

# REITs and TCFD

Download any of our white papers to get detailed understanding of the four pillars of the Task Force on Climate-related Financial Disclosures (TCFD) and start your climate journey today. The papers focus on [Governance](#), [Strategy](#), [Risk Management](#), and [Metrics and Targets](#).

## REITs and climate change

Climate-related risks and opportunities are becoming an increasingly important issue for the real estate investment industry. REIT portfolios are exposed to extreme weather events like storms, floods and sea-level rise, as well as transition risks resulting from the global transition to a low-carbon future, like regulatory changes and shifting market preferences.

### TYPES OF CLIMATE RISK AND THEIR POTENTIAL IMPACT ON REAL ESTATE

	Category	Potential impact
Physical risks	<b>Catastrophic events</b> Extreme weather such as hurricanes and wildfires.	<ul style="list-style-type: none"> <li>• Costs to repair or replace damaged or destroyed assets; value impairment</li> <li>• Property downtime and business disruption</li> <li>• Potential for increased insurance costs or reduced/no insurance availability</li> </ul>
	<b>Changes in weather patterns</b> Gradual changes in temperature and precipitation—such as higher temperatures, rising sea levels, increasing frequency of heavy rain and wind, and decreased rainfall—which are likely to exaggerate the impact of catastrophic events.	<ul style="list-style-type: none"> <li>• Increased wear and tear on or damage to buildings, leading to increasing maintenance costs</li> <li>• Increased operating costs due to need for more, or alternative resources (energy and/or water) to operate a building</li> <li>• Cost of investment in adaptation measures, such as elevating buildings or incorporating additional cooling methods</li> <li>• Potential for increased damages from catastrophic events</li> <li>• Potential for increased insurance costs or reduced/no insurance availability</li> </ul>
Transition risks	<b>Market</b> The possibility that markets vulnerable to climate change will become less desirable over time. Rising capital costs to pay for building and maintaining infrastructure to manage climate risks.	<ul style="list-style-type: none"> <li>• Reduced economic activity in vulnerable markets</li> <li>• Reduced occupier demand for properties</li> <li>• Reduced asset value</li> <li>• Potential for increased real estate taxes</li> </ul>
	<b>Policy and regulation</b> Regulations to address climate change—e.g., climate risk disclosure, tougher building standards, carbon pricing, emissions caps, changes to subsidies—as well as changing policies for providing funding for infrastructure or rebuilding after major events.	<ul style="list-style-type: none"> <li>• Increased cost of doing business due to new disclosure requirements and compliance measures</li> <li>• Increased taxes—both those resulting from public policies such as carbon taxes and those for funding adaptation infrastructure</li> <li>• Loss of subsidies or other funding opportunities</li> <li>• Additional capital investment to comply with stricter regulation</li> </ul>
	<b>Resource availability</b> Changes in the availability of key resources such as energy and water, including water scarcity.	<ul style="list-style-type: none"> <li>• Increased costs and reduced net operating income due to higher prices for water and energy</li> <li>• Additional capital expenditures to adapt buildings to operate with reduced/alternative resources</li> </ul>
	<b>Reputation and market position</b> Growing stakeholder preference to work with companies incorporating climate risk into investment decisions, and consumer preference for real estate products incorporating climate mitigation.	<ul style="list-style-type: none"> <li>• Risk to company brand and reputation if no action taken</li> <li>• Lower liquidity and/or reduced attractiveness of assets that have not incorporated climate mitigation</li> </ul>

[Climate Risk and Real Estate Investment Decision-Making \(ULI, Heitman\)](#)

Recent research indicates that the physical impacts of climate change can lead to huge property losses, with estimates showing that coastal properties worth USD \$106bn are likely to be below sea level by 2050.<sup>1</sup> Regulations around GHG emissions, building standards and carbon taxes are increasing globally, and 65 countries currently have carbon pricing initiatives in place.<sup>2</sup> REITS must watch out for these transition risks.

