MANAGING ORGANIZATIONAL SUSTAINABILITY:

THE BUSINESS CASE FOR SUSTAINABILITY PROFESSIONALS IN THE WORKPLACE

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EXECUTIVE SUMMARY

The growing presence of sustainability programs in public and private organizations has created new staff positions for individuals who can manage, coordinate, communicate and measure sustainability-related initiatives. According to the U.S. Bureau of Labor Statistics, the number of people employed in Green Goods and Services increased just over five percent in one year (US Department of Labor, 2013). The number of institutions that are members of the Association for the Advancement of Sustainability in Higher Education (AASHE) has increased 37 percent in the last four years (AASHE, 2012; AASHE, 2009). And the Association of Climate Change Officers (ACCO), which began in 2009 with 14 member organizations, now counts more than 100 participating organizations (ACCO, 2013).

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Despite this rapid growth, a 2011 study by the Weinreb Group found that the field still has much room to grow. In their survey, 29 companies among the roughly 7,000 publicly traded companies in the U.S. have established Chief Sustainability Officers since the first was appointed in 2004 (Weinreb Group, 2011). With the discipline of sustainability management advancing quickly to step into new top-tier leadership roles, pressing questions remain. How can dedicated sustainability staff support the goals of their organizations by improving sustainability? And how can they demonstrate that they have done so?

Current research makes clear that consensus has yet to be reached as to how sustainability staff should approach their work and evaluate their progress. Because true sustainability strategy reflects the business aims of its organization, sustainability officers take on unique roles, responsibilities and functions. Sustainability staff are coordinators, conveners and communicators for sustainability-related activity across functions and departments. They rely on many colleagues to both implement and measure progress related to sustainability, creating an indirect route to metrics that indicate sustainability performance. Research that captures how a sustainability practitioner influences the sustainability performance of his or her organization is just beginning to emerge from the fields of organizational studies and management performance.

By connecting managerial competencies to organizational structures and ultimately to sustainability performance, researchers are beginning to gain greater knowledge of just how sustainability managers can measure successes and link them to an organization's overall goals. This paper focuses on qualitative research, both original and existing, that explores the core functions sustainability staff perform and how their role relates to improving both sustainability and other key organizational objectives.

THE STATE OF SUSTAINABILITY PROGRAMS IN ORGANIZATIONS: BACKGROUND AND BASIS FOR ANALYSIS

Since Milton Friedman uttered his infamous creed, "the social responsibility of business is to increase its profits," (Friedman, 1970) much has changed in the landscape of business and in our public institutions. The scope of business as usual has been broadened to incorporate the impacts of business as usual on the systems that surround and support organizations. According to a global survey by KPMG in 2010: "62 percent of companies surveyed now have a corporate sustainability strategy, up from just over half in February 2008... Just 5 percent have no plans to create such a strategy, while the remaining firms are in the process of developing such a plan" (KPMG, 2011 [13]).

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Beyond sustainability engagement in corporations, educational institutions in the U.S. are also increasingly engaged in sustainability. The Association for the Advancement for Sustainability in Higher Education, a non-profit that provides sustainability resources to higher education institutions, has seen a steady increase of membership, even through the tough economic climate of the past few years (Flint-Chatto, 2011 [15]). It is clear that organizations are increasingly reaching a tipping point at which they decide to incorporate sustainability into their structures. However, this tipping point looks different for each organization, depending on their unique strategies and existing structures.

A subset of organizations deeply incorporates sustainability in the company's mission or core values. Organizations such as Patagonia, Method or Green Mountain College embody a niche of organizations whose core values and daily operations are infused with the principles of environmentalism, stewardship and sustainable development. These sustainability leaders set ambitious goals such as carbon neutrality and lead sustainability innovation in their respective fields. While such organizations are inspirational and influential beacons, they are not the norm.

One academic case shows that environmental legislation and consumer concern for environmental issues influence corporate action, and additionally corporate action can also influence stakeholders' behavior (Pizolatto and Zeringue, 1993).

Most organizations are reacting to either direct or indirect pressures to incorporate sustainability into their organizational architecture. Indirect pressure may come from the desire to avoid the label of 'laggard' as competitors or peer organizations adopt sustainability programs. Direct pressure may come from suppliers, buyers, shareholders, consumers, social activists, investors, insurers, trade associations, academic institutions, religious institutions or regulators (Hoffman 2001).

The catalyzing effect of stakeholder pressure is supported by a well-developed field of study, with many empirically documented cases (Delmas and Toffel, 2010; Hoffman, 2001 [142]). One academic case shows that environmental legislation and consumer concern for environmental issues influence corporate action, and additionally corporate action can also influence stakeholders' behavior (Pizolatto and Zeringue, 1993). Original research conducted for this study found supporting evidence for this phenomenon from one corporate sustainability director of a major financial sector company. His company's sustainability program was founded after shareholders began the shareholder resolution process to demand that the company begin reporting on key sustainability metrics. While a shareholder resolution never came to fruition, the company reacted by forming a sustainability program that incorporated shareholder requests, leading sustainability practices for the industry and sustainability objectives from company leadership. Thus, the company's sustainability program was determined through a blend of outside pressure for sustainability measurement, internal goals and leading industry practices.

