



2023  
**Regional Insights**  
Newport Beach

Which is it?



G R E S B<sup>®</sup>

**GRESB**

-or-

**GRES-BEE**

**Sustainability**

-or-

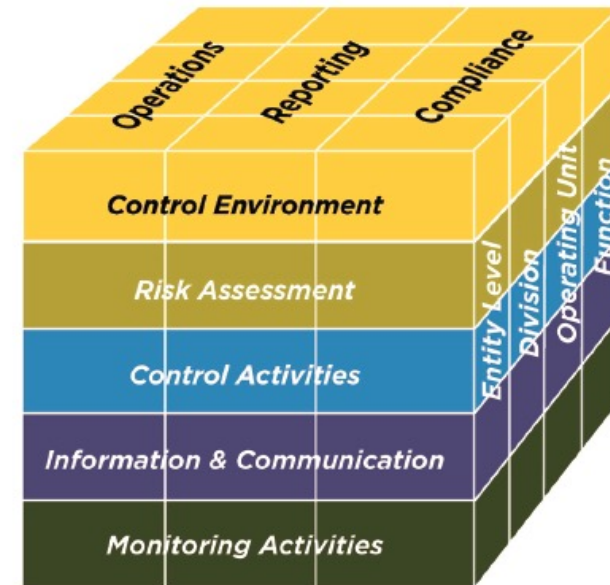
**ESG**

## What is ESG?

**E**nhanced Risk Management

**S**tructured Non-Financial Data

**G**lobal Best Business Practices



COSO Internal Control Framework

# Structured Non-Financial Data

Risk Management | Business Value | Competitive Positioning | Client Servicing



## Environmental

**Energy** consumption

**Water** use metrics

**Waste** generation

**GHG** emissions – all scopes

**Science-based targets**

**Climate risk assessments**

Management systems

3<sup>rd</sup> party ratings [LEED, etc]

## Social

Risk assessments

Training & development

**Tenant satisfaction**

Employee engagement

**Health & well being**

Diversity & inclusion

Supply chain monitoring

Community impacts

## Governance

**Decision accountability**

Personnel targets

Reporting & transparency

Industry leadership

**Transitional risk assessments**

Whistleblower protections

**Policies - green leasing & TI's**

Data process reviews & audits



G R E S B

The ESG Benchmark

**Assess** and **benchmark** ESG performance of real assets, providing **standardized** and **validated** data to capital markets.

# About GRESB



## Tailored ESG Framework :: Real Estate + Infrastructure

**Due Diligence** -- new allocations / investments

**Engagement** -- existing investment positions

**LP Material Issues** -- 1<sup>st</sup> + 2<sup>nd</sup> order

**KPI Metrics + Measures** -- management + reporting

## Academic Roots

Maastricht University + UC Berkeley

## Evolving ESG Indicators

Designed to **advance** + **progress** the global institutional investment industry

**ISO 14001** :: **Plan** | **Do** | **Check** | **Act**

Over 14,000 cumulative benchmark submissions since 2009

# GRESB :: Components | Aspects | Indicators



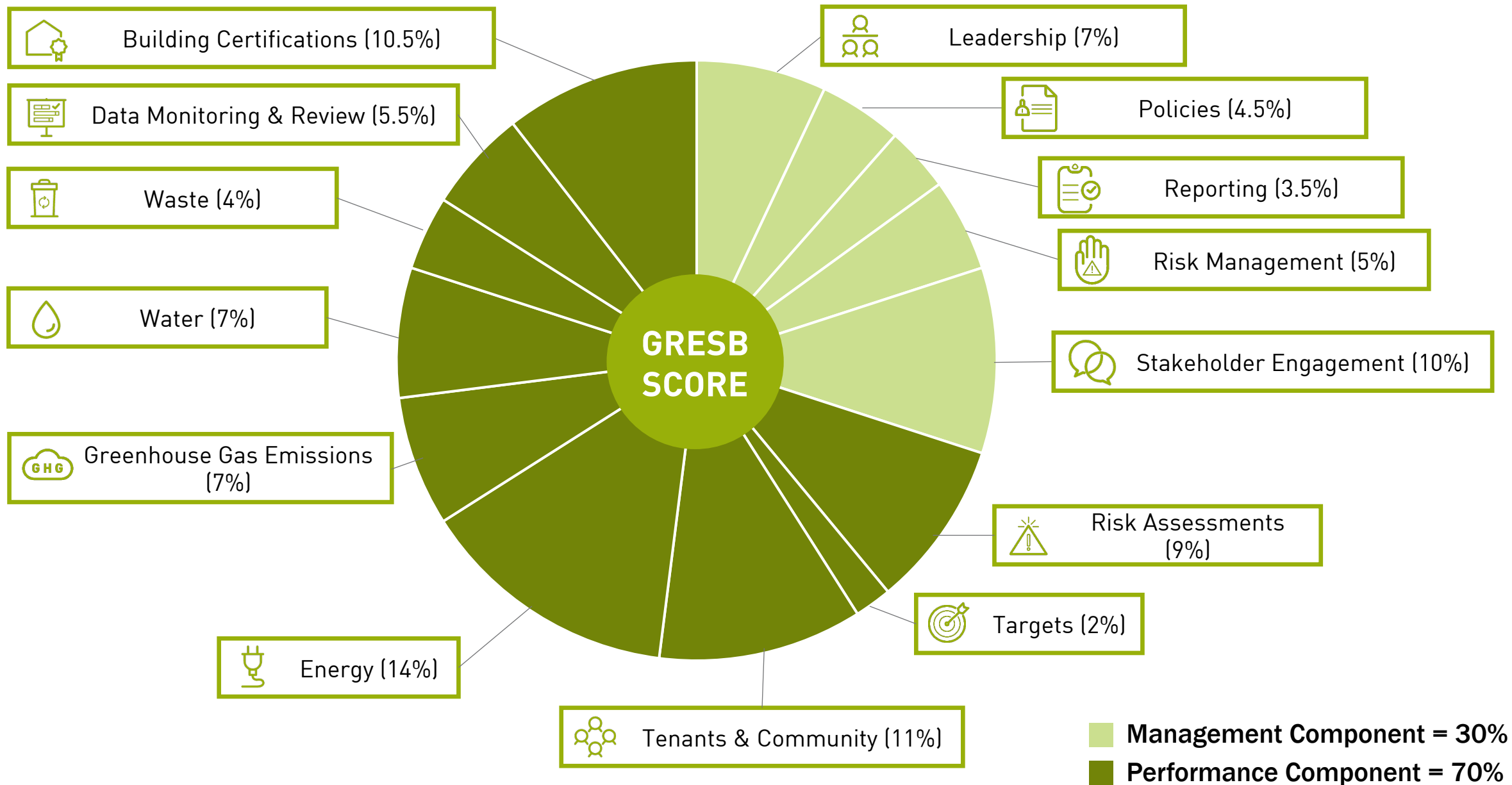
**Management Component**

**Performance Component**

**Development Component**

Leadership	Policies	Reporting	Risk Management	Stakeholder Engagement
Risk Assessment	Targets	Tenants & Community	Energy	Greenhouse Gas Emissions
Water	Waste	Data Monitoring & Review	Building Certifications	
ESG Requirements	Materials	Building Certifications	Energy	
Water	Waste	Stakeholder Engagement		

# GRESB Real Estate Aspects & Scoring Weights





# Connecting Stakeholders

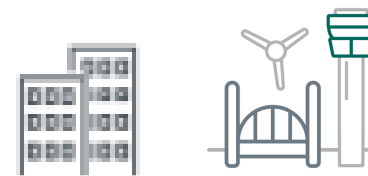
INSTITUTIONAL INVESTORS

Equity | Debt



G R E S B

STRUCTURED COMMUNICATION

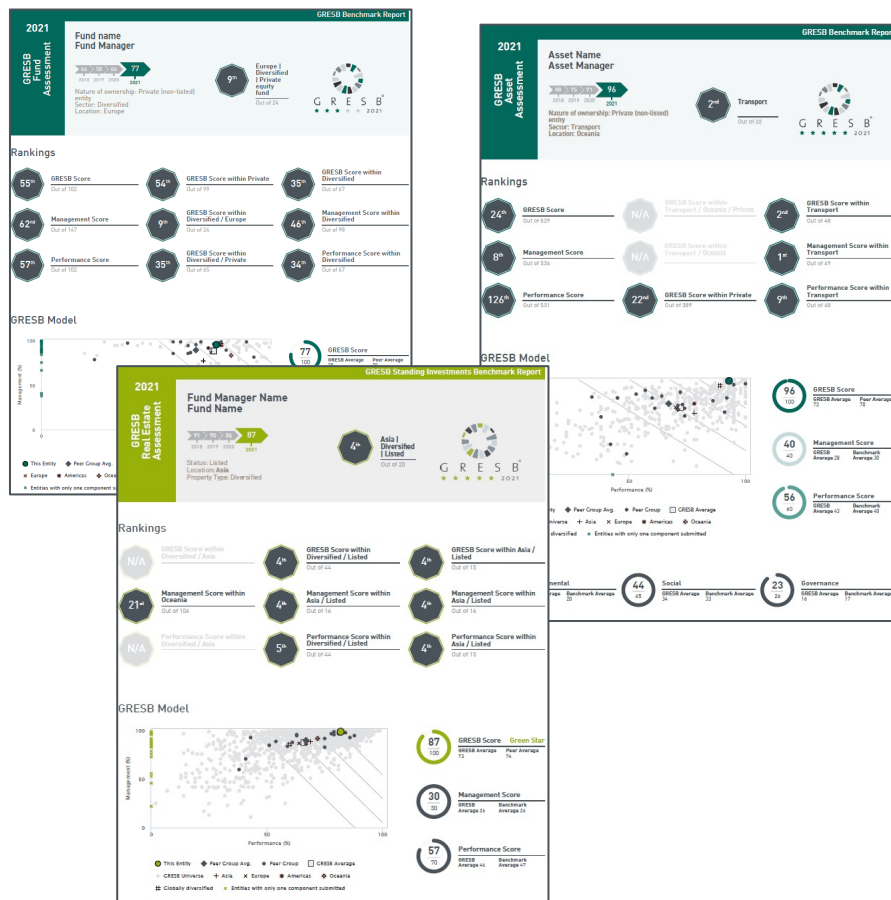


PORTFOLIO MANAGERS



ASSET MANAGERS

Structured Non-Financial Data



# Advancing the Market



**Management Education**  
**Enhanced Decisionmaking**  
**Stakeholder Communications**

**Chris Pyke**  
Chief Innovation Officer



**Tom Idzal**  
Head of Americas



**Sarah Welton**  
Director  
GRESB Foundation



**Dan Winters**  
Senior Director  
Strategic Initiatives



# GRESB Americas

**Reid Morgan**  
Manager, Member Relations  
Americas Region



**Paul Vozzella**  
Real Estate - Director  
Eastern North America



**Cristie Miller**  
Infrastructure – Director  
Americas Region



**Robert Slowko**  
Real Estate - Director  
Western North America &  
Latin America



# About the GRESB Foundation

The GRESB Foundation acts to:

- Lead the **evolution of GRESB Standards** in support of the Foundation's mission
- Facilitate **industry engagement** in standard development
- Seek **input from industry experts** to inform and evaluate the significance of **new and emerging issues**
- Ensure that **GRESB Standards are feasible** and can be practically implemented

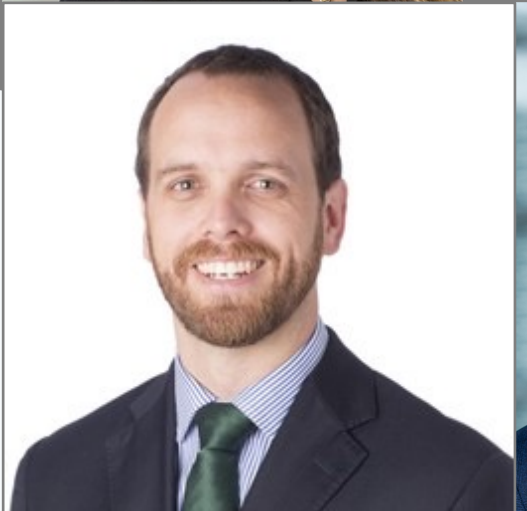
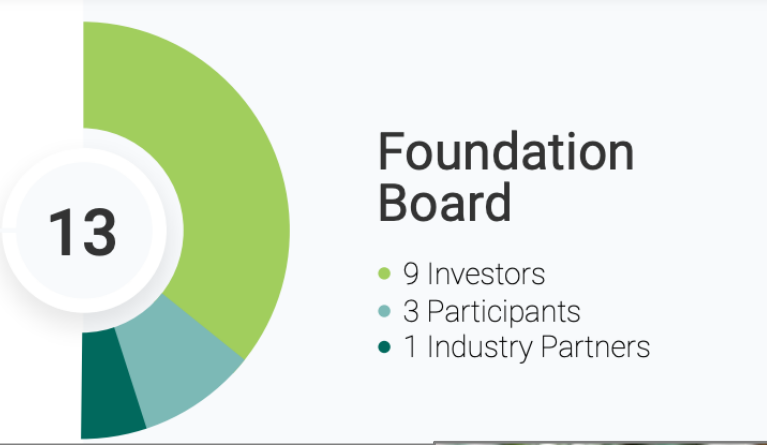
## Core Principles

1. Independent
2. Investor Led
3. Mission Driven
4. Industry Representative



# GRESB Governance Structure







13

## Foundation Board

- 9 Investors
- 3 Participants
- 1 Industry Partners

Esther An, **City Developments Limited**  
Matt Christensen, **AllianzGI**  
Mathieu Elshout, **PATRIZIA**  
Vincent Felteau, **PSP Investments**  
Patrick Kanters, **APG Asset Management**  
Maarten Jennen, **PGGM** (Deputy Chair)  
Kathleen Jowett, **LaSalle Global Solutions** (Chair)  
Helena Olin, **AP2**  
Will MacAulay, **HESTA**  
Dominique Moerenhout, **EPRA**  
Shama Naqushbandi, **AIMCo**  
Mary Nicholson, **Macquarie Asset Management**  
Stéphane Villemain, **Ivanhoé Cambridge**

41

## Standards Committees

- 13 Investors
- 20 Participants
- 3 Partners
- 5 Industry Partners

### GRESB Real Estate

Aleksandra Njagulj, DWS Group (Chair)  
Olivia Muir, UBS (Deputy Chair)  
Abigail Dean, Nuveen Real Estate  
Jorge Chapa, GBC of Australia  
Dan Grandage, abrdn  
Helen Gurfel, CBRE  
Ryuichi Horie, CSR Design  
Nina James, Blackstone  
Grace Kwok, AEC Group  
Darryl Neate, REALPAC  
Clementine Pacitti, Klepierre  
Andrea Palmer, PGGM  
Rob Simpson, Ivanhoe Cambridge  
Benjamin Thomas, The GPT Group  
Peter van den Tol, MN  
Derk Welling, APG Asset Management

### GRESB Infrastructure

Katherine Sherwin, BlackRock (Chair)  
Manuel Rodríguez, AINDA Energia (Deputy Chair)  
Jane Baseby, PATRIZIA  
Lucinda Callow, DWS Group  
Olta Cibuku, Amp Energy  
Jon Collinge, Morrison & Co  
Gerry Connelly, Amey Investments  
Chandra Eastwell, Macquarie  
Neil Krawitz, Arcus Infrastructure  
Shali Lingaretnam, Victorian Funds  
James Milner-Smith, Neos Networks  
Anne-Noelle Le Gal, Vantage Infrastructure\*  
Ruairi Revell, abrdn  
Ainsley Simpson, Infrastructure Sustainability Council



# What's Ahead: GRESB Real Estate 2024



## Full 2024 list of Changes

2024

### GRESB Real Estate Standard List of Changes

Following the [GRESB Standard Development Process](#) formalized in early 2022, the GRESB Foundation has reviewed and approved changes throughout 2023 aiming to develop, maintain and improve the GRESB Standard. The complete list of changes related to the 2024 Standard is presented in this document. There are four types of changes:

1. General 2024 Standard Changes
2. Tactical 2024 Standard Changes
3. 2025 Standard Changes
4. Other Changes

For each change, information on background and purpose along with a description on scoring and reporting impact for participants are provided.

