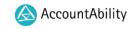


LEADING SUSTAINABILITY PRACTICES TOOLKIT

JANUARY 2016

WORKING DRAFT





Setting the Standard for Corporate Responsibility and Sustainable Development

Leading Sustainability Practices Toolkit

EXECUTIVE SUMMARY

Sustainability is an issue of increasing importance and relevance for the entire real estate industry, as well as specifically among REITS and publicly-traded real estate companies. The National Association of Real Estate Investment Trusts® (NAREIT) – the worldwide representative voice for REITs and publicly traded real estate companies with an interest in U.S. real estate and capital markets – looks to help provide its member REITS with a direction forward to guide them in their approach towards adopting good sustainability practices and improving business performance.

In early 2015, NAREIT asked AccountAbility to help it better understand leading sustainability practices among its membership, as well as within the global real estate community. The objective was to help NAREIT's members embed good practices in these activities, enhance their sustainability efforts, and improve their overall performance.

To that end, NAREIT and AccountAbility jointly conducted a coordinated stakeholder engagement initiative, seeking to learn from the expertise and experience of member REITs. The initiative was supported by:

- Interviews with REIT sustainability leaders and industry experts
- A sustainability survey sent to all NAREIT corporate members
- In-depth field and desk research by AccountAbility, and
- A stakeholder engagement workshop with members and industry thought-leaders, held on October 7, 2015 (New York City)

Each component of this engagement was reviewed, analyzed, and distilled to create this initial version of the Leading Sustainability Practices Toolkit (Toolkit), to be discussed further and refined with the membership.

Developed with the full breadth and depth of the U.S. REIT market and international peer guidance, the Toolkit frames the ten factors most critical to sustainability success at a REIT (shown at right).

We hope to improve this guidance as we continuously evolve the process of creating value and improving performance through better sustainability practices worldwide.

Regards,

Steve Wechsler CEO, NAREIT

Sta Q. Murr

Sheldon Groner

EVP Finance & Operations, NAREIT

Sunny Misser CEO, AccountAbility

CRITICAL SUCCESS FACTORS FOR SUSTAINABILITY

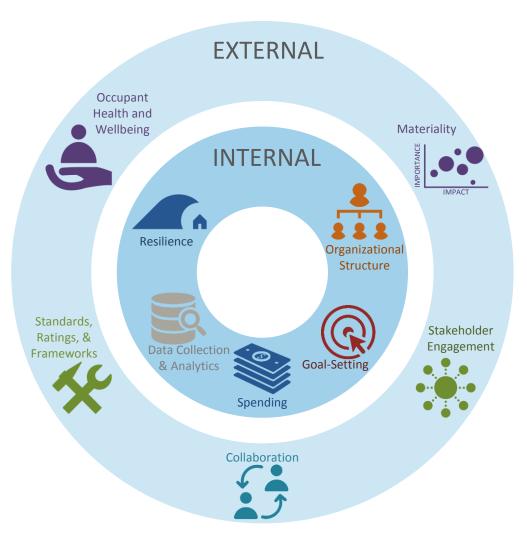




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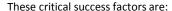




Critical Success Factors

CRITICAL SUCCESS FACTORS

For companies with established sustainability functions as well as those in the initial or exploratory stages, the Leading Sustainability Practices Toolkit addresses the critical managerial factors and principles required to drive success in an organization. The following guidance was distilled from expert interviews, existing leading practices of NAREIT member organizations, and other crucial insights gained from NAREIT's October 2015 stakeholder engagement.





Materiality

Materiality assessment determines and **prioritizes the key sustainability-related risks and opportunities** facing an organization. This enables organizations to improve business practices through informed strategies focused on mitigating risks and maximizing opportunities. In an environment of changing regulatory landscape and changing stakeholder demands for increased transparency and mitigating actions, a materiality assessment frames the business case for all constituents for both short and long term sustainability strategies. The assessment process addresses two fundamental aspects: 1) Sustainability issues that can affect the business in the short and long term, and 2) Those issues with potential impact or importance to stakeholders.



Stakeholder Engagement

Fostering support through an inclusive stakeholder engagement legitimizes the process by gaining buy-in of relevant influencers, some of whom may be potential opponents. An inclusive stakeholder engagement recognizes factors of progress and hindrance to sustainability initiatives. Influencers may be external, such as investors, tenants or policy-makers, or internal, such as boards of directors or employees. It facilities dialogue, educates stakeholders, highlights value drivers, and overcomes potential challenges by giving due importance to constituent stakeholders.



Organizational Structure

There is no singular path to developing successful approaches, given the diversity in corporate structures and cultures, types of businesses, and the dynamic pace of change. Overall, evidence has shown that governance structures that **recognize the importance of sustainability** to their core businesses have proven to be the greatest influencing factors of organizational success with sustainability. Regardless of the organizational structure or modalities - whether sustainability is centralized or decentralized, whether it is through dedicated sustainability functions or built into the organizational DNA at all levels, importance and value lie in identifying key characteristics in the culture and structure of the organization that promote sustainability and align it to the core business practices.



Collaboration

Across the board, intra- and inter-group collaboration should be a part of an organization's long-term sustainable strategy. Collaboration within organizations and within networks (across peer organizations) yields benefits of scale from synergies. It enables entities to better define baselines, to conduct effective benchmarking, and to develop leading practices expertise and foster ease of implementation. Additionally, where mechanisms for **learning and sharing** are in place, pitfalls are avoided and duplication of efforts and associated costs are reduced or eliminated



Standards, Ratings, & Frameworks

Communicating and disclosing have been shown to be two of the biggest drivers of behavioral change. Today, stakeholders are demanding greater access to data on sustainability from listed companies, holding them to a standard of "Disclose or Explain," resulting in rising opportunity costs to opaqueness. Resources and tools such as standards, frameworks, and ratings systems used to track or to benchmark performance should be utilized for maximum portfolio and constituent coverage.



Goal-Setting

Success requires organizations to **aim high**. Goals and objectives must be clearly articulated, embraced and disseminated by the tone at the top. Milestones must be set, along with execution strategies and timelines. An understanding of required resource and available tools to automate the process are essential. This streamlines the process and enables a smooth implementation. A growing number of publicly-traded companies, for example, have linked executive compensation to sustainability goals. Others have established enterprise-wide bonus incentives.



Measurements and Spending

"If it can't be measured, it can't be of value." Measuring the progress of sustainability initiatives is essential to quantify and qualify benefits and value. This builds the business case for funding of initiatives and for the strategic allocation of resources. Starting with a modest budget for a measurable aspect such as energy efficiency will quickly discern value and set the stage for wider expansion such as education-related programs for tenants on energy efficiency. Initial spending on, and measurement of distinct activities will collect data and furnish metrics for wider implementation of sustainability.

Continued on next page...





Critical Success Factors



Data Collection & Analytics

While tracking progress enables managers to demonstrate improvements, amassing evidence through time series of data helps to identify under-performing hotspots and areas of high costs and imminent risks. Data collection and analytics in relevant areas also gives a clear picture of asset-level and aggregate performance and highlights the implications of inaction. It provides strong incentives and a powerful basis for action.



Increasingly, companies with significant physical assets holdings are undertaking assessments of their exposure to megatrend issues such as water risks - including scarcity or flooding, and events driven by extreme weather patterns in the advent of climate change. REIT properties are especially vulnerable and will benefit from long-term planning and action plans that demonstrate, to both internal and external stakeholders, that the organizations are well positioned to adapt to the new era of sporadic natural disasters and disruptive environmental occurrences.



Occupant Health and Wellbeing

The **social dimension** is an important element of a comprehensive sustainability strategy. Employees, tenants, and suppliers are important participants in the company's operational success, each with contributions that might help or harm a company's reputation, brand and/or bottom line. Additionally, benefits yielded from social initiatives help to justify actions in other areas of sustainability. For example, tenant engagement and education often results in buy-ins and cooperation on diverting waste streams, which enhances the ability to collect data on waste.

The Toolkit is designed to assist all real estate investment trusts, regardless of size, geography, or sector. We hope you find this a valuable reference and wish you all the best on your sustainability journey.





Information Sources

OVERALL METHODOLOGY

This toolkit is the culmination of a threephase stakeholder engagement-based project conducted by NAREIT and AccountAbility.

Each of the individual components are used to inform the leading practices and supporting information in this toolkit, and is described on this page.



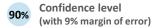
Source: AccountAbility Institute, 2015

CURRENT PRACTICES

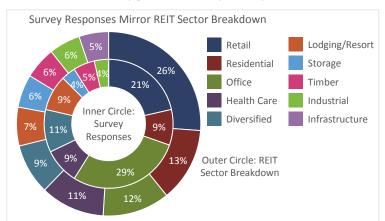
A 26-question sustainability survey was sent to REITs in August 2015. Open for three months, the survey garnered 56 complete responses.











CASE STUDIES

Residential

Health Care

Diversified

Office

A total of 16 interviews were conducted with sustainability leaders from almost all REIT sectors.





Lodging/Resort





Storage



Industrial





Infrastructure









STAKEHOLDER OBSERVATIONS

NAREIT International Peer Organizations

ENGAGEMENT WORKSHOP

On October 7, 2015 NAREIT sustainability stakeholders met for a one day workshop in New York on the Leading Sustainability **Practices Toolkit** initiative. Participants discussed the critical success factors and challenges through the exercises described at right.

- Stakeholders in attendance
- Opportunities to react to preliminary survey results
- Interactive group and individual activities
- Town hall-style discussions

RATIONALE



80+

Reports, Studies, and Articles Studied

5

NAREIT International Peers' **Guidance Reviewed**

9

Leader in the Light Real Estate **Winner Programs** Sustainability Reviewed **Events Attended**

Standards, Ratings, and Frameworks Benchmarked

12+

Real Estate Sustainability **Surveys Evaluated**

10+







12+

Materiality

Prioritizing Key Issues



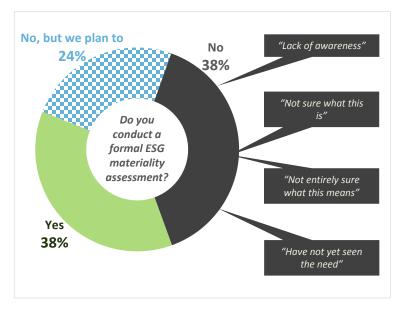




Materiality

CURRENT PRACTICES

Materiality assessments are becoming more common among REITs, reflecting the increased role materiality plays in sustainability strategy.



MATERIALITY FRAMEWORK

The Materiality Framework (below) has helped and continues to help countless companies better understand and successfully integrate ESG issues into their business strategy and performance.



Source: AccountAbility Institute, 2010

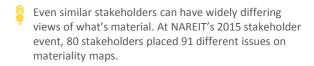
Prioritizing Key Issues



CONCEPT

Materiality relates to identifying and prioritizing the most relevant sustainability issues, taking into account the effect each issue has on the organization and its stakeholders.

STAKEHOLDER OBSERVATIONS



Prevalence of consensus does not increase for the most material issues. Of the issues NAREIT members mapped as important to business and stakeholders. none were consistent among participant groups. (see graphic below)



- "In conducting a materiality assessment, layer the different stakeholder inputs and weight them by how much the business affects them."
- "Consider the value opportunities identified in the materiality assessment to develop priorities around value-added activities."

LEADING PRACTICES

- Conduct a formal ESG materiality assessment to prioritize sustainability issues that affect the business and are important to stakeholders
- Consider both internal and external stakeholders
- Weigh each stakeholder's input based on collaboratively-determined criteria
- Update the materiality assessment annually, or more frequently
- Communicate materiality findings publicly

RATIONALE

Organizations & external sustainability ratings agencies are asking companies to demonstrate a more rigorous and consistent methodology for prioritizing 'material' issues, similar to their financial reporting counterparts.

Frameworks focusing on Materiality:













Firms with good performance on material issues significantly outperform firms with poor performance. Such firms with concurrently poor performance on immaterial issues perform the best.

