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CLAREMONT McKENNA COLLEGE SUSTAINABILITY REPORTING AT HIGHER EDUCATION INSTITUTIONS

SUBMITTED TO

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AND

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FOR

SENIOR THESIS

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Table of Contents

Chapter 1: Introduction
Chapter 2: Sustainability Reporting on Campus
Chapter 3: What can HEIs Learn from Corporate Reporting?
Chapter 4: The Pacific Sustainability Index: Ranking and Analysis 19
Chapter 5: Conclusion
Appendix A: Base Scoring Sheet
Appendix B: Sector Scoring Sheet
Bibliography

Chapter 1

Introduction

Multiple declarations, governmental and non-profit organizations and universities have issued a call for proper reporting of social and environmental impacts and initiatives within academia. Such reporting can increase awareness of environmental and social impacts, encourage development of sustainable policy and build a campus culture more committed to sustainability. Sustainability reporting at academic institutions has the added benefit of being a powerful teaching aid. Not only does it involve students "in matters that are direct, tangible, immediate, and consequential," the creation of a comprehensive report also "downscales global problems to a manageable size." Such benefits have created a general opinion among academic institutions that sustainability reporting should at least be considered.

Reporting, however, can take many forms with obvious differences in the benefits produced. Most frequent among higher education institutions (HEIs) is environmental reporting. While environmental reporting seeks to demonstrate that an institution is paying attention to and taking appropriate action to mitigate adverse impacts on the environment, sustainability reporting attempts to build upon this and expand the scope of evaluation.³ Thus, sustainability reporting is the most comprehensive form, allowing environmental, social and economic concerns to work together as the three legs of

¹ Andrew Nixon, Improving the Campus Sustainability Assessment Process 2002, 5.

² David J. Eagan and David W. Orr, <u>The Campus and environmental responsibility</u> (San Francisco: Jossey-Bass Publishers, 1992), 6.

³ J. Emil Morhardt, <u>Clean, green, and read all over: ten rules for effective corporate environmental and sustainability reporting</u> (Milwaukee: ASQ Quality Press, 2002), 15.

sustainability. Further differences surface due to the lack of standardization in both environmental and sustainability reporting. HEIs use assessments, audits, footprint analyses and web-pages to address the goals of sustainability reporting. Although each method does have some characteristics which differentiate it from the others, a lack of commonly understood definitions seems to prevent uniformity within each category. Many of these more nuanced differences in reporting styles are due to the immaturity of sustainability reporting within academia.

Sustainability and environmental reporting, although slowly emerging from its infancy, is often haphazard and is rarely conducted by the administrative bodies most likely to create and alter university sustainability policy. Although many anecdotal stories can be found which discuss the general process of reporting, little has been effective in bringing about standard practices for such university reports. Three years after the first American HEI sustainability report was published, David Eagan asked:

How many institutions even now have bothered to analyze their resource flows of energy, water, materials, food and waste? . . . How many have attempted to minimize the damage that they do to the world that their graduates will inherit? How many of the proudest of our colleges and universities educate their graduates even to understand the problem? The answers are clearly 'not many,' perhaps not even 'a few.' But things are changing.⁵

Sadly, these changes have not come as quickly as expected. In fact, fewer than a third of the nation's top HEIs have had comprehensive sustainability assessments conducted on their campuses. HEI sanctioned reports are even less common as many of the aforementioned reports were conducted independently by student groups or as part of a student research project. Since there is little recognition among the HEI community that

⁴ Dave Newport, Thomas Chesnes, and Angela Lindner, "The "environmental sustainability" problem: Ensuring that sustainability stands on three legs," <u>International Journal of Sustainability in Higher</u> Education 4.4 (2003), 357.

Eagan and Orr, 1.

such reporting is necessary, the variability in the information presented can only be expected. Nevertheless, there have been frequent efforts to standardize sustainability assessment in order to improve comparison between institutions. As more and more universities release official comprehensive reports, it is of the utmost importance that quality within reports is recognized and a standardized system of report analysis is made available. Through these methods, comparative analysis of one's own progress against peer institutions is possible and will hopefully increase the quality of all reporting.

This paper follows multiple lines of inquiry in order to determine whether HEIs are taking advantage of the opportunities afforded by sustainability reporting. Chapter 2 begins by evaluating the history of sustainability reporting at HEIs. It then looks more carefully at a current debate concerning the need for comprehensiveness in reports. Chapter 3 expands the discussion by comparing HEI reporting to the current state of its precursor, corporate reporting. When looking at corporations one finds that many benefits of corporate reporting have not been experienced after HEI reports because of differences in report structure. Finally, Chapter 4 evaluates and ranks 20 HEI reports through the use of the Pacific Sustainability Index (PSI), developed by the Robert's Environmental Center. A statistical analysis of the resulting data further illuminates problem areas in sustainability reporting within academia.

Chapter 2

Sustainability Reporting on Campus

History of Sustainability Reporting at Higher Education Institutions

Probably the first comprehensive environmental assessment conducted at an American higher education institution (HEI) was UCLA's In Our Backyard, 1989. April Smith and Robert Gottlieb recounted their experience in the essay "Campus Environmental Audits: The UCLA Experience." They claimed that the study was, "an institutional environmental audit of the university, a process that included a comprehensive characterization of campus environmental issues, an analysis of the governance mechanisms and regulatory framework guiding campus policies, a review of practices at other universities and similar institutions, and a set of recommendations for improving current campus policies and programs."

The report received a great deal of media attention including an article in the *Los Angeles Times* titled "UCLA Identifies a Major Source of Pollution-Itself." If the title seems controversial, comments contained within paint an even bleaker picture of the hidden pollution resulting from the green campus. "The Westwood campus is the city's third-largest user of electricity, the eighth-largest consumer of water, the 10th-largest producer of carbon monoxide, the study shows. UCLA runs a fleet of cars so large that it is surpassed only by Chevron and Disneyland in the amount of air pollution it brings to

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¹ Eagan and Orr, 10.

Southern California, the study says." ² Due to the obvious negative publicity of such an article and the discussion within of the controversy over a lack of regulation of the education sector, UCLA was less than pleased by the release of the masters project. Although the report changed the policy of the Associated Student of UCLA and possibly encouraged the eventual environmental regulation of universities, UCLA itself ignored the recommendations of the report and did not undergo the rapid change hoped for by the authors. ³ Possibly the most important impacts of the report were not felt on the UCLA campus. Due to the media attention received, the report played an influential role in advancing sustainability reporting as an important component of HEIs. In particular, it lead to a 1990 Earth Day initiative which resulted in almost one hundred audits based on *In Our Backyard* author, April Smith's, blueprint. ⁴ This template, *Campus Environmental Audit*, and its 1993 successor *Campus Ecology*, were the standard guidebooks for environmental assessment throughout the 1990s.