#### 1. General 2024 Standard Changes

##### Climate resilience and opportunities (RM5)

**Background and Purpose:** The previous Standard only covered climate-related risks and did not address climate-related opportunities (CROs). CROs are a critical aspect of the Task Force on Climate-related Financial Disclosures (TCFD) framework. Reflecting both risks and opportunities ultimately allows entities considering future climate scenarios to understand the full potential outcomes of their activities, and to align more closely with the TCFD. The GRESB Foundation recommended the Standard better incorporates CROs to increase alignment with TCFD.

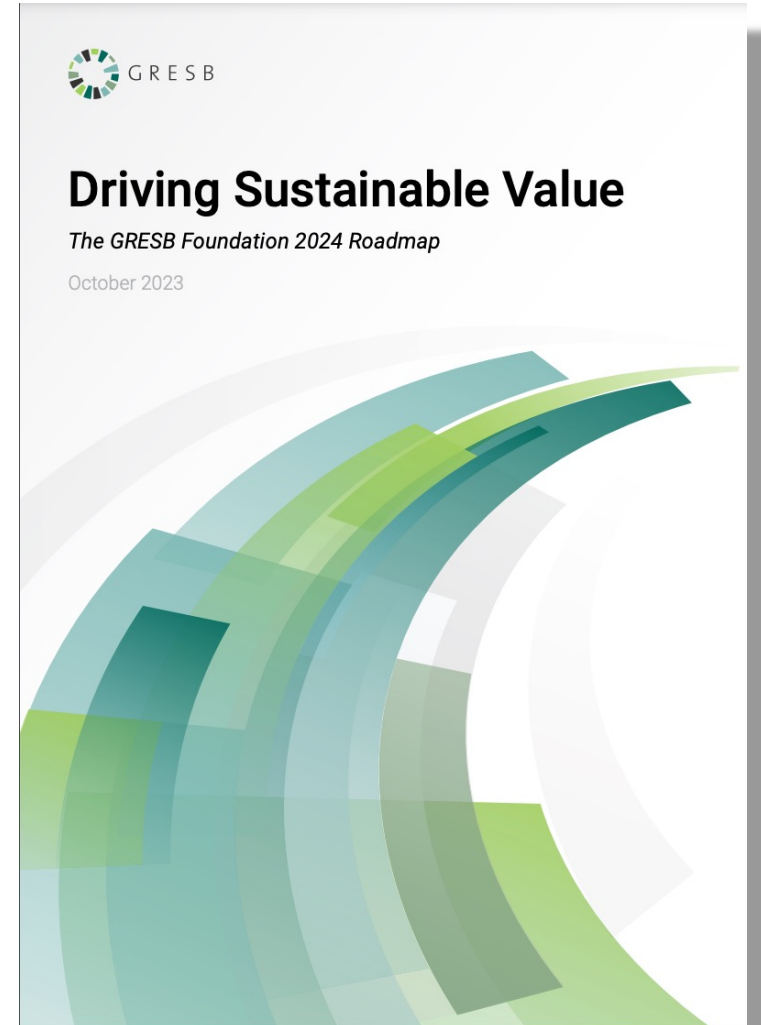
During 2023 the inaugural International Sustainability Standards – IFRS S1 and IFRS S2 – were published. The IFRS S1 and S2 align with and supersede TCFD. By incorporating CROs this year the Standards also align closer to IFRS. IFRS will be reviewed in future years in terms of even closer alignment, rather than TCFD.

Additionally, it was identified that the list of available transition and physical climate scenarios required an update to include the new 'Shared Socioeconomic Pathways' (SSP).

**Description of Change:** Scope of indicator *RM5 Climate resilience* is now expanded to cover climate-related opportunities along with textual clarification. The list of physical and transition scenario options is updated to include new SSP scenarios.

**Scoring Impact:** Indicator RM5 is now worth 0.5 point, through a reallocation of scoring weight from existing Risk Management indicators (see [Scoring Weight Reallocation Overview](#) below).

**Reporting Impact:** Participants are required to incorporate resilience into their climate strategy and provide a description on how the entity does so in light of any climate-related risks and opportunities. Participants are now able to select the new SSP-RCP pathways if they use them in their Physical and/or Transition Risk scenario analysis. This indicator will not be prefilled in 2024.



# 2024 GRESB Standards Roadmap



## **Building Certifications**

- defining validity periods
- expiration date

## **Net-Zero Target Setting**

- scoring – 1 point

## **EV Charging Stations**

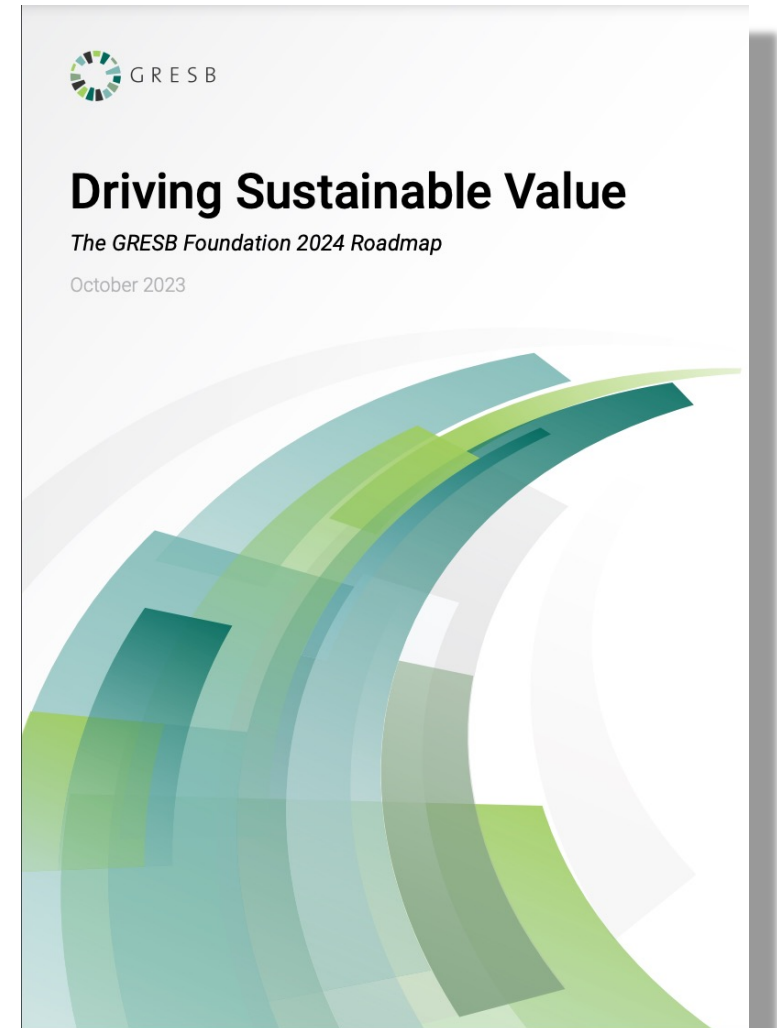
- isolate energy consumption apart from asset operations

## **Residential Assets**

- can report multiple energy ratings

## **Expanded Indicator Scopes & Scoring**

- climate-related strategies + opportunities
- country-based intensity values





# ESG 2023 What's UP!

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[gresb.com](https://www.gresb.com)



# ESG 2023 What's UP?

LP ESG Interest

## GRESB 2008 :: Founding LP Investor Members



# GRESB Investor Members 2013

actiam



atp=



B&I CAPITAL



COHEN & STEERS



Helaba Invest



Pensioenfonds Detailhandel



GRESB Founding Members

# GRESB Investor Members 2018



# GRESB Investor Members 2023



# ESG 2023 What's UP?

## Separate Account Submissions

US-based separate accounts   JVs	\$ Origin
Alberta Investment Management Corporation [AIMCo]	Canada
British Columbia Investment Management [BCIMC]	Canada
Caisse de dépôt et placement du Québec [CDPQ]	Canada
Canada Pension Plan Investment Board [CPPIB]	Canada
Norges	Norway
BVK	Switzerland
<b>CalPERS</b>	United States
<b>CalSTRS</b>	United States
<b>Los Angeles County Retirement Association [LACERA]</b>	United States
New York State Common Retirement Fund	United States
State of Colorado [COPERA]	United States
State of Illinois	United States
State of Iowa [IPERS]	United States
MassPRIM	United States
State of Oregon	United States
Texas Teachers	United States
Government Services Administration [U.S. GSA]	United States
New York Life General Account	United States



# ESG 2023 What's UP?

## Net Zero Commitments

### Net Zero Asset Owners Alliance

-- 86 institutional  
investors & insurers

### Net Zero Asset Managers Initiative

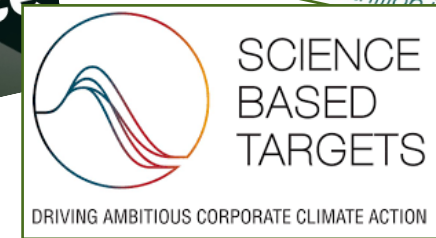
-- 315 asset  
management firms

### Net Zero Banking Alliance

-- 134 banks

### Science Based Targets

-- 277 real estate  
companies



- <https://www.unepfi.org/net-zero-alliance/alliance-members/>
- <https://www.unepfi.org/net-zero-banking/members/>
- <https://www.netzeroassetmanagers.org/signatories/>
- <https://sciencebasedtargets.org/companies-taking-action#dashboard>

# ESG 2023 What's UP?

## Net Zero Commitments

**CalSTRS :: 2030 Science Based Target @ 50% carbon reduction**  
**CalSTRS :: 2050 Net Zero Carbon Commitment**



**CALSTRS** myCALSTRS login

Members Retirees Employers Forms & publications News Investments About Contact

**Investments**

- Investment portfolio
- Sustainable investing
  - Path to net zero**
  - Stewardship
- Reports

### Path to net zero

**CALSTRS**

**Path to net zero**

03:57

We believe climate change is one of the greatest threats to our future, with undeniable links to business and financial investments. Climate change impacts health and safety, the environment and the global economy, which puts the CalSTRS Investment Portfolio at risk. Our mission is to support the retirement security of California's educators. Virtually all companies and assets in our portfolio are affected by climate risk and must prepare for climate change.

In September 2021, the Teachers' Retirement Board **pledged** to achieve net zero greenhouse gas emissions across the CalSTRS Investment Portfolio by 2050, or sooner. Net zero means the amount of greenhouse gases emitted is offset by the amount taken away. This decision acknowledges the complexity of the climate change challenges impacting the world and helps ensure we remain resilient and sustainable.

**Investment beliefs**

**Belief 9: Investment risks associated with climate change and the related economic transition.**

**Net zero infographic**

**Climate change is one of the greatest threats to our future —impacting our planet, the environment, the global economy and everyone's health**

# ESG 2023 What's UP?

## Net Zero Commitments



## State of Oregon :: 2050 Commitment



OREGON  
STATE  
TREASURY

[About Treasurer Read](#)

[News and Data](#)

[Unclaimed Property](#)

[About Treasury](#) ▾

[Contact](#)



### Sustainable Investing

Treasury recognizes the importance of taking action to understand and navigate investments risks related to the global climate crisis to help deliver sustainable long-term returns for our beneficiaries.



### Treasury's Commitment to Sustainable Investing

*"Climate Change is real. It's here. Now. And it makes our job of providing secure retirements for those firefighters, teachers, and public servants who have worked hard for a better Oregon, more difficult. That means we must look far into the future 30 and 40 years from now and consider all the risks and opportunities."*

# ESG 2023 What's UP?

## Net Zero Commitments

## New York City Comptroller :: 2040 Commitment

### Net Zero by 2040

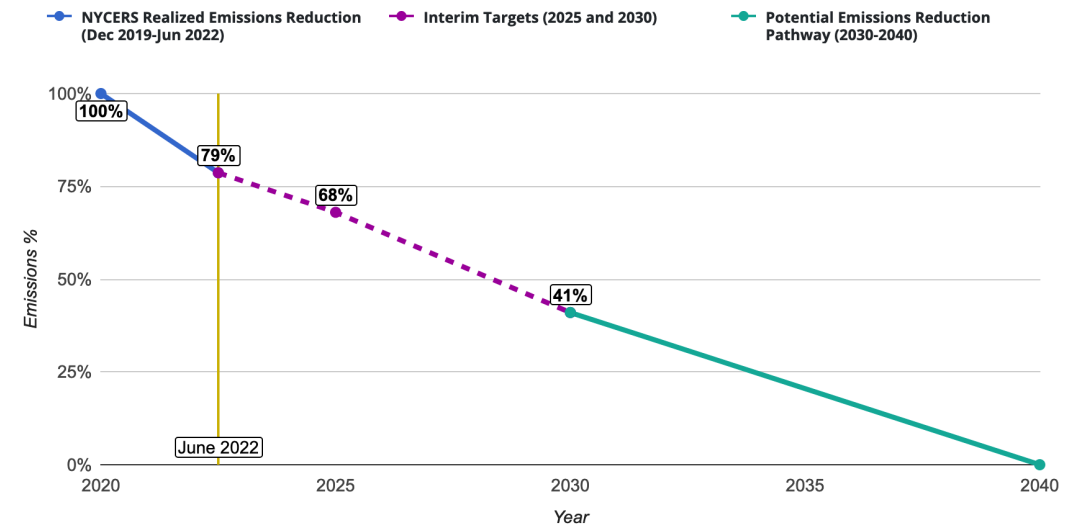
Comptroller Lander serves as custodian, trustee, and investment adviser to the New York City Retirement Systems. Climate change poses risks and opportunities to our investment portfolio. We seek to mitigate the risks, take advantage of opportunities, and reduce the contributions our investments make to climate change.