Source: Corporate Sustainability: First Evidence of Materiality (working paper), Khan, Serafeim, and Yoon, 2015





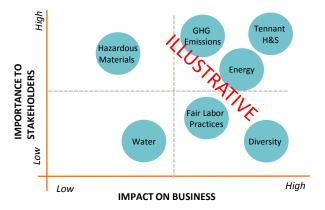
Materiality

ABOUT MATERIALITY

Traditionally, materiality was defined only through the lens of financial reporting. It now includes disclosure of the risks and opportunities from environmental, social and governance (ESG) issues that have impacts on corporate performance and on stakeholders in the long term.

A formal ESG Materiality Assessment can be conducted by asking stakeholders to map issues based on two factors:

- 1) impact on business
- 2) importance to stakeholders



KEY STEPS

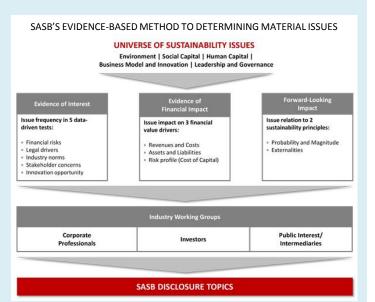
- Discern the issues most material to the company, its stakeholders, industry, and the wider operating environment
- Develop mechanisms and processes to continuously understand and assess materiality priorities
- Manage materiality to embed it in the company's DNA (business operations)
- Disclose on a timely and transparent basis both the progress and the impacts of sustainability commitments

Prioritizing Key Issues



SASB

In analyzing materiality, SASB starts with the identification of issues that might be of interest to the reasonable investor, followed by an assessment of their potential for economic impact. The method also allows for a forward-looking adjustment when current evidence suggests a broad range of scenarios associated with potential risk, uncertainty in potential economic impact, variability in investor interest, and/or the potential for systemic disruption.



Source: Conceptual Framework, SASB, 2013

SUSTAINABILITY FACTORS

When considering the impact on business, the below chart showing the potential relationship between sustainability factors affecting building value can be used as a starting point for impacts to evaluate.



Source: Breakthrough for Sustainability in Commercial Real Estate, Deloitte, 2014

Further Reading Available on: www.accountability.org

ADDITIONAL RESOURCES



Redefining Materiality II: Why it Matters, Who's Involved, and What It Means for Corporate Leaders and Boards describes the landscape of various global materiality initiatives and provides a framework for corporate leaders and boards to enhance the definition and management of non-financial materiality.



The Materiality Report: Aligning Strategy, Performance and Reporting explores the concept of materiality, reviews how various companies have tackled it and proposes a Materiality Framework that everyone can use to inform a corporate responsibility (CR) report.





Hotel

Managers

Investors

Guests and

Meeting

Equity Market Cap \$11.93 Billion (as of Dec 15th, 2015)

GEOGRAPHIC DISTRIBUTION



Host Hotels & Resorts, Inc. (Host) conducted a Materiality Assessment as a part of the process of refreshing their Corporate Responsibility (CR) strategy. It was inclusive, drawing on the views of diverse stakeholders, ranging from investors to community organizations*. The assessment refined Host's strategic direction and resulted in a CR strategy composed of three themes: responsible investment, environmental stewardship, and corporate citizenship.

*See back for more details on methodology.

KEY LEARNINGS

Sector: **Hospitality**

NGOs

Analysts & Rating Groups

CR

Reporting

Team

Board

Executive

Community

Service and

Green Teams

Employees

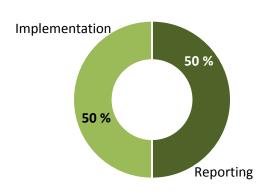
Management

Other Properties: Latin America, Europe, Asia

UNIQUE ADVANTAGES

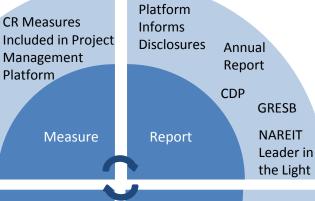
- ✓ Supportive CEO and **Board of Directors**
- ✓ High focus on sustainability from hotel managers, public facing brands with publiclystated goals
- ✓ CR target alignment with hotel managers

CR STAFF - TIME USAGE





KEY METRICS





Platform



Materiality **Analysis**

Planners (indirect) "Our objective is to create value for investors. To this end, CR is integrated into our business strategy. For every new project, we evaluate sustainability

attributes with a focus on generating a positive

economic return."

CRITICAL DRIVERS

External

Industry Working Groups

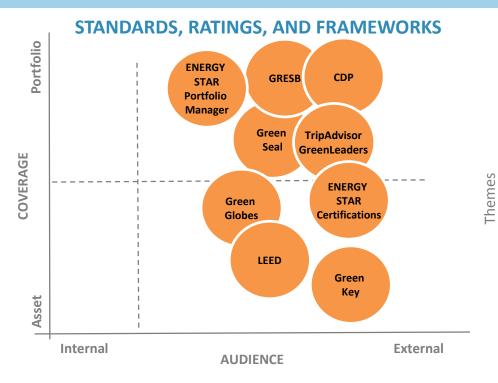
\$ Return on Investment Capital Projects

- % Reduction in GHGs, Water and Waste
- **Number of Community Service Events** and Employee Volunteer Hours
- Hotels with Green Building Certifications

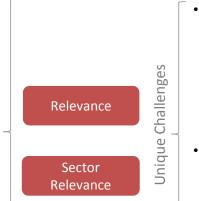




Equity Market Cap \$11.93 Billion (as of Dec 15th, 2015)



CHALLENGES



- Energy Star: difficult to certify upper upscale and luxury lodging assets.
- challenging to certify based upon age and composition of portfolio.

"Renewable energy remains very expensive and generally does not provide a satisfactory economic return unless we can leverage taxbased and regional market-based incentives. We have identified and executed on two large projects and continue to explore and evaluate other renewable power projects."

Materiality Assessment at Host Hotels

Host conducted a materiality assessment that included more than 30 internal and external stakeholder interviews. Host's understanding of materiality, according to their analysis of climate change risks described in their CDP report, considers three main factors:

- (i) Business impacts
- Needs, concerns and key business drivers of our stakeholders.
- Our degree of control and/or influence as an owner that does not manage its properties per U.S. REIT regulations

Whereas ESG materiality assessments typically only consider the first two factors, Host customized their analysis by factoring in their degree of control, a common complication at REITs. This 3-dimensional analysis refined Host's strategic direction and resulted in a CR strategy composed of three themes: responsible investment, environmental stewardship, and corporate citizenship.

"What we've tried to accomplish is to engage people across the organization and make them more aware of corporate responsibility and how it can be integrated into our business operations."

FUNCTIONAL STRUCTURE





Stakeholder Engagement

Fostering Support



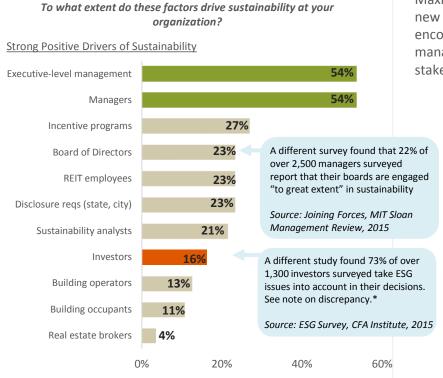




Stakeholder Engagement

CURRENT PERCEPTIONS

The "Tone at the Top" is viewed as the strongest driver of sustainability initiatives by REITs, which is consistent with other industries. More surprising, investors are currently not viewed as a powerful force, which contradicts findings from other industries. This may reflect the relative maturity of sustainability in the real estate industry. *



Fostering Support



CONCEPT

Maximizing success requires developing new champions, fostering the encouragement of existing supporters, and managing the relationship with all stakeholders.

POSITIONS REFLECTED IN JOB TITLES OF SURVEY RESPONDENTS

#	Position
25	VP
16	Director
11	SVP
6	Manager
3	EVP
3	Senior Director
2	CEO
2	Head of Function
2	General Counsel
1	Executive Director
1	First VP
1	President
1	CFO

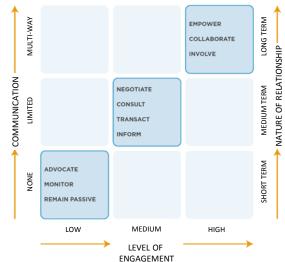
LEADING PRACTICES

- Identify stakeholders in an inclusive manner, including all those on whom the REIT has an impact and who have an impact on the REIT
- Define the purpose and scope of engagement with all stakeholder groups identified



Source: AA1000 Stakeholder Engagement Standard, AccountAbility, 2015

Utilize a formal process of engagement, explicitly choosing the level of engagement (below) that is maximizes responsiveness while remaining feasible



Source: AA1000 Stakeholder Engagement Standard, AccountAbility, 2015



STAKEHOLDER OBSERVATIONS



CONVERSATIONS

42% of stakeholders identified meeting presentations and conversations as the most effective form of communicating about sustainability with other functions.



13% of stakeholders identified formal reporting as the most effective form of communication with other functions.

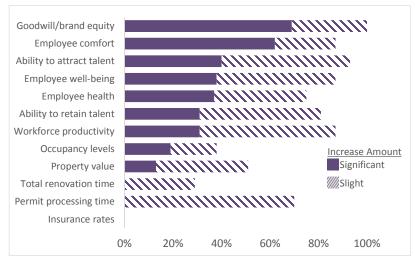
*"The REIT survey shows the push for sustainability coming from management, when in fact the original driver may be investors asking questions of those executives. If more of the survey respondents had been executives, or others in direct contact with investors, perhaps the survey results would show a stronger perceived influence from investors." [see table above]



Stakeholder Engagement

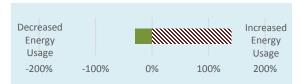
RATIONALE

The most significant benefits of green retrofits are to people, making the case for stakeholder engagement both easier and more imperative.



Source: The Dollars and Sense of Green Retrofits, Deloitte and Charles Lockwood, 2008

Tenants and building operators can reduce energy consumption by 30 percent and worst practices can increase energy consumption by up to 140 percent. "The impact of operations and tenants has a much greater potential to adversely impact building energy use than to improve it."



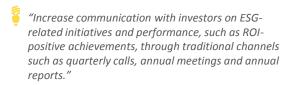
Source: Sensitivity Analysis: Comparing the Impact of Design, Operation, and Tenant Behavior on Building Energy Performance, New Buildings Institute, 2011

Fostering Support



STAKEHOLDER OBSERVATIONS, CONTINUED

"What struck me is how low tenants are perceived as a driver. In Europe they are much more important. To me that looks like a real opportunity for education to tenants going forward."



"Do not underestimate the importance of internal stakeholders, actively seek out potential champions in other departments."

Fits to the adherence to the

clusivity, materiality and

AccountAbility Principles of

ADDITIONAL RESOURCES



The Tenants & Landlords
Guide to Happiness, by the
Better Buildings Partnership and
The Fifth Estate, offers in-depth
case studies of successful
landlord/tenant relationships.



Occupant Engagement for Sustainability, by the Sustainability Roundtable, offers emerging trends and case studies of effective engagement.



The Stakeholder Engagement Manual: Volume 1 & 2, by UNEP, AccountAbility, and stakeholder research associates, provides practical guidance on stakeholder engagement.

ACCOUNTABILITY AA1000 STAKEHOLDER ENGAGEMENT STANDARD

BENEFITS OF STAKEHOLDER ENGAGEMENT



Released November 2015

More than 3,000 stakeholders consulted in its creation

Supports engagenr governme collective

engagement frameworks such as government consultation, collective bargaining etc.

ssues for sustainability



Is coherent with other sustainability-related

organisational improvements

nables learning from

Provides a **robust structure** for

engagement programmes and



sustainability-related standards that recommend or require stakeholder engagement

COMPONENTS OF AN ENGAGEMENT PLAN



An open-source framework for Assessing, Designing, Implementing and Communicating stakeholder engagement





Interviewee: Mr. Jeff Bedell
Title: VP – Sustainability

GEOGRAPHIC DISTRIBUTION

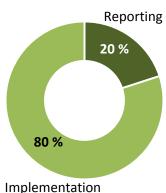


Other Properties: None

UNIQUE ADVANTAGES

- ✓ Company culture with strong sense of community
- ✓ Emphasis on return on investments
- ✓ Executive-level support
- ✓ Budget flexibility

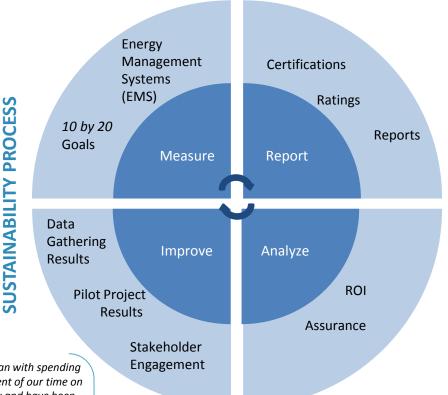
CR STAFF - TIME USAGE



"We began with spending 100 percent of our time on strategy and have been adding more reporting. It has been a challenge, because it wasn't something that was part of our planning when we put together the team that we have. But reporting is still not the majority of our time now, we're still really focused on the things that are making impact."

