



Brian A. Klinksiek
Director of Strategy and Research, Heitman

Dangers Range from Event Risks to Long-Term Existential Threats



**PHYSICAL
DAMAGE**



**INSURANCE
PREMIUM
REPRICING**



**TAX INCREASES
TO FUND
INFRASTRUCTURE**



**INVESTMENT
LIQUIDITY
REDUCED**



**ECONOMIC &
DEMOGRAPHIC
DAMAGE**



**ABANDONMENT
OF RISKIEST/
LEAST-RESILIENT
LOCATIONS**

Climate risks can cause increased investment by landlord and potentially decreased demand from investors and tenants

PHYSICAL RISKS <ul style="list-style-type: none">- Earthquake- Hurricane- Flood- Wildfires- Storm surge/sea-level rise- Heat stress- Water stress	TRANSITION RISKS <p>Capital Markets</p> <ul style="list-style-type: none">- Reduced investor interest <p>Rental Revenue</p> <ul style="list-style-type: none">- Reduced occupier demand <p>Operating Expenses</p> <ul style="list-style-type: none">- Increased operating expenses (maintenance and resource costs)- Increased insurance- Increased real estate taxes <p>Capital Improvements</p> <ul style="list-style-type: none">- Increased capital expenditures
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APARTMENT FINANCIALS

+	Residential Rental Revenue
-	Landlord Operating Expenses Insurance Real Estate Taxes Capital Improvements
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=	Apartment Cash Flow

Many requests motivated by adoption of recommendations of the **Task Force on Climate-related Financial Disclosures** (TCFD)



“What climate changes are forecasted in the **region where you hold assets?**”



“To what extent does your organisation look at the impact of **climate-related risks** and opportunities on your investment strategy?”



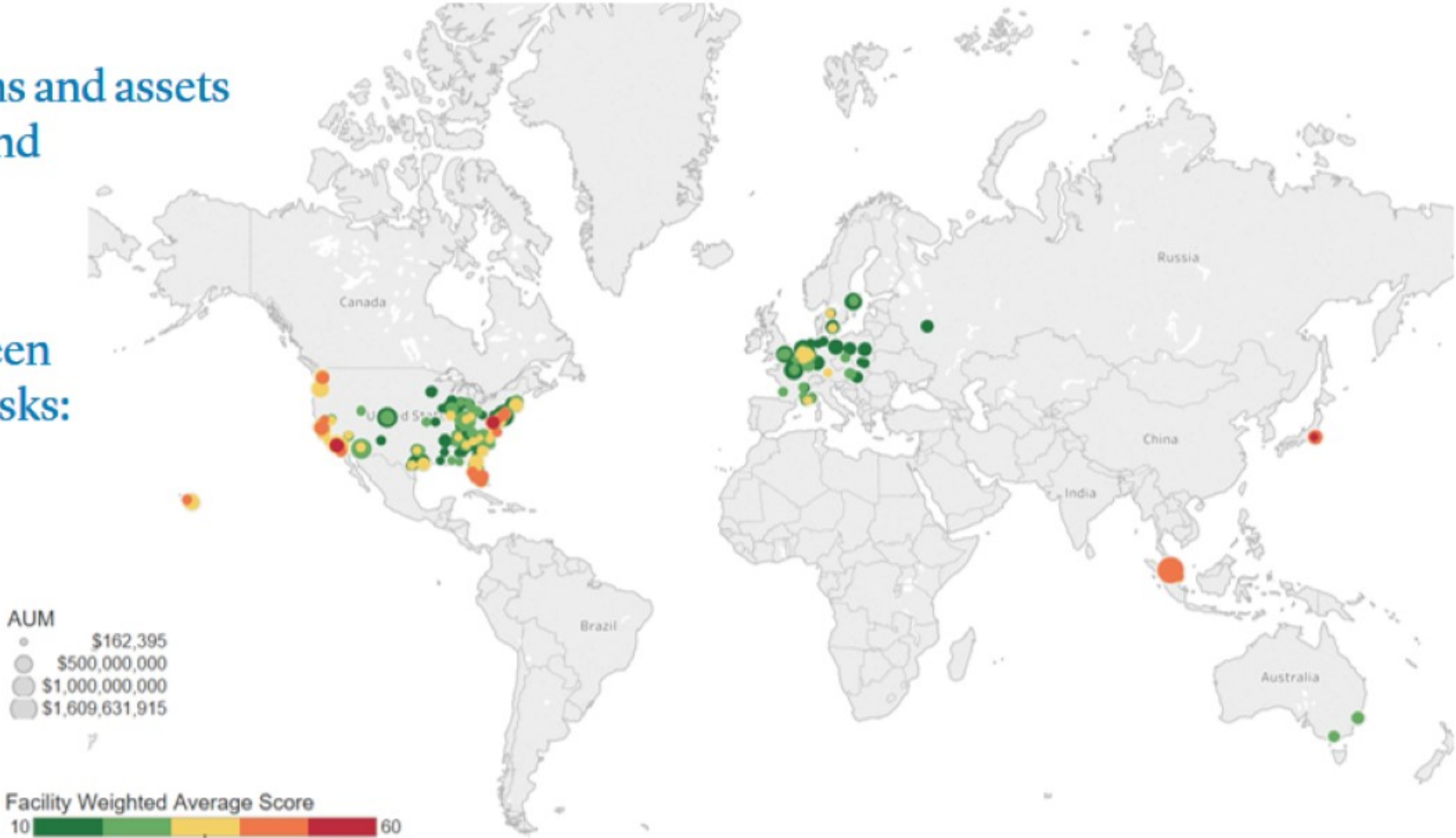
“Rank the most **vulnerable assets**, prioritise and have an action plan.”

