









## STRANDED ASSETS

Transition risks and potential effects on asset value

Declining market attractiveness



Declining attractiveness of submarkets due to increased vulnerability and exposure to higher costs

- Lower demand (investors and tenants)
- Decreasing market values
- Overall negative impact on the market environment

Tighter regulations



Legislation focused on climate change - e.g., disclosure of climate risks, CO2 pricing, carbon credits, etc.

- Tax increases, e.g. CO2 tax
- Energy efficiency standards
- Decrease in subsidies for certain technologies
- Costs due to publication obligations and regulation

Reputation and positioning



Stakeholder demand for real estate companies where climate risks are taken into account

- Loss of reputation if action is too late or if no action is taken
- Reputational risks for companies that do not sufficiently consider ESG topics in their strategy







# CHALLENGES: Investment Costs vs. Stranding Costs

#### **Rental income**

- Lower demand due to CO2 obligations of commercial tenants
- Lower net rents due to high ancillary costs

#### **Operating costs**

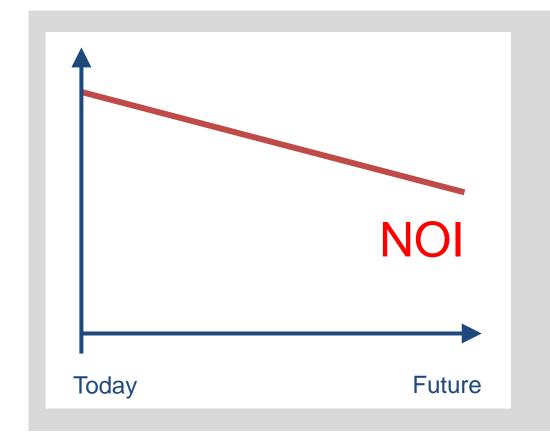
- CO2 taxes/certificates for high emission values
- Additional operating costs due to higher management costs

#### **Investment costs**

- Investments to counteract climate change
- Investment requirements due to new regulatory requirements

## **Borrowed capital**

Rising financing costs









The Carbon Risk Real Estate Monitor (CRREM) provides the real estate

industry with transparent, science-based decarbonization

pathways aligned with the Paris Climate Goals of limiting global

temperature rise to 2° C, with ambition towards 1.5° C. CRREM

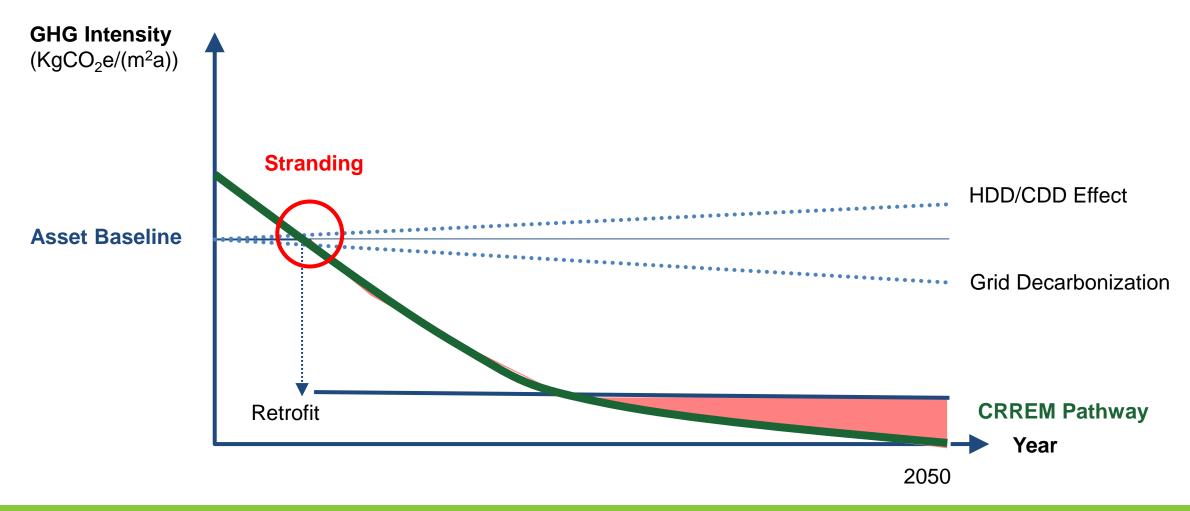
considers both operational carbon and energy intensities.