KEY LEARNINGS

- In 2014, Macerich set its 10-by-20 Goal: reducing 10 percent by 2020 (compared to 2013 levels) of absolute greenhouse gas (GHG) emissions, energy use, water consumption, and waste generation and diversion.
- "We have to find a way to partner with and impact the tenants. If we can't start putting programs in place in collaboration with tenants we are going to start hitting the limits of what we can do to impact our properties' sustainability as a whole."



Sector: **Retail**

Investors

Internal

"The drive from investors has really come into view for Macerich over the last several years. More and more of our investors are asking for ESG information."

CRITICAL DRIVERS
External

Company
Culture
originated
with
"Making
Good Things
Happen"

Board of Directors
CEO

COO

METRICS .

KEY

- Energy use and reduction
- On-site generation
- GHG management
- Employee travel

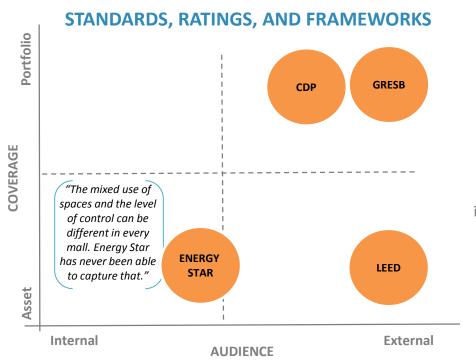
- Water use and reduction
- Waste diversion and recycling
- Refrigerant management
- Tenant and stakeholder engagement

Account Ability

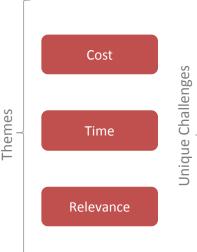


Interviewee: Mr. Jeff Bedell Title: VP - Sustainability

Equity Market Cap \$12.50 Billion (as of Dec 15th, 2015)



CHALLENGES



- Cumbersome process
- **Immaterial** disclosure requirements and indicators that may not be valuable to all companies

FUNCTIONAL STRUCTURE

"We haven't used the GRI framework for reporting to date. As long as the people looking at it understand your business and what parts of it are meaningful, they can look at it and understand that it is appropriate for retail malls to only report on 48 factors out of hundreds. But there is a risk that, if they don't understand, they may think 'Wow, they're hardly doing anything.'"

A Stakeholder Engagement Pilot Program

Macerich is running a pilot program at their 29th Street Mall in Boulder. The program involves stakeholder engagement with:

- tenants
- local community
- government agencies, and
- utilities.

Regarding this program, Mr. Jeff Bedell explained:

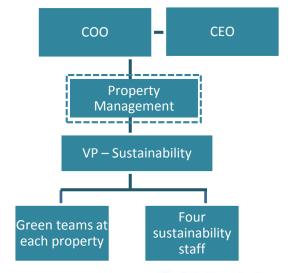
"We're looking for creative ways to fund some of the capital for tenant improvements to help incentivize efficiency. At that mall, we're mastermetered, so the tenants pay us for their energy use. We've even considered if we could partner with tenants and the contractors, providing the capital, doing the lighting upgrade, for example, and then they could pay us back over a six-month period by paying the same amount for energy before the savings kicked in (like an ESCO concept). We could recoup the capital and still get them to do the upgrade."

VP - Sustainability:

Directly engages COO relative to sustainability initiatives; COO and CEO are heavily involved in sustainability.

The sustainability team is a small group and therefore it relies on other cross-sectional functions within the company.

"As the VP of Sustainability, I meet with our COO every other week at a minimum and I provide reports to the CEO and Board quarterly."





SUSTAINABILITY ROLES



Organizational Structure

Maximizing Influence







Organizational Structure

CURRENT PRACTICES

Sustainability staff have responsibilities in multiple functions at almost half (49%) of REITs. Almost all REITs have a sustainability function, but at almost half of REITs sustainability staff have responsibilities in multiple functions. While there are benefits to CR being integrated into other core functions, these professionals have less time to focus on CR.



RATIONALE

There is a relationship between the perceived strength of sustainability drivers and the CR staff. REITs with dedicated staff feel more influence from executives and investors.



Maximizing Influence



CONCEPT

Where sustainability sits in an organization – the functions to which they report and have access – influences the effectiveness of sustainability efforts.

A different survey found that 96% of respondents have a specific person with responsibility for implementing sustainability objectives

Source: Results, GRESB, 2015

STAKEHOLDER OBSERVATIONS

63% of stakeholders said that sustainability should have access to all functions.

"All. Sustainability offers a valuable lens/framework for identifying and managing risks and opportunities."

"Most. Operations, leasing, and development."

78% of stakeholders said that compensation incentives are likely to increase sustainability performance.

"Yes. That which you compensate, you get focus. Should reward entire team so everyone is aligned."

"No. this could inadvertently narrow focus only to easily provable / measurable components."

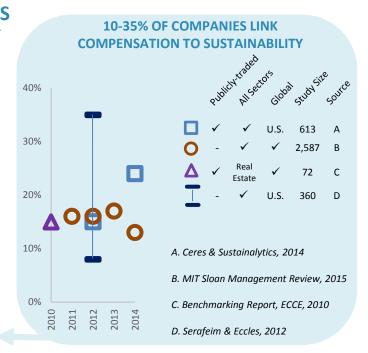
48% felt that compensation incentives were feasible to implement.

"Yes. If reliable metrics are available."

"No! Too little control."

LEADING PRACTICES

- Report to the CEO or COO and have access to all executive-level management and the Board of Directors or integrate sustainability into these functions
- Report to only one function, while having access to many functions
- Dedicate staff to sustainability, such that staff do not have responsibilities in other functions
- Link board and executive compensation to sustainability



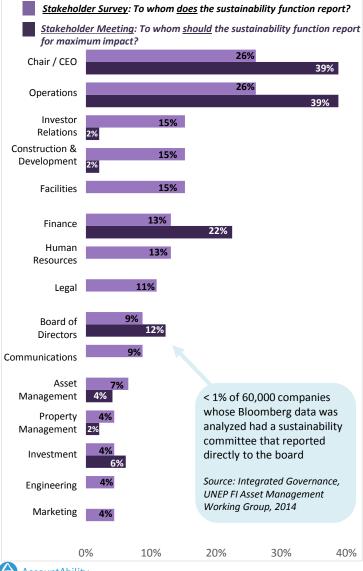




Organizational Structure

CURRENT PRACTICES, CONTINUED

REIT sustainability teams currently report to a wide variety of functions. There is much less variety in who teams believe they should be reporting to. Consistent with research and experience from other industries, sustainability teams will be most effective if they report directly to the CEO or are integrated into the operations function.



Maximizing Influence

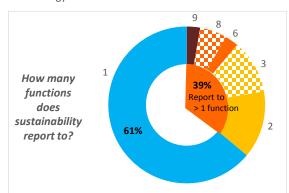


ADDITIONAL RESOURCES



Integrated Governance: A New Model of Governance for Sustainability, by the UNEP Finance Initiative. proposes a new governance model "in which sustainability issues are integrated in a way that ensures value creation for the company and beneficial results for all stakeholders in the long term."

Four in 10 sustainability professionals at REITs report to more than one function. This structure may assist the process of creating internal buy-in, but can complicate the process of prioritization in lieu of a fully embedded CR strategy.



RATIONALE, CONTINUED

When 180 "High Sustainability Companies" companies were compared against a matched control sample, several observations were made (see below).

Source: Serafeim & Eccles, 2012



High Sustainability Companies*

Evaluation *Voluntarily adopted sustainability policies by 1993 Criteria

Board of directors and sustainability

Top executive

Formal responsibility more frequent

compensation

Sustainability-tied incentives more frequent

Stakeholder engagement Processes more established

Orientation

Longer-term

Measurement and disclosure of nonfinancial information

Higher

Stock market and accounting performance

SIGNIFICANTLY OUTPERFORMS OVER THE LONG TERM

"Corporate governance has taken on a new level of importance for investors since the global financial crisis. Furthermore, the effects of globalization, urbanization, and industrialization have raised awareness of environmental issues, particularly with respect to climate change and how companies are addressing energy consumption and pollution. Meanwhile, a variety of social issues continue to generate conversations and headlines."

Source: Incorporating ESG Factors Into REIT Investing (RI Insight), Rogier Quirijns, 2015





Interviewee: Ms. Sukanya Paciorek Title: Former SVP - Corporate Sustainability

GEOGRAPHIC DISTRIBUTION



Other Properties: None

UNIQUE ADVANTAGES

- ✓ Positive senior management
- ✓ Vertical integration increases ease of implementation
- ✓ Geographically concentrated in competitive markets where CR provides edge
- ✓ Interest in CR from office tenants

KEY LEARNINGS

- In its first year, Vornado's sustainability team worked to position sustainability in a core business line for the company. Eight years later, Vornado has a fully integrated industry leaders program and team. See more details on the following page.
- Despite the fact that standards, certifications, and rating schemes don't ask for it, Vornado is able to focus sustainability efforts where gains can be maximized. "The thing that nobody ever asks is the most material question: where are your underperforming assets, and what are you doing about them?"



Sector: **Diversified**

Media

Tenants

Disclosure

Requirements

Compliance

Senior **Management**

Cost Savings

Internal **Employee**

Engagement

Brand Equity

Investors

"A major driver for us is our investment base. We see this from European pension funds in particular, but US pension funds such as CalPERS and CalSTRS are all catching up."

CR STAFF - TIME USAGE



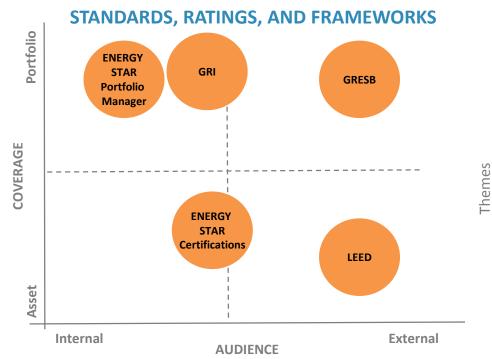
what has changed and what is material. Otherwise we spend our time doing, not reporting."

- **KEY METRICS** \$ CAPEX for energy efficiency
 - MW demand response capacity
 - **Square feet LEED and Energy** Star-certified space
- **MWh** Energy Reduction
- Tons of GHGs
- Tons of solid waste





Interviewee: Ms. Sukanya Paciorek Title: Former SVP - Corporate Sustainability



CHALLENGES



Unique Challenges

Expanding sphere of influence strategically

- Trade-off between reporting & doing
- Lack of external demand from tenants and investors
- Limited internal resources
- Variation among markets
- Translation of value of work to other functions

"Sustainability professionals at NAREIT's member REITs have varying degrees of support from senior management. The degree of support is directly linked to where sustainability is housed and who they report to."

Insights on Organizational Structure

"Organizations that do sustainability best are ones where the responsibility for sustainability lives with the group that is core to the business line. Depending on the REIT, it might be operations or development at the profit center. If you're stuck in marketing or investor relations, it is really hard to make change."