Climate change poses systemic and material investment risks to the global economy. New York City is among the first cities in the nation to commit to achieving net zero greenhouse gas emissions in our public pension funds by 2040. In 2021, three NYC retirement systems (NYCERS, TRS, and BERS) adopted a commitment to achieve a net zero greenhouse gas portfolio by 2040. These indicators share our progress to invest in climate solutions, divest from fossil fuels, and engage portfolio companies and asset managers to ultimately reach a net zero investment portfolio.

### Emission Reduction Targets

NYCERS TRS BERS

### New York City Employees' Retirement System



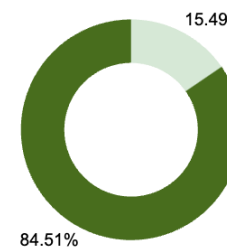
# Net Zero Targets by Region

Oceania

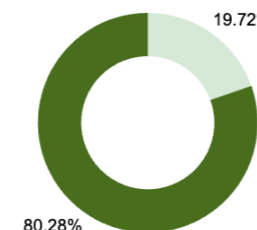
Policy



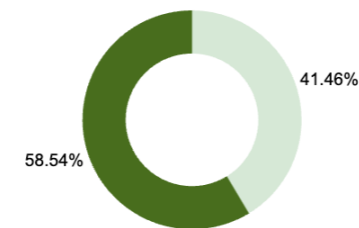
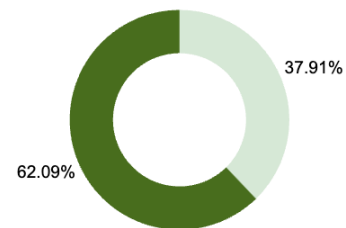
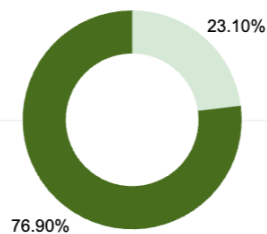
Commitment



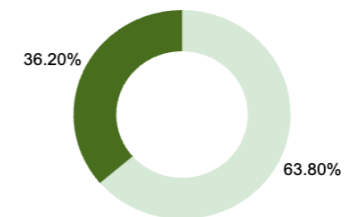
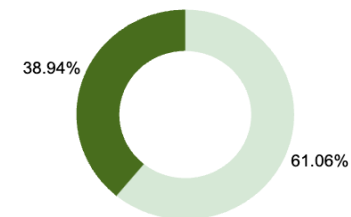
Target



European Union

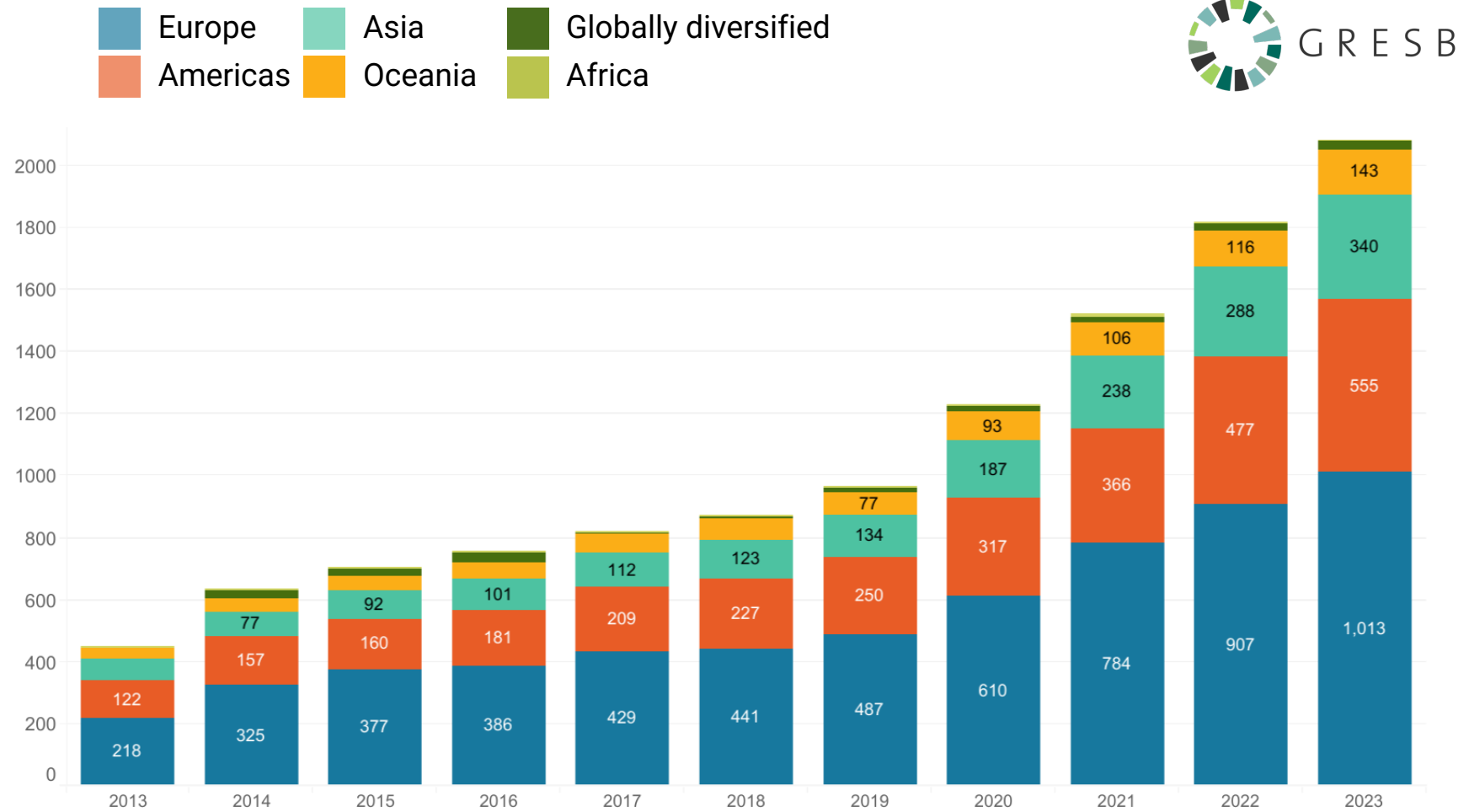


Americas



# ESG 2023 What's UP?

## GRESB Benchmark Members [funds + REITs]



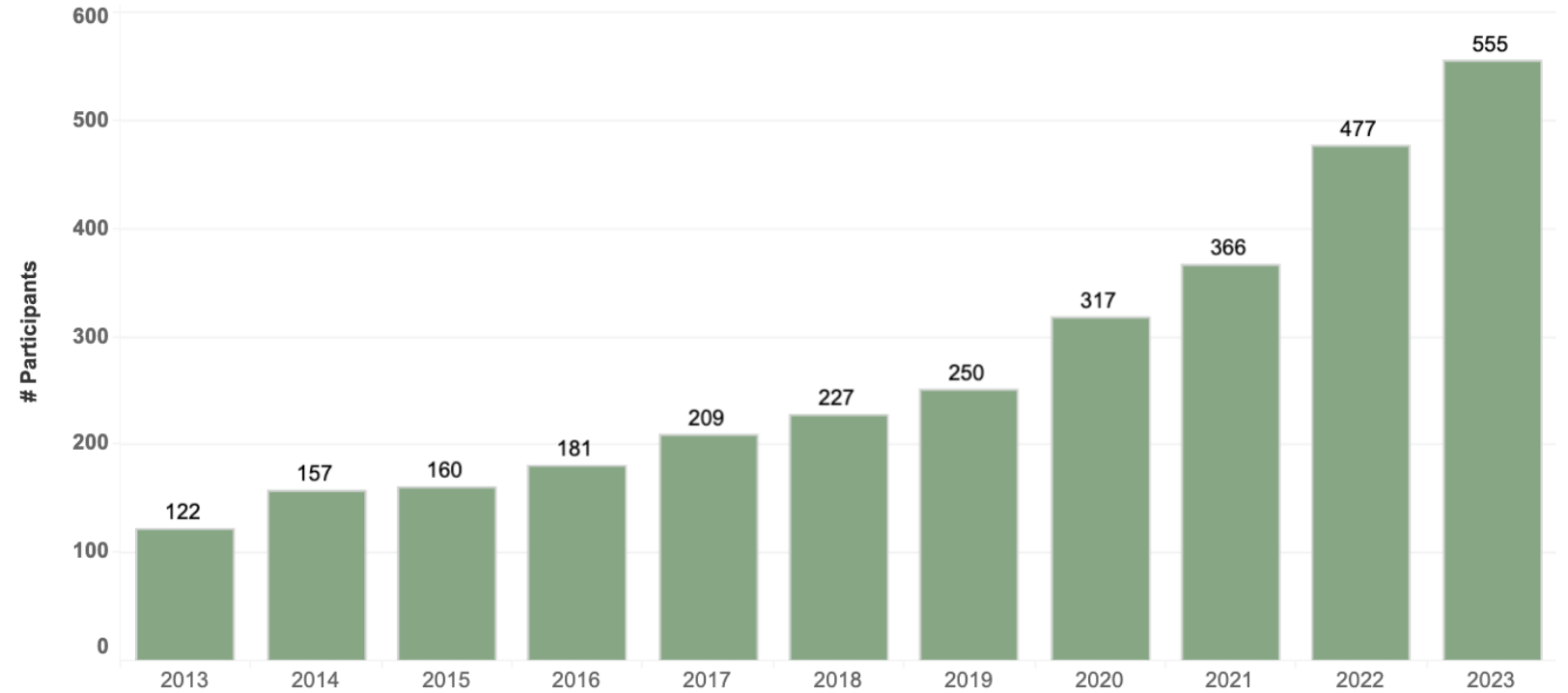
# GRESB Americas 2023

Top Growth Areas

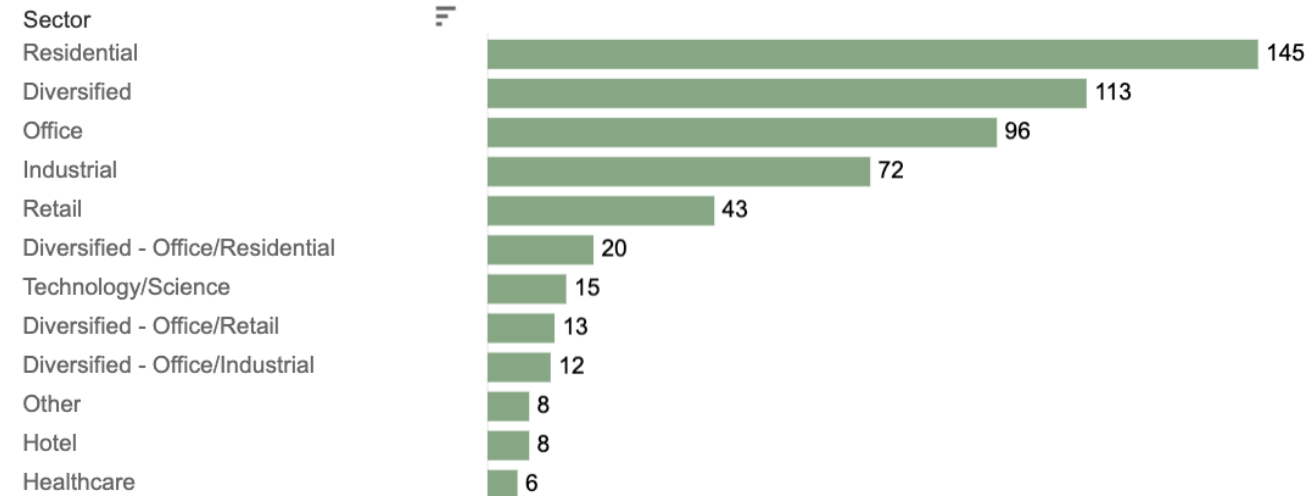
Multifamily Residential

Industrial

Diversified Value Add  
+ Opportunity Funds



# Participants by Sector



# ESG 2023 What's UP?

**GRESB Benchmark  
Members** [funds + REITs]

Type	2019	2023	% change
Total Portfolios in GRESB Benchmark	964 portfolios	<b>2,084 portfolios</b>	+116%
<b>Value Add + Opportunistic</b>	<b>184 funds</b>	<b>448 funds</b>	<b>+143%</b>
Core Funds	539 funds	<b>1,059 funds</b>	+96%
Listed Companies	240 REITs	<b>392 REITs</b>	+63%
NCREIF ODCE Funds	22 funds	<b>29 funds</b>	+30%
Total Asset Count	102,000 assets	<b>170,000 assets</b>	+67%