A further milestone in the spread of campus sustainability reporting came in 1994 with the first Campus Earth Summit at Yale University. Here, more than 120 HEIs from throughout the world, including Harvard, Stanford, Bowdoin, Middlebury and Wesleyan, signed the *Blueprint for a Green Campus*. It demanded comprehensive HEI reporting of sustainability by stating that each HEI should:

 Conduct an annual or biannual review of campus environmental impacts, including, but not limited to: solid waste, hazardous substances, radioactive waste, medical waste, wastewater and storm runoff, pest control, air quality, the workplace environment, water, energy, food, purchasing policies, transportation, campus design and growth, research activities, investment policies, business

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² Anne Roark, "UCLA Identifies a Major Source of Pollution - Itself," <u>Los Angeles Times</u> June 15, 1989 1989.

³ Eagan and Orr, 15.

⁴ Eagan and Orr, 15.

- ties, environmental education and literacy, job placement and environmental careers.
- Issue a report providing recommendations for improved performance in each area, ranking priorities for action, and setting goals to be completed by the next audit
- Distribute to all members of the campus community, including trustees, high-level campus officials, staff, faculty, students, alumni, foundation donors, corporate donors, government officials, environmental leaders, community leaders and the public at large.⁵

Further improvements in HEI reporting in the following years can at least partially be attributed to the Campus Earth Summit.⁶

The most recent wave of environmental reporting has arguably taken place due to the Environmental Protection Agency's involvement in University regulation. Over the past 10 years the EPA has stepped up inspections of HEIs in order to raise awareness among administrators for environmental failures. EPA proceedings have resulted in many expensive measures at HEIs including:

- The University of Georgia faces a \$2.62 million cleanup of hazardous waste in a landfill that polluted groundwater.
- Penn State must spend more than \$1 million to clean up a well that was contaminated with fire-fighting chemicals used during a campus training program.
- Lincoln University was fined more than \$50,000 for improperly managing oil tanks on campus.
- West Virginia University faces a \$15 million cleanup of asbestos in its basketball arena and will lose its home game schedule for an entire season. ⁷

However, the EPA has actively encouraged a system of self-auditing among HEIs by dropping most punitive fines for those institutions which report their own violations. After Vassar College drew nearly \$100,000 in hazardous materials fines EPA Regional Administrator Jane Kenny commented, "Vassar could have avoided most, if not all of, the penalties for violations of hazardous waste regulations by participating in EPA's

⁵ <u>Blueprint for a Green Campus: The Campus Earth Summit Initiatives for Higher Education</u> Heinz Family Foundation, 1995) http://www.hfp.heinz.org/pdfs/Blueprint-For-Green-Campus.pdf.

⁶ Nixon, 21.

⁷ Protecting Health and the Environment On and Off Campus, May 13, 2005 2005, Environmental Protection Agency, October 10, 2005, http://www.epa.gov/region02/p2/college/protect.htm.

voluntary self-audit program." One can easily see how such a policy could serve to encourage at least auditing of compliance issues such as hazardous materials use. Such an analysis at Bowdoin College led to a relationship with an auditing company, Woodard & Curran, which eventually resulted in a formal Environmental Impact Audit, covering issues far beyond just compliance. This is only a single example of the indirect benefits for sustainability reporting which the EPA policy might have. All of these different factors seem to explain why the number of sustainability reports has gradually risen since 1990. 10

HEI Assessment Scope: Comprehensive or Focused?

Even after widespread release of blueprints, books and declarations on how to prepare an assessment, one still finds an incredible diversity in the style of reporting at HEIs. Reports have been written by third parties, by students as part of a class, environmental organization, or thesis, by campus environmental task forces as well as by administrative committees. Some are touted as the first step for the institutionalization of annual reporting at the HEI, creating a benchmark to measure future success while other reports have not been updated in the 15 years since their original publication. As a result, it can still be difficult to compare the sustainable policies and performance at rival universities. Several important questions have surfaced concerning the scope of

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⁸ <u>Major Enforcement Actions Against Colleges and Universities in New York, New Jersey and the Caribbean, March 30, 2005 2005, Environmental Protection Agency, October 10, 2005 http://www.epa.gov/region02/p2/college/enforcement.htm.</u>

⁹ Mike Curato, et al, "Final Draft Report Environmental Impact Audit," (2000). http://ereserves.bowdoin.edu/other/sustain/bowdoinenvaudit.pdf. 10/01/05., ES-1.

¹⁰ Nixon, 23.

¹¹ Nixon, 26.

sustainability assessments. Are focused assessments preferable to comprehensive ones? Should social and economic indicators be included with environmental reporting in order to further expand the comprehensiveness? Sometimes such questions can hinge on the observed benefits of sustainability reporting.

April Smith has noted that the media leak of *In Our Backyard* did help galvanize a UCLA administration hostile to the proposed changes contained within. Obviously, the backlash by the UCLA administration to In Our Backyard is something which would preferably be avoided in future reporting. In Greening the Ivory Tower, Sarah Hammond Creighton draws on her experiences at Tufts to warn of the potential difficulties comprehensive assessments create in implementing actual change on campuses. According to her, "Tufts concluded that the broad-based campus audit could actually be detrimental to environmental action because of the general nature and heavy burden the audit places on university administrators whose time is better channeled into implementation of environmental actions." Furthermore, the data which was collected at Tufts was frequently seen as inadequate. For example, instead of absolute values of water usage, methods of predicting water usage including whether efficient toilets and shower heads were being used would be more helpful in designing future campus policy. The danger of collecting "data for the sake of data," is an important issue to keep in mind but one should realize that such data, if presented as a comprehensive report can provide benefits outside of informing institutional decision-making.

Although Creighton does note that audits of particular issues are "essential for measuring progress, informing decisions, and evaluating the project in environmental

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¹² Sarah Hammond Creighton, <u>Greening the ivory tower: improving the environmental track record of universities, colleges and other institutions</u> (Cambridge, Mass: MIT Press, 1998)337, ., 31.

terms," she sees little use for comprehensive reports. 13 She does recognize that in order to make informed decisions and determine progress towards a goal data is required but notes that this is best accomplished when each issue is approached individually. Such sentiments can be seen in the way many universities currently collect and maintain their data. When asked about comprehensive reporting at Brown University, its resource efficiency manager, Kurt Teichert, stated that the university has "never done a comprehensive audit - opting for problem/solution based approaches to data collection to address specific issues." Leith Sharp, the director of Harvard's Green Campus Initiative, responded that, "Harvard's so extraordinarily decentralized that it takes months if not years of work to gather campus wide data. We will keep working on it as resources become available but at the moment we focus more on building by building indicators and measurement." Davidson's facilities director, David Holthouser, claimed that due to his audits' goals of data management rather than demonstration, he had focused on individual issues rather than comprehensiveness. 16 Such a mentality of depth over breadth seems to be the most frequent reason for avoiding comprehensive evaluations of sustainability at HEIs.

Nevertheless, many HEIs do conduct broad assessments and one should be familiar with the logic behind such decisions. In his analysis of campus sustainability assessments, Andrew Nixon found that there are three primary functions of a CSA. They are:

Understand where an institution stands with regard to sustainability objectives.

¹³ Creighton, 31.

¹⁴ Kurt Teichert, 10/22/05.