Energy, Utilities, & Sustainability Teams

- Manage capital fund
- Energy procurement, efficiency & demand response
- Infrastructure upgrades
- LEED certification

Corporate Sustainability

- Leadership and Committees
 - **NAREIT**
 - RE Roundtable
 - **RFBNY**
- Annual Sustainability Report

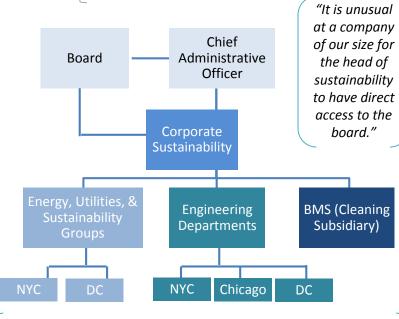
Engineering Departments

· Heads of Engineering

BMS (Cleaning Subsidiary)

Directors of Sustainability

FUNCTIONAL STRUCTURE



"We have a sustainability committee call once per month and we get together in person once or twice per year. We share best practices and set goals for the following year."



SUSTAINABILITY ROLES



Collaboration

Learning & Sharing







Collaboration

CURRENT PRACTICES

Sustainability at U.S. REITs is a collaborative endeavor, with national-level collaborations being the most common.



Average number of collaborative endeavors listed per respondent



44 International collaborations



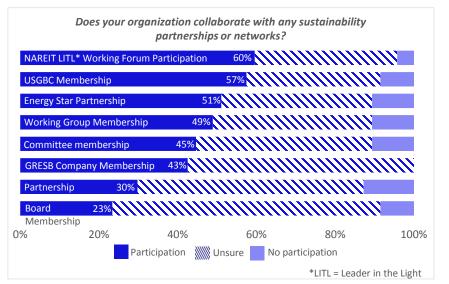
105National collaborations



21Regional & Local collaborations

"I am surprised and impressed that the public real estate market in the U.S. shares information openly and is operating collaboratively in this area - at this stage. However, that may change in the future as sustainability is increasingly recognized by REIT leadership for its competitive edge."

-Fraser Hughes, Deputy CEO, European Public Real Estate Association (EPRA)



Learning & Sharing



CONCEPT

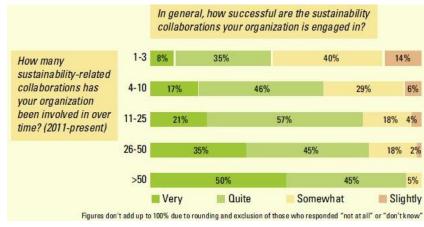
Collaboration is working together to realize shared goals by exchanging knowledge, solving problems, and building consensus.

LEADING PRACTICES

- Weigh the costs and benefits of time and effort spent on collaborative opportunities
- Collaborate in sector-specific networks that can help address areas that may be too broad in other networks
- Utilize formalized tools (such as Tenant Star) and shared commitments to align incentives and encourage progress
- Obtain active board support for collaborative endeavors

RATIONALE

Companies that are involved in more collaborations tend to assess those collaborations as more successful.



Source: Joining Forces: Collaboration and Leadership for Sustainability, MIT Sloan, 2015

STAKEHOLDER OBSERVATIONS



Characteristics of Valuable Collaboration

"Shared goals are key to good (nonadversarial) collaborations." "Best practicesfocused, mutually beneficial, perspectives from outside of real estate, and clear aoals."



Factors that Undermine the Effectiveness of Collaboration

"Rivalry/competition"

"Consultants and vendors pitching"

"Poor time management."

"Lack of prioritization."

"Involvement of multiple sectors when discussing reporting makes it so the conversation is either too broad or too specific to be useful."

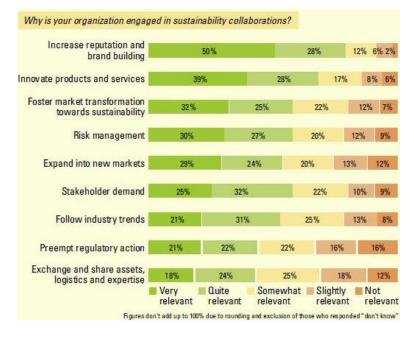




Collaboration

RATIONALE, CONTINUED

The number of collaborative endeavors relating to sustainability has been increasing: between 2000 and 2015, the number of companies reporting that they did not collaborate on sustainability dropped from over 40% to less than 5%. In that same time period, the number of collaborations per company has also been increasing, in some cases to over 50 collaborations at a single organization. The reasons for doing this are shown in the chart below.



A critical enabler of success for sustainability collaboration is active support from the board, as shown below.



Source: Joining Forces: Collaboration and Leadership for Sustainability, MIT Sloan, 2015

Learning & Sharing



"To be more efficient in tackling the issues that will most significantly affect their business and society, companies will need to consider engaging in collaborative partnerships with each other, as well as with stakeholders and other organizations."

Source: Sustainability and Reporting Trends in 2025, GRI, 2015

When looking ahead to 2020, collaboration has been identified as one of six components to a successful business strategy for real estate, as shown below.



Source: Real Estate 2020: Building the Future, PwC, 2014

TENANT STAR

Effective collaboration with tenants and building occupiers is an essential step on any REIT's sustainability journey. Issues arising from a lack of control over things like energy usage and waste diversion can be addressed with a positive working relationship. A new tool to establish and maintain this relationship is under development now: Tenant Star.

Tenant Star originated with a bill passed by Congress in April 2015. Once an appropriate baseline data set is gathered, Tenant Star will complement the ranking and ratings currently being provided by Energy Star.

"Tenant Star will encourage commercial tenants and landlords to design and construct leased spaces in office buildings to achieve high levels of energy performance. H.R. 2126 aligns office tenants – who can account for more than 50 percent of the energy consumed in an office building – to incorporate into the construction of their leased premises common sense, cost-effective measures that yield excellent returns on investment over short pay-back periods. Tenants will favor landlords whose buildings can support such installations. Broad adoption will save businesses billions of dollars on energy costs in the coming years. The reduced consumption will afford savings in future capital outlays for energy generation and related infrastructure."

-Anthony E. Malkin, Chair of The Real Estate Roundtable's Sustainability Policy Advisory Committee and Chairman, President, and CEO of Empire State Realty Trust, Inc.

ADDITIONAL RESOURCES



Joining Forces: Collaboration and Leadership for Sustainability, by MIT Sloan Management Review, Boston Consulting Group, and the UN Global Compact, reports the results of the sixth consecutive survey of more than 3,800 organizations from 113 countries.





Sector:

Office

Occupants

GEOGRAPHIC DISTRIBUTION

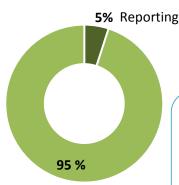


Other Properties: None

UNIQUE ADVANTAGES

- ✓ Sustainability efforts spearheaded and championed by CEO and Chairman
- ✓ Concentrated in highly competitive market with high awareness of sustainability

CR STAFF - TIME USAGE



Implementation & Analysis

KEY LEARNINGS

 Leadership & Sharing is central to sustainability at ESRT. CEO Anthony E. Malkin speaks nationally and internationally on the subject of energy efficiency in the existing built environment and is also the Chair of the Real Estate Roundtable's Sustainability Policy Advisory Committee. Mr. Malkin lectures at colleges and graduate schools and speaks at conferences on the subject.

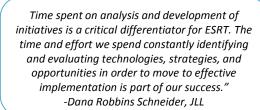
ESRT effectively collaborates and engages in policy development, highly focused on informing policy with effective practice and lessons learned at the city, state, and federal level. This is exemplified by

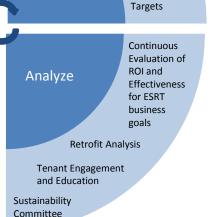
the passage of Tenant Star Sustainability at the Federal level. included in **Annual Report** Continuous Reporting and Tracking of Utility **Energy Star** Usage Certification

Report









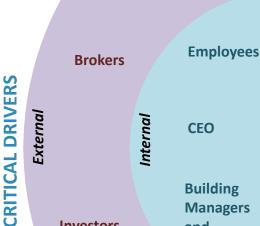
Green Lease

Leader Award

Term

Annual & Long

Sustainability



world, sustainability may have more significance. Real estate funds may have a greater need to satisfy stakeholders who are inquiring about sustainability."

Building Managers and **Engineers**

CEO

"I think that in the private equity

Investors

KEY METRICS

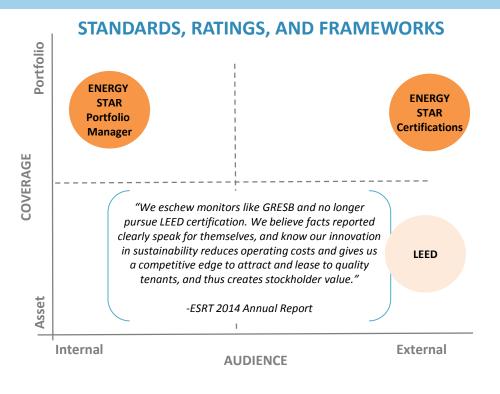
- % Renewable electric power
- · % Recycling of cartable waste
- % Portfolio Energy Star-certified
- \$ Annual Energy **Cost Savings**
- \$ Investment in energy and sustainability based on ROI





Interviewee: Mr. Anthony E. Malkin Title: Chairman & CEO

Equity Market Cap \$4.85 Billion (as of Dec 15th, 2015)



CHALLENGES

Relevance

Sector
Relevance

"There is not a single shareholder deciding not to buy my stock because we don't answer the GRESB questionnaire. Not one."

"At ESRT, sustainability is not a department which competes for time or resources - it is what we do. We disregard a tremendous amount of what is out in the marketplace as far as standards or certifications, and take our own path."

"We don't do anything because it's 'the right thing to do'.

Everything that we have done has had a commercial purpose. It's either cost neutral, and therefore at least from a marketing perspective it's differentiated, or it makes us or our tenants more economically competitive."

Insights on Collaboration

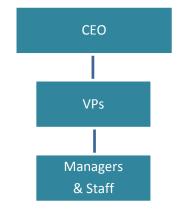
"The more developed that the sustainability circuit is, the more events that it has, the more attendees it has, then the less time people are in their offices doing anything with their peers and colleagues who are actually running the company. So a lot of the sustainability role, as it is presently carved out, is feeding a beast that has nothing to do with the basic business."

SUSTAINABILITY ROLES

"We do not separate sustainability from general management."

"There are a lot of people involved in sustainability who have no line to or by them to anybody who matters in the company, and I think this is the single biggest issue. REITs have got to get operationally involved in sustainability. Once they do, they will no longer be looking down at people who talk about sustainability, because they will no longer be so useless on the day-to-day business."

FUNCTIONAL STRUCTURE







Standards, Ratings & Frameworks

Communicating & Disclosing







Standards, Ratings & Frameworks

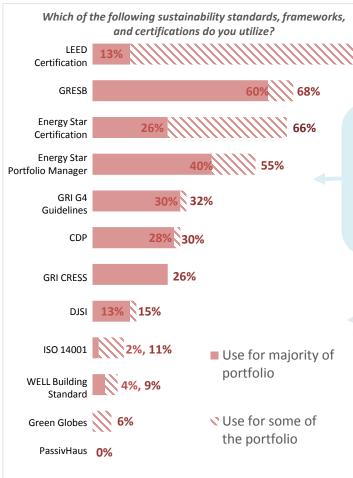
Communicating &

Disclosing



CURRENT PRACTICES

U.S. REITs use a wide variety of tools for their formal communication and pursuit of recognition, using more than 4 concurrently, on average. For a REIT at the beginning of its sustainability journey, choosing the right tools for the right audience is key.



50%

CONCEPT

The use of standardized tools and frameworks facilitates (but doesn't always streamline) communication, disclosure, and the pursuit of recognition for sustainability efforts.

While the NAREIT survey showed more U.S. REITs using GRI than CDP, the total number of real estate company disclosures for GRESB, GRI, and CDP (as of end of 2014) shown below ranks differently.

GRESB: 707

GRI: 166

CDP: 394

Source: Green Means Go (RI Insight), Ari Frankel, 2015

The graph and table below shows the adoption of green building certifications, including LEED and Energy Star, as of December 31, 2013.