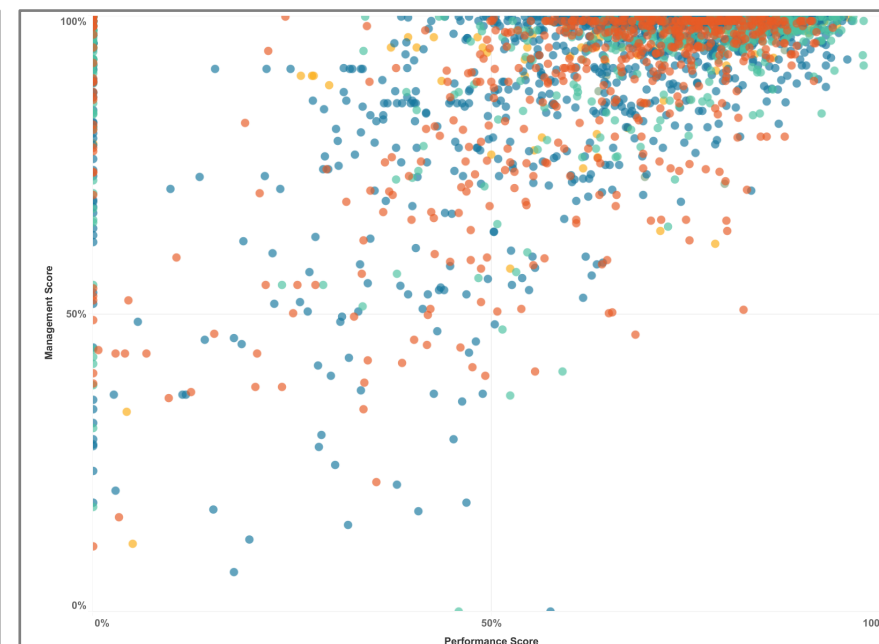


# ESG 2023 What's UP?

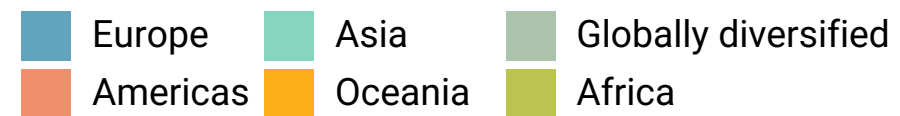
## GRESB Scores Globally



2019 Benchmark

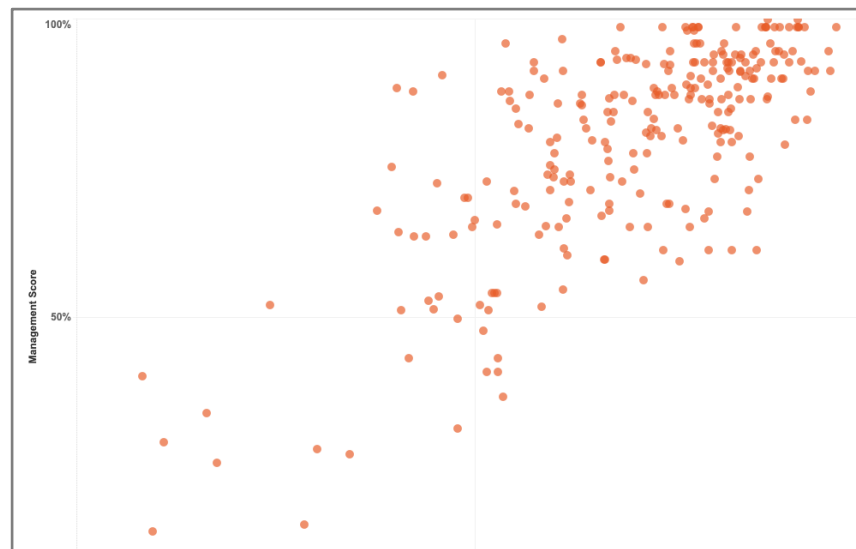


2023 Benchmark

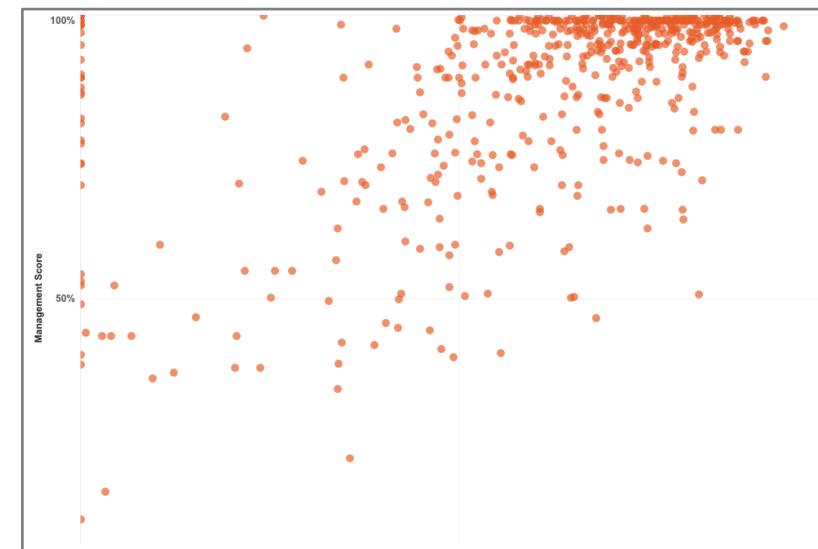


# ESG 2023 What's UP?

## GRESB Scores Americas



2019 Benchmark



2023 Benchmark



# GRESB Americas 2023

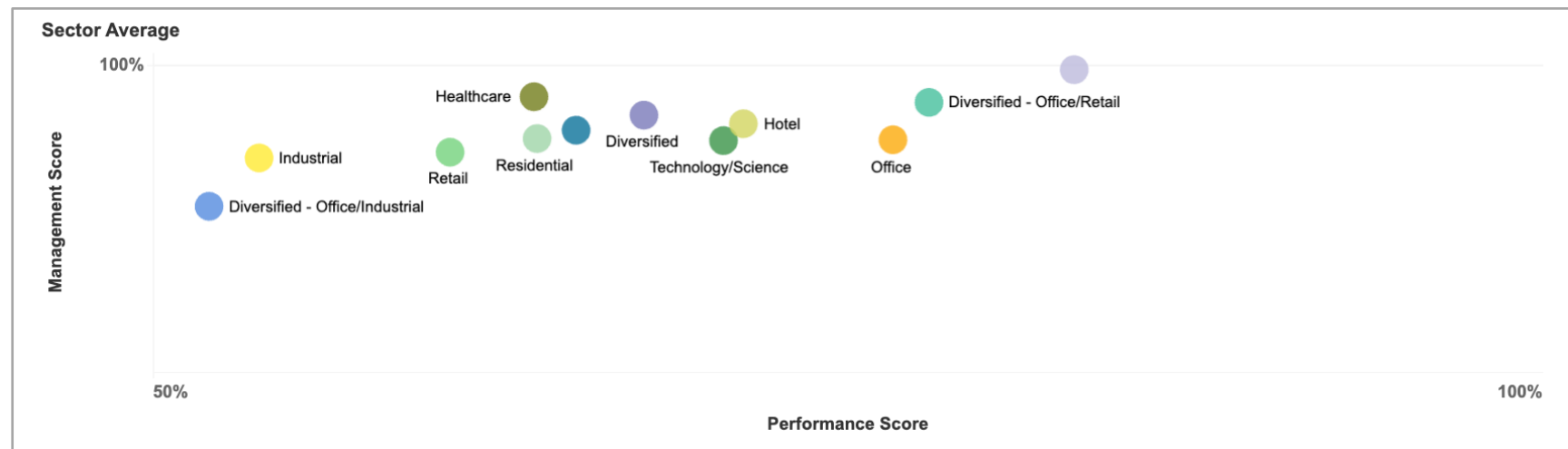
Raising the bar

## GRESB Star Ratings :: Score Breakdowns



### Standing Investments

GRESB Rating	Σ A	Top Limit	Bottom Limit	Limit Difference
★★★★★		94.38	87.47	6.91
★★★★		87.41	81.55	5.86
★★★		81.55	75.19	6.36
★★		75.17	65.13	10.05
★		64.83	7.09	57.75



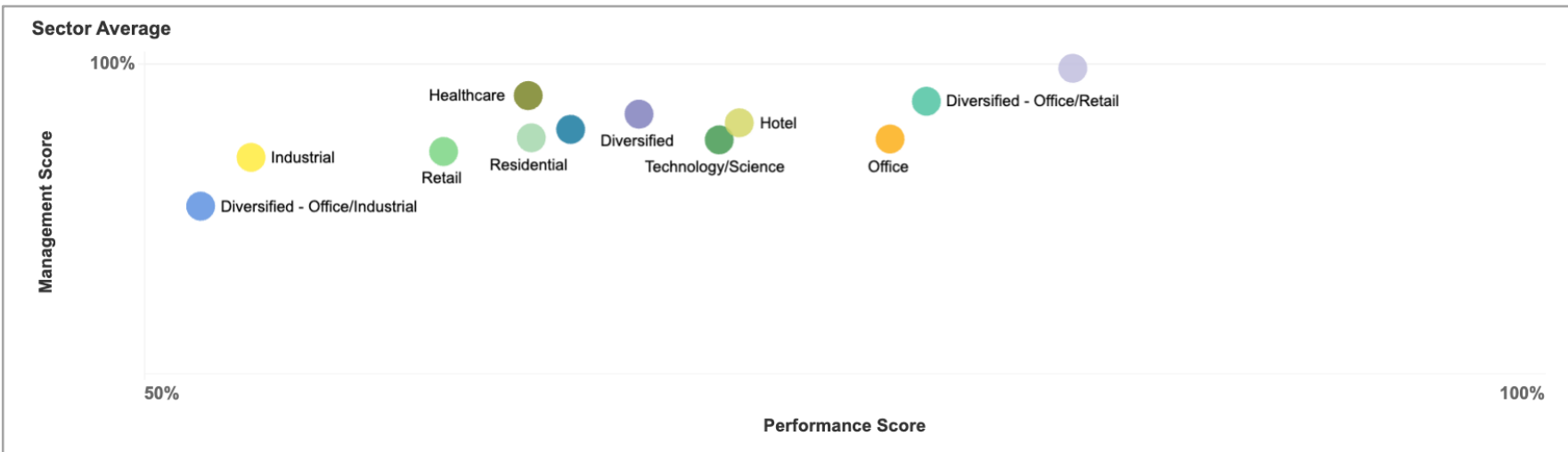
# GRESB Americas 2023

Raising the bar

## GRESB Score Averages – Management | Performance



GRESB Rating	Average Standing Investments Score	Average Management Score	Average Performance Score
★★★★★	89.68	29.34	60.34
★★★★☆	84.32	29.05	55.27
★★★☆☆	78.34	28.39	49.96
★★☆☆☆	70.72	26.92	43.80
★☆☆☆☆	49.83	20.34	29.49

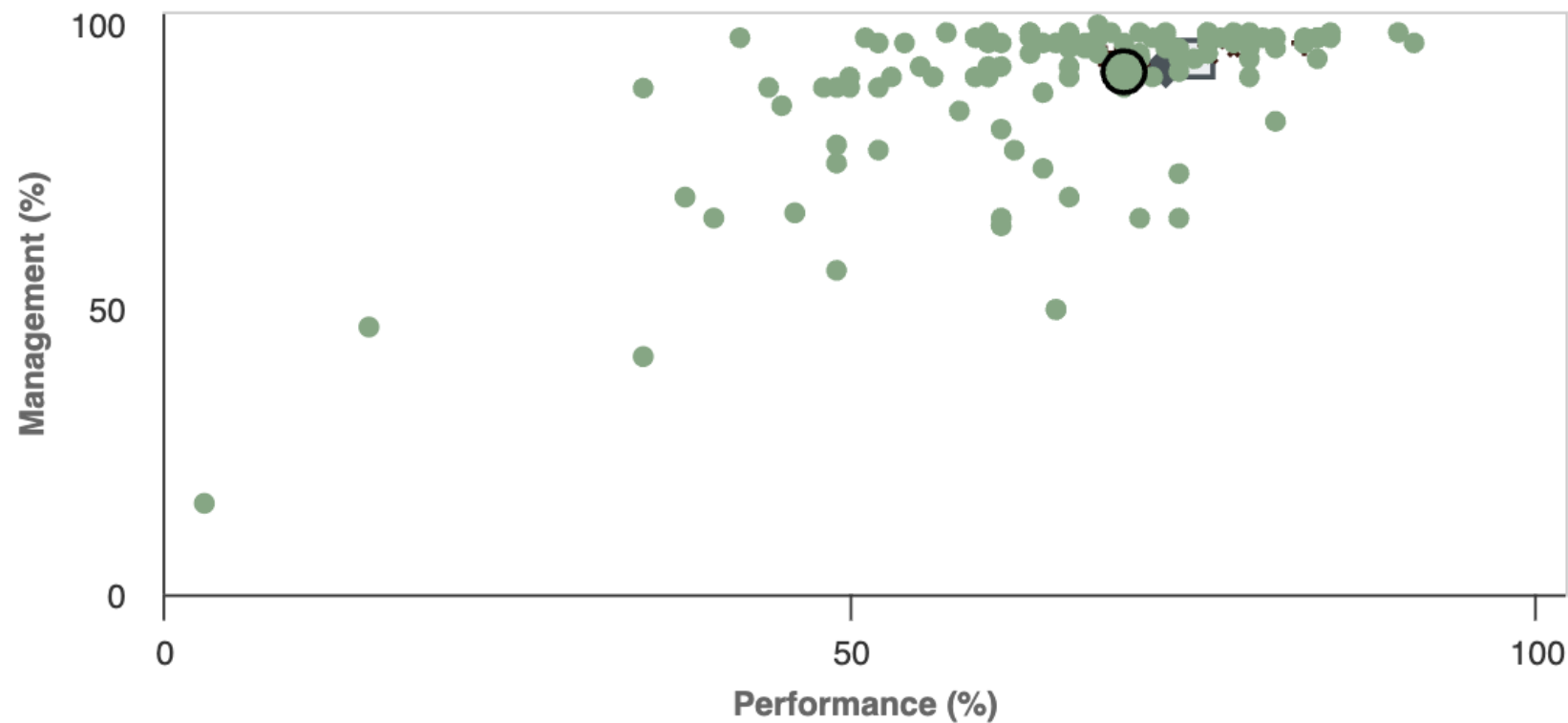


# ESG 2023

## What's UP?

Americas  
Multifamily Sector

### GRESB Model



- Portfolio    ● Portfolio Avg.    ◆ Benchmark Avg.    ● Benchmark    □ GRESB Average
- GRESB Universe    + Asia    × Europe    \* Americas    \* Oceania
- # Globally diversified    × Entities with only one component submitted

# ESG 2023 What's UP?

**Americas  
Multifamily Sector**

**GRESB 4 Stars  
GRESB 5 Stars**

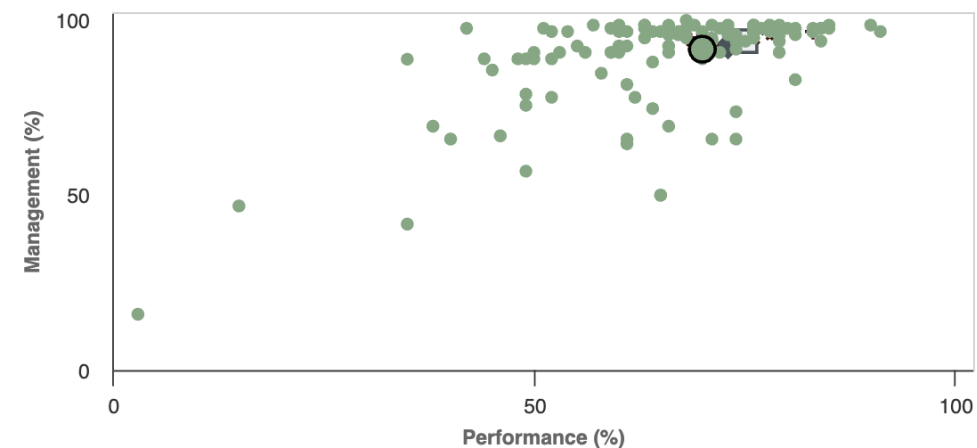
## GRESB 4 Stars

Avanath Affordable  
Crow Holdings  
Harrison Street  
Stoneweg  
Equity Residential REIT  
Avalon Bay REIT  
AIR Communities REIT  
Turner Impact Capital  
Essex Property Trust  
Pacific Urban  
Starlight  
Nuveen  
Lasalle  
UDR REIT  
Blackrock

