# How to build a smart building strategy

Drive energy and operational efficiencies + evolution of building technology and what's next

April 2023

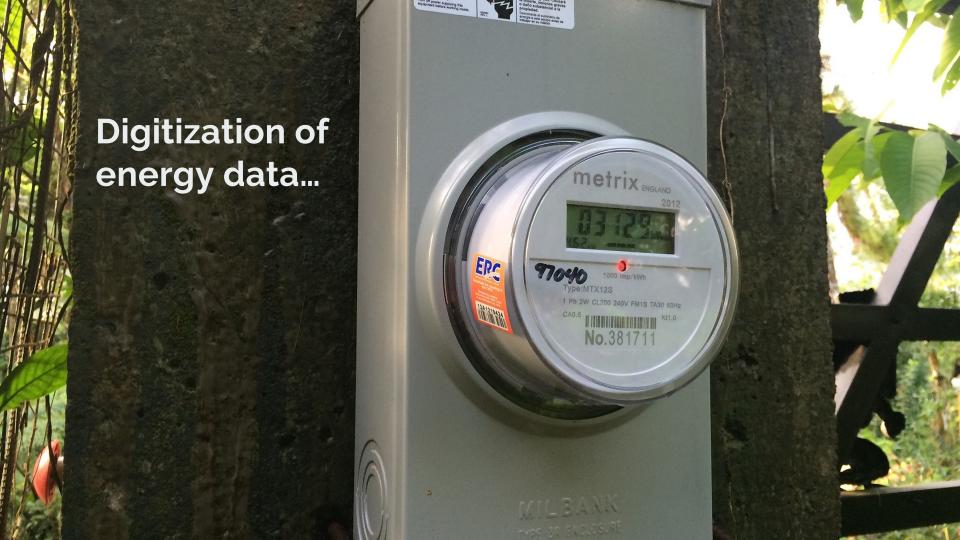
**Drafted by Aamidor Consulting** 

# Agenda

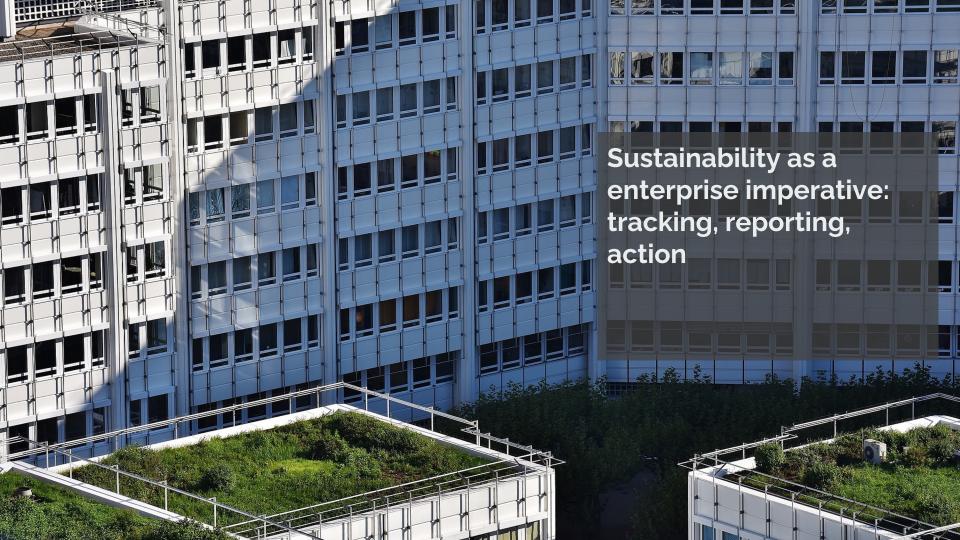
- What is a smart building?
- Why are smart buildings important?
- Core aspects of a smart building strategy
- What's happening in the market; what's next?