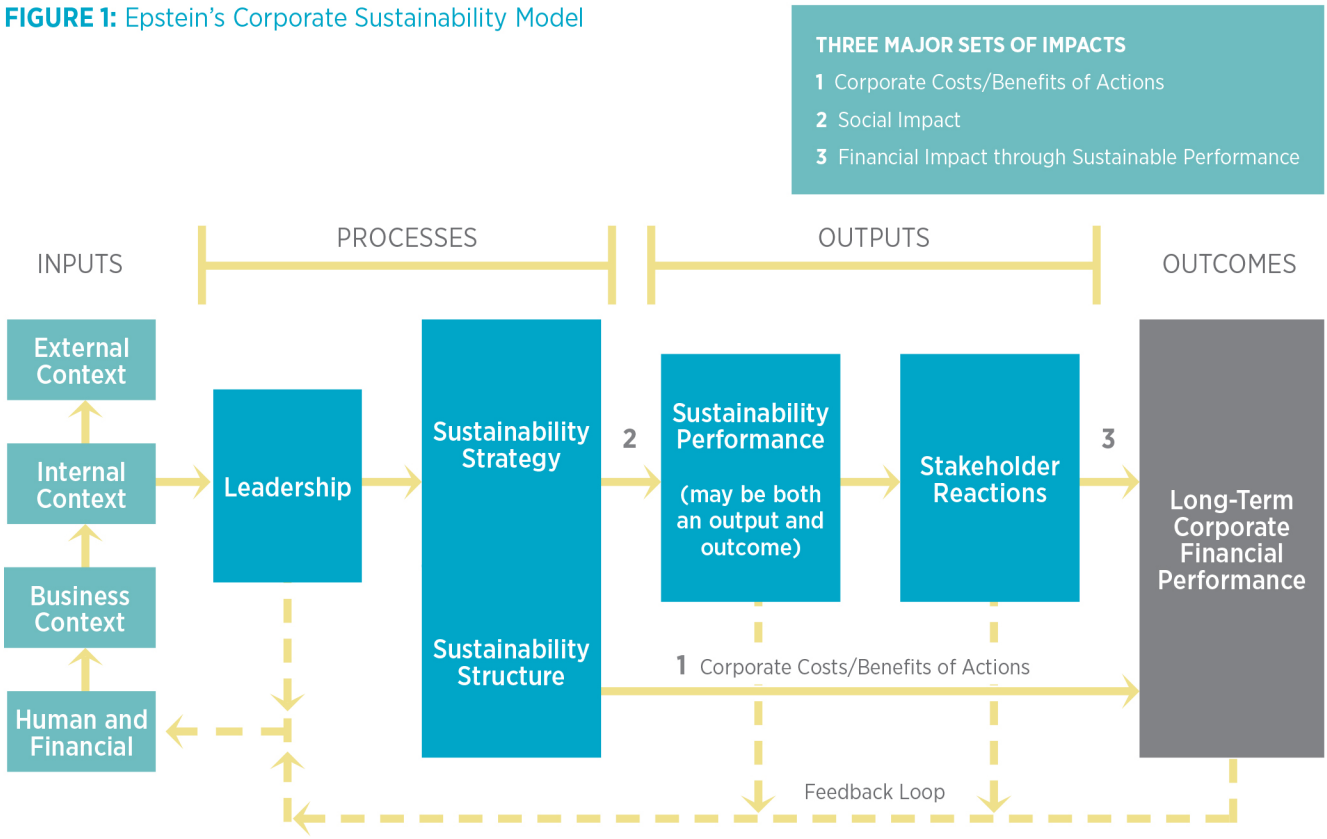
Existing internal structures are a powerful influence, as they may predetermine how a sustainability program can function (Smith, 2011). For example, a sustainability program operating in an organization that places heavy emphasis on quarterly performance may not have an opportunity to pursue long-term investment opportunities. However, a sustainability program operating in an organization that values long-term strategy would have an opportunity to pursue both long-term and short-term initiatives. Accounting structures are just one example of how existing structures may influence the form of a sustainability program. Other internal factors include governance, culture, leadership, business plan, measurement and reporting, organizational learning capacity and information systems (Delmas and Toffel, 2010; Smith, 2011 [75-80]).

Once an organization decides to initiate a sustainability program, the organization then structures and staffs the program, taking the program's form and goals into consideration. Currently, there is little academic literature on organizational architecture that is specific to sustainability programs and sustainability staff. Sustainability programs and sustainability staff are increasing at such a rate that academic research on the subject is still emerging, leaving gaps in knowledge. The specific relationship between sustainability staffing models and outcomes of sustainability programming is one such gap. However, untested models hypothesizing the role of sustainability in corporations are emerging and showing how sustainability staff are key to organizational outcomes. One such model, recently developed by professor of management Dr. Marc Epstein and illustrated on the following page (see Figure 1), provides a foundation to analyze how sustainability staff provide organizational impacts.

Sustainability staff are a key part of Epstein's model. As an input, sustainability staff are part of a corporation's human resources. Epstein says that "organizations need educated and trained individuals throughout the organization who can be sensitized to sustainability issues along with staff who can be specifically dedicated to sustainability." The level of committed human resources to sustainability "will significantly impact the ability to implement sustainability programs." (Epstein, 2008, [49])

According to Figure 1, sustainability staff could be seen as either an "input" (under "human and financial resources") or a process (under "leadership"). In this model, those "processes" create three impacts: financial costs and benefits, social impacts (including environmental sustainability performance) and long-term financial impact. These specific impacts are measurable outcomes that demonstrate the level of environmental, social or financial performance, which all contribute to an organization's sustainability performance.

FIGURE 1: Epstein's Corporate Sustainability Model



Source: Marc J. Epstein, Making Sustainability Work: Best Practices in Managing and Measuring Corporate Social, Environmental, and Economic Impacts, Greenleaf Publishing Limited, Sheffield, England, and Berrett-Koehler Publishers, Inc., San Francisco, Calif., 2008

This report aims to focus at a higher resolution than Epstein's model by casting a spotlight on the role of the sustainability professional and his or her role in the sustainability performance of organizations. With little academic or practitioner research currently available on the topic, this report will provide a preliminary exploration of the relationship between sustainability professional and performance as well as the opportunities, challenges and suggestions for future research. Original interviews of sustainability practitioners in both public and private organizations were conducted for this preliminary research. In all, 12 in-depth interviews were conducted with organizations, including higher education institutions, K12 school districts and corporations from a variety of industries.

To begin to answer the question of *how dedicated sustainability staff contribute to the sustainability performance of their organizations*, we break the question into sub-questions, in order to clarify the nature of the overarching question. First, we will examine how "dedicated sustainability staff" is defined by current practitioners to provide a clearer picture of how role functionality leads to final outcomes.

Next, we will examine how sustainability performance is evaluated by current practitioners in order to understand which metrics are most common and useful in evaluating success of sustainability performance. The final section, a synthesis of the two just described, will examine the main research question through current academic studies, survey findings and suggestions for future research.

HOW ARE THE ROLES OF DEDICATED SUSTAINABILITY STAFF DEFINED?

What trends are emerging in sustainability staff responsibilities, and how are the roles defined within the context of organizations? This section provides an understanding of how sustainability work is being conducted by staff.

The goals and functions of sustainability programs vary from organization to organization because sustainability programs are designed to meet the specific needs of their respective organizations. The roles of dedicated sustainability staff therefore take many forms across organizations. Further complicating the definition of sustainability staff is the cross-functional and highly collaborative nature of their roles as compared to individuals whose roles may be defined very similarly. This section will explore sustainability in the organizational chart and what responsibilities are filled by sustainability roles.

THE NEED FOR SUSTAINABILITY STAFF

In every interview conducted for this study, sustainability professionals said that their role was created after top leadership in the organization agreed to initiate, intensify or consolidate sustainability efforts, resulting in the decision to create a sustainability program. Thus, roles were created after leadership devised a general strategy for incorporating sustainability into the organization, giving rise to the need for a manager to lead or coordinate new efforts. This phenomenon is corroborated by a recent survey conducted by the Society for Human Resources Management. According to the survey, 36 percent of organizations surveyed indicated that the senior management team was responsible for creating the sustainability strategy, followed by 22 percent of organizations whose CEO/President developed the sustainability strategy. Thus, when sustainability professionals step into these new roles, expectations to meet specific objectives already exist. At the same time, the given roles and responsibilities are not static; all participants agreed that their roles and responsibilities were constantly evolving to fit emerging needs of the organization.