### **TCFD and benefits for REITs**

A growing number of REITs are now seeing the value in disclosing the climate-related risks and opportunities that are relevant to their businesses. The Task Force on Climate-Related Financial Disclosures (TCFD) is viewed by investors, regulators, policymakers, and other stakeholders as the gold standard for producing this information. In mid-March, the Securities and Exchange Commission (SEC) released a draft rule requiring companies to disclose their climate risks, based in part on the TCFD framework.

Beyond addressing the needs of investors and regulators, using the TCFD framework can help organizations identify how climate change impacts their businesses and how management of climate risks and opportunities can be integrated into decision-making and strategies. It can also assist with developing transition roadmaps toward a more sustainable future. In short, the TCFD is one of the best tools available for understanding how climate change is impacting your business, and what you need to focus on.

The TCFD framework is divided into four pillars focused on:

- Governance — How an organization's leadership is prepared to drive climate action, at both the Board and management level;

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<sup>1</sup> [Vinson & Elkins Real Estate Opportunities in the Energy Transition](#)

<sup>2</sup> [UNEP FI, CRREM Managing Transition Risk in Real Estate: Aligning to the Paris Climate Accord](#)

- Strategy — How the management of climate-related risks and opportunities are considered within the organization’s strategy;
- Risk Management — Whether the organization’s risk management framework takes climate-related risks into account; and
- Metrics and Targets — What climate-related metrics are being tracked by an organization and how the organization sets and measures progress against climate goals.

The TCFD can be used by businesses in any sector, but it is incredibly useful for REITs given their exposure to both physical and transition risks.

### **Governance**

The Governance pillar of the TCFD asks organizations to disclose how their board and management show climate leadership and ambition. The pillar includes two recommended disclosures. These aim to illustrate the processes that inform the board and management of climate-related issues, and help them gain expertise on climate-related topics. They also cover how the board and management take climate change into consideration for decision-making and strategic planning.

## Governance

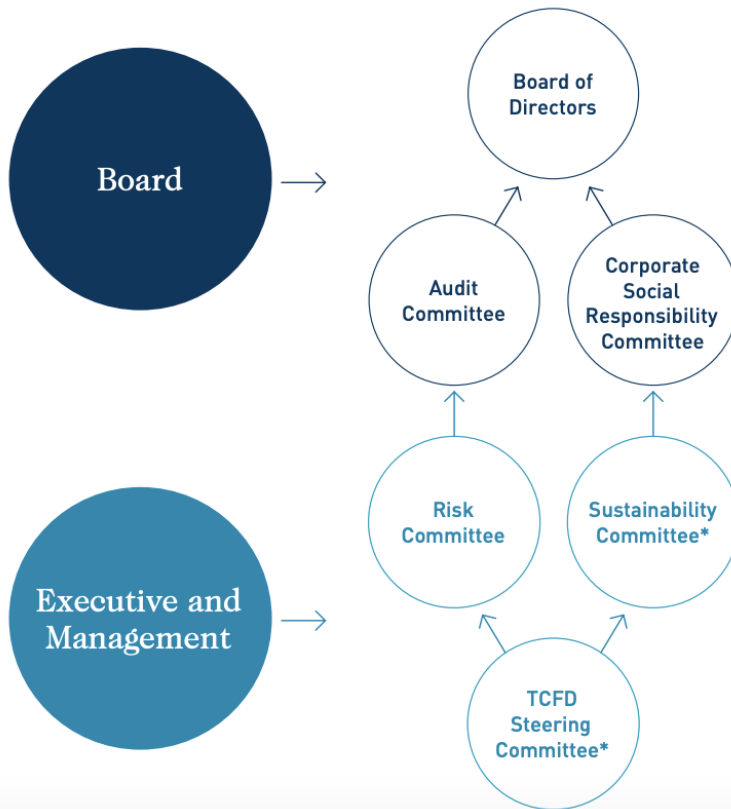
### Board oversight of climate-related risks and opportunities

Our Board Director responsible for climate-related issues is Simon Carter, Chief Executive Officer. Previously as Chief Financial Officer, Simon chaired our Risk and Sustainability Committees. To ensure continuity and accountability, these committees are currently chaired by Interim Chief Financial Officer David Walker.