¹⁵ Leith Sharp, 10/21/2005.

¹⁶ David Holthouser, 10/11/05.

- Identify areas and develop strategies for improving an institution's sustainability performance.
- Help build a culture committed to sustainability.¹⁷

When one carefully analyzes these three goals one can see that a comprehensive analysis can be more effective at achieving them. In order to fully understand both where an institution stands and what initiatives could improve sustainability, seeing the big picture allows one to make important connections between different areas of the university which might not be possible with focused reporting. In discussing why the research group decided to focus on the institutional level, the authors of *In Our Backyard* noted that:

Environmental issues are rarely analyzed in a comprehensive manner at the institutional level. Comprehensive analyses of environmental problems and solutions have been conducted at the global, national, regional and municipal level. An institutional analysis can significantly further progress toward understanding and addressing environmental issues. Many environmental problems are generated and experienced at the institutional level. ¹⁸

By analyzing sustainability issues at the level from which most institutional decisions are made, important connections between various issues can be made. Furthermore, a culture committed to sustainability can also be better fostered by comprehensive reporting. The University of California at Berkeley Campus Sustainability Assessment claims that it is an important first step in "engaging the campus in an ongoing dialogue about working towards environmental sustainability." Thus, one can see that although focused reports can be effective tools for specific goals, comprehensive reporting is better suited for attaining the general changes on campuses explained by Nixon.

In trying to determine the greatest deterrents to sustainability at HEIs, Velazquez et al noted several problems which would be better addressed through comprehensive

¹⁷ Nixon, 5.

¹⁸ Tamra Brink, et al, <u>In Our Backyard: Environmental Issues at UCLA, Proposals for Change, and the</u> Institution's Potential as a Model, 1989), 5.

¹⁹ <u>UC Berkeley: Campus Sustainability Assessment 2005</u> The Chancellor's Advisory Committee on Sustainability, 2005). http://sustainability.berkeley.edu/assessment/pdf/CACS_UCB_Assessment_Full.pdf. 10/01/05, 6.

sustainability assessments than in focused reports. Among other things, they complained of a disinterested and unaware campus community, a lack of access to necessary data, problems in information communication and a dearth of explicit policies as well as definitions of concepts.²⁰ Some of these complaints were echoed by the EPA in an analysis of HEI reporting, claiming that, "Environmental efforts on campus were not effectively communicated. Environmental information or data was absent, obsolete, or unreliable. . . Student, faculty and community concerns were difficult to address in a coherent and informed manner because of the lack of data."²¹ Although Creighton may be correct in saying that focused reports can be better suited for aiding decision-making on specific issues, both Velazquez's and the EPA's deterrents to sustainability show that there are important roles for sustainability assessments which focused reports are incapable of filling. A single and comprehensive report puts standard data at all stakeholders' fingertips. It can be used to define each aspect of sustainability and the institutional policies surrounding them. Finally, comprehensive and publicly released reports can be used to inspire interest in sustainability by presenting information in a form easily digestible by all stakeholders. As a result, students, alumni, faculty and community members can stay as informed about campus policies and impacts as administrators to better facilitate an open dialogue.

This question of varying levels of comprehensiveness has expanded to take the form of a debate over sustainability versus environmental reporting. Although

²⁰ Luis Velazquez, Nora Mungia, and Margarita Sanchez, "Deterring sustainability in higher education institutions: An appraisal of the factors which influence sustainability in higher education institutions," <u>International Journal of Sustainability in Higher Education</u> 6.4 (2005), 384-388.

Best Management Practices for Colleges and Universities: Institutional Communication, 2003, 11/05/05 http://www.epa.gov/ne/assistance/univ/pdfs/bmps/EnvironmentalPerfReport.pdf.

sustainability reporting hypothetically includes all aspects found in an environmental report, it attempts to go further by incorporating the other two components of sustainability, economic and social aspects of an HEI. In using the Global Reporting Initiative to structure sustainability reporting at the University of Florida, it was found that, "broadened sustainability reporting can bring to life the links between social issues and their fiscal and environmental costs." These thoughts underscore the idea that to truly determine their current successes and failures with respect to sustainability, HEIs must bring a wide variety of issues together in a single analysis. Although very few institutions have done so, more and more schools are turning towards comprehensive sustainability reports as powerful tools for defining institutional policy and a green image.

Whether to complete comprehensive sustainability reports has become a crucial question because, although most schools have begun to at least collect some environmental data for decision-making, little transparency is seen within academia concerning such impacts as well as the social and environmental policies surrounding them. In the next chapter, I will analyze how this issue is representative of the immaturity of HEI sustainability reporting. The fourth chapter will offer a statistical analysis of HEI reporting in order to define this immaturity more thoroughly as well as to identify areas most in need of development. Generally, by looking to the corporate sector for inspiration, one can find that many characteristics of reporting are missing from HEI reporting. Moreover, these missing components have the potential to greatly aid HEIs in attaining their goals of increased sustainability.

²² Newport, Chesnes, and Lindner, 358.

Chapter 3

What can HEIs Learn from Corporate Reporting?

In determining the three primary goals of sustainability assessments, Andrew Nixon focused on the goals of sustainability reports of HEIs available in 2000. Due to this, he has missed goals of sustainability reporting long found in the corporate sector and recently emerging among colleges and universities. Beyond his three stated goals, comprehensive sustainability assessments have the potential to ease comparison between institutions, can increase dialog and trust among stakeholders and as a result generally increase the status of campus sustainability in the university community.

While focused reports can have positive results, they miss these beneficial aspects of environmental reporting witnessed in the corporate sector. Corporations, as a result of their financial reporting, have realized that transparency can do a great deal to encourage investment and consumption of products as well as push for sustainable performance within an industry. Volkswagen distributes its sustainability report to all of its employees to motivate them and potential customers to take pride in Volkswagen's products. Chevron maintains a dialog through surveys of public opinion towards the corporation's sustainability practices. The mere presentation of data in one comprehensive report available to all stakeholders can allow critical evaluation of all aspects of a college campus from many points of view. Individual reports scattered throughout the university and filed away in the facilities, environmental health and safety, purchasing and

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¹ Morhardt, 13.

development offices does not provide the same accessibility and attention as a single report issued and advertised to all stakeholders. Velazquez et al. noted this "lack of opportune communication, and information," as one of the primary deterrents for successful sustainability initiatives within HEIs.²

Beyond providing data for decision-making and encouraging greater communication, broad reports at universities and colleges could also make comparison by third parties of the environmental impacts and initiatives of various institutions easier, thus encouraging good performance. Creighton claims that "A broad-based audit will be useless if it neither compares the track record of the college or university to other similar institutions nor provides the detailed information needed to make change," but misses the idea that if all universities were to present demonstrative and comprehensive documents pertaining to sustainability, competition for excellence would itself encourage this change.³ Such reports would optimally include comparison to other institutions as well as information needed to make changes but this data may not be as integral as Creighton claims. In an industry self-described as "obsessed" with rankings, it is a failure not to offer data concerning sustainability performance.⁴ Furthermore, this data must be readily available to prospective stakeholders. Once such information is readily available, comparisons can be drawn. This would allow prospective students, faculty and investors to incorporate sustainability performance as part of the difficult decision of which HEI to aid or patronize. Corporate style reporting could thus increase administrative attention to and quality of environmental and social performance.

