

**Schoen Sustainability: Founder and Principal (2018-2021)**

- ▶ Advise real estate investors and managers on ESG strategy and implementation to create long-term value, including integration into internal processes and systems such as quantitative risk analysis models

**Clarion Partners: Director, Sustainability (2015-2018)**

- ▶ Integrated ESG analysis into due diligence, annual business planning, and management processes
- ▶ Managed ESG reporting including GRESB, PRI, CDP, and annual Corporate Responsibility report

**U.S. Department of Energy: Fellow (2014-2015)**

- ▶ Led commercial real estate segment of Obama Administration's 13-billion-square-foot Better Buildings Initiative

**First Potomac Realty Trust (NYSE: FPO): Manager, Energy and Sustainability (2011-2014)**

- ▶ Established energy and sustainability department and reduced total annual energy spend by 10%

**Johns Hopkins University: M.S. Energy Policy and Climate (2010-2014)**

- ▶ Climate science, energy technology, energy project finance, cash flow analysis, MBA accounting and financial reporting

**U.S. Green Building Council: LEED Associate and Hospitality Sector Lead (2008-2011)**

- ▶ Contributed to technical development of global LEED standards; grew LEED hospitality market share by 400%; ghost-wrote for C-suite

**Corporate Executive Board (NYSE: CEB): Associate (2006-2007)**

- ▶ Recruited C-level executives to Real Estate Executive Board; contributed to development of Sustainability Leadership Council

**University of Maryland: B.A. Sociology (2002-2006)**

- ▶ 35% of coursework in economics, statistics, business management, organizational development, and architecture

- **Subject matter expertise**

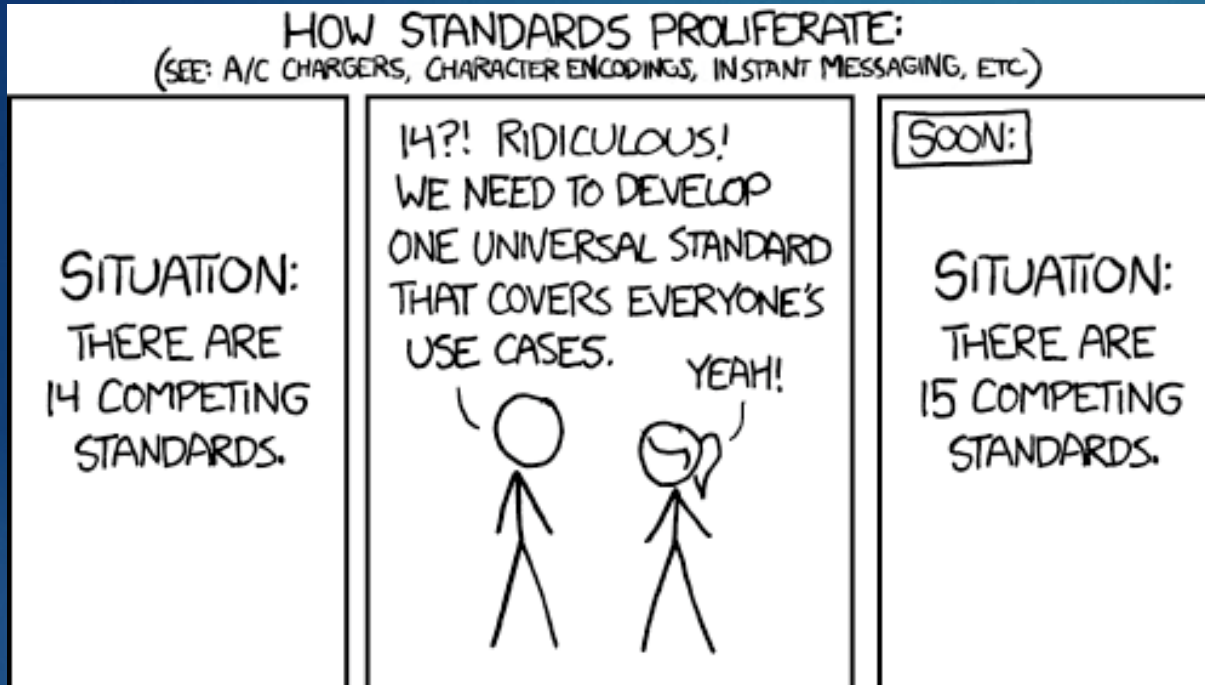
- **In-company experience: private-sector sensibility and intimate knowledge of how ESG efforts play out on the ground**

- **Efficient and effective ESG implementation**

# ESG Today

(Some of the) ESG Standards, Disclosure Frameworks, and Certifications Applied to U.S. Real Estate Assets, Owners, Managers, and Investors