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The most common reason for establishing sustainability programs, as stated in six of 12 interviews, was that leadership wanted to consolidate various sustainability efforts across the organization by adding unity and structure to existing efforts. Prior to establishing sustainability programs, these professionals stated that sustainability efforts were ad hoc projects or that responsibilities were split across several positions. These responsibilities were institutionalized and consolidated once the sustainability program was established and the sustainability-focused position was created. Two of the organizations created and staffed sustainability programs to respond to pressures

from customers, shareholders or stakeholders. Two of the organizations stated that programs were created when top leadership decided to take action on sustainability, but could not elaborate further why top leadership came to that conclusion. The remaining two organizations either did not know why the programs were created or stated that the program was a blend of external pressure, desire to consolidate and top leadership support.

THE ORGANIZATIONAL CHART

Given the many ways that sustainability programs come to exist in organizations, it is no surprise that sustainability staff occupy diverse locations in the organizational structure. The Association for the Advancement of Sustainability in Higher Education (AASHE) captures this in their 2010 annual survey of sustainability professionals working within college and university environments:

FIGURE 2: Sustainability Office Location, AASHE Survey

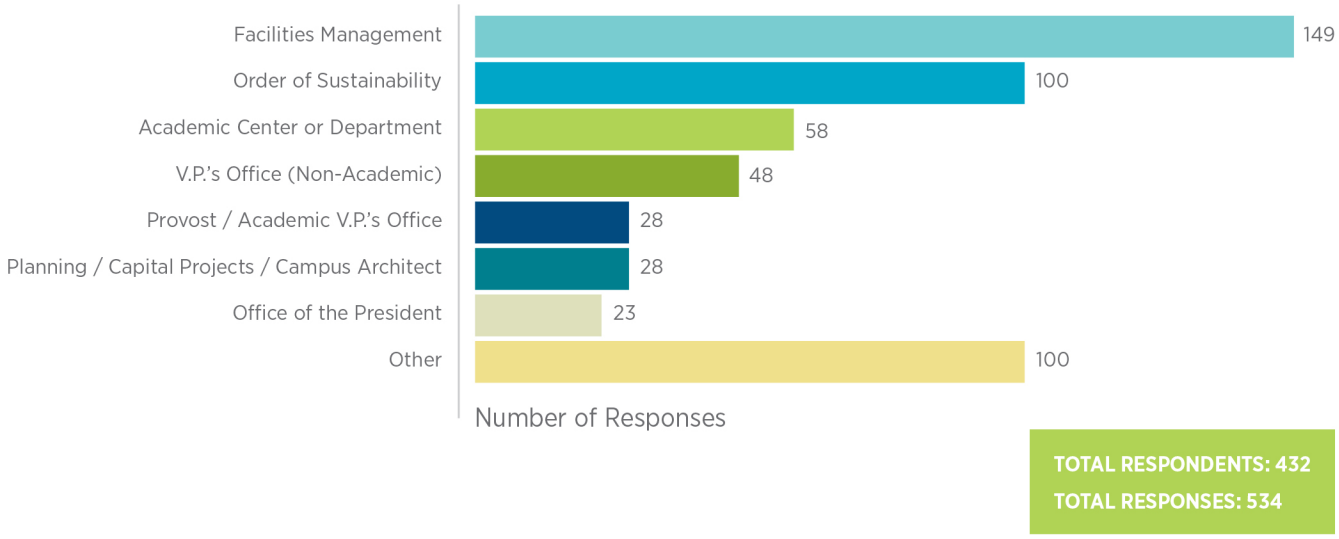

FIGURE 3: Positions of Interviewed Sustainability Staff in the Organizational Structure

DIVISION OF POSITION	TOP-LEVEL REPORT
Operations	Chief Sustainability Officer/Chief Procurement Officer (dual role)
Human Resources	VP of Human Resources
Finance	Chief Financial Officer
Environment, Health, & Safety	Chief Operating Officer
North American Sustainability Office	Chief Sustainability Officer
Global Supply Chain	VP Environment, Health, & Safety and Product Sustainability
Facilities	Environmental Services Manager
Operations	Chief Financial Officer
Communications & Technology	Chief Information Officer
Office of the President	Board of Directors / Regents
Office for Capital Facilities	Director of Capital Facilities
Office of Sustainability	Vice Chancellor of Capital Programs

The number of responses indicating sustainability staff placement in facilities management indicates a strong relationship with operations management. In three of the 12 organizations interviewed for this report, sustainability positions grew out of energy manager or facility manager positions, which were responsible for tracking and measuring utilities. Because the management of energy use, water use, natural gas use, waste production and other resource management efforts are often related to sustainability performance metrics, facility roles and sustainability roles are aligned in many ways. However, as will be discussed below, most practitioners make a distinction between a data measurement role and the role of sustainability professionals.

While nearly 20 percent of practitioners in the AASHE survey report that the office of sustainability is their home, as many respondents replied that their office location is in an 'other' location in the organizational chart. Thus, even within a single type of organizations (higher education institutions), sustainability staff is not pigeonholed in a specific department. This finding was confirmed among interviews with sustainability personnel for this report.

Sustainability professionals occupied varying positions in the organization chart with corresponding variance in the highest executive in that department. This result echoes the idea that sustainability programs and their staff are organized to meet the unique needs and pressures placed upon organizations.

DIFFERENT DEPARTMENTS, SIMILAR ROLES

Despite different locations in the organizational chart, 11 of 12 sustainability professionals interviewed for this report highlighted their role as a facilitator and coordinator to help embed sustainability in all areas of operations and strategy. Nine of those interviewed have a small, centralized office (with 1-3 staff members) that acts as a central node to disseminate information and coordinate the activity of various departments or, in some cases, regional offices. One corporate sustainability manager explained that she "convenes people from different functions and business sectors to push forward sustainability initiatives." Another top corporate sustainability manager described his position from corporate headquarters as bringing "tools and programs to sites around the world." Sustainability staff work across functions and departments to both pull together and disseminate information regarding sustainability initiatives. Facilitating and coordinating sustainability-related programs to help others in the organization is the prevailing best practice for sustainability roles (Smith, 2011; Tripoli, 2010; Epstein, 2010).

Sustainability staff work across functions and departments to both pull together and disseminate information regarding sustainability initiatives. Facilitating and coordinating sustainability-related programs to help others in the organization is the prevailing best practice for sustainability roles (Smith, 2011; Tripoli, 2010; Epstein, 2010).

One respondent drew the metaphor that EHS professionals are like sustainability accountants, whereas sustainability professionals are the communicators of that accounting data.