As part of assuming this responsibility, building his knowledge and informing our approach, Simon took part in The Prince of Wales' Business & Sustainability Programme at the Cambridge Institute for Sustainability Leadership. The Board is updated on climate-related issues at least annually and has ultimate oversight of risk management. Significant and emerging risks are escalated to the Audit Committee and climate risk is tracked as part of our 'Environmental Sustainability' principal risk category (see pages 78-87).

Our Board CSR Committee meets three times a year and oversees the delivery of the Sustainability Strategy, including the delivery of the Pathway to Net Zero and the management of climate-related risks. In Q4 FY21, the CSR Committee received an update on the physical climate risk analysis which commenced during the year.

## Governance framework



### Management's role in assessing and managing climate-related risks and opportunities

The Board delegates responsibility for analysing:

Climate-related risks to the Risk Committee, which consists of the Executive Committee and leaders from business units, including procurement and property management. Each business unit maintains a comprehensive risk register, which is reviewed quarterly by the Risk Committee. Climate risks are identified through a process involving trend analysis and stakeholder engagement. Identified risks are incorporated into our risk framework and managed by the appropriate business areas.

The TCFD Steering Committee reports to the Risk and Sustainability Committees, both of which meet quarterly. Ultimate oversight is at Board level, with our Corporate Social Responsibility Committee playing a role from May 2019. Any resulting disclosure requires approval by the Audit Committee.

Having a robust climate strategy enables a REIT to develop resilience to climate-related risks and maximize climate-related opportunities. A good climate strategy identifies and prioritizes climate-related risks and opportunities across different time horizons, evaluates how these risks and opportunities may impact the organization’s overall strategy and financial planning, and takes into account forward-looking climate scenarios.

**Key Findings and Strategies**

Based on the study, CDL can expect a net negative impact of \$82 million on our operating profits in 2030 in a 1.5°C warmer scenario – using 2018 as the baseline year. A majority of the negative impact is attributed to transition risks, with maximum impact on our Development Properties unit due to anticipated changes in building standards and construction costs. Given the likely impact of relevant climate-related risks on CDL’s operations, reputation and profitability, we will consider strategies including:

Relevant Climate-related Risks	Strategies	Applicable Regions	Applicable Business Units (in order of priority)
<b>Transition</b> <ul style="list-style-type: none"> <li>Building standards</li> <li>Carbon pricing</li> </ul>	Meet net zero carbon commitment through building design and material selection: <ul style="list-style-type: none"> <li>Formulate clear steps to achieve net zero operational carbon</li> <li>Offset unavoidable emissions using emerging and innovative technologies</li> <li>May include green building materials, district cooling, incorporating renewables through BIPV and leveraging AI technology to reduce water and energy use</li> </ul>	All	Development Properties, Hotel Operations, Investment Properties
<b>Transition</b> <ul style="list-style-type: none"> <li>Carbon pricing (from waste disposal)</li> </ul>	Leverage technology: <ul style="list-style-type: none"> <li>Tackle food waste generation through management and procurement procedures</li> <li>Leverage advances in AI technology to improve operational efficiency</li> </ul>	All	Hotel Operations
	Promote construction designs for waste reduction and management: <ul style="list-style-type: none"> <li>Embed dedicated waste segregation capabilities within buildings</li> <li>Use materials and components that can be easily reused or adapted to reduce waste</li> </ul>	All	Development Properties
<b>Physical</b> <ul style="list-style-type: none"> <li>Flood</li> </ul>	Conduct physical risk assessments and investing in necessary infrastructure resilience: <ul style="list-style-type: none"> <li>Participate in city infrastructure efforts</li> <li>Include flood risks in properties insurance strategies</li> </ul>	China, UK	Development Properties, Hotel Operations, Investment Properties
<b>Physical</b> <ul style="list-style-type: none"> <li>Heat wave</li> </ul>	Implement additional practices to combat rising heat stress and provide safe working conditions for construction workers: <ul style="list-style-type: none"> <li>Include heat management as part of risk assessments</li> <li>Establish a comprehensive response plan for workers showing signs of heat stress</li> </ul>	Singapore	Development Properties
	Design and construct buildings by considering changing weather patterns: <ul style="list-style-type: none"> <li>Incorporate natural cooling features into the design of new buildings</li> <li>Adjust existing building infrastructure to cope with heating and cooling capability demands</li> </ul>	UK	Development Properties
<b>Physical</b> <ul style="list-style-type: none"> <li>Wildfire</li> </ul>	Strengthen business continuity plans for wildfire events and enhance building resilience to make them less prone to impacts of wildfires: <ul style="list-style-type: none"> <li>Develop robust recovery plans and incorporate preventative features to limit damage in properties in wildfire-prone states</li> </ul>	USA	Hotel Operations, Investment Properties