# Part 1: What is a smart building?

# **History lesson**











# Components of a smart building

# Is a smart building *JUST* an energy efficient building?



#### Or, is it....

Energy efficiency

Carbon emission reductions

Smart access / security

IOT

Smart HVAC + Lighting

Advanced AV Systems Tenant/ occupant engagement

## It may be everything above, but it also is:

#### People:

Staff to deliver key outcomes within the buildings; plus, solutions to augment their responsibilities

#### **Processes:**

Operational plans
to utilize people
and technology
solutions based on
an organization's
goals

#### **Technology:**

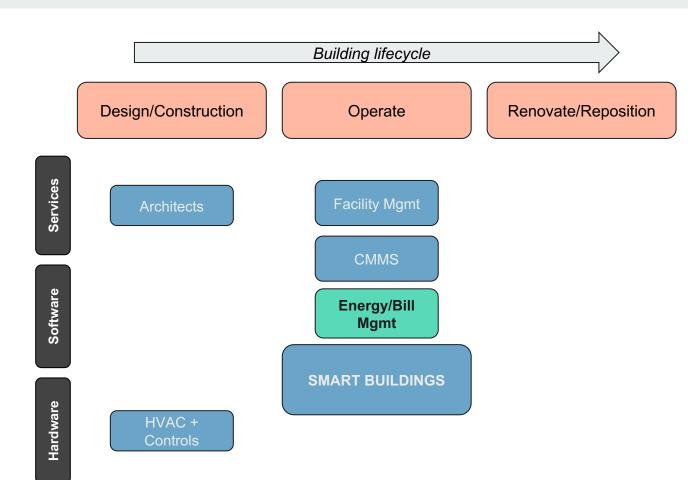
Existing and emerging solutions that can be used to deliver better outcomes for all stakeholders

#### **Resources:**

Time and capital to train staff, develop methods/plans/strategies, and identify/utilize technology.

#### **Tech Stack**

Most offerings fit into this high-level framework...



#### A few additional notes...

- Building type and portfolio size matter
- There is a learning process walk, then run!
- Sharing your learnings with colleagues and other stakeholders will advance your progress.

# Questions??

Part 2: Why are smart buildings important?

# **Market trends**



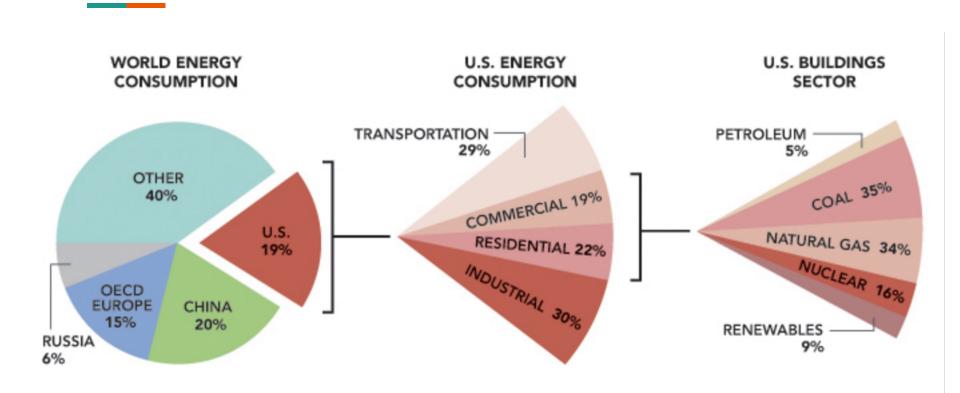




IHS estimates that total device connections will be 125B by 2030.