PROPERTY RISK SCREENING

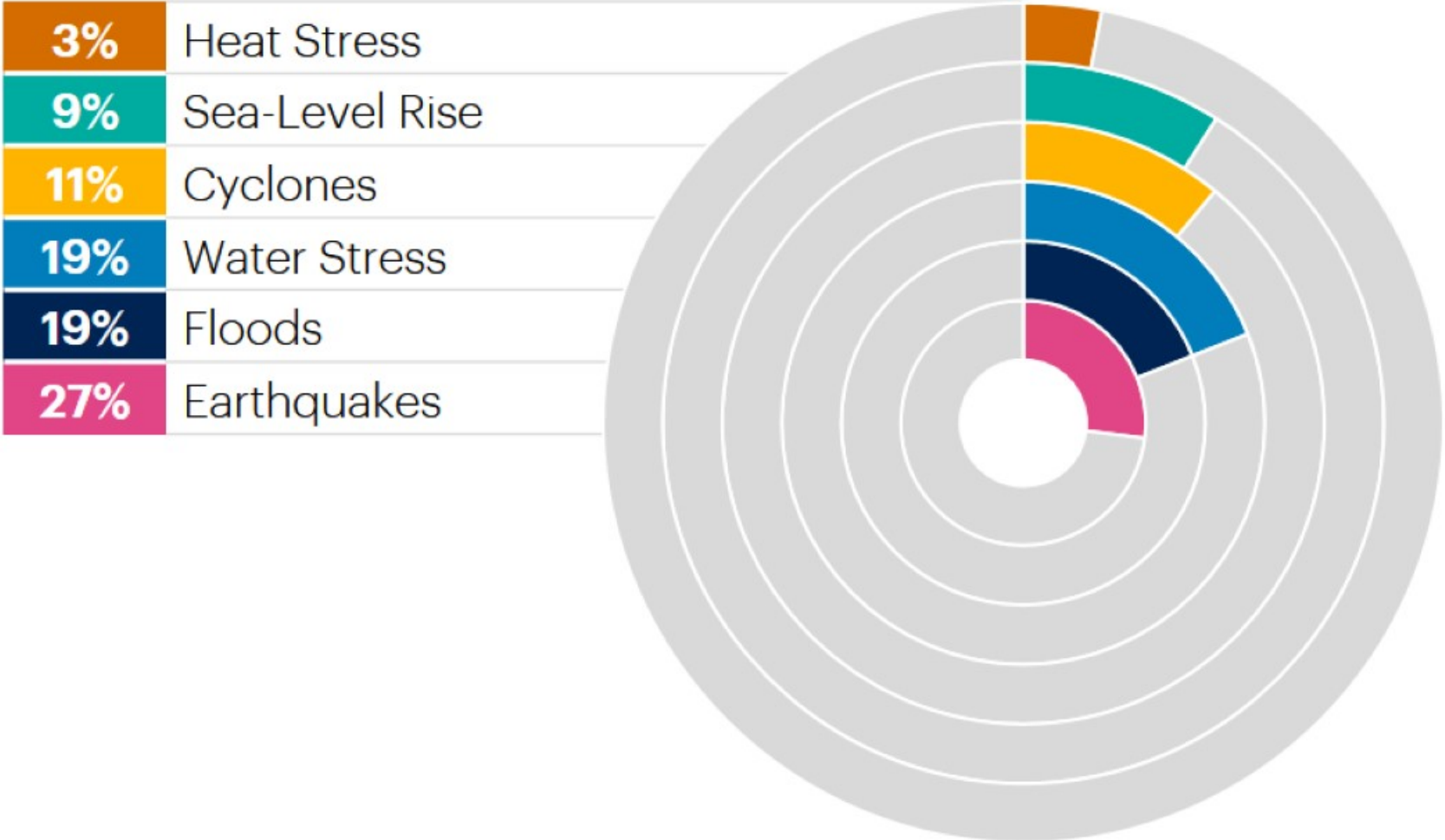
Heitman screens new acquisitions and assets under management on climate and environmental locational risks through Four Twenty Seven

Each asset receives a score between 0-100 for each of the following risks:

- Flood
- Hurricanes / Typhoons
- Sea-level rise
- Water stress
- Heat stress
- Earthquakes
- Wildfires (2019)



2018 PERCENT OF PORTFOLIO AUM VULNERABLE TO RISKS



ACQUISITION IMPACT ON % OF PORTFOLIO VULNERABLE

	Threshold	PROPOSED ACQUISITION Property Score <i>(Highlight scores over threshold)</i>	Current Portfolio Vulnerable <i>(% by Value)</i>	POST-ACQUISITION Portfolio Vulnerable <i>(% by Value)</i> <i>(Includes proposed acquisition)</i>
Hurricanes & Typhoons	50		11%	
Floods	50		19%	
Sea Level Rise	50		9%	
Earthquakes	70		27%	
Heat Stress	65.8		3%	
Water Stress	82.5		19%	



Initial Review

Identify climate risk exposure, insurance premiums, and real estate taxes



Due Diligence

For high risk, additional climate analysis and property assessment for capital expenses



Residual Value / Disposition

Higher sensitivity for at-risk properties, and upon exit, potentially a limited buyer pool/less demand