Buildings Area

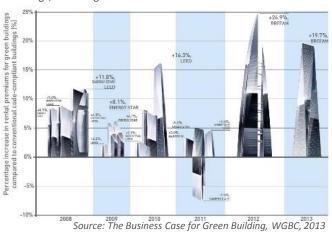
	_		24.14.1.160			
		Energy Star	10%	30%		
		LEED	5%	19%		
45 -						
40 -						
35 -						
30 -						
25 -	25					
25 -						
15 -						
10 -						
5 -						
0 -				-		
	2005 2006 2007	2008 2009 20	10 2011 20	12 2013		
	——% of Buildi	ngs ——% o	f sq. ft. of Buil	dinas		
Soui	rce: Green Buila	ling Adoption	Index, CB	RE, 20		

LEADING PRACTICES

- Select tools that are maximally efficient for your organization at achieving the desired level of transparency, responsiveness, and marketing value
- Select tools that address your material issues and important stakeholders, considering both internal and external audiences
- Apply single-asset tools strategically, and ideally systematically, within portfolio

RATIONALE

Several studies have shown increased rental premiums for sustainable buildings, including those with certifications shown below.



"Technology innovation and sustainability will be key drivers for value. All buildings will need to have 'sustainability' ratings, while new developments will need to be 'sustainable' in the broadest sense, providing their residents with pleasant places to live.

Source: Real Estate 2020: Building the Future, PwC, 2014



0%

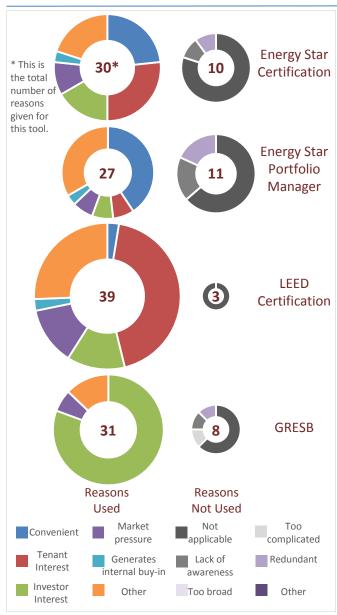


Standards, Ratings & Frameworks

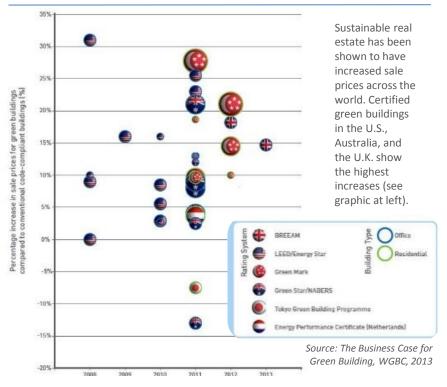
Communicating & Disclosing



CURRENT PRACTICES, CONTINUED



RATIONALE, CONTINUED



ADDITIONAL RESOURCES



A Guide to Corporate Responsibility and Sustainability Reporting, released 2010 by Real Property Association of Canada (REALDac)



Best Practices Recommendations on Sustainability Reporting, released 2014 by European Public Real Estate Association (EPRA)



A Guide to Corporate Responsibility Reporting in the Property Sector, released 2009 by Property Council of Australia

Real Estate Investment Trusts®

REITs: Building Dividends and Diversification

STAKEHOLDER OBSERVATIONS

"We use the standards, frameworks, and certifications that promote our growth and value for our stakeholders: institutional investors, shareholders, tenants and customers. In some circumstances, we use certain frameworks and certifications to comply with local regulations."

"Energy Star Certification & Portfolio Manager - our program is too new, plan to use. Green Globes - testing LEED as a better branded standard. GRI G4 - best general standard for our public reporting. ISO14001 - program too young to consider at this time. SASB - not convinced of added value yet ."

GRESB appears to be the industry standard. It is also endorsed by NAREIT. We are also looking into GRI and SASSB. We do use LEED checklist for our construction - - just not the certification."



GEOGRAPHIC DISTRIBUTION



Other Properties: Canada, South America

UNIQUE ADVANTAGES

- ✓ Strong customer demand for sustainable products
- ✓ Large impact on economy
- ✓ Integration of sustainability into projects

KEY LEARNINGS

- Some firms may have unique business models and as such, peer benchmarking may not be valuable. However, it is still crucial to pursue sustainability to benchmarking against oneself.
- Proliferation of various standards have become overwhelming for Weyerhaeuser. There is a perception issue for some standards; the dominant standards have a lot of marketing behind them, other, lesser known, are also highly credible.

Annual

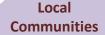
Report

Web-Integrated

Sustainability

Report







Employees

care about sustainability and we also see that it helps attract the best new talent to the company."

"Our employees



Assessment Energy Management Systems Measure (EMS)

Stakeholder Feedback **Improve**

Millennium

Ecosystem

Participation on Working Analyze Groups **Goal-Setting** External

Audits

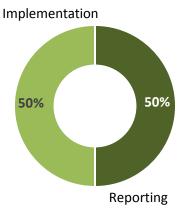
Indices

Internal Benchmarking

B-to-B **Customers**

Investors

CR STAFF - TIME USAGE



"In the short term, ideally we will approach only 20% time spend on reporting. And the in the long term, ideally we won't need an official role to handle reporting requests at all. Instead, people throughout the business would be empowered to respond to these requests."

- **EY METRICS**
- Recordable incident rate
- Energy and water usage

CRITICAL DRIVERS

External

- Certification of timberlands
- Certified fiber

GHG emissions

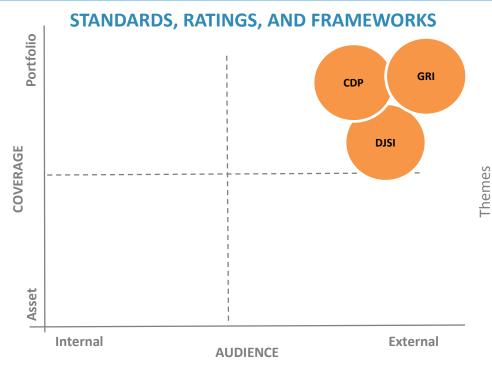
Supply chain risk





Interviewee: Ms. Ara Erickson
Title: Sustainability and Communications Manager

Equity Market Cap \$15.37 Billion (as of Dec 15th, 2015)



CHALLENGES



- Trade-off
 between
 reporting and
 implementation
- Distinct from other REITs
- Proliferation of various standards and frameworks

"Our model is different from other REITs, so when we can't compare ourselves to others, we benchmark against other Timber REITs and other forestry companies (non-REITs)."

"Our operations have a large impact on the economy. We need to be sustainable because our model requires a social license to operate."

Insights on Standards, Ratings, & Frameworks

"We are getting asked to do a lot of reporting. A lot of the tools ask you to report the same metric, but in slightly different units or with slightly different boundaries. We're working on streamlining our processes, but we have also had success pushing back on the tools that are asking for some slight variation to see if they can change things on their end to be more standardized."

SUSTAINABILITY ROLES

Business Units, EHS, Communications, Corporate Affairs, General Counsel, and Board Committee

- Sustainability is co-housed with the communications department
- Sustainability positions are spread throughout business functions

FUNCTIONAL STRUCTURE







Goal-Setting

Aiming High







Goal-Setting

STAKEHOLDER OBSERVATIONS

When asked about leading practices in sustainability, several stakeholders identified goal-setting as critical:

"Create standards and goals that can be tracked."

"Company targets."

"Need reporting targets."

"Goal-setting."

Aiming High



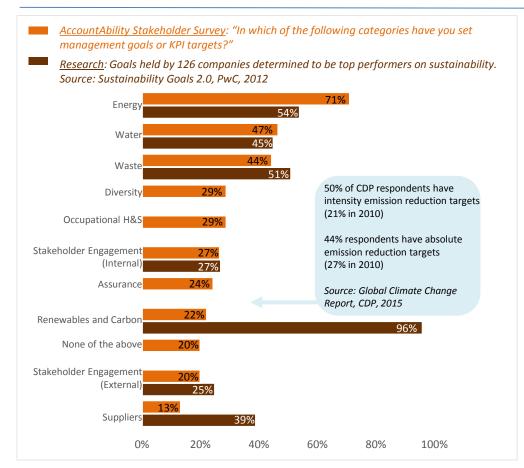
CONCEPT

Setting goals sets and solidifies priorities across the organization, increasing performance, accountability, and visibility.

LEADING PRACTICES

- Focus goal-setting efforts on criteria that are both material (based on a formal ESG materiality assessment) AND measureable with data currently available
- Set goals even if they must be modest at first, to focus functions across the company that are critical to reaching goals
- Create clear-cut short-term (quarterly, or annual) and long-term (2-5 years) goals to lead a systematic business strategy
- Communicate goals in language that is aligned with company strategy
- Ensure support and ownership through transparent communication – internal and external – of goals and progress toward them

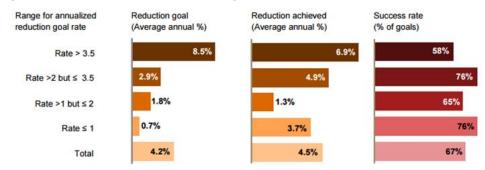
CURRENT PRACTICES



U.S. REITs have begun the work of shaping the future through setting sustainability goals. The types of goals being set by REITs mirror other industries for the most part. However, other industries are farther along with goals for renewables, carbon, and supplier CR performance.

RATIONALE

Companies generally achieve impact reduction goals two-thirds of the time, regardless of the level of ambition reflected in the goal set. The most ambitious goal-setters have a lower success rate, but larger absolute reductions.



Source: Sustainability goals 2.0: An evolving landscape, PwC, 2012





Goal-Setting

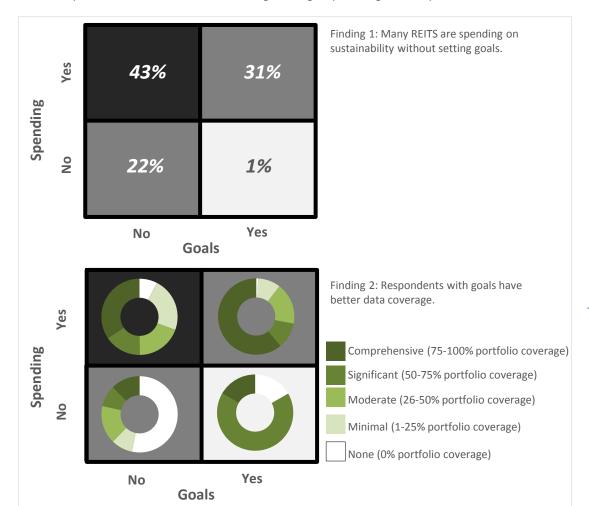
Aiming High



CURRENT PRACTICES, CONTINUED

Many REITs are spending on sustainability without setting goals. This is a counterintuitive and potentially counterproductive practice.

A powerful link between goals and data was illuminated in the results. When evaluated, a distinguishing characteristic of those REITs who have set sustainability goals is that they have a better picture of their portfolio, afforded by environmental and social data coverage of a higher percentage of their portfolio.



RATIONALE, CONTINUED

"Business leaders should set ambitious goals to tackle crucial issues. In order to position the company as committed to advancing the sustainability agenda in a decade of large-scale challenges, ambitious goals are needed."

Source: Sustainability and Reporting Trends in 2025, GRI, 2015

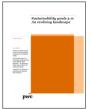
Effective goal-setting requires prioritization. The priorities below were developed through a world-wide a series of consultations with thousands of UN Global Compact participants.



POST-2015 ISSUE AREA PRIOIRITIES

Source: Building the Post-2015 Business Engagement Architecture, UNGC, 2015

ADDITIONAL RESOURCES



Sustainability goals 2.0: An evolving landscape, by PwC presents findings from evaluating the goal-setting amongst 126 companies identified as top sustainability performers.



Sectoral Decarbonization Approach (SDA), is a product of the Science Based Targets Initiative providing comprehensive guidance from the Carbon Disclosure Project (CDP), World Resources Institute (WRI) and the World Wildlife Fund (WWF).