# Significance of buildings

## Building Energy Use: Worldwide and the US (2011)



## **Building Characteristics/Trends:**

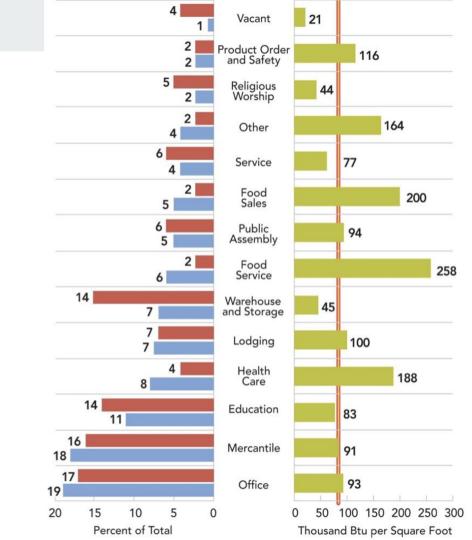
Energy / sq ft (2003)

**Total Floorspace** 

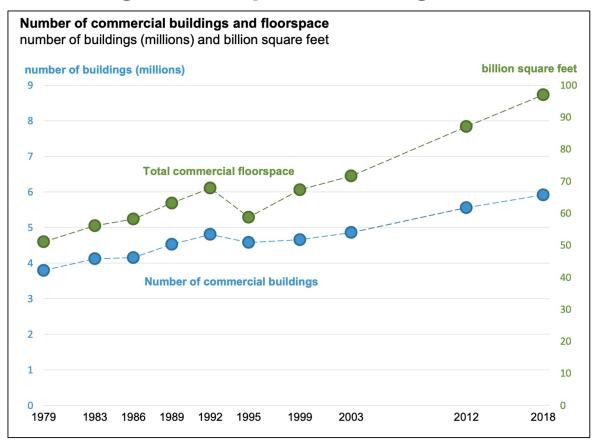
Primary Energy Consumption

**Energy Intensity** 

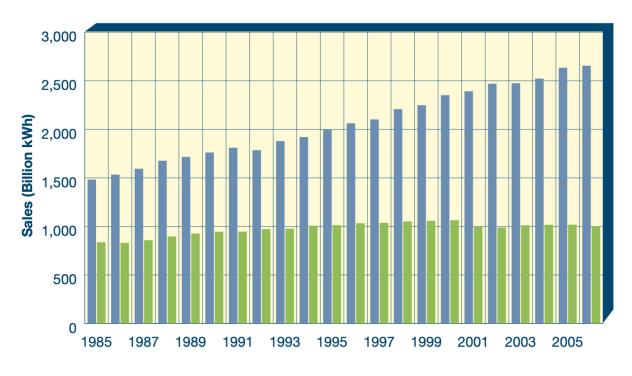
Average (91)



## Steady increases in buildings and square footage



## Electricity consumption in buildings vs. industry





# Other notable trends

## Sustainability: an emerging focus for buildings

#### Commitment

In 2021, all 100 of the largest U.S. REITs by equity market capitalization reported publicly on their ESG efforts. Even smaller REITs are normalizing ESG reporting, with the percentage of REITs with an equity market capitalization under \$5 billion that report on ESG efforts publicly jumping from 41% in 2017 to 98% in 2021. Over the last five years, the number of REITs issuing standalone sustainability reports has nearly tripled as REITs prioritize telling their ESG story to investors and the public.

-NAREIT REIT ESG Dashboard

#### Action

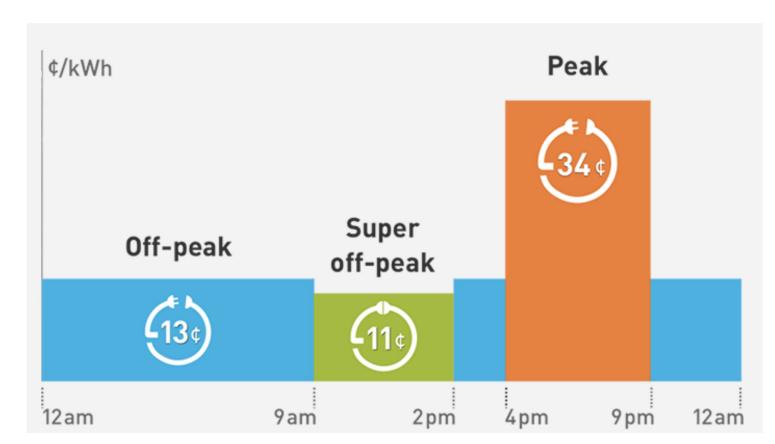
As of October 2021, only **25% of U.S. REITs have portfolios**where at least **25% of properties are considered green**,
according to Sustainalytics BV, Morningstar's ESG-focused data
company. Only 17% of U.S. REITs have portfolios where 50% or
more of their properties are green.