– [Integrated Sustainability Report 2021](#)  
**City Developments Limited**

## Risk Management

An organization’s climate risk management processes should be designed to identify, assess and manage climate-related risks, in a proportionate manner relative to other material risks. Having a consistent climate risk management

approach can help an organization focus resources and efforts towards the most material risks.

### **RISK MANAGEMENT**

Our process for identifying and assessing climate-related risks begins with gathering information on Macerich facilities' operational characteristics (e.g., locations, facility types and square footage of buildings), energy consumption, waste generation, and water usage. Each site is assessed by various chronic and acute physical risk types such as wildfires, extreme storms, sea-level rise, flooding, heat waves, drought, biodiversity, and diseases; and transitional risks such as market changes, technology, policy and regulation, and reputation. Facility-level data regarding physical risks were extracted from risk assessments conducted over the last five years by risk mitigation professionals. Additional information characterizing physical and transitional risks was taken from various government, independent organization and academic resources. Facility-level absolute sales per square foot (calculated using income per square foot and gross leasable area GLA) is used to attribute a magnitude of financial impact to the climate-related risks.

Our processes for managing climate-related risks are typically spearheaded by responsible internal stakeholders in Environmental, Finance, Legal, Operations, Risk Management and Sustainability. The ESG Working Group helps guide the priority order of climate-related risks and considers their materiality determinations. Each regional group evaluates its risks and opportunities and determines which options can mitigate or control those risks.

Our process for identifying, assessing and managing climate-related risks is integrated into Macerich's overall risk management process with guidance from our ESG Working Group and execution at the department level. Stakeholder engagement surveys and discussion have informed our approach, as will climate scenario analysis, which is underway. With ultimate oversight and responsibility for climate-related issues residing at the Board level, engagement by the Board and executive leadership drives the overall risk management effort.



- [Corporate Responsibility Report](#)  
**Macerich**

### **Metrics and Targets**

Once an organization has outlined oversight of climate-related responsibilities, has a robust climate strategy in place and established climate risk management processes, metrics and targets will help to characterize, measure and monitor its climate performance. Too often, businesses jump

straight to metrics and targets — thinking that they need to have a net-zero goal, for example. However, It is important to lay the foundation through governance, strategy, and risk management, before setting metrics and targets.

Every year we report our full carbon footprint, including indirect emissions from our value chain activities (i.e. Scope 3 emissions). By developing a full GHG emissions inventory, incorporating scope 1, scope 2, and scope 3 emissions, we're able to understand the total emissions associated with our business. The GHG Protocol identifies 15 categories for scope 3 emissions of which eight are directly relevant to our business. The table below provides a breakdown of our entire emissions inventory. Our scope 3 reporting methodology is detailed on pages 6-12.