Goal-Setting: A Case Study

Interviewee: Ms. Mona Benisi
Title: Senior Director – Sustainability

GEOGRAPHIC DISTRIBUTION

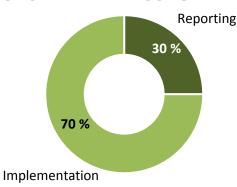


Other Properties: Asia, Canada, Europe

UNIQUE ADVANTAGES

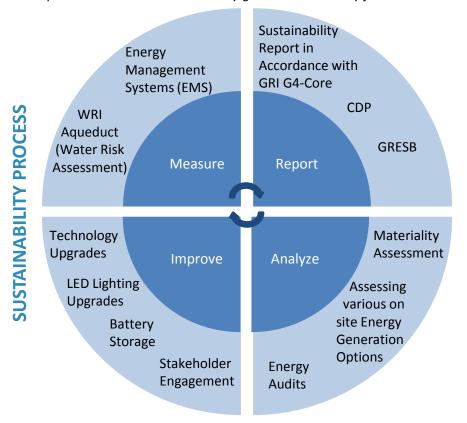
- ✓ Large scale and size
- ✓ Strong investor engagement
- Cross functional internal collaboration to advance sustainability
- ✓ Introduced sustainability organizational structure that secures executive support to further improve sustainability performance across the portfolio

CR STAFF - TIME USAGE



KEY LEARNINGS

- Simon's sustainability strategy has always been invigorated by its commitment to goals, and the company has recently strengthened this commitment by publicizing quantitative goals with execution dates (see details on next page).
- "Over the past decade, Simon has established itself as a leader in sustainability. In 2014, we took major steps to solidify our sustainability framework and leadership, as a result we are proud to introduce sustainability goals in Simon's key framework areas."



KEY METRICS

- % Reduction in GHGs, Energy, and Water
- % Diverted Construction Waste
- % Properties with EV charging stations and children's play areas
- % Properties engaging with local communities
- \$ Donated to Simon Youth Foundation
- # of Tenants to engage with on sustainability issues

Sector: **Retail**

Investors

Regulations & Compliance

Competitors

CRITICAL DRIVERS

External

Improved operational efficiency

efficiency

Experience gained through joint venture properties internationally / Part ownership in French real estate company

(Shoppers)

(Tenants)

"Shoppers are showing increased interest in sustainability topics – e.g. they appreciate Simons extensive EV charging station network."

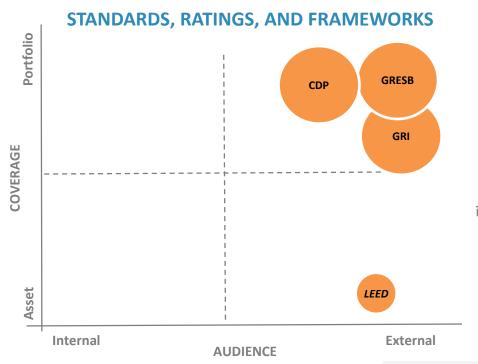




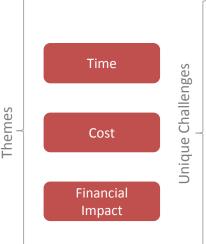
Goal-Setting: A Case Study

Interviewee: Ms. Mona Benisi Title: Senior Director – Sustainability

Equity Market Cap \$58.70 Billion (as of Dec 15th, 2015)



CHALLENGES



- Size of portfolio and data gathering for tenant space
- Trade-offs between reporting and implementation
- Conveying the business case of sustainability

"There is not a sustainability strategy and a company strategy but one sustainable corporate strategy"

"It's crucial to find the best way for an organization to integrate sustainability goals into the overall business priorities"

Goal-Setting at Simon

Simon's 2014 Sustainability Report described several goals. These were qualitative and trend-based (increasing, decreasing, expanding, etc.). Simon's 2015 Sustainability Report demonstrated a notable advancement and commitment by publicizing quantitative sustainability goals. See some examples of this evolution below:

2014

"Our goal is to continuously reduce our electricity usage."

"It's important for us to work collaboratively to further both Simon's and our tenants' sustainability goals."

"Simon's short-term goal seeks to expand our food diversion initiatives."

2015

SUSTAINABILITY ROLES

Goal: Improve portfolio-wide energy efficiency by 5-10% by 2020 (base year 2013).

Goal: Engage with top 10 tenants on sustainability issues by 2018.

Goal: Divert pre-consumer food waste from landfills at selected properties by 2020.

Senior Director of Sustainability

- Manages the Sustainability Office, develops company's sustainability strategy
- Collaborates with different business functions, with reports to Asst. **General Counsel**

Sustainability Executive Committee

Set up by Sr. Director of Sustainability to get (1) executive support (2) resource commitment (e.g. time from staff in various functions to push initiatives)

Sustainability Field Network

• Creates and implements action plans to carry out sustainability efforts

Sustainability STRUCTURE **Executive Committee**

- President of Malls
- President of Mills
- President of Simon **Premium Outlets**
- Asst. General Counsel and Secretary
- SEVP & Chief Administrative Officer
- Chief Marketing Officer & President of Simon **Brand Ventures**
- **EVP Property** Management
- SVP Finance

FUNCTIONAL

VP Investor Relations

Sustainability Working Group Sustainability Office Sustainability Field Network



Spending

Allocating Resources Strategically



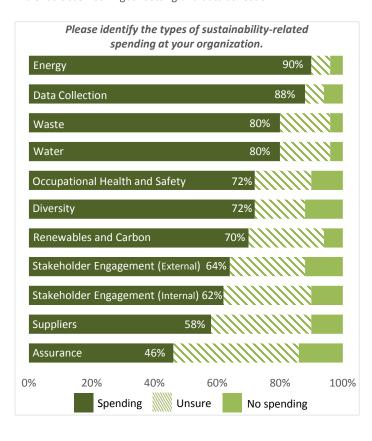




Spending

CURRENT PRACTICES

While the process for determining how much to spend on what projects varies dramatically amongst U.S. REITs, the types of spending are similar, primarily on the environmental rather than social or governance components of sustainability. This mirrors trends observed in goal-setting and data collection.



"People are always waiting for THE DEFINITIVE STUDY that will prove these things work out. We have over a decade of research — slicing and dicing whether green building is worth it in every way, and by now many people are immune to it or just react to it by saying that it doesn't apply to me. Instead, for us, the idea is integrated and coordinated execution of proven practices by real estate companies and funds."

-Chris Pyke, COO of GRESB

AccountAbility

Allocating Resources Strategically



CONCEPT

The strategic allocation of resources through sustainability budgeting or other spending plans is critical in a field with long-term risks and limited resources.

LEADING PRACTICES

- Compare results year on year to evaluate return on investment
- Integrate the sustainability budget into the broader budget, but clearly mark line items to ensure return on investment can be captured
- Spend on a pilot project or "easy win" early to make the business case for scaling up and securing a larger budget

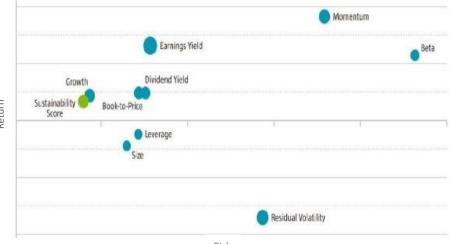
RATIONALE

"The results show that the degree to which REITs invest in efficient buildings is positively related to the quality of their credit ratings, and it is also associated with a significantly lower spread. The relation persists at the level of individual buildings and their mortgages: environmentally-certified buildings are financed at significantly lower spread, varying between 30 and 60 basis points, depending on the specification."

Source: Environmental Performance and the Cost of Capital: Evidence from REIT Bonds and Commercial Mortgages, European Center for Corporate Engagement, 2014

Research published by RobecoSAM in 2015 shows that the "sustainability factor" is "a promising candidate for use in factor models with multiple sources of risk and return." See the factor plotted in the graph at right.

Source: RobecoSAM, Factor Estimation Platform: BARRA Portfolio Manager



Risk

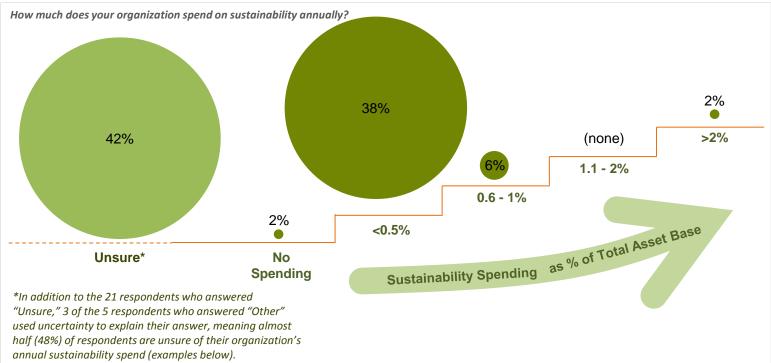




Spending

Allocating Resources Strategically

CURRENT PRACTICES, CONTINUED



"We do not measure sustainability as a separate category of expense."

"Impossible to measure -- fully integrated."

"Given the ubiquity of sustainability-related business practices, and the broad range of ESG performance indicators, the annual 'sustainability spend' at Boston Properties is not so easily quantified."

EXTERNAL VERIFICATION

External verification of sustainability data adds credibility to ESG disclosures. Important to investors, independent verification is now mainstream for sustainability practices globally. However only 46% of REITs reported spending on assurance (see previous page).



63% of North American investors think it is important that ESG disclosures be subject to some level of independent verification.

Source: ESG Survey, CFA Institute, 2015



63% of participants subject their sustainability disclosures to review by an independent third party.

Source: Results, GRESB, 2015



64% of respondents obtain independent verification of Scope 1 and 2 data.

Source: Global Climate Change Report, CDP, 2015

ADDITIONAL RESOURCES



The Business Case for Green Building, by the World Green Building Council provides a review of the costs and benefits for developers, investors, and occupants.



AccountAbility AA1000 Assurance Standards is one of the most widelyrecognized frameworks for external validation to follow.



Green Bond Guidelines for the Real Estate Sector, by GRESB provide real estate guidance for capital market participants when originating Green Bonds





CRITICAL DRIVERS

External

Equity Market Cap \$10.33 Billion (as of Dec 15th, 2015)

GEOGRAPHIC DISTRIBUTION

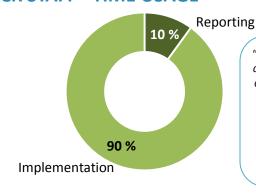


Other Properties: Europe, Australia, Asia

UNIQUE ADVANTAGES

- ✓ Customers seeking to green their supply chain
- ✓ Established leadership in energy efficient data centers
- ✓ Strong internal support for sustainability
- ✓ Scale and size allows responsiveness to global customer demand

CR STAFF - TIME USAGE



KEY LEARNINGS

SUSTAINABILITY PROCESS

Data

Center

Rating

Tools

Low &

"If I'm smart, I'm spending a lot of time on policy and

driving leadership among

organization's key stakeholders and

executives to get buy-in on these things. The

reality is reporting soaks

up a lot of time."

no cost

upgrades

Capital

Projects for

Cost-savings

- Clean energy technology is a big focus of customers in this particular industry segment, in which energy consumption can be up to a quarter of the total operating costs for a data center.
- "There is a gap between the language that the business speaks and the language that sustainability speaks. With our green bond, there was an opportunity to overlay these two."

PUE to monitor

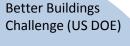
Energy Efficiency

Measure

Improve



Market Regulations







Customers

Senior Management

Cost Savings

"Increasingly, there is a strong demand from clients on clean energy. This is partially driven by NGO pressure on how green the Internet or cloud is."

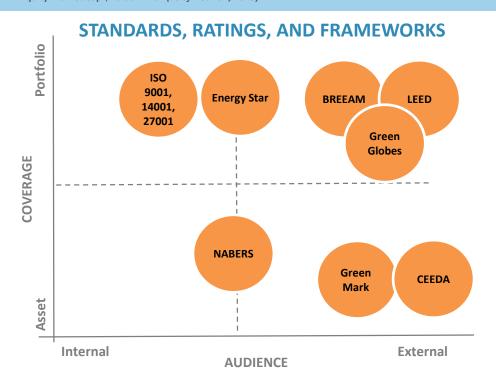
KEY METRICS

- \$ Power Usage Effectiveness (PUE)
- Energy Mix, share clean energy
- Green data centers
- Energy savings
- Water savings

Equity/Bond Investors







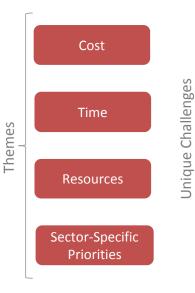
Insights on Spending

"I think there is still an opportunity to better link up sustainability issues with traditional business dialogue and practices, such as the process for acquiring or renovating a building.