Managing the measurement, tracking and reporting of sustainability metrics is another common responsibility among sustainability personnel. Eight of the 12 sustainability professionals surveyed manage sustainability data collection and reporting; however, many rely on colleagues to collect data. At this point, it is important to describe the distinction between sustainability staff and closely related environmental roles. Our survey found that two types of roles assist in sustainability measurement: Environmental, Health & Safety (EHS) staff (commonly, environmental managers) or facilities personnel. EHS personnel occupy a distinct place in the architecture of an organization, they are defined by the Bureau of Labor Statistics as specialists who "inspect workplaces for adherence to regulations on safety, health, and the environment. They also design programs to prevent disease or injury to workers and damage to the environment"

("Occupational Health and Safety Specialists," 2012). According to several sustainability professionals surveyed, EHS forms the technical, data and compliance-driven side of sustainability. Facilities personnel focus on physical operations of buildings, including but not limited to energy and water efficiency, waste management and even transportation. While EHS and facilities personnel are seen as significant contributors to sustainability programs, the roles of sustainability manager, EHS manager, and facilities managers are clearly distinct. One respondent drew the metaphor that EHS professionals are like sustainability accountants, whereas sustainability professionals are the communicators of that accounting data.

While sustainability staff, EHS and facilities roles are closely connected, sustainability staff envision themselves largely as communicators, coordinators and long-term strategists rather than technical personnel. The responsibilities of sustainability staff also reflect a role that extends beyond the responsibilities of a technician. Because organizational leadership creates sustainability programs to consolidate, coordinate and intensify sustainability activity across the organization, sustainability staff are expected to be the coordination hub of sustainability activity, the main voice of sustainability communications and the driving force of sustainability efforts.

SUMMARY

- An understanding of the institutional history relative to the founding of the sustainability program will provide context for the program's current form. Through understanding this history, both practitioners and researchers alike can better interpret the goals, roles and values that make up the structure of the sustainability program.
- Close collaboration with related functions such as environmental engineers, energy managers or facility managers can blur the defining boundaries of sustainability staff. Sustainability programs promote strategic and long-term thinking, and sustainability staff implement initiatives across a broad spectrum of environmental issues, relying on the work of others for data mining and technical implementation.
- Coordination is a key role that sustainability staff provides to a sustainability program. This role is significant because, in order to achieve strategic outcomes that reach across departments, communication and coordination between departments is essential.

HOW IS SUSTAINABILITY PERFORMANCE EVALUATED?

How is the work of the sustainability professional determined to be successful and impactful? This section will examine the outcomes sustainability staff are most often expected to produce and how those outcomes are measured.

How sustainability performance is evaluated depends on who is conducting the evaluation, which metrics are used and what standards are established for performance. Sustainability performance can be measured using financial, environmental, social or governance-related metrics. Within these broad categories of performance evaluation, there is no single gold standard for defining sustainability performance. Furthermore, many organizations choose to pursue metrics, standards and goals that correspond to their own unique sustainability strategy. To eventually answer the question of whether sustainability professionals are successful within their own organizations, we will have to understand how to connect sustainability professionals with the metrics used to gauge their own organization's performance. However, performance metrics and standards that are determined by external organizations are most useful to researchers comparing sustainability performance across organizations.

FINANCIAL PERFORMANCE

After much debate, academic literature has agreed that good social and environmental performance of corporations generally leads to better financial performance (Orlitzky, 200). While this consensus is not necessarily proven for all organizations, all organizations do have financial obligations. Thus, the use of financial metrics to measure sustainability performance is and has further potential to be wide-reaching.

The positive impact of resource conservation on an organization's bottom line is undisputed (Celentano, 2008; Kiron, 2012; York, 2008; Porter, 1995). Reducing energy, water, heating oil, natural gas, fuel or other resources saves

APPLYING ROI TO SUSTAINABILITY STAFF

It is rare to find an example of ROI applied to a specific staff person or position. Only a single interviewee measured the ROI of his sustainability position: John Cook, director of sustainability at UC Riverside (UCR). He was installed at Riverside in late 2010 as the organization's first dedicated sustainability staff member. Before Cook's tenure began, UCR sustainability efforts were managed by several different divisions and had no coordination point for activity. Additionally, sustainability efforts lacked capacity for effective reporting and stakeholder engagement. In Cook's first year he began to tackle these challenges to run the sustainability program more effectively. After the first year with UCR, Cook developed a return on investment model to measure the cost savings of his efforts compared to the cost of his employment. Through this model, he was able to demonstrate to UCR leadership that he was saving UCR more than he was costing and was also more cost-effective than hiring consultants.

By demonstrating how his efforts aligned sustainability efforts with the business case, Cook was able to hit the triple bottom line sweet spot. Not only was he improving the campus' sustainability performance, he was also improving the bottom line. Ultimately, this metric helped make the case to transform his sustainability position from a 3-year position to a permanent position.

money. Initiatives that align the business case with environmental performance are the holy grail of sustainability program success. Eleven of 12 participants surveyed for this report said cost savings realized through resource conservation is a key metric when making the case for sustainability within their organizations and is also a key metric to demonstrate success to organizational leadership. Return on investment (ROI), which two organizations mentioned as another key metric, is one way to express these cost savings. One corporate participant noted that executives buy into the sustainability program because it's very business-driven, saying, "the program has very qualitative, feel-good aspects, but it's balanced with good ROI through cost savings via water and energy." Another corporate participant pointed out that the organizational structure plays a factor in the importance of this metric, as sustainability staff housed in business units, which are driven by profit and loss, would need to hold this metric central to their work. Cost savings are also important in educational and non-profit institutions, where budgets can be restrictive. Four of the six educational organizations surveyed for this report stated that cost savings through resource efficiency were of particular interest to organizational leadership.

While ROI is considered an effective metric in determining the success of sustainability performance, even organizations that are top performers in sustainability do not apply ROI uniformly to sustainability programs or staff (Senxian and Jutras, 2009). The Aberdeen Group, a business intelligence research firm, ranked the sustainability efforts of 200 large, medium and small enterprises that were launching or growing their sustainability programs. This study found that only 44 percent of enterprises that were measured to be "significantly superior to the industry average" in sustainability programming used ROI to measure sustainability initiatives. Thirty-nine percent of the surveyed enterprises which fell into the "industry average" category subjected sustainability initiatives to ROI measurement. Between the Aberdeen Group survey and our own findings, it is clear that ROI is an effective, but not necessarily widely used metric to communicate the value of sustainability programs to organizational leadership.

While ROI is considered an effective metric in determining the success of sustainability performance, even organizations that are top performers in sustainability do not apply ROI uniformly to sustainability programs or staff (Senxian and Jutras, 2009).