² Velazquez, Mungia, and Sanchez, 386.

³ Creighton, 30.

⁴ <u>eReference Shelf</u>, St. John's University Libraries 11/10/05, http://archive.stjohns.edu/pls/portal30/sjudev.school.home?p_siteid=42&p_navbar=278&p_id=59763.

Differences between Corporate Reports and HEI Assessments: Author, Audience and their Implications

Before one can accept thorough application of corporate style reporting to non-profit institutions such as universities, one must look at the differences between the two sectors. Four primary and interrelated differences surface and are discussed in this section. 1) HEI reports are rarely written from the perspective of the college or university administration. 2) Similarly, they are usually directed at the administration as opposed to customers or investors. 3) Due to this internal target, HEI reports can be unpublished or more difficult to find than corporate counterparts. 4) As a result of differences in their clients, HEIs have an even greater responsibility to follow corporate style reporting in points 1-3.

The most obvious disparity which comes to mind when evaluating the reports is the fact that corporate reports are accepted documents from the voice of the corporation. Until very recently, comprehensive reports about colleges and universities have rarely been official documents from the university, instead taking the second or third person, demanding change within the university system. Some reports even explicitly notify the reader that the document is not in any way to be construed as official policy of the university. Corporate sustainability reports frequently take their structure from financial reporting, including introductory statements from CEOs or the Chairman of the Board. Since they usually are not officially vetted, HEI reports are usually incapable of presenting statements with official policy implications. For example, reports frequently

⁵ Brink, et al.

include "recommendations" sections rather than stated goals as seen in reports written by an administration or corporation. ⁶

Even when written by "environmental councils" formed by the administration or board of trustees, reports too often stop short of explicitly stating what will happen. "State of the Environment at Middlebury College – 1998", written by the Middlebury College Environmental Council at the request of the president ends with "Specific recommendations that should be authorized or promoted by the President."⁷ The biggest problem with such reporting is that it fails to capture the trust of other stakeholders. Although it is good to see that someone is investigating an organization's impacts, it is nearly impossible for institutional credibility towards sustainability to be positively influenced by any report that begins by reminding the reader that, "Neither the University of California nor the GSAUP either support or disavow the findings in this project. University affiliations are for identification only; the university is not involved in or responsible for the project," as In Our Backyard does. BP had its CEO introduce its 2002 "Environmental and Social Report," and the chairman of the board of management for BMW Group signed the preface for their "Sustainable Value Report: 2005/2006." By doing so, a corporate commitment to sustainability is implied since top executives have

⁶ <u>University of Pennsylvania: Campus Environmental Audit</u> Penn Environmental Group, 1996). http://dolphin.upenn.edu/~pennenv/audit/. 10/01/05, 17. Brett Smith, et al, <u>Macalester College: Environmental State of the College</u>, 2004).

http://www.macalester.edu/environmentalstudies/Audits/enviraudits.htm. 10/01/05, 4.

⁷ Dan Bedford, et al, <u>State of the Environment at Middlebury College - 1998</u>, 1998). http://community.middlebury.edu/~enviroc/state.html. 10/01/05, 47.

⁸ Brink, et al. disclaimer.

⁹ bp: Environmental and Social Review 2002, 2002.

http://www.bp.com/liveassets/bp_internet/globalbp/STAGING/global_assets/downloads/E/Environmental_and_social_report_2002.pdf. 11/01/05;

BMW Sustainable Value Report 2005/2006, 2005.

http://www.bmwgroup.com/e/nav/index.html?http://www.bmwgroup.com/e/0_0_www_bmwgroup_com/verantwortung/publikationen/sustainable_value_report_2005/sustainable_value_report_2005.shtml. 11/10/05.

taken the time to address these important issues. Only a few of the analyzed HEIs such as the University of North Carolina – Chapel Hill, have recognized that an acknowledgement of a document's contents by a top administrator such as a chancellor is an important step in creating a powerful sustainability report. ¹⁰

The Middlebury example highlights not only the voice of the authors but also shows who the report was written for. In this case, Middlebury was writing a report for its president in order to track "improvements and identify areas which require further development." Which benefits are reaped frequently depend upon the target audience of a given report. Morhardt notes that corporate sustainability reports are all directed at one or more of the following audiences; employees who want to have pride in their company, customers who may make purchasing decisions based on perceived sustainability, financial institutions and investors who need to be assured of sustainability and environmental organizations which can be important allies. 12 Many HEI sustainability reports, however, focus attention on the administration and internal decision-making. Colgate's "Green Strides" report was designed to "identify and assess different environmental issues on campus and provide suggestions to be used by the administration to reduce the University's environmental impact."¹³ It is interesting that the most frequent audience for HEI reporting is not even listed as a typical audience for corporate reporting. By avoiding direct engagement of stakeholders outside of the administration, sustainability assessments frequently miss an opportunity to expand

¹⁰ <u>UNC Chapel Hill: Campus Sustainability Report 2003</u> (Chapel Hill: University of North Carolina Sustainability Office, 2003). http://sustainability.unc.edu/Documents/AnnualReportWeb2003.pdf. 10/01/05, 2.

¹¹ Bedford, et al, 1.

¹² Morhardt, 13-14.

¹³ Green Strides, "ENST 480 Audit, Green Strides: Implementing Colgate University's Environmental Greenprint," . http://groups.colgate.edu/greenstrides/enst/480/default.htm. http://groups.groups.htm. http://groups.htm. http://groups.htm<

interest in campus sustainability to students, faculty, donors and the surrounding community. Although informing decision-makers is a necessary step in fostering sustainability, the point of view and target audience of comprehensive HEI sustainability reports highlight their immaturity and weaknesses.

Furthermore, finding reports as an outsider can be much more difficult than in the corporate sector. Once again, this is a function of the writers' target audiences. Corporations invest great amounts of time and money in order to widely disperse a green image. Some estimate that BP has spent over \$600 million in its recent rebranding in order to spread a green image. 14 As a result, it is to be expected that their reports are extremely refined and are readily available on the company web-site. In his research of corporate sectors, Morhardt noted that since student environmental activists "often rely on poor word-of-mouth information," sustainability reports can do a great deal to reduce controversy over corporate policy. This, however, depends upon the ease of access that students have to such reports. 15 Corporations are beginning to pay attention to the idea that they can control and distribute the documents which will mold public perception of corporate sustainability. HEIs, on the other hand, have been slower in realizing this power. Within academia, the few reports that are written are difficult to find, frequently buried in offices or obscure university web-sites. Although it is to be expected that reports written to aid internal decisions are not widely disseminated, it is a shame that the transparency expected of the corporate sector is not applicable in HEIs.