Credit: Ben Myers, Boston Properties

A March 2021 EDHEC Infrastructure Institute report<sup>1</sup> reviewed 17 ESG assessment schemes and found that they exhibited:

1. Considerable scope divergence (including the definition of infrastructure and ESG)
2. Measurement bias (including a tendency to use mostly qualitative measures)
3. Process and input indicator bias (as opposed to actual impact or risk measures)

<sup>1</sup> [https://edhec.infrastructure.institute/wp-content/uploads/2021/03/ESG\\_Approach\\_Roadmap\\_2021.pdf](https://edhec.infrastructure.institute/wp-content/uploads/2021/03/ESG_Approach_Roadmap_2021.pdf)

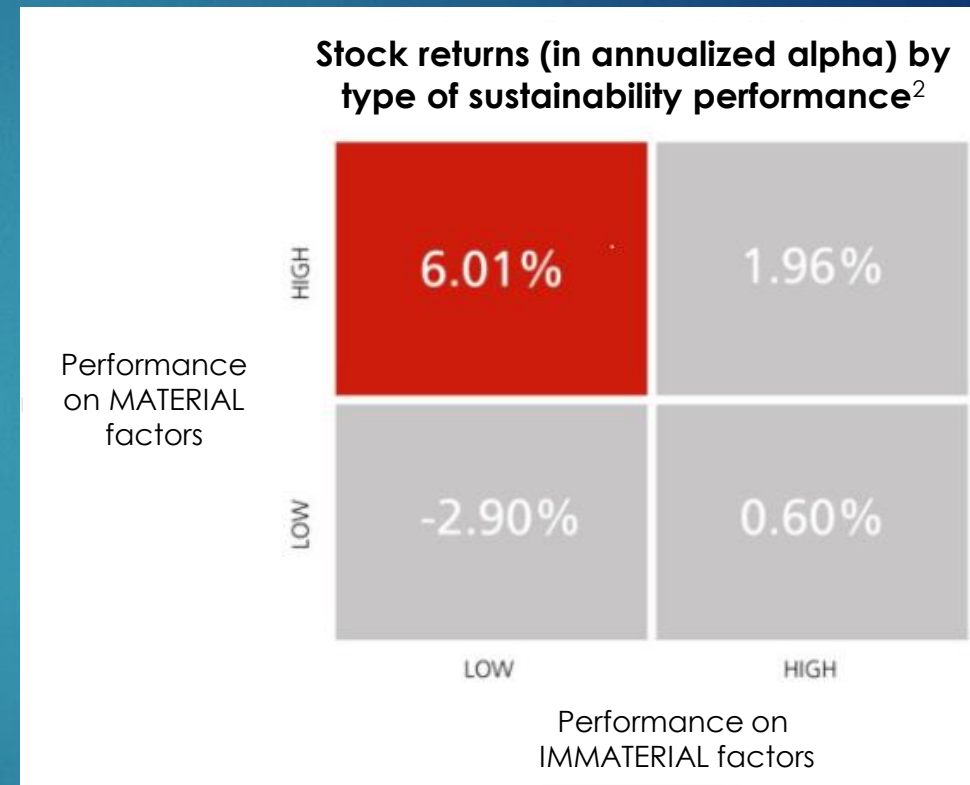
<sup>2</sup> [realassets.ipe.com/news/infrastructure-esg-reporting-schemes-not-capturing-financial-risks-edhec-warns/10051312.article](https://realassets.ipe.com/news/infrastructure-esg-reporting-schemes-not-capturing-financial-risks-edhec-warns/10051312.article)



# Harvard Business School<sup>1</sup>: Some ESG Investments Are Financially Beneficial While Others Are Neutral or Even Detrimental

- ▶ WINNERS: Entities that invest in material sustainability/ESG factors and avoid immaterial sustainability/ESG factors have the best future financial performance.<sup>1</sup>
- ▶ LOSERS: Underinvestment in sustainability/ESG and investment in *immaterial* sustainability/ESG associated with inferior and average financial performance.
  - ▶ Investors and companies that underinvest in sustainability/ESG or invest in immaterial sustainability/ESG miss or dilute the financial benefits of effective ESG efforts.
  - ▶ 80% of ESG disclosures are financially immaterial.<sup>1,2</sup>

***ESG focus determines whether ESG is a distraction from or contributor to financial performance***



<sup>1</sup> Mozaffar Khan, George Serafeim, and Aaron Yoon (2015): [papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2575912](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2575912)

<sup>2</sup> SASB slide deck 8/8/2016: <https://www.schoensustainability.com/thought-leadership>