#### STRANDING RISK ANALYSIS ON ASSET LEVEL

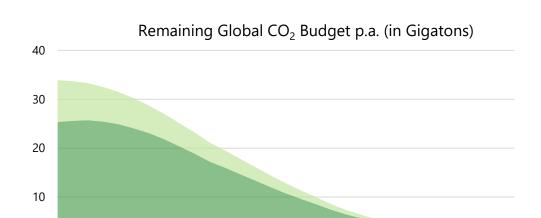








### **GLOBAL CO2 & kWh INTENSITY PATHWAYS**



2035



2030

■ Other Sectors



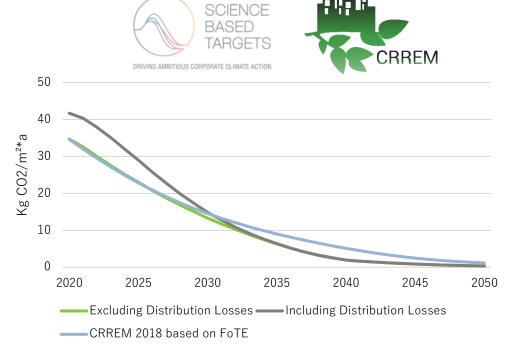
2040

Building Operations



2050

2045



2020

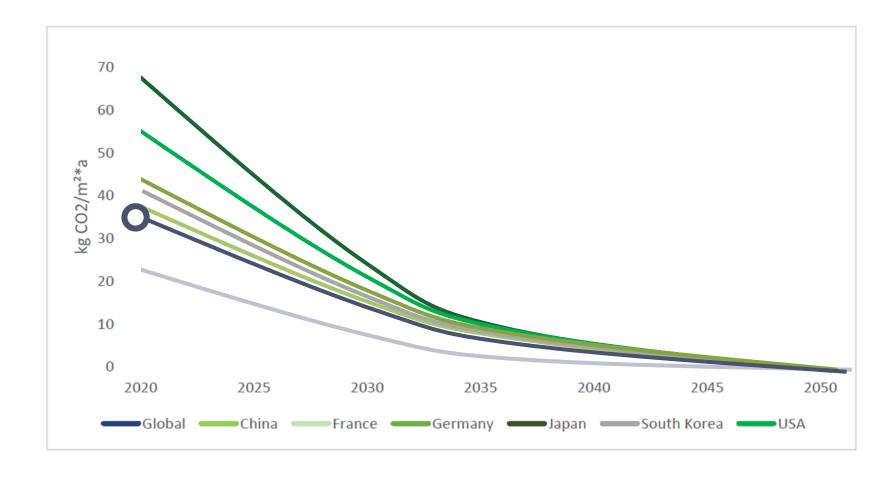
2025







#### CRREM PATHWAYS: FROM GLOBAL EMISSIONS TO CO2-INTENSITIES













## **Strategy 2**

More renewable energy on-site (PV, Heatpumps, Wind etc.)



Building automation (Smart Metering etc.)













#### Strategy 1

Energetic retrofit (Insulation, techn. Equipement etc.)

#### **Strategy 3**

Consumer behaviour (Green Leases, User Manuals etc.)

#### **Strategy 5**

Purchase greener electricity ("Gold" Standard etc.)

Getting to "Net Zero"







# CRREM MARKET UPTAKE STILL GROWING FAST

#### **INDUSTRY ALIGNMENT –**

**ENSURING INDUSTRY UPTAKE & GLOBAL ACCEPTANCE (EXTRACT)** 



















Total funds of over 6.000 bn. USD Assets under Management (~20% of the global CRE market) used the tool.

Please note: numbers are based on <u>direct</u> contact via. the CRREM Team (excluding the tool downloads directly from the homepage and the indirect use of CRREM pathways via licensing partners).







## CRREM COLLABORATION WITH EEA

#### THE NEED FOR MORE <u>SECTOR SPECIFIC GUIDANCE</u>

- > CRREM to publish sector guidance for logistics and Hotel.
- Collaborating directly with big players in the sector to ensure bestpractice on reporting and benchmarking against CRREM and outlining the challenges for the sector.
- Guidance on how to normalize asset-level data against the CRREM decarbonization pathways.





#### THE NEED FOR HIGHER GRANULARITY IN REGIONS

- Focus on North America CRREM, ULI, and the Lawrence Berkeley National Lab (LBNL) are partnering to create more granular curves for the US and Canada.
- Focus on Australia NABERS & AGBC & CRREM partner up to further increase update of CRREM in Australia.
- Focus on Asia CRREM and AEC have launched a further "CRREM program: Net Zero Real Estate Group/Pioneers for China/HK" to increase focus and uptake.







### **THANK YOU!**



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