## GRESB 5 Stars

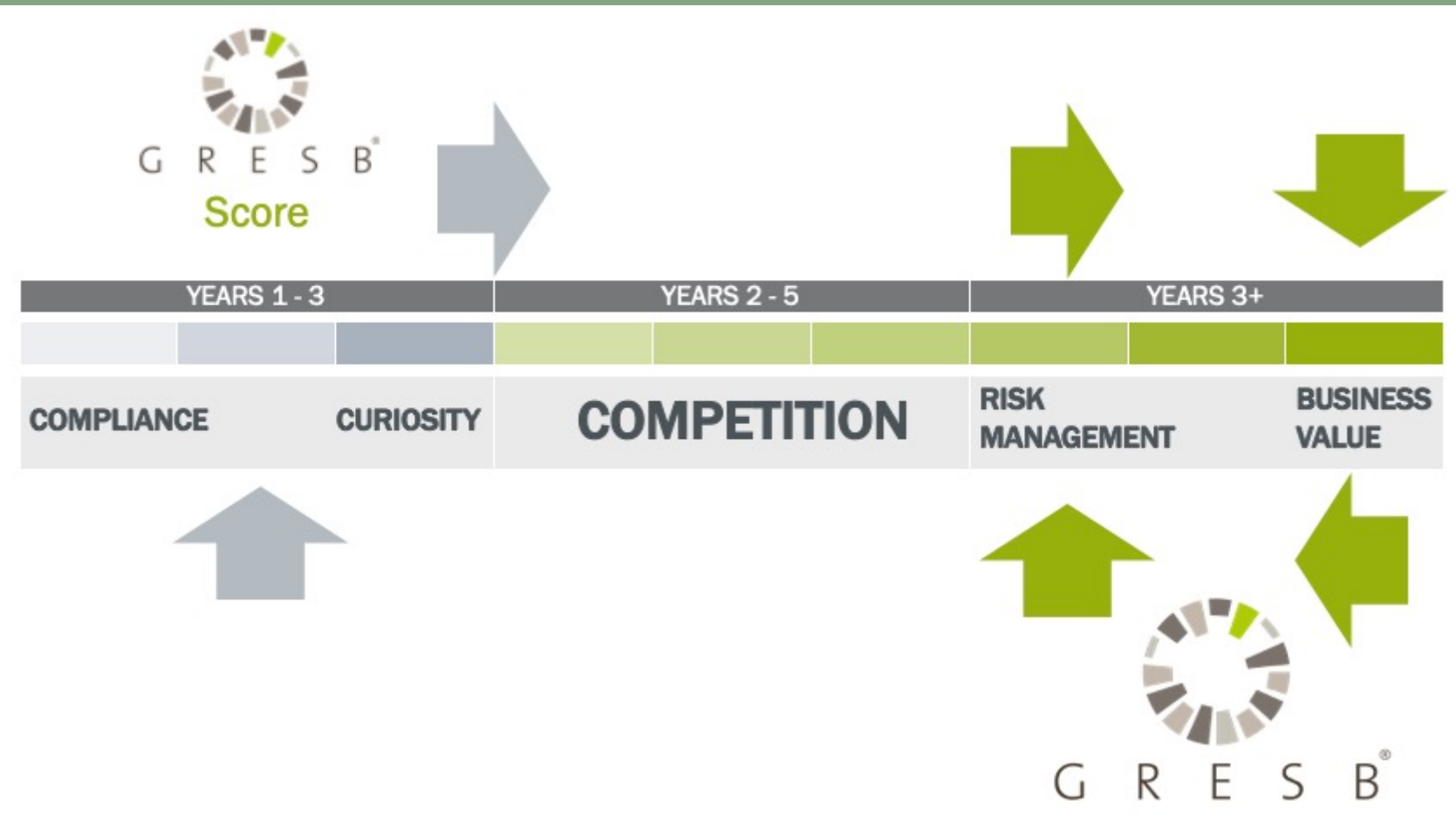
Berkshire Residential  
Lendlease  
Greystar (multiple funds)  
Sentinel Real Estate Fund  
GID Investment Advisers  
Clarion Partners

**GRESB Model**



● Portfolio    ● Portfolio Avg.    ◆ Benchmark Avg.    ● Benchmark    □ GRESB Average  
 ● GRESB-Universal    + Asia    × Europe    \* Americas    \* Oceania  
 # Globally diversified    × Entities with only one component submitted





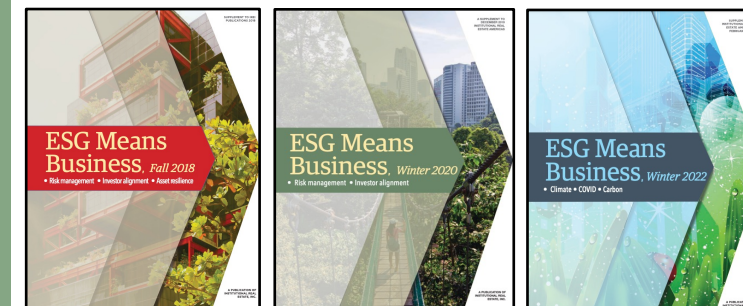
# RESULT

## Continuous Improvement

ESG benchmarking is an ongoing process

Organizational advancement + change

**There is no “winning” ESG**





## Participation & Score



## Peer Comparison



United States of America | Residential, Multi-family | Non-listed  
26<sup>th</sup> out of 27

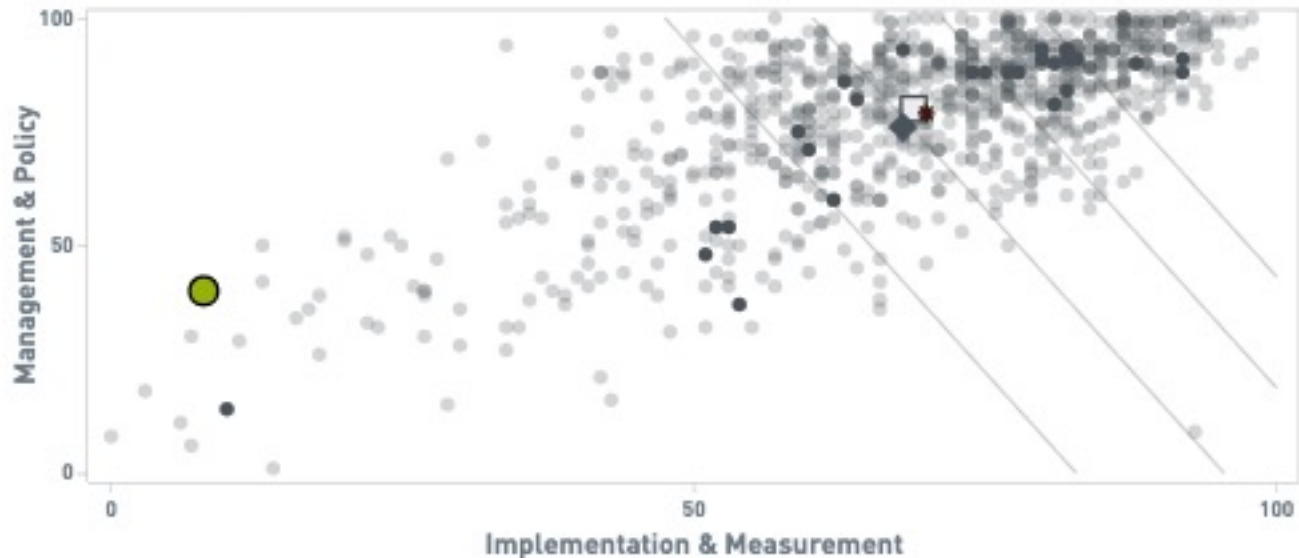


[Guidance](#)



[Guidance](#)

Score disclosed to peers



**R03.1** POINTS: 1.3/2

[Solutions](#) [Guidance](#)

## Risk assessments for new acquisition

Percentage of Peers

Issue	Percentage of Peers
Yes	100%
<b>Issues included</b>	
<input checked="" type="checkbox"/> Building safety and materials	100%
<input type="checkbox"/> Climate change adaptation	80%
<input type="checkbox"/> Contamination	100%
<input type="checkbox"/> Energy efficiency	100%
<input type="checkbox"/> Energy supply	80%
<input checked="" type="checkbox"/> Flooding	100%
<input type="checkbox"/> GHG emissions	80%
<input type="checkbox"/> Health and well-being	100%
<input type="checkbox"/> Indoor environmental quality	60%
<input checked="" type="checkbox"/> Natural hazards	100%
<input checked="" type="checkbox"/> Regulatory	100%
<input type="checkbox"/> Resilience	80%
<input type="checkbox"/> Socio-economic	60%
<input checked="" type="checkbox"/> Transportation	60%
<input type="checkbox"/> Water efficiency	100%
<input type="checkbox"/> Waste management	100%

# Kilroy Realty Corporation

Participation & GRESB Score



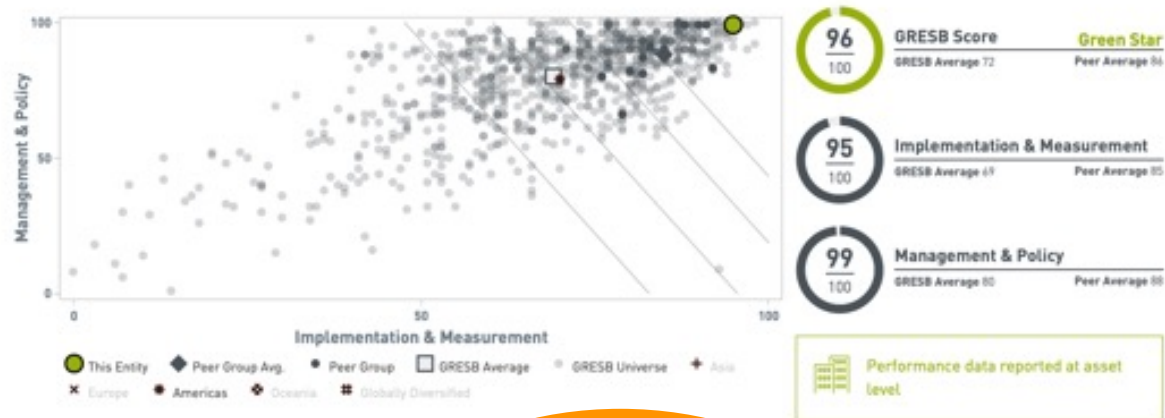
Peer Comparison



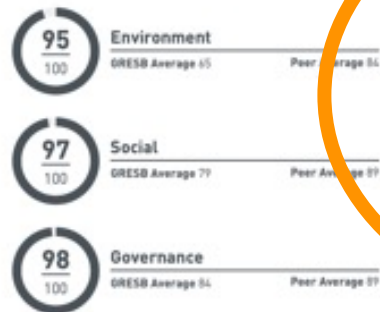
United States of America | Office | Listed  
out of 12



## GRESB Model



## ESG Breakdown



## Trend



## R03.1 POINTS: 2/2

### Risk assessments for new acquisition

Percentage of Peers

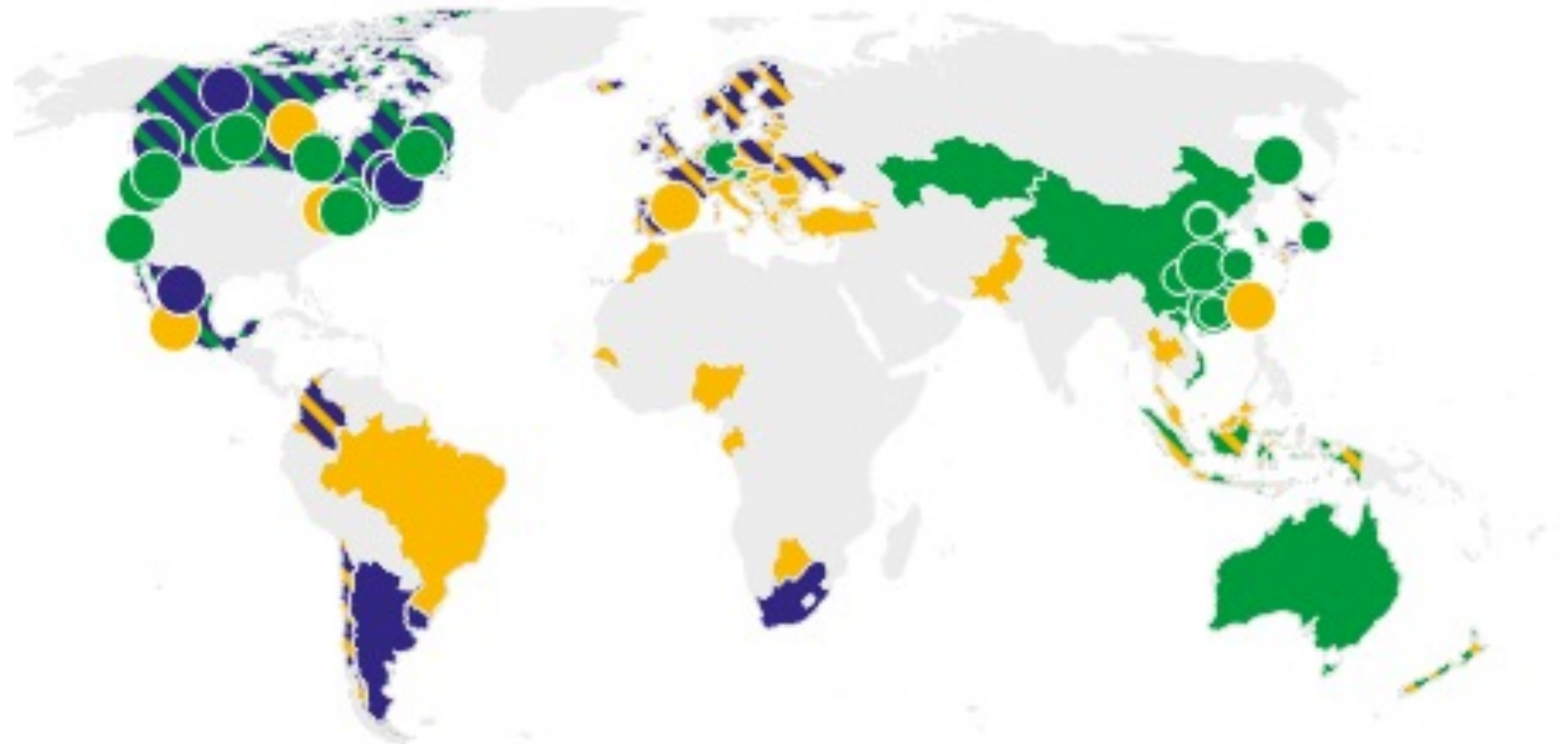
Yes 100%

#### Issues included

✓ Building safety and materials	100%
✓ Climate change adaptation	55%
✓ Contamination	100%
✓ Energy efficiency	100%
✓ Energy supply	91%
✓ Flooding	91%
✓ GHG emissions	64%
✓ Health and well-being	91%
✓ Indoor environmental quality	91%
✓ Natural hazards	100%
✓ Regulatory	100%
✓ Resilience	64%
✓ Socio-economic	36%
✓ Transportation	73%
✓ Water efficiency	91%
✓ Waste management	82%
✓ Water supply	82%

## Carbon Pricing Dashboard

- ETS implemented or scheduled for implementation
- ETS or carbon tax under consideration
- ETS implemented or scheduled, ETS or carbon tax under c...
- Carbon tax implemented or scheduled for implementation
- ETS and carbon tax implemented or scheduled
- Carbon tax implemented or scheduled, ETS under consider...