Further, only 7% of U.S. REITs reported a strong green building investment program, while 20% reported having some kind of program. Another 27% indicated limited activities, while 46% have not disclosed any program at all.

-S&P Global Market Intelligence

"The real estate sector is reaching a crucial stage in the evolution of its approach to climate risk. We are coming to understand that <u>leadership from the real estate investment industry is essential</u> for society's approaches to climate change to be effective, efficient, and equitable, versus deferring difficult decisions and displacing those who cannot afford to adapt.- Ed Walter, CEO, ULI

## Rates are becoming more dynamic



## Other key trends

#### Talent/Labor Shortage

"FM faces critical talent shortfall..." (RICS/IFMA)

"The overall quantity of willing and available workers continues to diminish." (Facility Executive Magazine)

#### Infrastructure Spending

RMI estimates 115M sq feet of commercial space could be retrofitted via the The Inflation Reduction Act's (IRA) commercial building tax credit.

## But, there is some uncertainty around smart buildings

#### **Pros:**

- Commercial-ready offerings
- Numerous vendor offerings push prices down
- Services are becoming more integrated with technology
- More infrastructure for proptech (investors, events/conferences, reports, etc)

#### Cons:

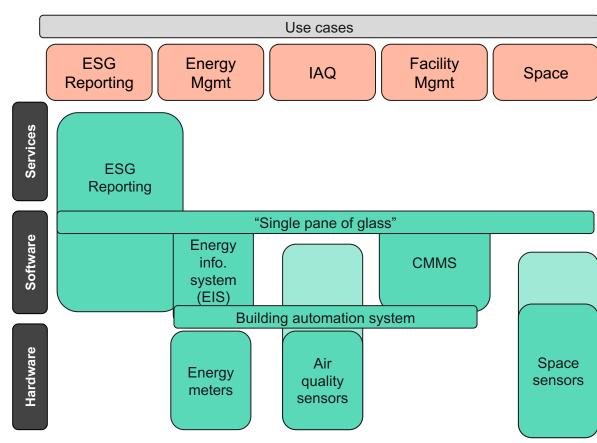
- Uncertain ROI
- Inconsistent implementation costs/timelines
- Confusing vendor landscape
- Overlapping products

- The market for proptech/smart buildings is becoming more mainstream. But it does not appear to be growing as fast as projected.
- Funding into proptech/smart buildings appears to be detached from overall buyer adoption of solutions.

## And, the market remains fragmented...

- A lot of solutions overlap with other offerings. Some cover multiple use cases, or multiple components (hardware, software, and/or services).
- This leads to buyer confusion, which may delay purchasing decisions.

Note: Diagram is illustrative, and not meant to be comprehensive.