¹⁴ Sharon Beder, "bp: Beyond Petroleum?" Battling Big Business: Countering Greenwash, Infiltration and other Forms of Corporate Bullying, ed. Eveline Lubbers (Devon, UK: , 2002) 26-32.

Morhardt, 15.

This lack of transparency is particularly troubling in light of the fact that, compared to corporations, universities present a unique social need for corporate style reporting directed towards clients because of their customer base. Corporate customers are likely to stay potential customers for a longer time than the clients of universities, the students. As a result, HEIs have the luxury of shifting to accommodate environmental or social demands of current students but within four years almost the entire client body will have been turned over. At Claremont McKenna College, members are still appointed to a student-faculty environmental committee but the group has not met in several years and appears to be more of a relic from days gone by than an active organization. Due to the possibility of retreating on environmental promises made to one group of students, direct and comprehensive impact and policy reports could help ensure continuity and allow expectations of performance to be developed.

This leads into a second area where the unique characteristics of students as consumers demands officially sanctioned reporting. The earliest corporate reports in the late 1980s were primarily the domain of environmentally conscious corporations such as Aveda, The Body Shop, Ben & Jerry's and Seventh Generation. These companies recognized that their customer and investor interest relied heavily on their environmental practices and as a result opted to become more transparent. In academia, most students only make one or two consumption decisions when it comes to their education. As a result, they are more susceptible to making uneducated and unsustainable decisions as to where they should study. Greater prominence and accessibility for HEI sustainability

¹⁶ Morhardt, 4.

reporting would show students to judge college and university sustainability and then rely on that judgment for the multiple years they will patronize the institution.

Chapter 4

The Pacific Sustainability Index: Ranking and Analysis

Application of the Pacific Sustainability Index

Chapter 3 has shown that corporate style reporting has the potential to fulfill needs of stakeholders as well as benefit the HEI as a whole. As a result, analysis of university reporting through the use of a scoring system designed for the corporate sector could answer interesting questions about what HEI reports are missing. Does comprehensive academic sector reporting truly accomplish the benefits such a system offers? It is possible that individuals compiling such massive reports fail to address individual issues in enough depth to aid decisions while writing a report incapable of attracting the attention of diverse stakeholders? If focused reports are better designed for decision-making are comprehensive reports taking advantage of their unique advantages?

The Pacific Sustainability Index (PSI) offers a unique way to evaluate colleges and universities. Although designed for the corporate sector, the PSI offers the ability to evaluate the transparency of an institution fostered through its sustainability reporting. Through the compilation of reporting guidelines and certification processes, the PSI allows one to separate the environmental intent (EI), environmental reporting (ER), environmental performance (EP), social intent (SI), social reporting (SR) and social

performance (SP) into separate categories.¹ This breakdown facilitates the determination of the specific strengths of various HEI reports as well as allowing comparison of reporting practices between HEIs and the corporate sector.

Both regulators and administrators of HEIs have called for some form of comparison for sustainability at various institutions. The EPA has stated that, "Colleges and universities are accustomed to comparisons. Use of a similar reporting framework or agreement on a limited set of common indicators would allow credible comparisons, trend analyses and prioritization of action plans based on actual, rather than perceived, performance which would greatly enhance the greening movement at colleges and universities." Furthermore, Michael Shriberg of the University of Michigan has demanded that "Scholars and practitioners need to either help shape a sustainability ranking system or provide a clear rationale for why ranking is not appropriate."³ Although directly ranking universities on their actual performance would be beneficial, it should be noted that the PSI is not the best system for such a purpose. Even though the PSI does offer points on performance, these points are entirely dependent upon the statistics provided within reports. Two distortions of performance ranking can thus happen; an HEI will get no credit for excellence if not touted in a report and an institution's reporting will be trusted completely as the PSI has no auditing system to match true performance with claimed performance. One must remember that the goal of the PSI is to test only for comprehensiveness or transparency of a given report rather than

¹ What the PSI Scores Mean, Robert's Environmental Center, Claremont McKenna College, October 5 2005 http://www.roberts.mckenna.edu/psi/whatthescoresmean.asp.

² Best Management Practices for Colleges and Universities: Institutional Communication, 5.

³ Michael Shriberg, "Institutional assessment tools for sustainability in higher education," <u>International Journal of Sustainability in Higher Education</u> 3.2 (2002) .268.

the performance of an *institution* as a whole.⁴ Nevertheless, transparency of reporting as measured by the PSI can provide an insight into the dedication of HEIs to sustainability and thus provide interesting information.

Structure of Analysis

For this study, the top 30 national universities and top 30 liberal arts colleges according to the US News and World Report were selected for analysis.⁵ A search of their web-pages and the internet using pairings such as "sustainability" or "environmental," with "report," "assessment," or "analysis" was used to find documents. After this initial phase, institutions without reports were contacted via email to allow presentation of reports I had not found. Surprisingly, only 18 comprehensive HEI reports were found for the pool of 60 top HEIs. To augment this, two further reports, from the University of Florida and Michigan State were arbitrarily added to create a sample size of 20 reports. These reports were then scored according to the PSI base scoring questionnaire.⁶ Further indicators and questions specifically appropriate to the Colleges and Universities sector were then created and added to the database to form a sector specific scoring questionnaire. To see the complete base scoring and sector scoring questionnaires see appendices A and B.

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⁴ Morhardt, 171

⁵ America's Best Colleges 2006, 2005, US News and World Report, October 5 2005 http://www.usnews.com/usnews/edu/college/rankings/rankindex brief.php.

⁶ Emil Morhardt, <u>PSI Base Scoring Sheet</u>, 2005, Robert's Environmental Center, Claremont McKenna College, October 25 2005, http://www.roberts.mckenna.edu/PSI/scoringsheet.asp.

Scores were then determined for each of the six components of the PSI. Environmental intent attempts to quantify the quality of explanation of corporate policy, initiatives, goals and management towards environmental issues. Discussion of environmental policy, environmental management systems and stakeholder consultations are all examples of the 31 components of the EI score. Environmental reporting determines the degree to which indicators such as energy usage, and waste production are used. In this case, each indicator is given one point if mentioned, an additional point for quantitative data and a third point for historical trends. Environmental performance uses the same indicator questions as environmental reporting but offers one point if improvement is shown in an historical trend and one additional point if the HEI shows itself to be performing better than a peer average or if the data is at maximum performance (0 violations, 100% recycling, etc.) The final score for each component is given as the percentage of possible points actually received. Social scoring follows the same structure but looks for indicators such as anti-corruption practices, demographic statistics, policies towards free association, community development initiatives and employee safety statistics. Once again, scores for social intent, social reporting and social performance are given as percentages of possible points earned. Comprehensive environmental (ES) and social (SS) as well as a total PSI score are then formed by averaging the different components.

How do HEIs Rank?