KEY STATISTICS ON REGIONAL, NATIONAL AND SUBNATIONAL CARBON PRICING INITIATIVE(S)

73	Carbon Pricing initiatives implemented
39	National Jurisdictions are covered by the initiatives selected
33	Subnational Jurisdictions are covered by the initiatives selected
<p>In 2023, these initiatives would cover <b>11.66 GtCO<sub>2</sub>e</b>, representing <b>23%</b> of global GHG emissions</p>	

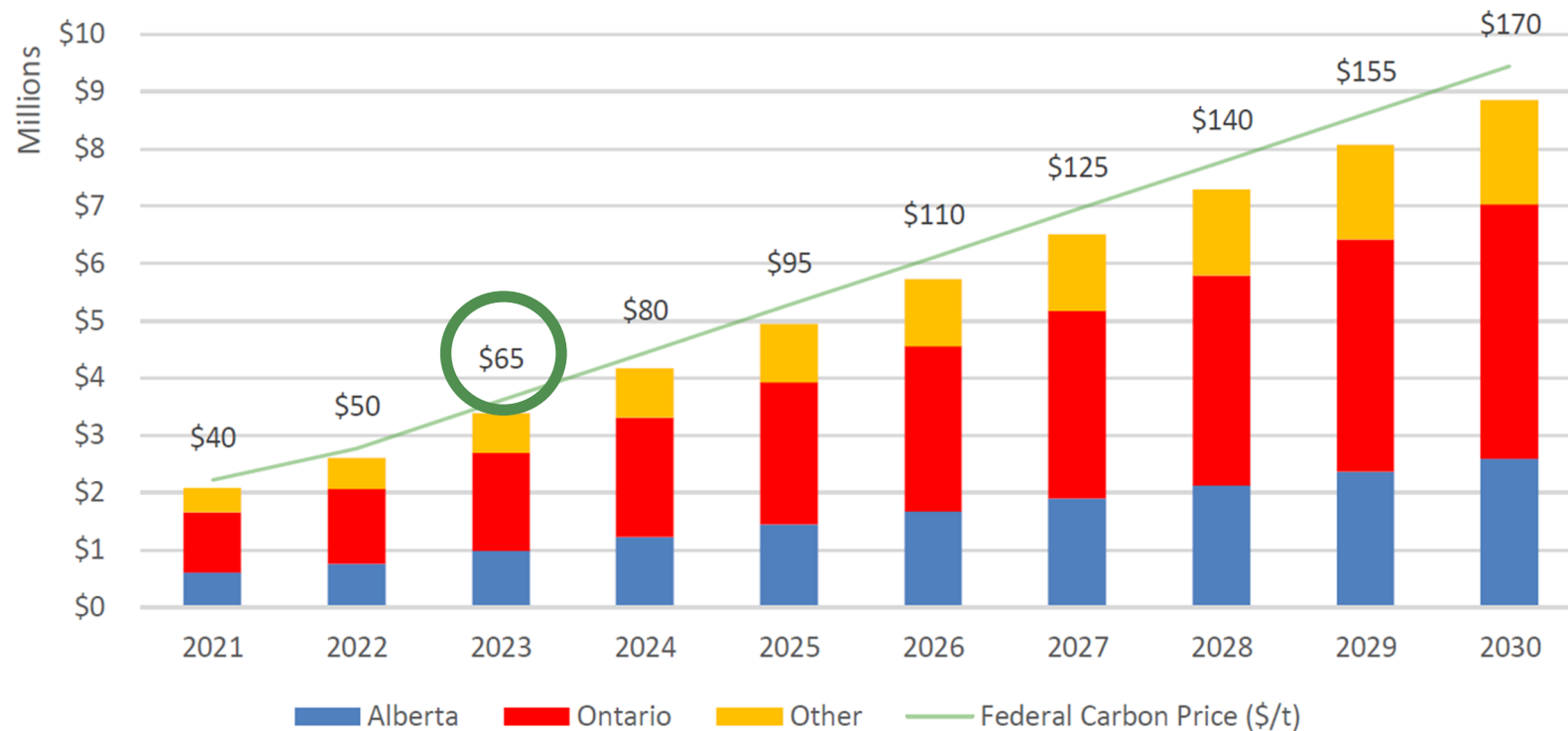
# ESG 2023 What's UP?

## Carbon Reduction Strategies

# ESG 2023 What's UP?

## Carbon Reduction Strategies

### Pricing in Carbon Emissions in Canada

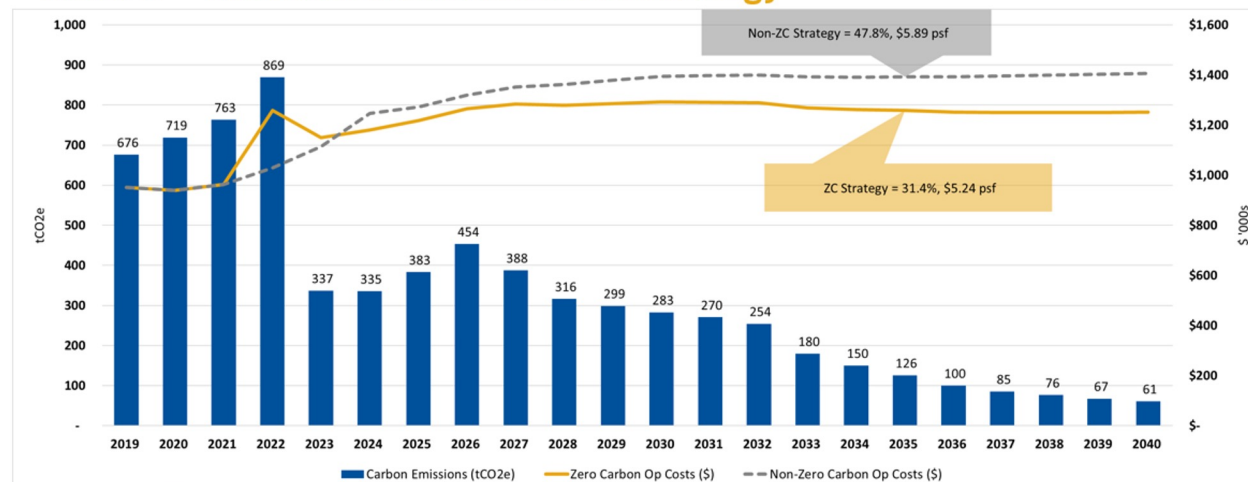


# ESG 2023 What's UP?

## Carbon Reduction Strategies

# Asset Managers Decarbonization Strategies

## Asset B – Executed Decarbonization Strategy



- \$3.9M**  
Of capital invested to decarbonize
- 81%**  
Reduction in carbon emissions by 2035 from 2019 baseline
- 50%**  
Reduction in Carbon Emissions by Certification Date (2022)

Strategy	Measure	2019	2020	2022	2024	2026	2028	2030	2032	2034	2036	2038	2040
Non-Zero Carbon	Total Emissions	676	719	869	841	944	794	748	706	589	526	489	462
Non-Zero Carbon	Utility Costs incl Carbon Tax (\$)	952,019	939,868	1,029,967	1,106,818	1,179,922	1,222,862	1,255,868	1,260,637	1,252,592	1,253,936	1,259,965	1,267,626
Non-Zero Carbon	Carbon Offsets (\$)	-	-	-	-	-	-	-	-	-	-	-	-
Non-Zero Carbon	Capital Spend (\$)	-	-	-	2,224,800	-	-	-	-	-	-	-	-
Non-Zero Carbon	Capital Amortization (\$)	-	-	-	139,185	139,185	139,185	139,185	139,185	139,185	139,185	139,185	139,185
Non-Zero Carbon	Op Costs (\$) incl Offsets, Carbon T	952,019	939,868	1,029,967	1,246,003	1,319,107	1,362,047	1,395,053	1,399,822	1,391,777	1,393,121	1,399,150	1,406,811
Non-Zero Carbon	Total Utility Consumption (ekWh)	8,413,578	8,287,374	8,040,618	7,801,208	7,568,927	7,343,563	7,124,908	6,912,764	6,706,936	6,507,237	6,313,484	6,125,500
Non-Zero Carbon	Building Area (sqft)	238,885	238,885	238,885	238,885	238,885	238,885	238,885	238,885	238,885	238,885	238,885	238,885
Non-Zero Carbon	Op Costs (\$/sqft) incl Offsets, Carl	3.99	3.93	4.31	5.22	5.52	5.70	5.84	5.86	5.83	5.83	5.85	5.89
Zero Carbon	Total Emissions	676	719	869	335	454	316	283	254	150	100	76	61
Zero Carbon	Utility Costs incl Carbon Tax (\$)	952,019	939,868	1,029,967	964,757	1,030,735	1,050,162	1,059,676	1,060,444	1,048,218	1,045,097	1,046,334	1,048,875
Zero Carbon	Carbon Tax Avoided (\$)	-	-	-	40,435	53,959	66,919	79,034	76,848	74,603	72,393	70,252	68,171
Zero Carbon	Carbon Offsets (\$)	-	-	34,767	21,463	39,912	35,426	38,469	34,593	20,407	13,595	10,366	8,283
Zero Carbon	Capital Spend (\$)	-	-	3,876,996	-	-	-	-	-	-	-	-	-
Zero Carbon	Capital Amortization (\$)	-	-	193,850	193,850	193,850	193,850	193,850	193,850	193,850	193,850	193,850	193,850
Zero Carbon	Op Costs (\$) incl Offsets, Carbon T	952,019	939,868	1,258,584	1,180,070	1,264,498	1,279,437	1,291,995	1,288,887	1,262,475	1,252,541	1,250,550	1,251,008
Zero Carbon	Total Utility Consumption (ekWh)	8,413,578	8,287,374	8,040,618	5,065,823	4,897,944	4,735,064	4,577,034	4,423,710	4,274,950	4,130,620	3,990,587	3,854,724

Kingsett Capital Carbon Reduction Tool – download it here:

<https://sustainability.kingsettcapital.com/downloads/>

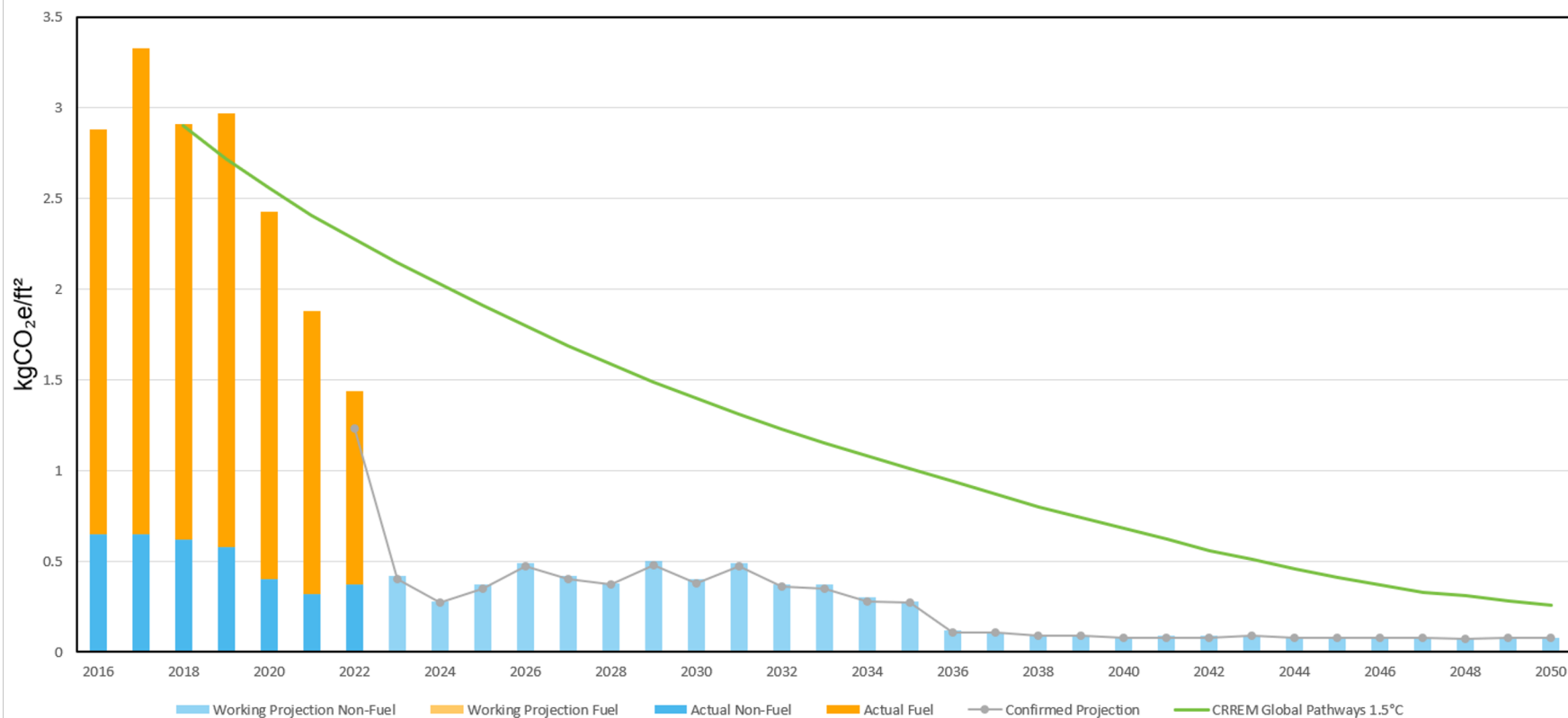
# ESG 2023

## What's UP?

### Carbon Reduction Strategies

## Paris Climate Agreement @1.5C

### Emissions Performance vs. Paris Climate Agreement



# GRESB Transition Risk Report

- Transition risk insights based on data provided in the Real Estate Assessment
- Data estimation and GHG calculation methodology built from asset-level data
- Built on the Net Zero Asset Owner Alliance and IIGCC recommended CRREM Decarbonization Pathways.