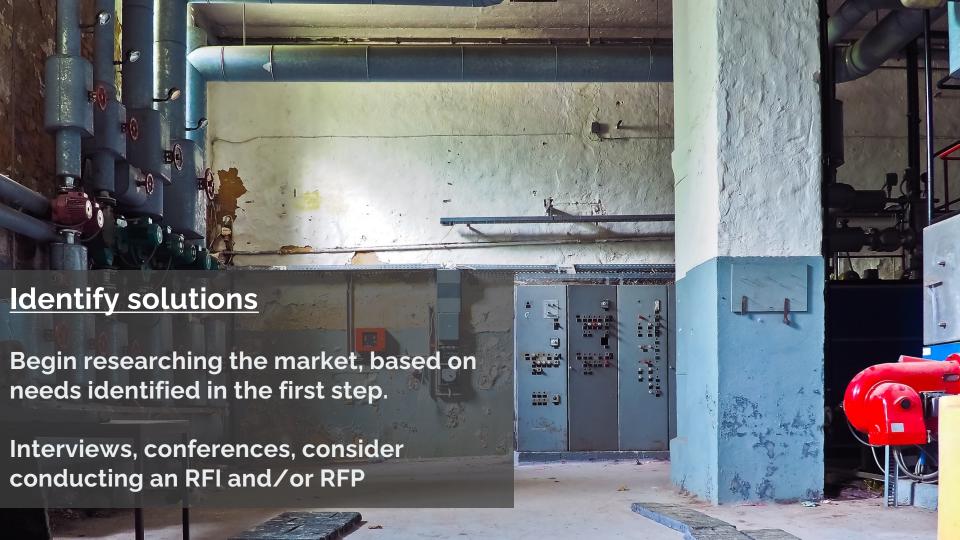
# Questions??

# Part 3: Core aspects of a smart building strategy

## 5 steps to a smart building strategy...

Research	Identify solutions	Pilot	Select and Deploy	Iterate
Understand the state of the market; Identify key internal stakeholders; Identify gaps	Research solutions, compare offerings to internal needs, and conduct various information discover efforts (RFI, RFP, etc)	Deploy a few promising solutions on a limited basis.	Review results, select the best fit solution, and message the rationale across the organization.	Use initial deployments to learn what works, where the new gaps are, and what needs to be added.











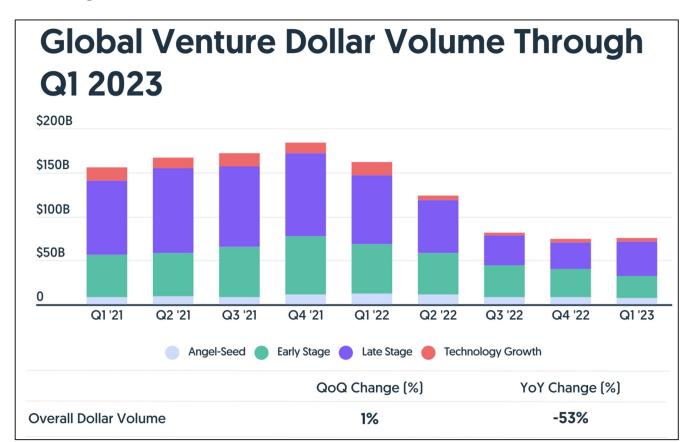


### Questions??

Part 4: What's happening in the market; what's next?