After applying the PSI, one can rank HEIs according to their total score. The results are seen in Figure 1. The University of Michigan – Ann Arbor, the University of Florida and the University of California – Berkeley have excelled beyond other HEIs in presenting both their intents and impacts concerning sustainability. Although this score gives a general impression of the comprehensiveness of all of the HEI reports evaluated, scores are skewed for a variety of reasons. HEIs which chose to write only environmental reports are penalized because social scores comprise half of the PSI score. For example, although Yale had a comparatively high score of 25.89 for its environmental components, its decision not to include social reporting dropped its PSI score to 15.20. Similarly, excellence in ER may be watered down due to a lack of discussion of intent. It is for these reasons that individual scores for each PSI component can be more informative in evaluating HEIs.

Figure 1

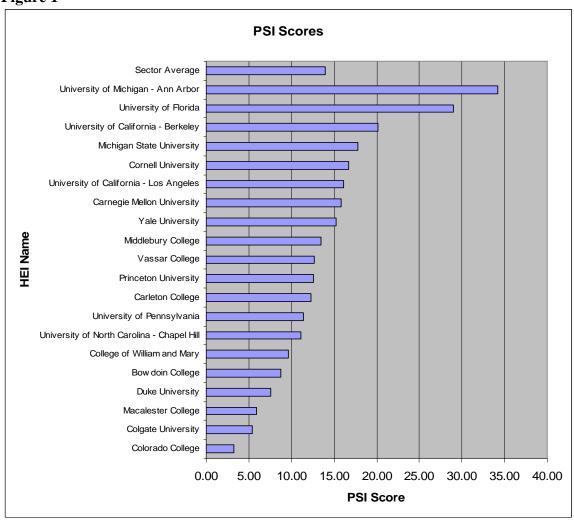
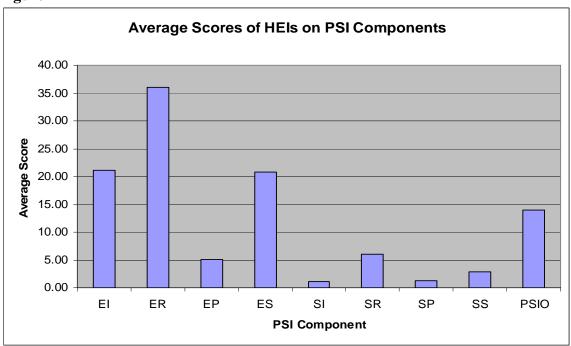


Figure 2



As seen in Figure 2 EI and ER scores are by far the strongest components of HEI sustainability reports. EI and ER scores for each HEI can be seen in Figures 3 and 4 respectively. Although some institutions like the University of Florida, the University of California – Berkeley and the University of Michigan – Ann Arbor fall at the top of both categories, some HEIs use reporting styles more conducive to high scores in either EI or ER. Cornell, for example, presents its data in a series of websites which do an excellent job of outlining official policies and plans of action. As a result, EI scoring, which is "intended to measure how much companies demonstrate their awareness of and intention to respond to environmental issues," gives the institution a high rank.⁷ On the other hand, Carnegie Mellon's "Environmental Indicators for Carnegie Mellon University: Baseline Assessment 2004," has a very different format. Its opening abstract hints at the rigid quantitative analysis of environmental indicators contained within. Thus, one would

⁷ Morhardt, "What the PSI Scores Mean", 1.

expect its ER score to outshine EI. Even when looking at the three universities which excelled in both categories, one finds a great deal of variation in styles and reasons for high scores. Due to its sheer exhaustiveness, "Sustainability Assessment and Reporting for the University of Michigan's Ann Arbor Campus" would be expected to fulfill most of the PSI's demands with its 405 pages. UC Berkeley presents its data in a concise and visually appealing manner which balances presentation of quantitative data with discussion of applicable policies. The University of Florida's success under the PSI scoring system can be at least partially attributed to its adherence to GRI guidelines, which played an important role in the development of the PSI.8

 $^{^8}$ David Newport and Thomas Chesnes, "Greening UF: University of Florida Sustainability Indicators August 2001," (2001) . http://www.sustainable.ufl.edu/indicators.pdf. 10/01/05, 2.

Figure 3

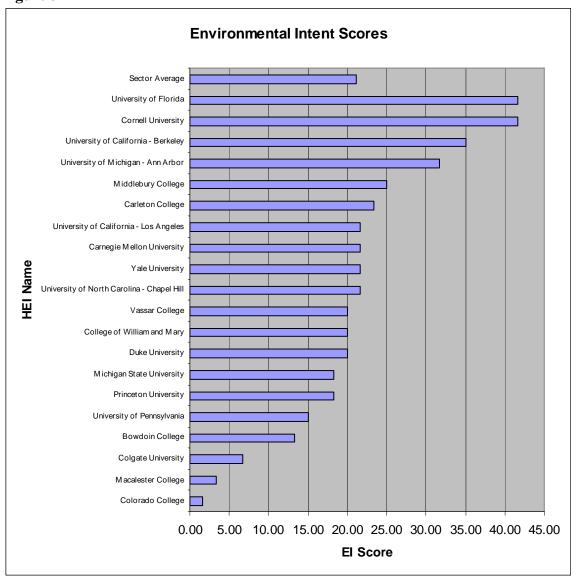
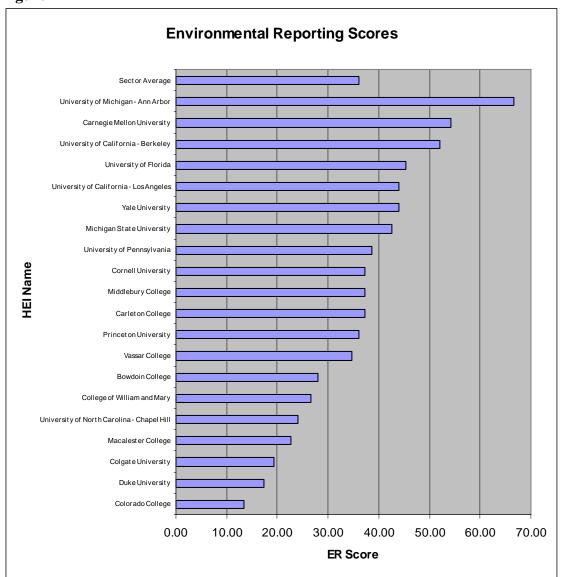


Figure 4

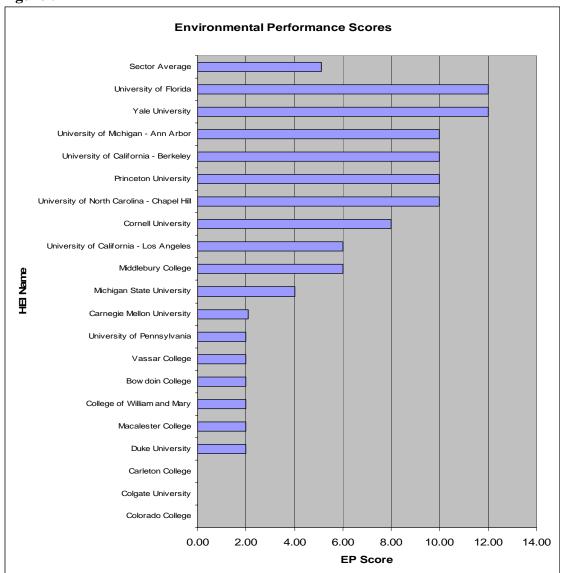


Environmental performance scores, shown in Figure 5, can be slightly misleading. These scores are entirely dependent upon information provided within each HEI's report. As a result, excellence must be touted, either in the form of historical trends or comparisons to peer institutions. A high EP score would signify both quality of performance as well as the excellent reporting required to show such comparisons. Due to these demands, environmental performance is typically the lowest environmental score

for all industries evaluated by the PSI. Furthermore, HEIs face unique challenges which make low performance scores even more understandable. In his letter to the reader of the "Greening UF," President Charles E Young recognized that his school's report establishes a baseline for measuring future progress. This highlights the difficulty of high scores in this category. Since HEIs are just now developing baseline assessments, it is not possible to find historical trends in order to prove good performance. Furthermore, since few schools have published their impacts, comparison throughout the sector becomes more problematic as well. One would hope that EP scores would improve as institutions become more transparent and try to maintain records of the benefits of environmental improvements.