## What is material? Blackstone's Don Anderson (2017)<sup>1</sup>

“Many... tackle sustainability in a way that is costly and does not ultimately improve performance instead of driving fast, measurable change by embedding measurable, high-ROI strategies that drive earnings and improve environmental performance”:

- ▶ **Company One** engaged a consultant and spent many months and a lot of money collecting data from various divisions and regions to calculate a proper “carbon footprint”. A separate “green team” with representatives from across the firm simultaneously pondered the question: “What does sustainability mean to us?”
- ▶ **Company Two:** A massive global real estate portfolio owner and manager hired a senior, full-time sustainability lead, created a stakeholder-facing website focused on sustainability, joined a number of organizations dedicated to environmental performance improvement and public disclosure, and ran an RFP process to select a carbon emissions data quality vendor.
- ▶ **Company Three** developed a carbon calculator but missed the potential to drive environmental performance improvement, a loss for the company as well as their environmentally-concerned customers.

“None of these activities reduced these firms’ environmental footprint, produced cost savings associated with reduced energy use, or created a corporate culture for future impact. They also did not meaningfully impact core business. As such, none of these activities would qualify as first-tier interventions for Blackstone’s Team. That is because they are not direct paths to performance improvement for any company with action-oriented leadership and results-oriented stakeholders.”

<sup>1</sup> [www.blackstone.com/docs/default-source/black-papers/sustainability-myth-madness-and-magic.pdf](http://www.blackstone.com/docs/default-source/black-papers/sustainability-myth-madness-and-magic.pdf)

## Real Estate-Specific Research: ESG Performance Measurement Correlates With Higher Returns While ESG Policy Is Neutral or Negatively Associated

### The Financial Rewards of Sustainability: A Global Performance Study of Real Estate Investment Trusts

(Franz Fuerst, Cambridge University Professor of Real Estate & Urban Economics, 2015)

“...it becomes evident that the actual implementation and monitoring of sustainability measures is a vastly more significant and more powerful driver of financial performance than the management and policy metric.”

“...very few of these sub-scores appear sufficiently powerful to result in significantly higher operational or stock market returns. A negative association is found for Monitoring & EMS<sup>1</sup> and a strongly positive relationship is found for Performance metrics particularly for ROAs and ROEs, possibly underlining the importance of tangible sustainability metrics in achieving higher operational performance.”

- ▶ **Conventional Wisdom: Start with Corporate ESG Policy**
- ▶ **For Efficient Value Creation: Start with ESG Measurement**
  - ▶ **Step 1 (Performance Measurement) Drives Step 2: Performance Improvement**

<sup>1</sup> The Monitoring & EMS aspect of the GRESB Real Estate Assessment, which GRESB reorganized in 2020, produced a sub-score based mostly on information about a company's internal systems. EMS – Environmental Management Systems – are complex, often consultant-produced policy/process documents. This aspect's sub-score was unaffected by actual ESG performance.



## Key Performance Indicators: Foundation for Returns-Focused, Manageable, Effective ESG

<b>Tenant (occupant) and community satisfaction and well-being</b>	Survey results (Kingsley or similar), affordable housing units, fair housing violations
	Indoor environment: Indoor air quality: ventilation rates, air filter class (MERV), low-emitting materials
	Indoor environment: Daylight and views metrics (Andrea Chegut research)
	Walk Scores, stairway access, automated external defibrillators
<b>Environmental</b> •Energy •Water •Climate	Walk Scores, % previously developed/infill (development)
	New construction/major renovation Predicted EUI and % better than code
	Capital allocated to improvements + projected cost savings and GHG reductions
	Operating asset like-for-like use, cost, emissions, % renewable/reuse
	Physical climate risks/mitigation and transition (regulatory) climate risks, including value-at-risk
<b>Talent engagement, well-being, diversity, equity, and inclusion</b>	Employee survey results: Net Promoter Score; training, inclusion, equality questions; Glassdoor data
	Hiring, promotion, and departure rates by race/ethnicity, gender, and job category
	Racial/ethnic/gender composition of governance bodies and total workforce by job category
<b>Compliance</b>	Non-compliance/legal incidents, investigations, and monetary losses (penalties/settlements/proceedings)

