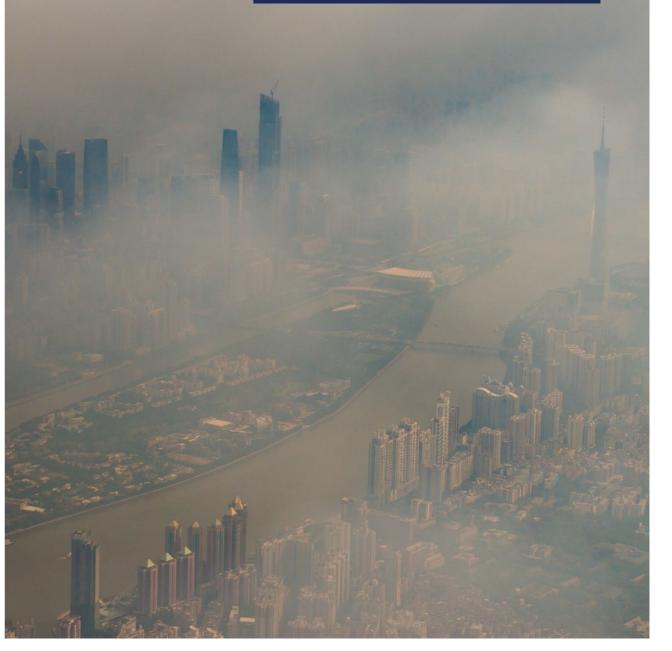
Of all the emissions reductions possible through 2030, buildings are by far the largest source of low-cost reductions."

World Resource Institute

#### INCREASING INSURANCE COSTS

QUESTIONABLE FUTURE AVAILABILITY IN SOME MARKETS

Insured Cat loses are increasing at an alarming rate - nearly 700% since 80's



	PHYSICAL RISKS	TRANSITION RISKS	
	POTENTIAL IMPACT		
Catastrophic events ▶	Costs to repair or replace damaged or destroyed assets	Reduced economic activity in vulnerable markets	<ul> <li>Market vulnerability</li> <li>Policy and regulation</li> </ul>
	Property downtime and business disruption	Reduced occupier demand for properties	
	Potential for increased insurance costs/decreased availability	Reduced asset value	
Changes in weather patterns	Increased maintenance cost/ Increased wear and tear on or damage to buildings	Potential for increased real estate taxes	
	Increased operating costs	Increased cost of doing business due to new disclosure requirements	
	Cost of investment in adaptation measures, such as elevating buildings	Increased taxes	
	Potential for increased damages	Loss of subsidies or other funding opportunities	
	Potential for increased insurance costs/ decreased availability	Additional capital investment to comply with stricter regulation	
			1

Increased costs and reduced net operating income due to higher prices for water and energy Additional capital expenditures to adapt buildings to operate with reduced/alternative resources

Risk to company brand and reputation if no action taken Lower liquidity and/or reduced attractiveness of assets Resource availability

Reputation and market position

## How are we responding to Climate Risk?

#### DATA FROM CLIMATE RISK PROVIDERS

Evaluate data from climate risk providers in all acquisitions at time of allocation

### EVALUATE EXISTING ASSETS

Evaluate data for existing assets during annual strategic plans, and communicate with clients accordingly

#### NET ZERO CARBON PATHWAY

Our Net Zero Carbon pathway sets out how we will achieve net zero carbon within our portfolios by 2050.

#### THOUGHT LEADERSHIP

How do we (both the industry-at-large and LaSalle) become an intelligent and careful consumer of these predictive models?

#### REPORTING CLIMATE RISK

Report on climate risk to fulfill global commitments - Transparency and reporting Climate Risk (greenwashing)

#### NEXT STEPS

Report on climate risk to fulfill global commitments - Transparency and reporting Climate Risk (greenwashing)

## Net Zero Carbon

# Europe leads the way on our NZC pathway

#### **ACQUISITION**

Integrate net zero principles into our investment strategy and due diligence Undertake NZC audits and access operational energy data pre-acquisition