A good example I went through recently was green bonds. For me, it was a terrific opportunity to engage with the CFO and CEO on a 'green flavor' of a traditionally purely corporate finance transaction. I spent quite a bit of time with the finance team to get them to understand 'what is a green building' and what is a qualified use of proceeds for the bond.

Up to that point, there had been a pretty big gap in the language both groups in the same company were speaking. The process was great and has enabled me to have a better dialogue with finance on a goingforward basis."

CHALLENGES



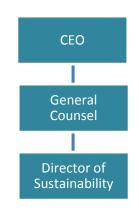
- Data centers perceived as nontraditional real estate asset class
- Customer demand for costeffective supplies of renewable energy
- Balancing facility resiliency vs. energy efficiency
- 'Dashed lines' collaborating with teams outside of direct reports
- Implementing projects in 24-7-365 critical environments

"I would love to have one report and have everybody recognize it and feel like it is adding value. The holy grail is a single universal platform for reporting."

Corporate Sustainability Director of Sustainability

- Implementation of formal sustainability policy
- Analyze and select appropriate frameworks for reporting and manage overall reporting workload
- Expand customer access to clean energy and energy efficiency solutions

FUNCTIONAL STRUCTURE







Data Collection & Analytics

Gathering the Evidence



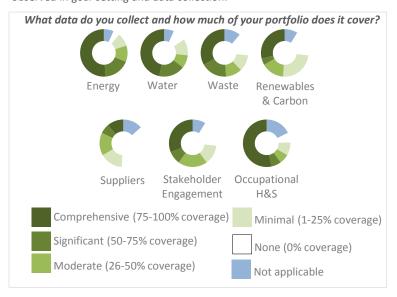




Data Collection & Analytics

CURRENT PRACTICES

The focus areas for data collection – where U.S. REITs have the best portfolio coverage – are the environmental rather than social or governance components of sustainability. This mirrors trends observed in goal-setting and data collection.



Gathering the Evidence



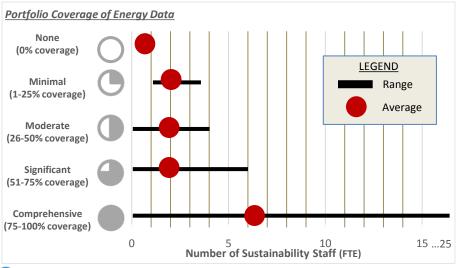
CONCEPT

The collection and use of data on environmental, social, and governance performance is central to sustainability efforts at all REITs, required for demonstrating ROI, assessing opportunities, and optimizing strategies.

LEADING PRACTICES

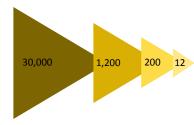
- Collect data for material environmental, social, and governance factors
- Aim to collect data from as much of the portfolio as possible, and distinguish between the performance within from performance outside of REIT control
- Build systems to automate the collection and triage of data
- Utilize stakeholder engagement with a focus on education as well as green lease terms to obtain data from building occupants
- Engage with utilities to foster positive relationship and access to data
- Engage with REIT employees to facilitate access to data within organization

Survey results highlighted the relationship between manpower and data coverage. Those with better data coverage have more people working on sustainability, as shown below.



STAKEHOLDER OBSERVATIONS

"Data needs to be triaged. 30,000 bills may generate 1,200 flags, many of which are false positives, leaving 200 to evaluate, and 12 to actually do something about."



💈 "It doesn't take very many 'oops' moments to pay for a full-time position."

🏅 "Not everything that can be measured should be."

"The challenge with data is harvesting the value from it: making it useful, engaging tenants, communicating it well."

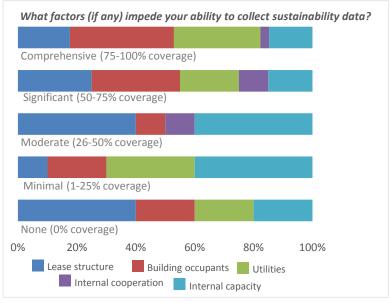




Data Collection & Analytics

CURRENT PRACTICES, CONTINUED

The challenges facing those collecting data differ, depending on how much data coverage the respondent currently has. Lease structure and internal capacity are the early challenges, whereas building occupants and utilities take over as the main challenges as a REIT approaches a more complete data coverage of the portfolio.



Gathering the Evidence



ADDITIONAL RESOURCES



Model Lease Clauses, by Australia's Better Buildings Partnership is one part of an expansive tool that provides best practice lease clauses.



Green Lease Library, maintained by the Institute for Market Transformation provides several resources on green leasing.

GREEN LEASES

Comprehensive data collection and analytics is essential to meeting a REIT's sustainability objectives. Lease structure accounts for a substantial portion impeding members to collect appropriate and comprehensive sustainability data. Green leases are a tool to address one of the market's major data challenges.

Green lease clauses tend to fall into one of the following four areas.

Pass-through Clauses

Allow pass-through of energy efficiency investment costs to tenants.

Operations Clauses

Allow the building to operate more efficiently and/or reduce environmental impacts.

Sustainable Purchasing

Establish rules about the types of materials which can be purchased in tenant and common-area spaces.

Reporting

Require data-sharing on building energy use and progress towards goals through benchmarking or other systems agreed on between the landlord and tenant.

Source: Green Leasing, A Better City, 2014

"There is no one single solution to leasing; frameworks where landlords and tenants can work together for energy and resource management, metering, and upgrades benefit all parties through lower outgoings, more productive relationships, and increased asset value."

Source: Model Lease Clauses, Better Buildings Partnership, 2015

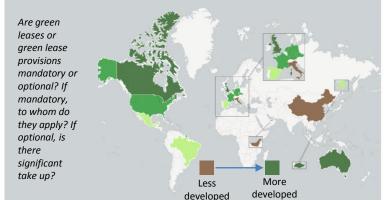
STAKEHOLDER OBSERVATIONS, CONTINUED

Most REITs still find the challenges below to be "significant" and very few have overcome these issues.

	Lack of capacity internally at REIT	Lease Structure	Lack of Cooperation - Occupants	Lack of Cooperation - Utilities
Overcome	"We have hired additional resources when needed."	"Had legal meet with leasing and made it happen."	"Not a challenge in office. It's in the lease agreement."	"Third party 'ran herd' for us. Waste was the hardest."
Actively addressing	"Looking to hire FTE dedicated."	"Approaching tenants to get participation."	"Lots of turnover so effort to re-train occupants."	"Manual meter reading, tenant engagement."
Significant challenge	"Newer ops person "Leasing doesn't in charge, splits want to add time. Hard to keep anything focused." controversial."		"It's a matter of education."	"Utilities don't want to help or are too slow to respond."

___More REIT

RATIONALE, CONTINUED



"The closest to any form of legal requirement relating to green leases is in France, where it is now compulsory to attach to any commercial lease of premises in excess of 2,000 square meters an Environmental Annex that requires landlord and tenant to exchange energy- and waste-related information."

Source: Baker & McKenzie, 2015





GEOGRAPHIC DISTRIBUTION

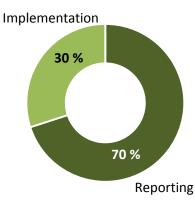


Other Properties: Europe, Canada and Asia

UNIQUE ADVANTAGES

- Ongoing support and open access to the CEO and Executive Management Team
- History of stakeholder engagement
- Experience with stringent regulations and ESG-minded investors

CR STAFF - TIME USAGE



KEY LEARNINGS

- "One of our priorities is to obtain more data. To do this requires engaging the right people within Prologis, as well as customers and utilities. We are working on educational materials to explain why we need access as well as tools to track and analyze data."
- Prologis is systematic about its new developments, and designs to local sustainability rating systems, when available. We are opportunistic in seeking lighting retrofits, energy efficiency improvements, renewable energy, and energy storage opportunities with existing properties.



Sector: Industrial

Customers

"Our customers are increasingly interested in our sustainability initiatives. Especially larger customers who have sustainability programs of their own."

Communities

CEO

External

CRITICAL DRIVERS

Investors

Brand
Differentiation

Employees

Regulations

Building Codes

- · % of portfolio with energy-efficient lighting
- MW Solar energy installations
- kWh Energy consumption

KEY METRICS

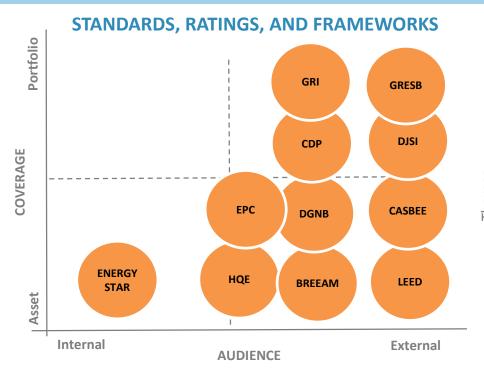
- Tons Carbon footprint reduction
- % of portfolio with cool roofs
- Number of sustainable building certifications

- Ethics, career & professional training
- Employee survey results
- Hours volunteered
- \$ charitable donations
- \$ and months donated through Space for Good program

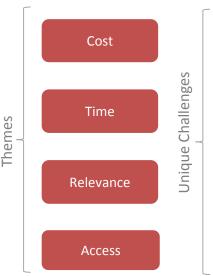




Interviewee: Ms. Jeannie Renné-Malone
Title: VP – Sustainability



CHALLENGES



- Data gathering given parameters of triple net lease
- Peer-to-peer benchmarking

"We buy and sell properties frequently, which presents a sustainability reporting challenge. For example, if we LEED-certify ten properties that we have sold before the next sustainability report comes out, the numbers do not necessarily match up year over year."

Insights on Data Collection

"Due to regulatory challenges, and triple net lease structure, we currently only have access to energy data for about 10% of our properties in the US, whereas in Europe and Asia we have access to data for over 90% of our properties. Third party vendors contact us frequently offering data collection services and it can be very expensive. We are working on figuring the best way forward."

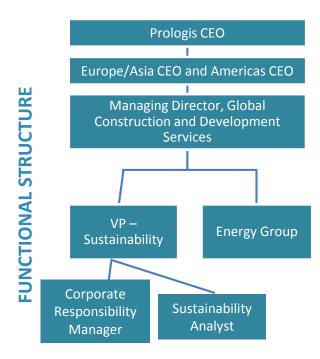
"The challenge with existing standards and frameworks is that there is no apples-to-apples comparison for our industry. Organizations with access to more data receive higher rankings but the methodologies don't factor in boundaries of control and differing levels of data access."

VP – Sustainability, Energy Team, and Executive Management

- VP Sustainability works with the Energy Team
- A CR manager and a sustainability analyst facilitate data collection and support reporting

Sustainability Committees

- Regional Practice Groups focused on sustainability
- Sustainability Champions in each office



SUSTAINABILITY ROLES

Resilience

Long-Term Planning





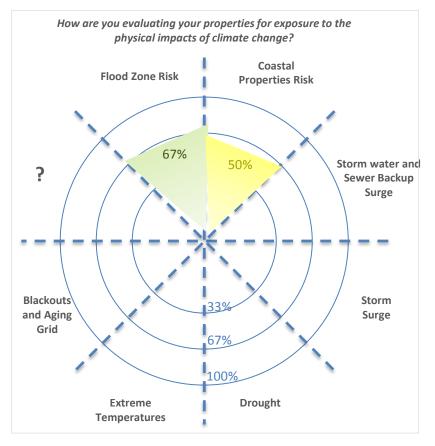


Resilience

CURRENT PRACTICES

Real estate companies are experienced at evaluating certain longstanding risks, however their challenge is to keep up with the advent of new risks.

Additionally, 31% of respondents are not currently evaluating their properties for exposure to the physical impacts of climate change.



"The 2015 GRESB results show that 54% of all GRESB participants have a policy in place that addresses climate risks. However, of all participants, only 35% have policies in place that address resilience. This topic clearly needs attention, as the need for buildings to be resilient to the impacts of climate change becomes more critical, and current extreme events have the potential to become even more extreme."