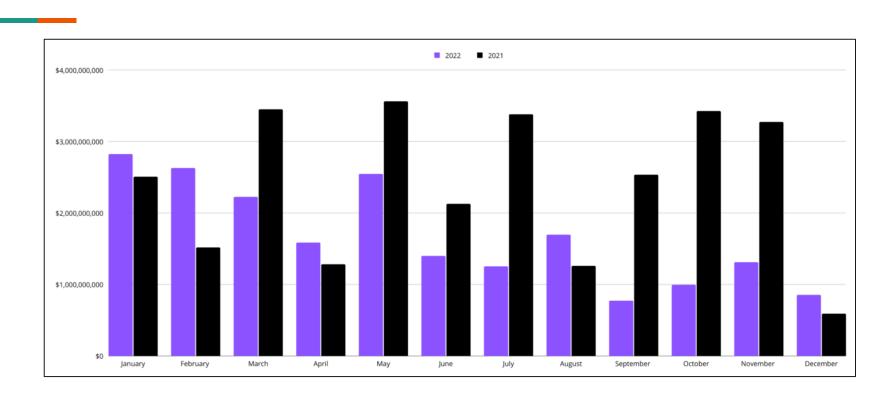
### **Macro environment**

### Overall venture investing is down...



Source: Crunchbase

### Proptech investment is down 38 percent from 2021 to 2022

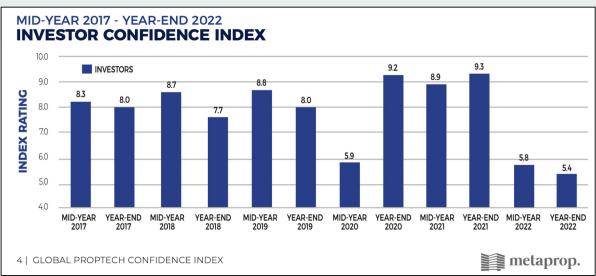


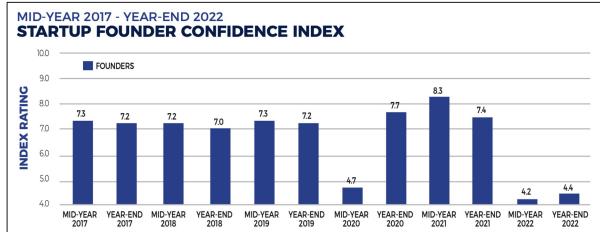
Source: Center for Real Estate Technology and Innovation

#### Confidence is down

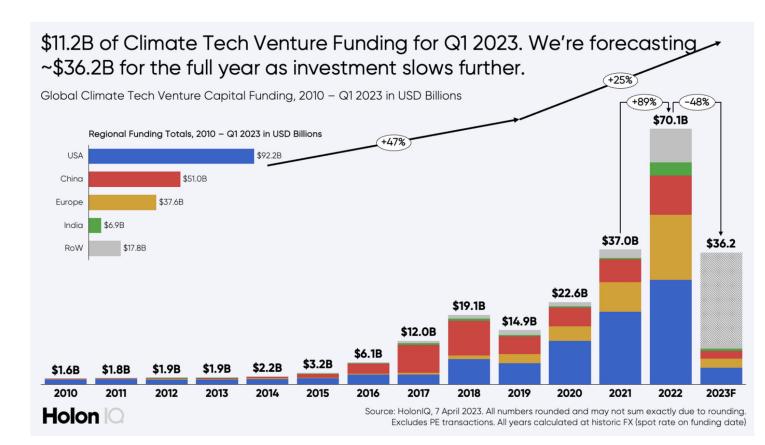
Metaprop reports that confidence is down for both investors and startup founders.