# ESG 2023 :: What's Up

## Summary

### **LP ESG Interest**

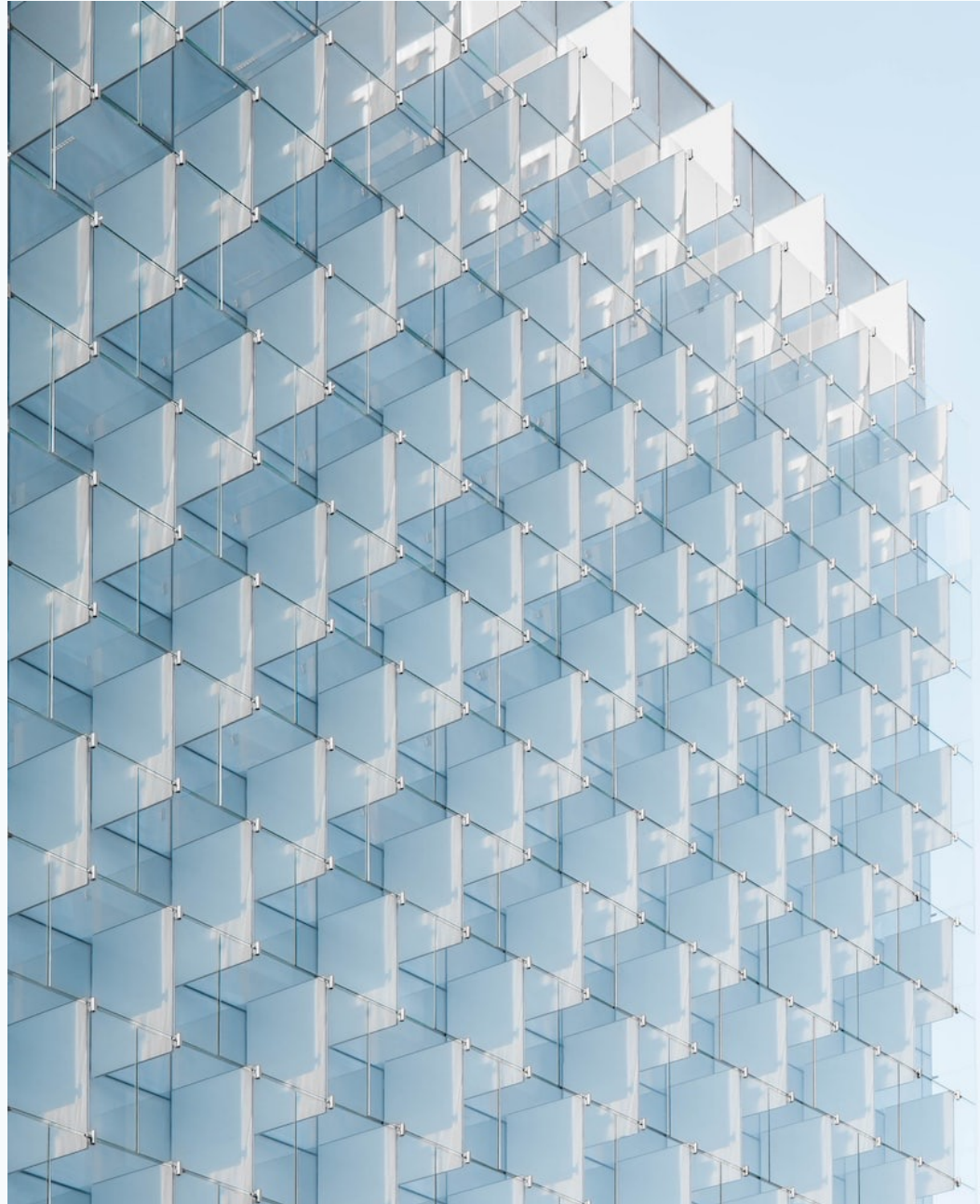
- carbon footprinting
- climate damage risk exposure
- best-in-class fund managers | REITs

### **Net Zero Commitments**

### **GRESB Benchmark Members**

### **GRESB Scores**

### **Carbon Reduction Strategies**







What else is up?

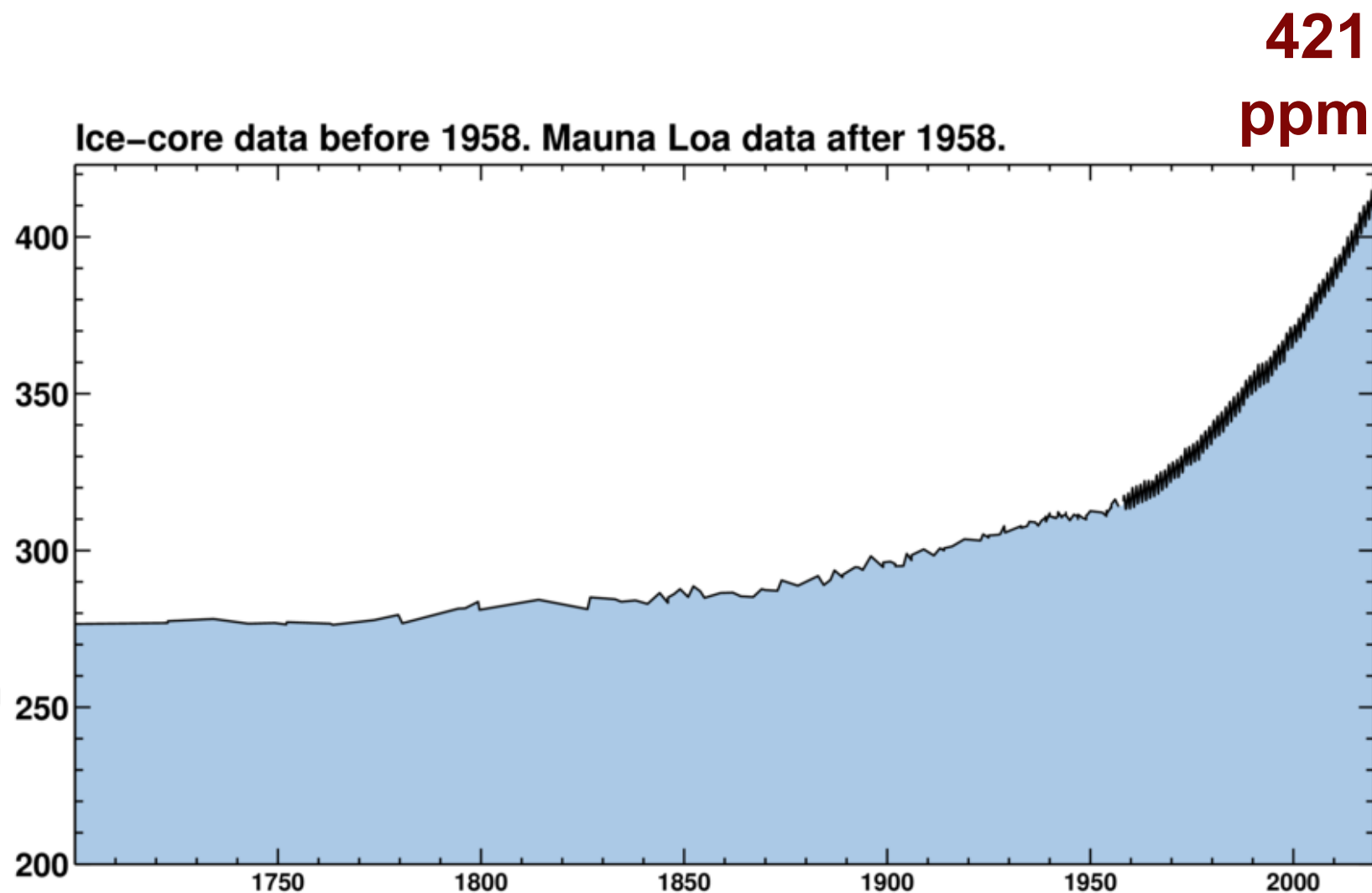
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[gresb.com](https://www.gresb.com)