<u>Environmental</u>	<u>Social</u>	<u>Governance</u>
<p>: risks and opportunities related to the natural environment, including natural resource costs, natural disasters, extreme weather, climatic changes, tenant and community preferences, and environmental public policy</p> <p>Pension fund officials who managed corporate governance for years or decades before ESG was a buzzword have been saying for years about sustainability and ESG: “It’s all governance”.</p>	<p>: of or relating to the life, welfare, and relations of human beings in a community : of or relating to human society or the welfare of human beings as members of society → Generally encompasses <u>risks and opportunities related to people or society</u>, including <u>employee, customer, supplier, government, and community</u> engagement, well-being, diversity, equity, and inclusion</p>	<p>: the rules, practices, and processes by which a firm is directed, controlled, and operated : involves balancing the interests of a company's many stakeholders including shareholders, <u>employees, customers, suppliers, financiers, government, and community/society</u> : provides the framework for attaining a company’s objectives so <u>encompasses practically every sphere of management</u> from action plans and internal controls to performance measurement and corporate disclosure <small>(investopedia.com/terms/c/corporategovernance.asp)</small></p>
Environmental factors impact both people/society and investments and are therefore both social factors and governance factors.	All of ESG is Social: Before it was called ESG, it was called “Corporate Social Responsibility” and “Socially Responsible Investing”	All of ESG is Governance: Any E/S risk or opportunity related to an investment is a G issue. Governance factors impact people/society, so are also "social factors".
Energy cost, use, emissions, renewables	Tenant satisfaction and well-being (IAQ)	Shareholder/Board/Mgmt rights and responsibilities
Water cost, use, reuse	Talent / labor health, safety, well-being, engagement, and development (culture, living wage, benefits, wellness)	Board and Management structure, quality, diversity oversight, effectiveness, and compensation
Waste management cost, generation, diversion		
Building materials cost & environmental impact	Diversity, equity, and inclusion (DEI)	Alignment/conflicts of investor/mgmt interests, political influence, business conduct, compliance
Climate emissions (“carbon footprint”)	Community impact and engagement	Risk management independence and effectiveness
Climate transition risk	Affordable housing	Resilience, crisis preparedness, and cybersecurity
Physical climate risk and resilience (G issue)	Historic preservation	E/S policies, processes, and impact measurement
Land use, biodiversity, light pollution		
<b>Management of (long-term) risks and opportunities -- innovation, long-term value creation = “sustainability”</b>		



Environmental Terminology		
<b>Energy</b>	Cost, use, emissions, renewables	GHG emissions associated with energy consumption; Renewable energy sources produce significantly less GHG emissions
<b>Water</b>	Cost, use, reuse	Water reuse, also called water recycling, reclaims water and treats and reuses it onsite
<b>Waste</b>	Waste generation, waste diversion	Waste diversion: Reuse or recycling of waste to <i>divert</i> it from landfill or incinerator disposal
<b>Climate</b>	Physical risk	Risk of physical damage to assets from extreme weather, sea level rise, and other climatic changes
	Transition risk	Financial risk from public policy and/or consumer demand changes as the economy <i>transitions</i> to a low-carbon future
	Stranding risk	The risk of an asset becoming unprofitable as a result of physical climate impacts or the climate transition
	Resilience	The capacity to absorb, recover quickly from, adapt to, and maintain function in the face of both physical climate impacts (flooding, wildfires) and the transition to a low-carbon economy
	Greenhouse gas (GHG)	A gas that creates a greenhouse effect and traps heat in the Earth's atmosphere, warming the planet Primarily carbon dioxide (CO <sub>2</sub> ), methane, nitrous oxide, ozone; commonly expressed as CO <sub>2</sub> -equivalent)
	Climate emissions / carbon emissions	Emissions of greenhouse (heat-trapping) gases; “carbon” is shorthand for “carbon dioxide-equivalent”
	Carbon footprint	Total GHG emissions caused by a building or organization, expressed as carbon dioxide-equivalent
	Carbon neutral / net zero emissions	Complete negation of the GHG emissions associated with an individual, building, or organization by eliminating emissions or removing greenhouse gases from the atmosphere
	Paris-aligned (equates roughly to net zero emissions by 2050)	Aligned with the goal of the 2016 United Nations Framework Convention on Climate Change (UNFCCC) Paris Agreement to limit global warming to well below 2°C above pre-industrial levels
	Embodied GHG (climate) emissions	GHG (climate) emissions associated with the construction and physical structure of a building including building materials
	Operating GHG (climate) emissions	GHG (climate) emissions from the operation of a building or company, including electricity, fuel, and transportation
	Scope 1 emissions	Direct GHG emissions from owned or controlled sources including on-site fuel combustion and company-owned vehicles
	Scope 2 emissions	Indirect GHG emissions from purchased electricity, steam, or heat consumed on-site
Scope 3 emissions	All other indirect GHG emissions including from tenant-controlled energy use, employee and tenant commuting and travel, water use, and waste disposal	