For sustainability programs in municipal, educational or non-profit institutions, the amount of grant funding leveraged is also an important metric to consider. Many grant or gift opportunities exist to help these organizations implement aspects of sustainability programs. Two of the sustainability managers interviewed for this report were responsible for applying for grant funding to support sustainability efforts. Whether through cost savings or grant funding, financial metrics demonstrate how sustainability staff can measure success and demonstrate value within the organization.

Meeting customer demands and generating new business is another important financial aspect that was brought up by two corporate survey respondents. Increasingly, businesses are requiring sustainability-related data from their supply chains or requesting more sustainable products. The ability to meet these demands is dependent, in part, on the presence of sustainability staff to collect, coordinate and disseminate information. One corporate participant tracks the number of times customers ask about sustainability-related data or products as a metric to measure the need for the program and staff. The ability to meet customer demands through sustainability efforts contributes to additional paying customers. Although it would create a direct link from sustainability programs to dollar value, this metric is not widely used.

ENVIRONMENTAL SUSTAINABILITY PERFORMANCE

Environmental performance metrics are tracked internally by organizations to both meet regulatory standards and sustainability goals. Out of the organizations interviewed for this report, each one that measured and reported environmental metrics also developed measurement frameworks based upon their own unique sustainability goals. Thus, organizations did not overly rely on external environmental metrics frameworks, such as the Global Reporting

Initiative (GRI), to determine internal performance measurement. Three of the six corporate respondents said that GRI was a factor in creating their organization's environmental performance metric framework, but their internal reporting was distinct from the full GRI framework. The respondents based in educational organizations indicated even less reliance on third party frameworks; two respondents used ENERGY STAR Portfolio Manager (which measures only energy and water), one used the Sustainability Tracking, Assessment and Rating System (STARS) and the rest did not use any external framework.

In fact, this lack of reliance on external measures is considered industry best practice for corporations. Each organization's sustainability program is formed to meet unique strategy objectives, and the metrics to measure achievement should be relevant to that strategy. Corporate governance scholars state, "Companies should avoid using sustainability metrics that are too vague and generic, and instead chose metrics that are relevant to their core business" (Singer, 2013 [62]). While this strategy may create the best alignment within companies, the lack of uniformity with which metrics are tracked and presented publicly among organizations makes comparing one organization's sustainability performance against another's a challenge (Smith, 2011).

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The emerging field of environmental, social and governance (ESG) measurement is attempting to create frameworks for socially responsible investors to make side-by-side sustainability comparisons through indices or rating and ranking systems. While such efforts provide the uniformity that the field currently lacks, they are considered "highly trusted" by only 48 percent of sustainability experts, according to a 2010 survey by Globescan raising issues of credibility and legitimacy (Sadowski, 2010). Those who doubt these emerging frameworks cite questionable accuracy in reflecting actual sustainability performance, as opposed to the ability to score well and cloak undesirable data. Mistrust is furthered by challenges in collecting unbiased data and by lack of transparency in the rating process. Despite these concerns, success on these systems can be an important internal metric for a few organizations. For example, AkzoNobel currently links a portion of executive bonuses to performance on the Dow Jones Sustainability Index (DJSI). Shell also linked executive bonuses to the DJSI until 2011, until they were removed from the DJSI due to concerns over oil spills in Nigeria (Cowan, 2011). Shell still links executive bonuses to sustainability performance, however the company uses its own internal metrics to determine success.

Similarly, 11 out of 12 organizations interviewed for this report use their own internal metrics to determine sustainability performance. As mentioned above, three of the six corporate interviewees used GRI as a basic foundation on which to build a more robust measurement scheme using internal opinions of experts, overall sustainability goals and industry standards. Other organizations relied solely on internal opinions of departmental experts (such as EHS personnel), overall sustainability goals and industry standards to determine specific internal metrics.

While metrics may not be uniform for each organization, it is possible to determine which environmental metrics are most commonly used to establish progress and success. In research conducted by the National Association for Environmental Management (NAEM), 74 NAEM members consisting of large, multinational corporations were surveyed to determine the most common environmental metrics tracked. The ten most tracked metrics are listed in Figure 4 (Soyka, 2012 [48]).

Metrics that are tracked are not reported publicly as often as they are tracked internally; for example, only 77 percent of surveyed companies are publicly reporting emissions related to climate change (Soyka, 2012 [48]). However, internal benchmarking and reporting plays an important role in demonstrating success within organizations.

FIGURE 4: Most Tracked Environmental Metrics, NAEM Survey

METRIC	PERCENT OF RESPONDENTS THAT TRACK FOR INTERNAL PURPOSES
Energy Use / Efficiency	93%
Environmental Fines / Compliance	96%
Climate Change (Greenhouse Gas Emissions)	88%
Water Use	86%
Waste Production/ Reduction	88%
Environmental Spills	84%
Environmental Liabilities	80%
Environment Emissions (Non-climate Change)	69%
Renewable Energy	63%
Recycling	68%

The findings from our interviews conform to the NAEM survey results. Nine of 12 sustainability professionals interviewed for this report indicated that senior leadership pays particular attention to environmental metrics that are linked to cost savings; as such, all of the organizations interviewed are engaged in energy use measurement. Eight of 12 organizations are engaged in measuring greenhouse gas (GHG) emissions, even without a direct relationship to cost savings. While interviewees did not discuss the decision to track GHG emissions explicitly, GHGs are subject to increased scrutiny and regulation both in the international community and within the U.S. For example, the Global Reporting Initiative recommends tracking GHGs because some GHGs are considered pollutants and some are the subject of international conventions, which according to GRI makes it a metric that is worthy of tracking.

In two cases, responding organizations made public commitments to meeting specific environmental metrics, which led to increased attention and support from senior leadership toward meeting the publicly disclaimed goal. The goals were specifically set on greenhouse gas emission reductions, waste to landfill reductions and water use targets. These public commitments clearly defined the nature of success and emphasized the importance of one environmental metricover another. For sustainability staff within organizations, it is critical to meet such goals and act upon organizational priorities in order demonstrate sustainability performance success.

SUMMARY

- Cost-saving metrics are powerful internal indicators of success to organizational leadership. This metric can be converted to return on investment for the sustainability program in general, specific initiatives or even staff members but is underutilized as an effective metric.
- Many organizations rely on internal benchmarking to evaluate sustainability performance, using metrics that originate both from within and outside of the organization. Sustainability staff must understand and meet those internal goals in order to demonstrate their role's relationship to sustainability performance.
- For researchers, internal success benchmarks make measuring across organizations more difficult. Stakeholder evaluations or sustainability indices, though in some ways problematic, may be necessary to evaluate sustainability performance.
- While not a common practice, finding metrics that reinforce stakeholder or customer interests in sustainability-related functions can help demonstrate success to organizational leadership. Fulfillment of stakeholder or customer requests by specific sustainability personnel can help link this success metric back to the specific sustainability staff member's actions or roles.