Source: Metaprop



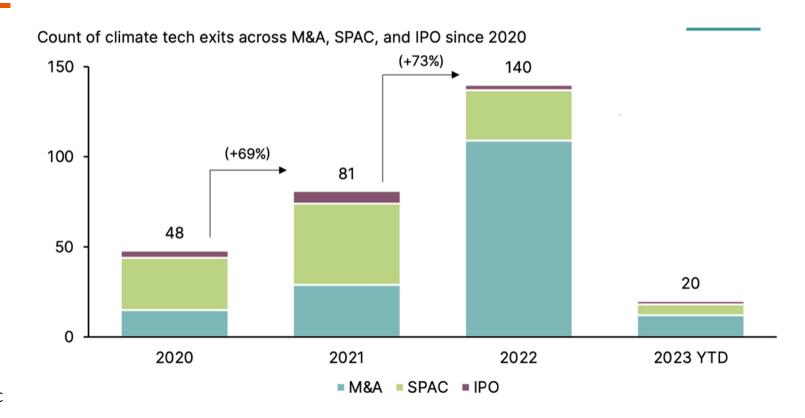


#### Climate tech is a bright spot, but still slowing in 2023



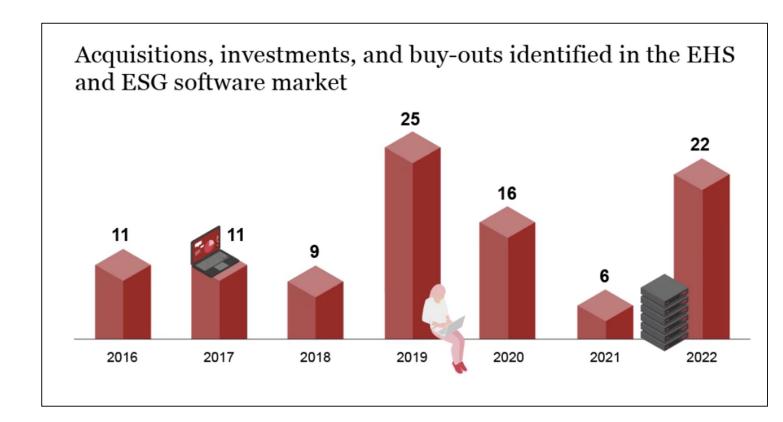
Source: Holon IQ

### **Including exit activity**



Source: Climate Tech VC

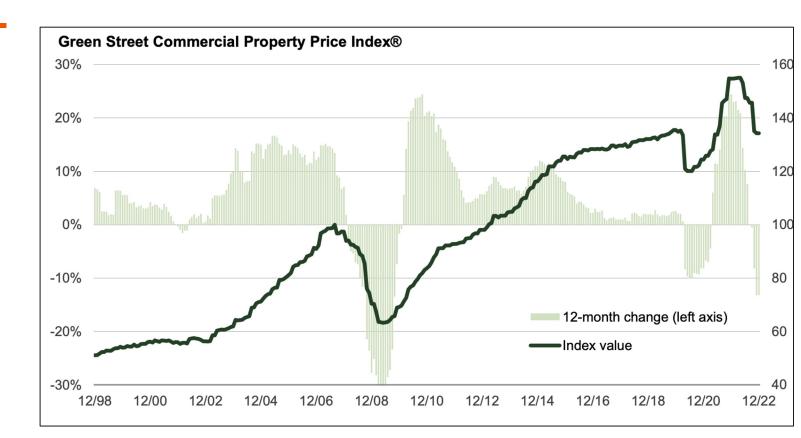
#### ESG/sustainability software is a busy market for investors