#### **OPERATION**

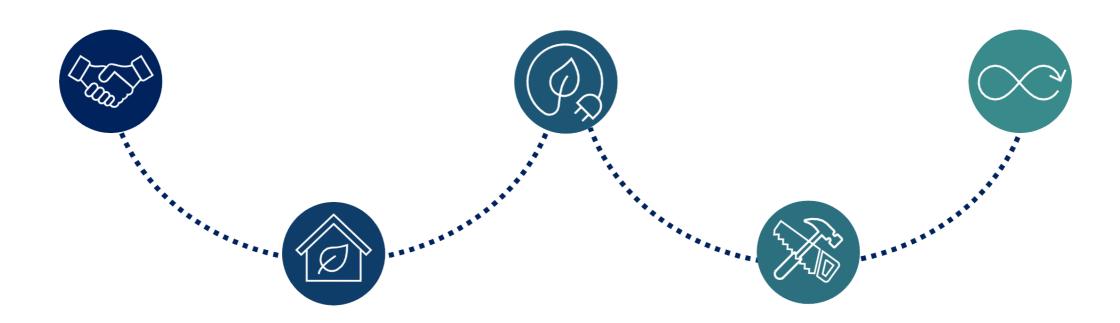
Reduce energy consumption by one third by 2030 by aligning Energy Use Intensity of our assets with leading net zero carbon benchmarks

Support suppliers to decarbonise asset management services in line with science- based targets

#### DISPOSAL

Include carbon stranding risk as part of our investment decision- making process

Share operational energy data and NZC pathway information with buyers and support them with their own NZC due diligence



#### DEVELOPMENT

Undertake Whole Life Carbon Assessments of developments Cut embodied carbon intensity by 50% by 2030 Develop an internal carbon price and use to finance retrofit of standing assets Build to NABERS Design for Performance principles

#### REFURBISHMENT

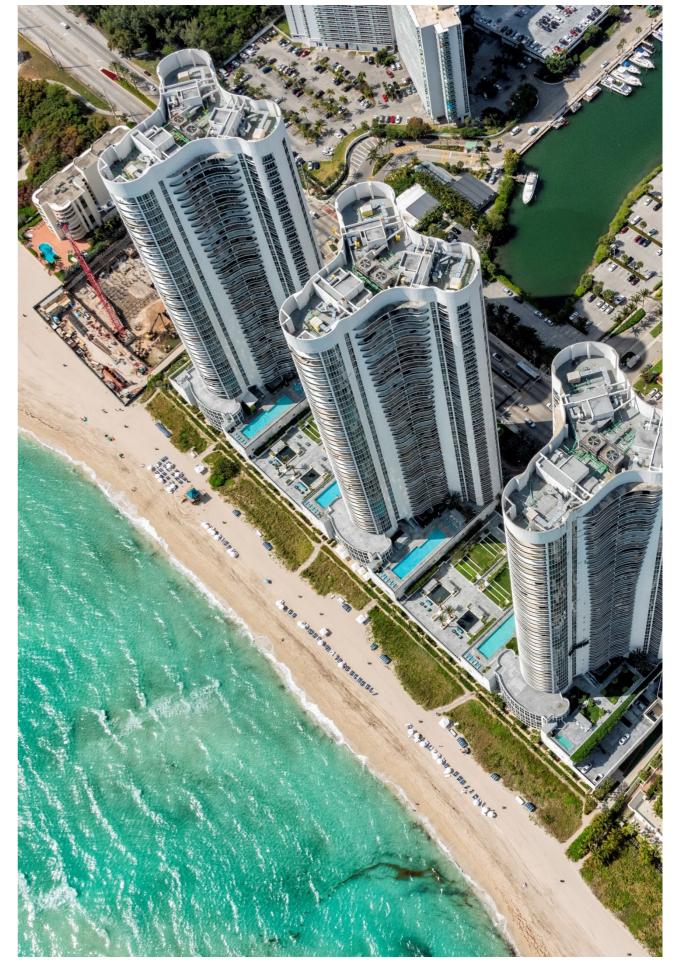
Undertake Whole Life Carbon Assessments of materials and equipment procured for refurbishment and maintenance.

Minimise carbon through low carbon material and equipment choices

# Climate Risk Analysis generates opportunities

Opportunities might include:

- Achieving financial outperformance by anticipating climate change impacts
- Hardening standing assets to withstand hazard events
- Diversifying portfolios across hazards and potential impacts
- Managing and reducing insurance costs.



## LaSalle's integration with many different disciplines

#### **OPPORTUNITIES ACROSS ALL DEPARTMENTS AT THE FIRM**

Climate risk and sustainability knowledge is useful across the life cycle of any investment fund or specific asset.



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