HOW DO DEDICATED SUSTAINABILITY STAFF CONTRIBUTE TO THE SUSTAINABILITY PERFORMANCE OF THEIR ORGANIZATIONS?

This section will explore analytic research to link management presence to sustainability performance, discuss critical functions of sustainability staff and expose case-based opportunities for future research.

Organizations that have hired sustainability staff intuitively understand the intangible benefits to the organization. As one sustainability practitioner interviewed for this report said, "Having the right people providing the right support will help support the program." Sustainability staff are unlike sales personnel, whose contributions to the organization can be seen in the volume of sales. Dedicated sustainability roles are strategic positions that support and drive cross-functional initiatives towards established sustainability goals. Sustainability staff engage others across the organization in order to achieve measurable outcomes. Thus, their contributions to achieving those outcomes are more similar to a general manager's than to a salesperson's.

As noted in the introduction to this report, the link between sustainability staff and sustainability performance seems intuitive. In order to progress beyond this intuitive understanding, links need to be measured between sustainability staff, their actions and sustainability performance. While these specific links have not yet been drawn in academic literature, both academic literature and interviews conducted for this research identify ways to grow the empirical body of evidence for this link.

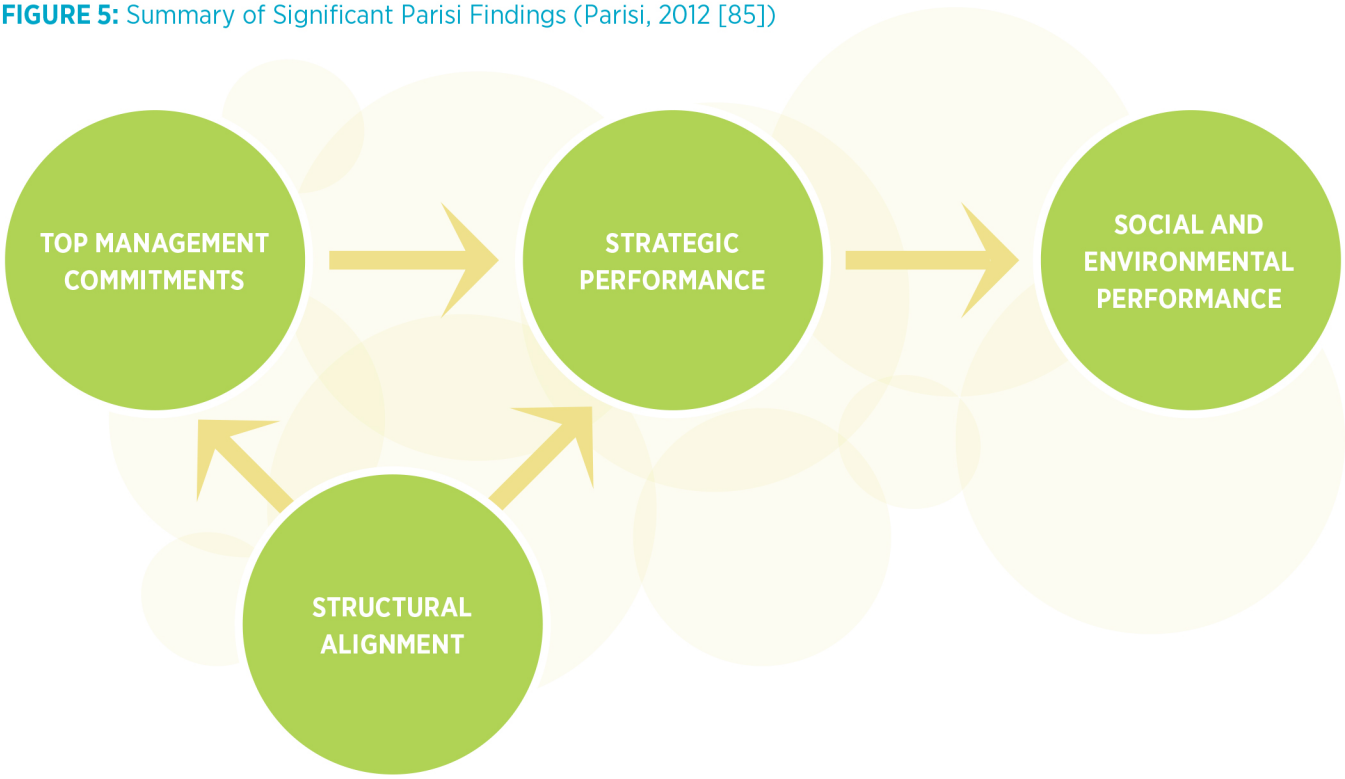
LINKING COMMITTED LEADERSHIP, COMPETENT MANAGEMENT AND PERFORMANCE

Eleven of 12 survey respondents interviewed for this report said that their sustainability positions were created after organizational leadership decided to enhance or create their sustainability programs. It follows then that sustainability practitioners entered an organizational structure where leaders were committed to sustainability efforts. This distinction is significant because commitment from top leadership and access to top leadership has been shown to be a key determining factor of sustainability performance in organizations (Kiron, 2012).

A study by Christiana Parisi, performance management professor at Copenhagen Business School, advanced this idea to illuminate exactly how top management can improve sustainability performance specifically. Through studying the adoption of specific actions by

Through studying the adoption of specific actions by managers in 119 companies, Parisi found that committed leadership led to actions that specifically improved sustainability performance, as evaluated by stakeholders outside of the company.

FIGURE 5: Summary of Significant Parisi Findings (Parisi, 2012 [85])



managers in 119 companies, Parisi found that committed leadership led to actions that specifically improved sustainability performance, as evaluated by stakeholders outside of the company. The two significant actions that top managers take to improve sustainability performance include: (1) implementing successful strategic performance management systems (e.g. scorecards, reporting structures, information sharing systems) and; (2) creating alignment between goals, organizational structures and strategies. Ultimately, Parisi found that through these actions, top managers have a "relevant, indirect effect on companies' social and environmental performance" (Parisi, 2012 [87]).

While the top managers identified for Parisi's study were not necessarily sustainability staff, this finding is relevant to the study of sustainability staff and sustainability performance in two respects. First, Parisi's study provides a model for how future studies might be conducted specifically on sustainability managers by coupling managerial decisions of sustainability staff with sustainability performance based on stakeholder evaluations. Second, in our research for this report, we found that sustainability staff were hired by leaders committed to sustainability. When this finding is applied to Parisi's model, it appears that hiring sustainability staff could be an effective managerial decision made by top management in order to achieve structural alignment within the organization. Ultimately, the decision to hire sustainability staff in order to achieve structural alignment is unique to each organization, and thus Parisi stops short of making that recommendation. However, depending on the organization, hiring a sustainability staff member may augment existing skills and capacities in order to effectively implement a sustainability strategic performance management system or otherwise create organizational alignment.