Source: PwC

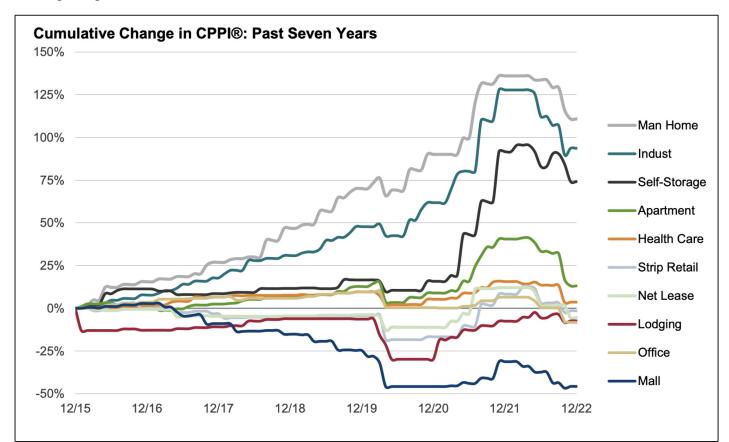
### Real estate market

### Property prices are declining...



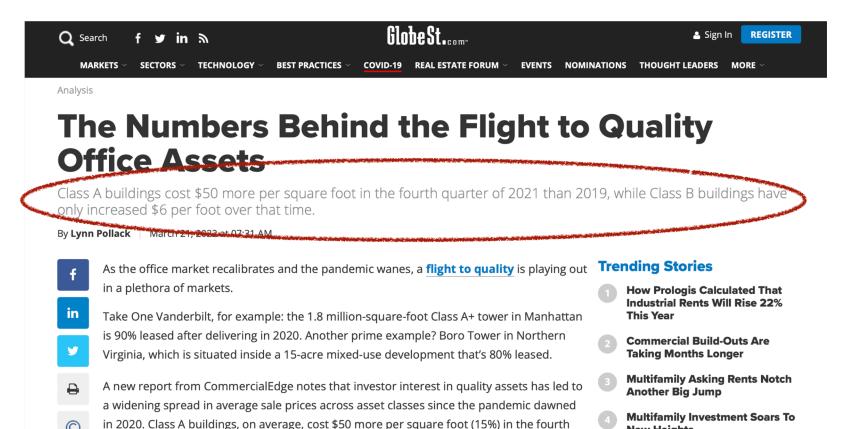
Source: Green Street

### Those declines vary by asset class



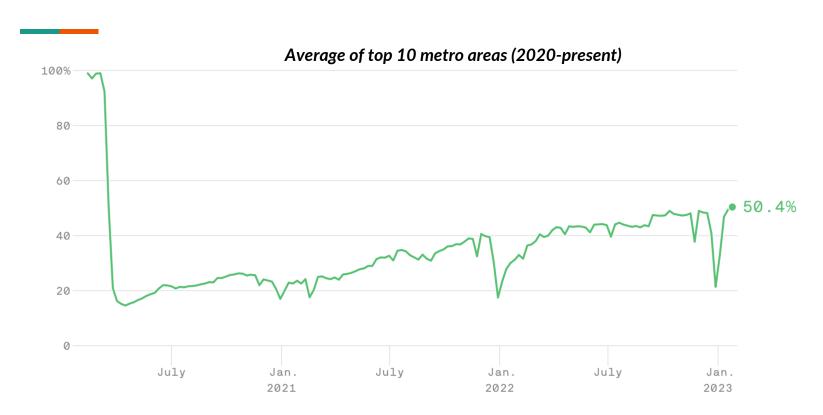
Source: Green Street

### But class A office is doing much better than class B/C



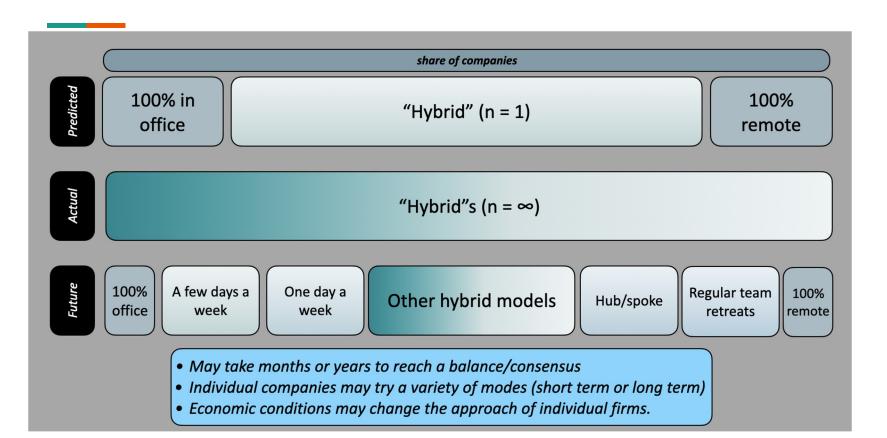
**New Heights** 

### Returning to the office...by the numbers - UPDATE



Source: Kastle Systems, from Axios

### Hybrid working - predicted, actual and future



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## **About Aamidor Consulting Inc Experts in Smart Buildings**

- Strategic and market insight for investors: commercial due diligence, review of/feedback on investment thesis
- <u>Product strategy for vendors</u> (small and large): competitive intelligence, voice of customer research, market sizing, go-to-market
- Market research for enterprises and industry stakeholders: provide an independent, data driven perspective on the industry, opportunities for growth, current and future trends
- Advisory services for real estate owners/operators: technology adoption strategy development, procurement support