⁹ Newport and Chesnes, 4.

Figure 5



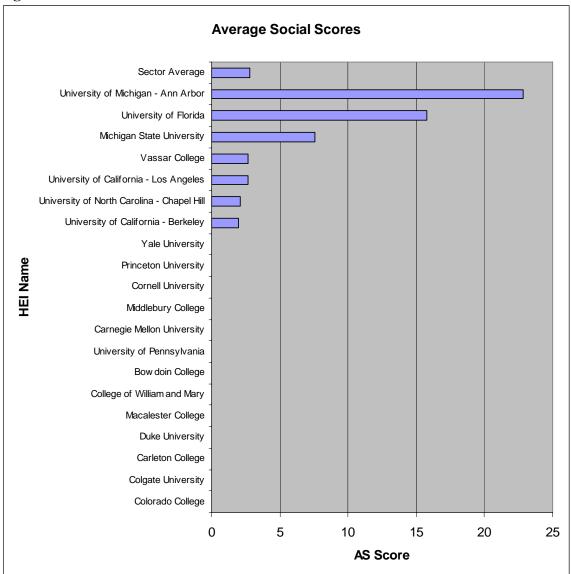
Reporting of social intent, impacts and performance are three more areas which hold the potential for great improvement in HEI sustainability reporting. Figure 6 shows the average social score of all HEIs. Only three universities made conscious attempts to include social considerations as an important component of sustainability reporting. Reports from the University of Michigan – Ann Arbor, the University of Florida and Michigan State University each included sections separate from environmental indicators,

addressing purely social impacts of the institution. Figure 7 breaks the social scores of these institutions into the three social components of the PSI; intent, reporting and performance. The general lack of sustainability reporting seems to provide evidence for claims made by Dave Newport et al. While working on developing the sustainability initiative for the University of Florida, they asked, "Is 'sustainability' so linked to its 'green' roots that universities cannot see the other shades of this increasingly important movement?" Newport continues by describing the benefits UF's sustainability movement has received by linking social, environmental and economic issues together. Although it should be noted that most HEIs don't purport to write 'sustainability' reports if they include only environmental data, HEIs need to recognize the important benefits of addressing the social aspects of their institution.

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¹⁰ Newport, Chesnes, and Lindner, 357.

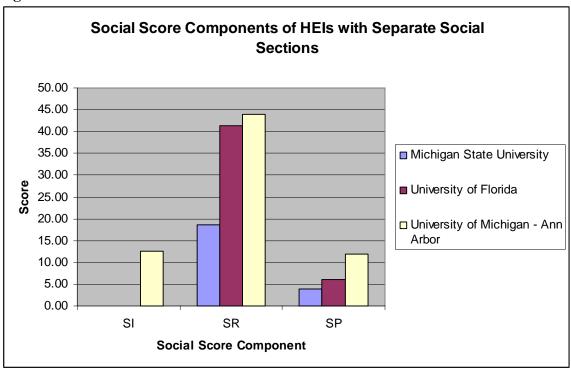
Figure 6



When evaluating the social scores of institutions which recognize the need for social reporting, trends similar to environmental scores are found. Social reporting is by far the strongest of the three components. This strength spills over into social performance when HEIs discuss improvement in workforce diversity or employee health. Social intent is sadly neglected. Institutions need to realize that reporting of social

indicators, while highly beneficial, should be accompanied with distinct social policy statements, goals and commitments.

Figure 7



Correlation to other Factors

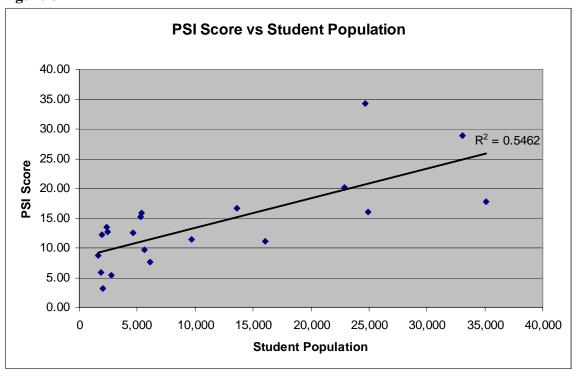
Since evaluated reports span more than 15 years and come from extremely diverse institutions, correlation to other statistics should be evaluated. One could imagine that the sheer size of state universities could pose an insurmountable hurdle. Leith Sharp of Harvard University commented that, "Harvard's so extraordinarily decentralized that it takes months if not years of work to gather campus wide data." ¹¹ Conversely, one would expect that a university of 50,000 might be more capable of devoting the necessary

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¹¹ Sharp

resources for a detailed analysis of campus sustainability than a small liberal arts college. In order to find which schools are advantaged in their reporting, PSI scores were plotted against institution size. Student population size was selected as a readily available and universal determinant of institution size. The resulting data showed a strong correlation, with an R² value of 0.5462 as seen in Figure 8. The upward slope of the resulting trendline gives credence to claims that larger institutions are more capable of compiling comprehensive sustainability reports. The arguments of institutional decentralization presented by Sharp appear to explain an inability to conduct a report at all rather than an excuse for poor reporting. Since this study examines only publicly released reports, it cannot provide insight into the truth of such claims as they rest on reports never published. Nevertheless, the high number of reports from institutions with student populations under 10,000 compared to those from larger institutions provides some evidence that reports of small schools may originally be less intimidating. Once the momentum to write a report has been mustered, however, large institutions may be better equipped for excellence in sustainability reporting.