Academic research has also shown that hiring managers with the right skills will help organizations successfully implement strategy and generate results (Martell et al, 1996). A study by human resources scholars not only supports that hiring competent managers makes a difference in strategy implementation, but also that managers with diverse managerial skills, innovative personality characteristics and tenure have a significant and positive relationship with strategic outcomes (Ibid.)

Both the Parisi study and the human resources study connect the presence of competent managers to strategic outcomes, highlighting the importance of having the right people fill the right roles. These studies provide the nalytic foundation towards understanding how sustainability staff are linked to sustainability performance.

CONCLUSION:
TYING IT ALL TOGETHER

Academic research and case-based evidence have laid the foundation for linking sustainability staff to sustainability performance by clarifying key factors in management, organizational structures and performance measurement. The logical next step is to use these methods to isolate the impact of sustainability staff on a variety of specific measures.

Unlike sales staff, whose performance can be directly measured by volume of sales, sustainability personnel find it more difficult to define success in their role. Sustainability roles are highly collaborative, complicating the method for attributing a positive result to any one position. A single, straightforward method for measuring the effectiveness of sustainability personnel across the board may not be possible. However, both academic literature and common sense suggest that good managers with defined goals and pre-defined metrics will achieve measurable outcomes, and organizational sustainability is no different.

The Center for Green Schools at USGBC intends to continue this research through focused case studies. The significance of sustainability staff in bringing about critical shifts in organizational structure and business operating principles will only grow in future years. Therefore, the community of sustainability professionals and advocates must continue to collect the evidence and draw the lines more firmly between sustainability managers and performance. The vital importance of demonstrating the measurable and visible success of the sustainability leadership role in all organizations cannot be overstated.

FUTURE RESEARCH

Current academic studies lend a general understanding of how sustainability performance can be measured via financial or environmental sustainability metrics and how general managerial structure links to performance. However, there is a lack of research that spotlights sustainability managers and their link to sustainability performance. Challenges to this field of research include:

- The relative newness of the sustainability role in organizations
- Isolating the contributions of sustainability staff within their cross-functional and highly collaborative positions
- The availability of consistent sustainability data across organizations
- Separating correlation from causation[5]

Despite these challenges, there are increasing opportunities to study this relationship due to the increasing amount of data available and number of academic studies on the topic. One promising case study of the University of California system is detailed in the following section.

THE UC SYSTEM: A CASE STUDY FOR FURTHER RESEARCH

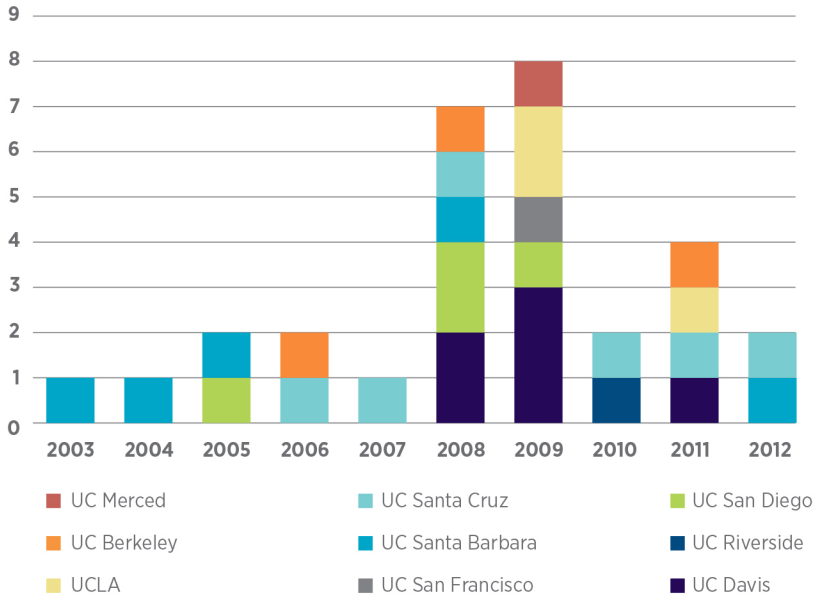
The University of California (UC) system presents a unique opportunity to study the relationship between the hiring of sustainability staff and sustainability performance. In 2003, the UC Board of Regents approved the Green Building and Clean Energy Policy Principles. With these principles in place, the University of California Office of the President (UCOP) founded the office of sustainability and hired a sustainability manager. Over the past decade, the policy has expanded to become a comprehensive sustainability policy, "with guidelines and goals in the areas of Sustainable Transportation, Climate Protection Practices, Sustainable Operations and Maintenance, Waste Reduction and Recycling, Environmentally Preferable Purchasing, Sustainable Foodservice, Clean Energy, and Green Building" ("Sustainability Policy at UC"). The UCOP sustainability manager coordinates 10 university campuses that report in each of these policy areas.

Over the past 10 years, the campuses have created sustainability positions at varying rates. Regardless, the UCOP has maintained a common dataset to examine sustainability performance and sustainability staff presence across campuses. The common goals set forth by the UC system give environmental performance metrics that can be compared to the timing and the number of sustainability staff hired across each campus. Further, delineation between sustainability staff and non-sustainability staff is standardized. UCOP defines sustainability staff as those who are committed full time to sustainability and work across all areas of sustainability. Staff who work on parts of sustainability such as energy managers or environmental planners are not considered sustainability staff at the UC system level.

[1] *The investment in human resources for sustainability may correlate with additional investment in sustainability initiatives. Causation of better sustainability performance would need to be positively identified as originating from sustainability staff.*

Preliminary research shown in Figure 6 demonstrates a significant hiring bump in 2008/2009. According to the UCOP sustainability manager, Matthew St. Clair, additional climate change reporting requirements were added to the UC system reporting policy in 2007/2008. Prior to this addition, campuses had been simply adding climate action planning to existing staff responsibilities. After the addition, many campuses chose to hire dedicated sustainability staff, in part, to help manage sustainability efforts and climate action planning. It is important to note that the increased climate action planning burden was not solely responsible for creating the need for sustainability staff, but rather became a tipping point for many campuses to hire sustainability staff (Personal communication, Matthew Saint Clair, Sustainability Manager, UCOP).