Source: Report, GRESB, 2015

Long-Term Planning



CONCEPT

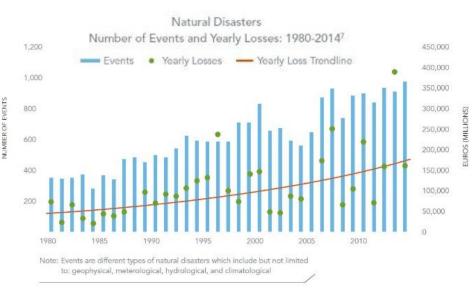
Resilience is the assessment and management of the universe of physical, social, and environmental risks as they evolve. Beyond that, resilience is mitigating risks of future events in the present by growing the capacity to absorb shocks and recover from extreme events.

LEADING PRACTICES

- Assess existing risks for possible evolution and monitor horizon for emerging social and environmental risks
- Manage risks by diversifying and growing organizational capacity to respond to and recover from risk events
- Educate executive-level management and investors about the long-term returns of resilience
- Consider collaborative and joint endeavors to assess and manage risks
- Ensure resilience features are taken into account in property valuation

RATIONALE

"Scientists and institutions have linked the more frequent and intense occurrence of natural disasters to the trends associated with climate change. This increase in extreme weather events can have significant impacts on economic arowth and asset value. The chart at right highlights the increasing frequency and costs associated with natural disasters since 1980."



Source: Greenprint Performance Report v6, ULI Greenprint Center for Building Performance, 2015





Brown discounts

Increased speed of

Higher risk exposure of non-sustainable

portfolio (more volatility)

Lower occupancy

Shorter

tenancies

Costly ___

maintenance

regimes

rates

Failure to meet sustainability benchmarking

criteria of potential investment partners

Unintended consequences

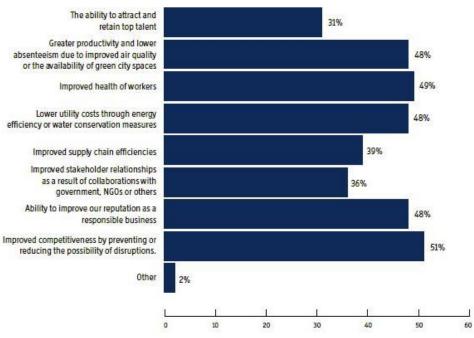
depreciation

Resilience

RATIONALE, CONTINUED

"In the past, many companies would have seen these investments as a means of burnishing their reputations. But, notably, this is not the top driver. In fact, the top benefits cited are increased competitiveness, productivity, efficiency, the improved health of workers and savings that contribute to long-term business success (see graphic below)."

What do you believe are the long-term benefits of investing in climate change resilience? Please select all that apply.



Source: Building Climate Change Resilience in Cities, The Economist Intelligence Unit, 2014

Long-Term Planning

"A broader range of risks will emerge. New risks will emerge. Climate change risk, accelerating behavioral change and political risk will be key."

Source: Real Estate 2020, PwC, 2014



Property value decrease

Inability to compete with

Decrease in value due to

Flooding ___

Increased temperatures

Subsidence

Changing rainfall patterns

Decreased future occupant

comfort and satisfaction

low energy rating

Inability to lease due to

new regulations

Extreme weather events

newer, greener properties

due to changes in planning/ transport policy

STAKEHOLDER OBSERVATIONS



ADDITIONAL RESOURCES

Returns on Resilience, by the Urban Land Institute uses ten detailed case studies to demonstrate the business case for investment in resilience, spanning a diverse range of geographical locations and climate-related risks.



"Resilience assessment and management faces the challenges of a long time horizon and high degree of uncertainty. We don't have an answer to those, but we do think more practically about portfolio mix and diversification."



"We are working to determine the actions we will take to mitigate risk. First, we are evaluating what investments will help promote and strengthen resilience in natural infrastructure in natural disaster-prone areas. For that, we're thinking at the collaborative level, investing in joint solutions. Second, we conduct a robust analysis, rigorous in breaking down on cost-value basis how we should proceed, which we support with a collaborative stakeholder exercise."





Occupant Health & Wellbeing

Taking Care of People



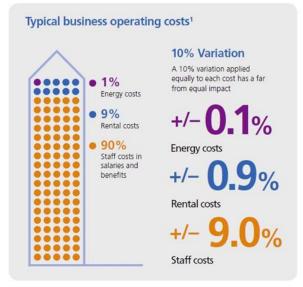




Occupant Health and Wellbeing

RATIONALE

"For most employers meanwhile, a healthy, happy workforce is a vital component of a productive, successful business in the long-term. Staff costs, including salaries and benefits, typically account for about 90% of a business' operating costs (as the diagram shows). It follows that the productivity of staff, or anything that impacts their ability to be productive, should be a major concern for any organization."



Source: Health, Wellbeing & Productivity in Offices, WGBC, 2014

Taking Care of People



CONCEPT

Given the amount of time people spend indoors, buildings have the potential to be a large positive or negative influence on the health of their occupants. Improving the impact of real estate on people is a growing interest as more significant returns continue to be found.

STAKEHOLDER OBSERVATIONS

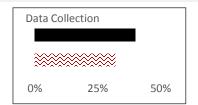
- "We are doing random acts of health promotion. That's not to say they are not individually good, but they are not linked in an effective way. Understand where you are putting your effort and design a coordinated intervention."
- "Everyone is concerned about air quality. But what does that mean? There aren't yet any legal standards."
- "Health and wellbeing is a major part of our operations. The scientific basis is there and we know with certainty that for our tenants in medical office space, it is important."

LEADING PRACTICES

- Assess health and wellbeing opportunities and risks across the portfolio
- Consider a wide array of stakeholders, including REIT employees, tenants, building operators, guests, customers, etc.
- Weigh each stakeholder's input based on collaboratively-determined criteria and prioritize action accordingly
- Begin evaluating opportunities before required by regulation, as small changes can reap large rewards
- Prioritize metrics to measure and report based on their impact to business and ease of measurement
- Utilize a vast body of research or conduct your own micro-experiments to demonstrate the business case to key decision makers

CURRENT PRACTICES

The REIT survey indicated that greater attention is still given to environmental issues than to social and governance issues. This is reflected in answers about spending, data collection, and goal-setting, as shown below. To this, one stakeholder reacted: "I am surprised by these results. My perception is that in most REITS, governance-related function and social functions are more mature than environmental. Governance important to publicly-traded REITS. Maybe it varies by sector? Or perhaps it is the result of more environmentally-focused people responding to the survey."









Occupant Health and Wellbeing

Taking Care of People



RATIONALE, CONTINUED

Small changes to building operation and layout can make drastic changes to occupant comfort and to the bottom line. The operational productivity and health benefits of LEED-certified buildings, as determined in a net present value analysis, are shown in the graphic below.





Source: The Business Case for Green Building, WGBC, 2013

ADDITIONAL RESOURCES



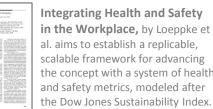
AccountAbility

Health, Wellbeing & Productivity in Offices, by the World Green Building Council puts forward the best and latest information on building design feature that are known to have positive impacts.



the concept with a system of health

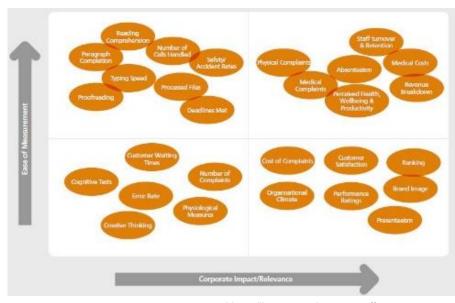
Design for Social Sustainability, by Future Communities provides a framework for the social elements of sustainability in SOCIAL SUSTAINABILITY communities.



Health and wellbeing was ranked as one of the top two most important social reasons for building green in every region of a global study, suggesting that "there is a unifying global opinion on how green building can improve the human condition." Regions studies included USA, Australia, Europe, UAE, Singapore, Brazil, and South Africa.

Source: World Green Building Trends, McGraw Hill Construction, 2013

"Our initial research and discussions produced a list of almost 40 possible health, wellbeing and productivity outcome metrics. This was far more than we expected most businesses could or would want to use. The group narrowed the list of outcome metrics down and compiled a 4-quadrant schematic (see below) to separate out the outcomes by ease of measurement and impact on business. This process informed a final list of seven metrics."



Source: Health, Wellbeing & Productivity in Offices, WGBC, 2014



Occupant Health and Wellbeing: A Case Study

Interviewee: Mr. Rick Avery Title: VP - Sustainability/Engineering/PM

GEOGRAPHIC DISTRIBUTION



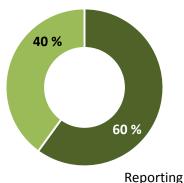
Other Properties: UK, Canada

UNIQUE ADVANTAGES

- ✓ Integration of sustainability into business model
- ✓ Holistic approach to sustainability
- ✓ Corporate commitment to broader health care issues

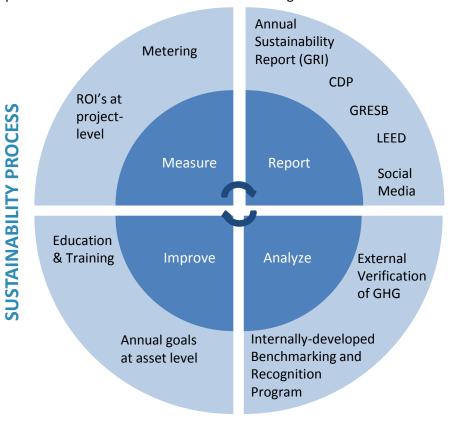
CR STAFF - TIME USAGE

Implementation



KEY LEARNINGS

- The company truly believes that it is more than just real estate: we see the role we play in affecting the delivery and experience of health care delivery.
- "The company is very much focused on culture, having a positive workplace, and doing all the right things for our people." Their signature corporate wellness program, REITLIFE, includes health screenings, healthful meal solutions, monthly educational programs featuring expert guest speakers and individual and team fitness challenges.



KEY METRICS

- **Energy use reduction**
- **GHG** emissions
- Water use
- **Diversity** metrics
- Number of certified buildings
- **Building participation in Energy Star**
- Recycling at HCN's medical office portfolio
- **Employee survey results**

Sector: **Health Care**

Sustainability **Analysts & Ratings Groups**

Competitors

Senior Management

Internal

REIT Employees

Tenants

CRITICAL DRIVERS

External

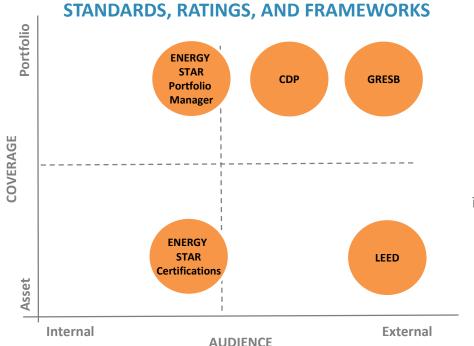
Investors

"We had our first serious request from a pension fund in late 2015. We had spent the past several years reporting, with as lot of headscratching about its value, and finally its importance is recognized."

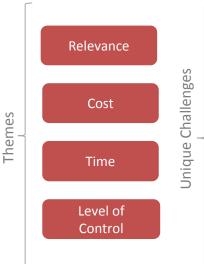




Interviewee: Mr. Rick Avery Title: VP - Sustainability/Engineering/PM



CHALLENGES



- Relative significance of energy use compared to revenue for medical office buildings
- Limited influence over some properties
- Developing vision of the value of reporting
- Lack of clarity and comparability around sustainability metrics

"In sustainability, it's not like someone wins and someone loses. At this stage, what sustainability really means is trying to get everyone to perform excellently."

Occupant Health and Wellbeing is **Amongst Top Sustainability Priorities** for Budget Allocation

Governance

- **Policymaking**
- Stakeholder engagement

- Employee survey programs
- Professional development
- Health and wellness

Environmental

- Operational enhancements
- Modernization of portfolio

"All three leas of the sustainability stool governance, social. environmental they're really embedded in the company culture. We're catching up now in documenting it, being able to measure it, and talking about performance."

VP - Sustainability, **Engineering and Project Management**

Leads HCN's sustainability program

SUSTAINABILITY ROLES

- **Executes capital** investments and operational enhancements in the medical office portfolio
- **Facilitates** benchmarking activities

FUNCTIONAL STRUCTURE



Team & Operating Partners





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