# ESG 2023

## What else is UP?

1. Carbon = 420 PPM



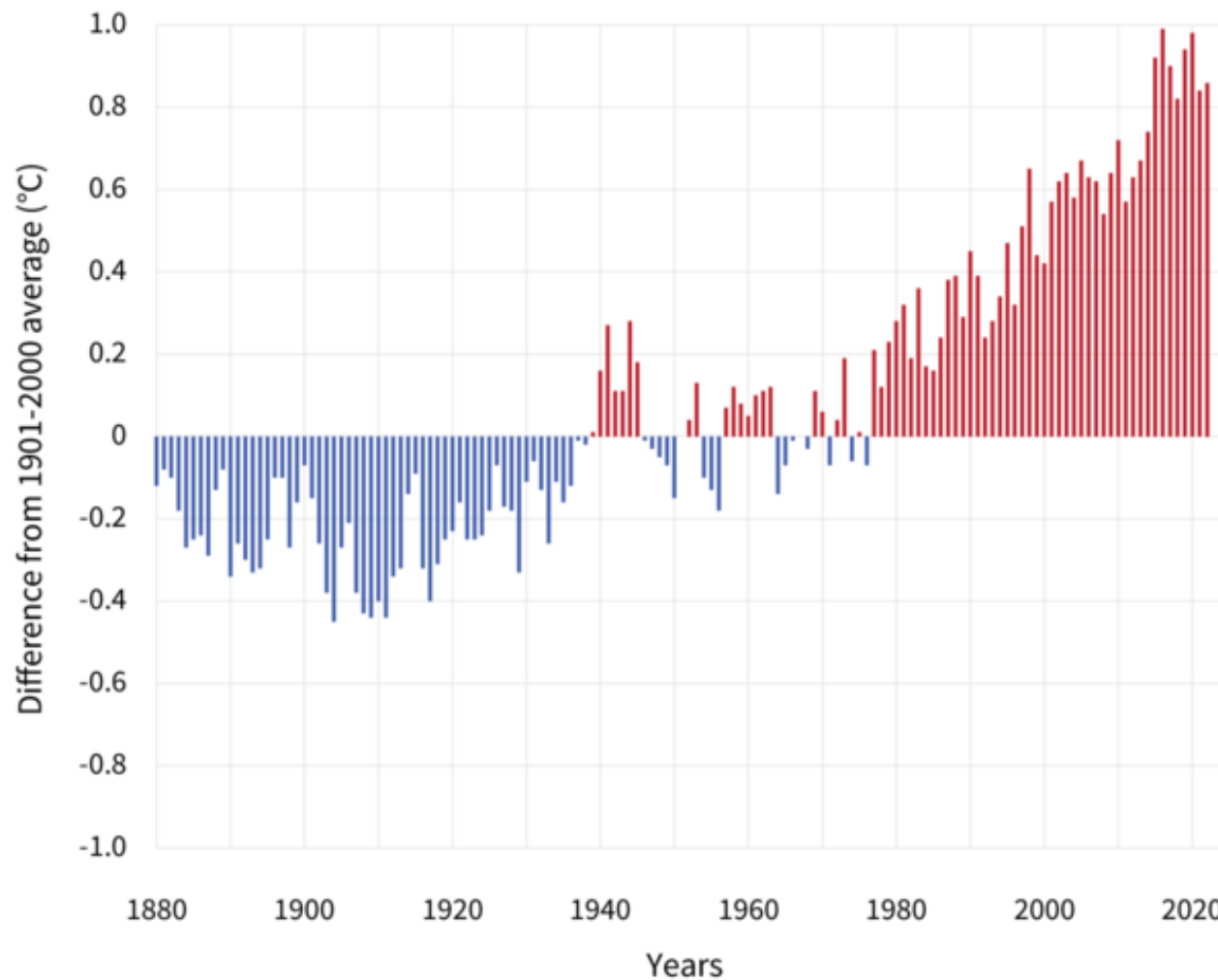
# ESG 2023

## What else is UP?

1. Carbon = 420 PPM

2. Global Surface  
Temperatures

## GLOBAL AVERAGE SURFACE TEMPERATURE

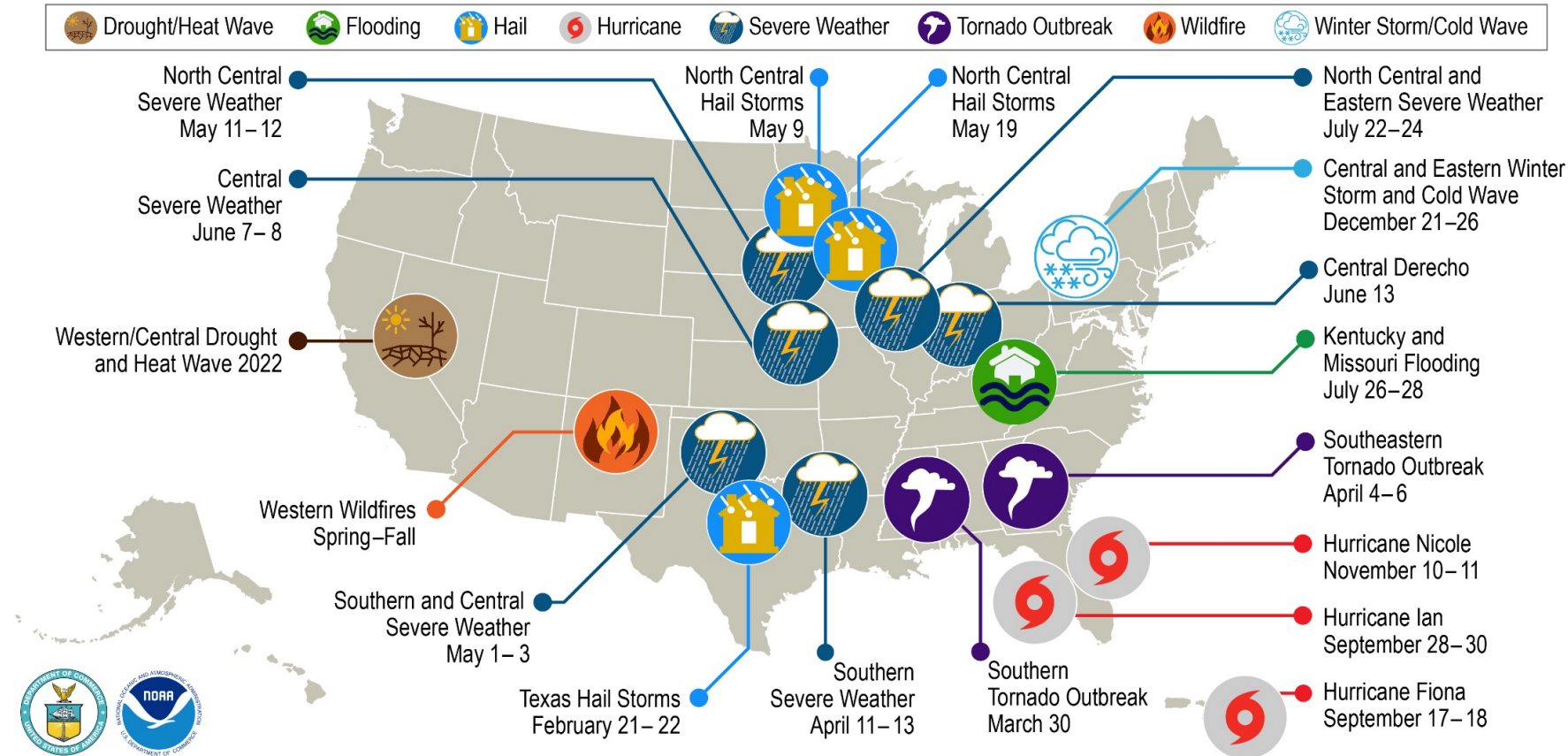


# ESG 2023

## What else is UP?

1. Carbon = 420 PPM
2. Global Surface Temperatures
3. Climate damages

### U.S. 2022 Billion-Dollar Weather and Climate Disasters



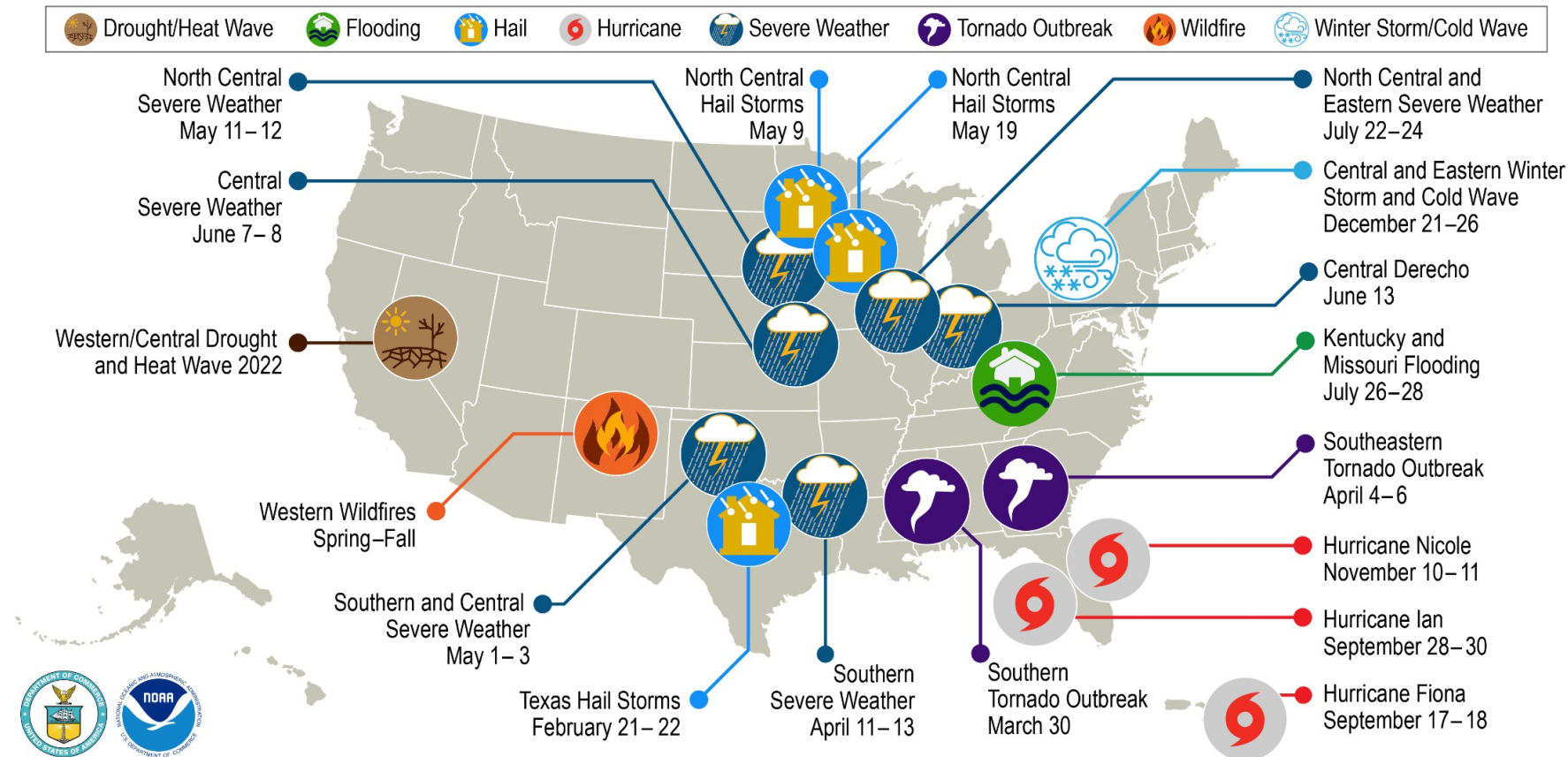
This map denotes the approximate location for each of the 18 separate billion-dollar weather and climate disasters that impacted the United States in 2022.

# ESG 2023

## What else is UP?

1. Carbon = 420 PPM
2. Global Surface Temperatures
3. Climate damages

### U.S. 2022 Billion-Dollar Weather and Climate Disasters



This map denotes the approximate location for each of the 18 separate billion-dollar weather and climate disasters that impacted the United States in 2022.

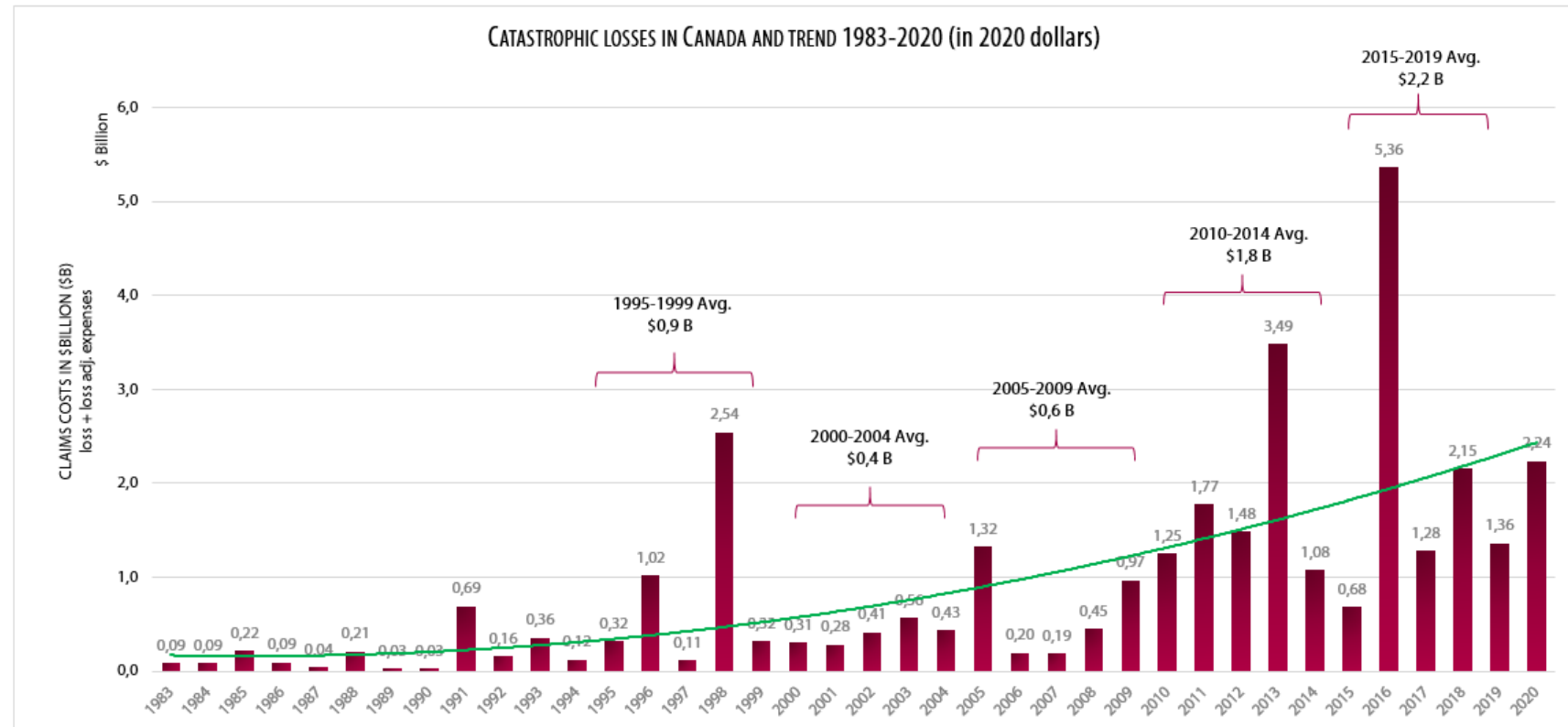
# \$169.8 Billion

# ESG 2023

## What else is UP?

1. Carbon = 420 PPM
2. Global Surface Temperatures
3. Climate damages

## Canada Insured Losses – 2020 dollars



Sources: 1983-2007: BAC, PCS Canada, Swiss Re, Deloitte; 2008-2020: CatIQ.

# GRESB TCFD Alignment Report

## What to expect?

- › Built from TCFD-relevant data straight from the GRESB Assessments
- › Advantages:
  - › Identify gaps in TCFD disclosure efforts
  - › Benchmark TCFD process adoption with peers
  - › Communicate TCFD readiness to investors



# ESG 2023

## What else is UP?

1. Carbon = 418.5 PPM

2. Global Surface Temperatures

3. Climate damages

4. Regulations

# United States Energy Disclosure Laws





# ESG 2023

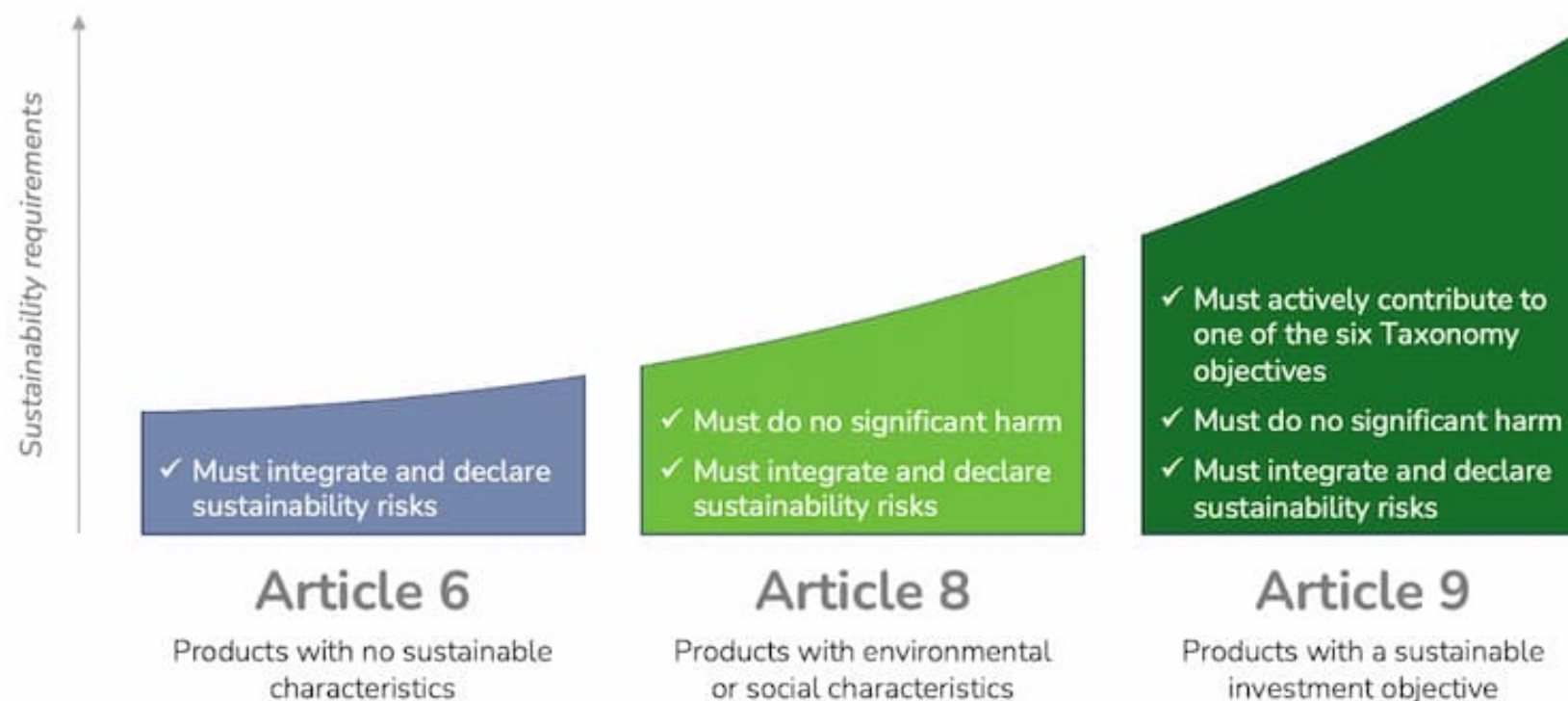
## What else is UP?

1. Carbon = 420 PPM
2. Global Surface Temperatures
3. Climate damages
- 4. Regulations**

# European Union

## Sustainable Finance Disclosure Regulation

### Financial product classification in SFDR



# GRESB SFDR Reporting Solution

## Principal Adverse Impact (PAI)

Drawing on the Real Estate Assessment, GRESB's SFDR solution can improve product level reporting.

- › Start with more accurate data
- › Align with future CSRD requirements
- › **Benefit from sophisticated estimations**
- › Gain added flexibility in reporting



## Important Takeaway Concept

# ESG = Structured Non-Financial Data



## Environmental

Energy consumption  
Water use metrics  
Waste generation  
GHG emissions – all scopes  
Science-based targets  
Climate risk assessments  
Management systems  
3<sup>rd</sup> party ratings [LEED, etc.]

## Social

Risk assessments  
Training & development  
Tenant satisfaction  
Employee engagement  
Health & well being  
Diversity & inclusion  
Supply chain monitoring  
Community impacts

## Governance

Decision accountability  
Personnel targets  
Reporting & transparency  
Industry leadership  
Transitional risk assessments  
Whistleblower protections  
Policies - green leasing & TI's  
Data process reviews & audits

# New GRESB Member Solutions



**Internal: Management Decision-making**

**External: Stakeholder Communications**

**Download slide presentations**

<https://www.gresb.com/nl-en/gresb-results-events-2023/>



G R E S B

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**Dan Winters, CRE**  
GRESB Senior Director

d.winters@gresb.com



# ESG Experts Panel



**Dan Winters**  
GRESB



**Isela Rosales**  
Bridge Investment Group



**Ryan Tinus**  
LivCor



**Michelle Winters**  
Conservice

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