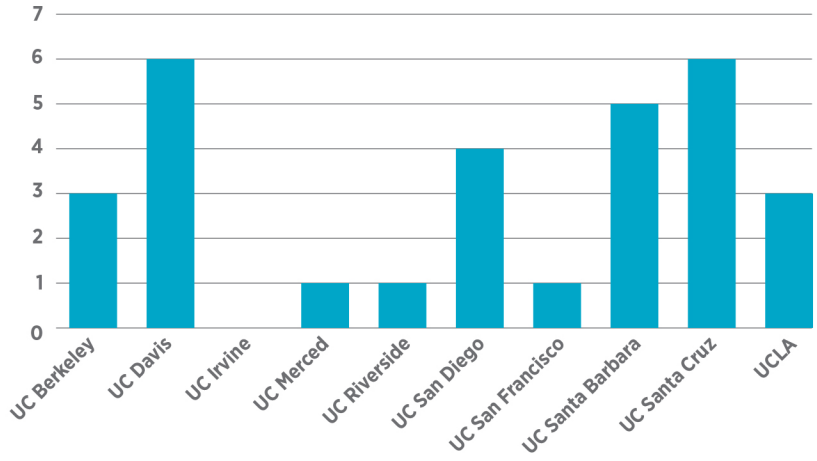
FIGURE 6: Hiring in UC System Over Time



**UC Irvine does not have dedicated, full-time sustainability staff*

The UCOP sustainability manager has a birds-eye view of the before-and-after effects of hiring sustainability staff on each of the 10 campuses. According to St. Clair, the biggest difference can be seen when campuses go from 0 sustainability staff to 1 sustainability staff. After hiring sustainability staff, campuses are better able to meet internal goals, produce higher-quality reporting data and are more involved in UC system-wide efforts on sustainability. St. Clair's observation is corroborated by John Cook, UC Riverside's sustainability director and first dedicated sustainability staff member.

FIGURE 7: Total Sustainability Staff at Each Campus



When Cook first came to UC Riverside (UCR), management of sustainability efforts was scattered across campus, creating a disorganized approach to sustainability strategy and implementation. The program lacked strategy, organization and coordination. Since joining UCR over 2 years ago, John Cook has provided a key coordinating role so that decisions that affect sustainability performance across departments are well-managed. He is the lead strategic thinker for the program, among many staff, faculty and students who help implement the program. Lastly, he adds capacity to complete essential tasks, such as reporting, planning and stakeholder engagement that may otherwise be left undone.

Preliminary research for this case shows that cumulative sustainability performance over 2003- 2012 show a positive correlation between two specific metrics and the presence of sustainability staff across campuses. In order to conduct this research, the following metrics were used to indicate sustainability performance:

- Number of LEED green building program certifications (includes interiors, retrofits and new construction)
- Average percentage of waste diversion
- Difference of current waste diversion rate from baseline rate
- GHG Scope 1 & 2 Reductions / 1000 ft^2
- On-campus renewable energy capacity (in kW)
- Percentage of water use reduction from baseline

These metrics were chosen from many in the UCOP Annual Sustainability Report due to their relatively consistent measurement from 2003 to 2012; they ranged in measurement from 10 years to 4 years of data.[6] The correlation analysis returned the positive or negative nature of the relationship of the performance to presence of sustainability staff. The strongest correlations, those above 0.5 or below -0.5 on a scale from -1 to 1, demonstrated a positive relationship among the number of sustainability staff hired in specific years, the number of LEED certifications and percentage reduction in water use. The full list of correlations can be found in the Appendix.

These results show that the presence of sustainability staff from 2003 to 2005 is correlated with the number of LEED buildings today. Other years did not show a significant correlation over 0.5 or below -0.5. Furthermore, the presence of sustainability staff for all years shows a strong correlation with water reduction. Other metrics considered in the correlation analysis did not show significant correlations. Strong correlations indicate areas that are worth examining to determine causation; however, they do not indicate causation. Further statistical analysis, again using a model similar to Parisi's, would be necessary to determine causality.

An analysis of the UC system that could illuminate the connections between the presence of sustainability staff and sustainability performance would require quantitative analysis of both performance and hiring dates, informed by qualitative research. Coupled with interviews both at the UCOP and campus level, a more holistic understanding of the relationship between sustainability staff and sustainability performance can be presented for further study.

CONCLUSION

By providing a better understanding of sustainability staff roles, relevant performance metrics and keystone functions of sustainability staff, this report provides preliminary direction for the next step in linking sustainability staff to organizational sustainability performance. Cases such as the UC system sustainability program have reached the point where there is enough data to be able to conduct this research. Not only will such studies advance the case for sustainability practitioners within organizations, but they will also uncover key competencies and best practices for sustainability staff in the field.

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[2] Metrics for each year from 2003 to 2012 were aggregated for each campus and correlated with the cumulative total sustainability staff in each year using Microsoft Excel 2010's correlation analysis.

APPENDIX A:

INSIGNIFICANT CORRELATION COEFFICIENTS BETWEEN SELECTED UC SUSTAINABILITY METRICS AND THE PRESENCE OF SUSTAINABILITY STAFF

AVERAGE PERCENTAGE OF WASTE REDUCTION CORRELATION COEFFICIENT	
2003	0.328997252
2004	0.216212448
2005	0.198298892
2006	0.239159714
2007	0.196180261
2008	0.2601626
2009	0.265304708
2010	0.308196628
2011	0.352214807
2012	0.352214807

DIFFERENCE OF CURRENT WASTE DIVERSION RATE FROM BASELINE RATE CORRELATION COEFFICIENT	
2003	-0.359722663
2004	-0.161652497
2005	-0.317317865
2006	-0.433164955
2007	-0.331193896
2008	-0.22900546
2009	-0.383874672
2010	-0.428483707
2011	-0.505753268
2012	-0.505753268

GHG SCOPE 1 & 2 REDUCTIONS / 1000 FT[26] CORRELATION COEFFICIENT	
2003	0.143226129
2004	0.241308564
2005	0.391387868
2006	0.430769686
2007	0.348612371
2008	0.238282572
2009	0.290401354
2010	0.311617941
2012	0.336158808

KW OF ON-CAMPUS RENEWABLE ENERGY CAPACITY CORRELATION COEFFICIENT	
2003	-0.234191546
2004	-0.067505781
2005	-0.24479236
2006	-0.306814925
2007	0.083550815
2008	0.570516916
2009	0.479955466
2010	0.483284038
2011	0.361177233
2012	0.361177233

APPENDIX B:

SIGNIFICANT CORRELATION COEFFICIENTS BETWEEN SELECTED UC SUSTAINABILITY METRICS AND THE PRESENCE OF SUSTAINABILITY STAFF

# OF LEED CERTIFICATION CORRELATION COEFFICIENT	
2003	0.86
2004	0.89
2005	0.79
2006	0.64
2007	0.56

PERCENTAGE REDUCTION IN WATER USE CORRELATION COEFFICIENT	
2003	0.50
2004	0.59
2005	0.60
2006	0.61
2007	0.73
2008	0.69
2009	0.65
2010	0.56
2011	0.60

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