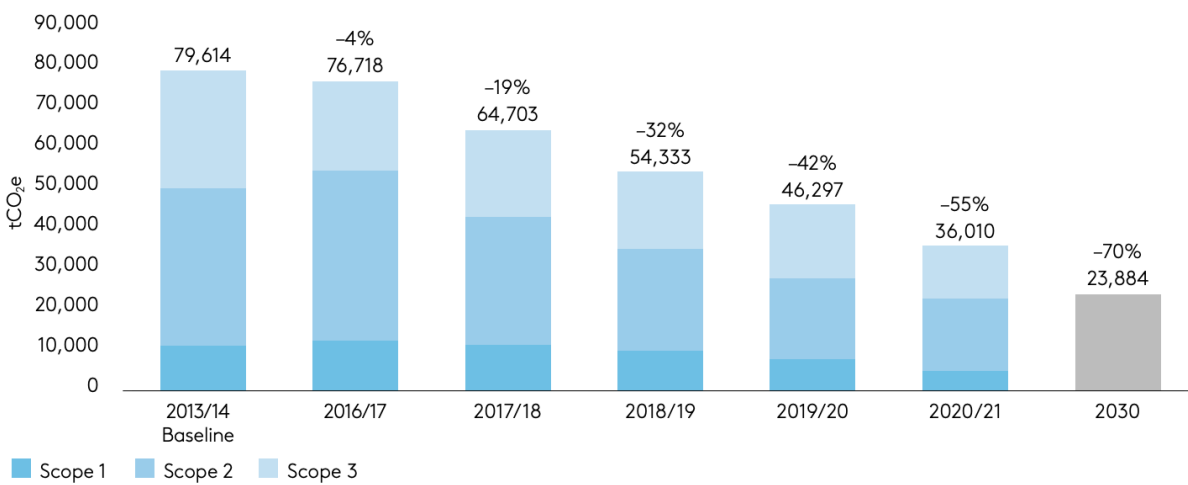
**Landsec – Scope 1, 2 and 3 emissions** Table 15

GHG scope	Category	2018/19		2019/20		2020/21	
		Emissions (t CO <sub>2</sub> e)	% of total value chain	Emissions (t CO <sub>2</sub> e)	% of total value chain	Emissions (t CO <sub>2</sub> e)	% of total value chain
Scope 1	Scope 1	11,490	3.6%	9,158	3.4%	7,554	3.3%
Scope 2	Scope 2	30,518	9.7%	25,382	9.4%	18,434	8.0%
Scope 3	Scope 3	272,937	86.7%	255,031	87.2%	205,255	88.8%
	1. Purchased goods and services (PG&S)	48,123	15.3%	48,787	18.1%	34,004	14.7%
	2. Capital goods	89,149	28.3%	69,123	25.6%	84,261	36.4%
	3. Fuel- and energy-related activities	8,764	2.8%	6,919	2.6%	5,052	2.2%
	4. Upstream transportation and distribution	Grouped under PG&S	0.0%	Grouped under PG&S	0.0%	Grouped under PG&S	0.0%
	5. Waste generated in operations	785	0.2%	770	0.3%	284	0.1%
	6. Business travel	324	0.1%	270	0.1%	33	0.0%
	7. Employee commuting	180	0.1%	166	0.1%	168	0.1%
	8. Upstream leased assets	n/a	0.0%	n/a	0.0%	n/a	0.0%
	9. Downstream transportation and distribution	n/a	0.0%	n/a	0.0%	n/a	0.0%
	10. Processing of sold products	n/a	0.0%	n/a	0.0%	n/a	0.0%
	11. Use of sold products	n/a	0.0%	n/a	0.0%	n/a	0.0%
	12. End-of-life treatment of sold products	n/a	0.0%	n/a	0.0%	n/a	0.0%
	13. Downstream leased assets	125,612	39.9%	108,996	40.4%	81,433	35.2%
	14. Franchises	n/a	0.0%	n/a	0.0%	n/a	0.0%
	15. Investments	n/a	0.0%	n/a	0.0%	n/a	0%
Total emissions		314,945		269,571		231,223	

– [Sustainability and Performance Data Report 2021](#)  
**Landsec**

**Landsec carbon reduction target performance**

Chart 4



## **Conclusion**

Global efforts to standardize climate disclosures for businesses have accelerated recently. The US Securities and Exchange Commission (SEC) proposed a rule for mandatory climate disclosure for issuers on March 21, which has been fashioned around the TCFD recommendations.

In the UK, as of April 6 all listed companies, banks and insurers with more than 500 employees are now required to produce TCFD-aligned disclosures. Japan, New Zealand, Switzerland, the European Union, Canada, Brazil, and many others are also considering mandating climate-related disclosures aligned with the TCFD recommendations.

In the real estate investing space, there is growing demand for REITs of all sizes to disclose in alignment with the TCFD. A number of REITs are also committing to net-zero targets and climate action goals, something that the TCFD recommendations can help with, by providing guidance to develop credible decarbonization strategies.