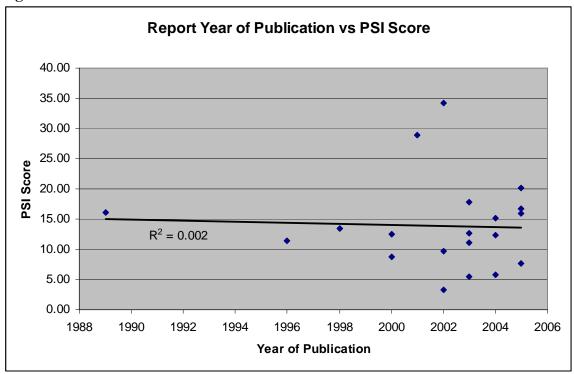
Figure 8



A similar analysis was attempted to determine the correlation of date of publication and quality of reporting. One would hope that research conducted on sustainability reporting at HEIs and a growing collection of previously published reports would positively influence scores over time. This, however, has hardly been the case. When PSI scores are plotted against year of publication, shown in Figure 9, the resulting trend-line actually portrays a negative trend in quality of reports over time. The extremely low correlation ratio and resulting value of R², however, implies that almost all of the data is merely noise. Thus, it is possible to infer that historically there has been little improvement of sustainability reporting at HEIs. It is likely, however, that individual institutions improve on their own reporting as further reports are released. Because this study only evaluated the most recent report by each institution, such improvements would be overlooked. Since many of the most recent assessments have claimed to be the first in

a series of recurring reports, such an analysis may prove increasingly interesting over the coming years.

Figure 9



Cross Industry Analysis

Beyond presenting a useful tool for analyzing the comparative quality of HEI sustainability reports, the PSI can bring statistical evidence for the claims made in Chapter 3. Upon evaluating the quality of environmental reporting at the nation's top universities and colleges, one finds that HEIs are behind corporations in many ways. Emil Morhardt in *Clean, Green and Read All Over*, noted that, "In 1989, environmental reports were usually thought of as a place to publish information on air emissions, effluent discharges, and waste disposal. It then became apparent that they were also good

places to publish enthusiastic reports of environmental initiatives and improvements. . . Safety and health of employees soon followed."¹² Since the majority of reports are still not conducted through the HEI directly, many reports look more like their 1989 counterparts than more modern corporate sustainability reports. Although it is not necessarily a bad thing that PR departments have not become involved in structuring the reports, greater involvement on the part of the HEI to be involved in outlining its specific visions, goals and initiatives would force greater thought about sustainability at the top echelons of HEI administration.

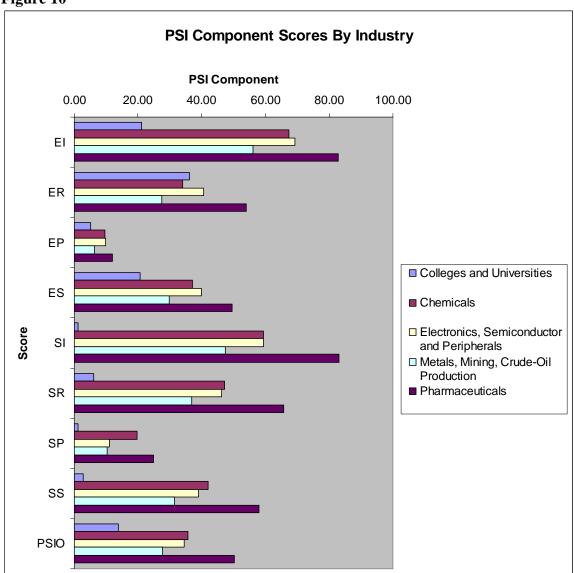
By comparing the sector averages of PSI scores from HEIs to those of other industries one finds interesting trends. The PSI database has comparable data for the chemicals, pharmaceuticals, electronics and metals and mining industries. As seen in Figure 10, HEIs typically score extremely low on environmental intent as well as on all social scores. However, the HEI environmental reporting score is the median of the five sectors, only 2.33 points lower than the average for all sectors. To put this number into perspective, HEIs fall 38.21 points short of the five-sector average for EI. These differences can be explained by using the observations made in Chapter 3. Both the sources and objectives of HEI reporting would be expected to force low intent scores while maintaining acceptable reporting scores. Since the most common goal of HEI reports is internal decision-making, one would assume that presentation of quantifiable indicators of environmental issues would be a top priority. Discussion of policy, as quantified in EI, would be less likely to appear in such documents since the authors usually have no authority to speak officially. Corporate reports, on the other hand, engage

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¹² Morhardt, 4

outsiders and thus are more likely to rely on "visionary statements" or claims of a corporate "commitment to minimize consumption." ¹³

Figure 10



Discussion of stakeholders serves as an excellent example of HEIs' inabilities to provide proper reporting of environmental and social intent. Morhardt described the need for such discussion stating that, "The purpose of an environmental or sustainability report

¹³ Morhardt, "PSI Base Scoring Sheet".

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is to inform-and hopefully communicate with-stakeholders. Reports are likely to be better focused if the stakeholders for whom the report is intended are identified in the report and are kept in mind during the writing of it."¹⁴ This statement, however, does not necessarily prove true when evaluating HEIs. As discussed in Chapter 2, the purpose of an HEI sustainability report is more frequently than not the collection of data for decision-making rather than informing stakeholders. Thus, few HEI reports would be expected to collect on the many points offered for discussion of consultations with stakeholders.

Many may claim that HEIs are disadvantaged in this analysis since the PSI has been designed with the corporate sector in mind. It is true that cross-sector analysis may not be as simple as Figure 10 makes it seem. For example, most corporations receive points for providing company financials in the form of a 10-K. HEIs, however, don't need to provide this data and thus frequently fail to get the associated points. Although some questions have been crafted to be particularly suitable for the corporate sector, they all still have important implications for HEIs. Even though the PSI should not serve as a definitive comparison of different industries, it does have the ability to emphasize what organizations are failing to report. In the case of HEIs, this cross-sector comparison of PSI scores illustrates that much improvement stands to be made in conveying both sustainable intent as well as social impacts.

Corporations have frequently been cited as an inspiration for expanding sustainability and environmental reporting at colleges and universities. In its evaluation of environmental performance reporting at HEIs, the EPA complained that, "More than 2000 organizations worldwide voluntarily publish environmental reports, but only a small

¹⁴ Morhardt, 87.

number of colleges and universities report periodically on their environmental performance."¹⁵ Such comparison to other sectors has also served as encouragement for those individuals pushing for social and economic considerations to be included in HEI sustainability reports. ¹⁶ By once again turning to corporate successes in reporting, improvements in explaining the reasoning behind and policies guiding sustainability could be achieved. In order to understand what changes need to take place, however, a more detailed analysis of the differences between corporate and HEI reporting is needed.

EI/ER Ratio Analysis

The ratio of EI to ER scores can foster a better understanding of the differences in report composition. This ratio attempts to quantify the relative amount of attention paid to each component. This ratio has the added benefit of allowing better comparison between universities with 50,000 students, colleges with 1,000 students and corporations with 100,000 employees. By focusing on the ratio, even institutions with low scores can illuminate the discussion by showing what their report emphasizes. According to earlier discussions, one would expect that in general HEIs would score below corporations in such an analysis. Figure 11 shows exactly this trend. HEI reports have proven particularly weak in addressing environmental intent while maintaining high reporting scores. Even the highest HEI EI/ER ratios fall more than 33% below averages for other industrial sectors. This observation underscores the fact that HEIs have a great deal to learn from corporations in order to create reports which tell a compelling story of institutional

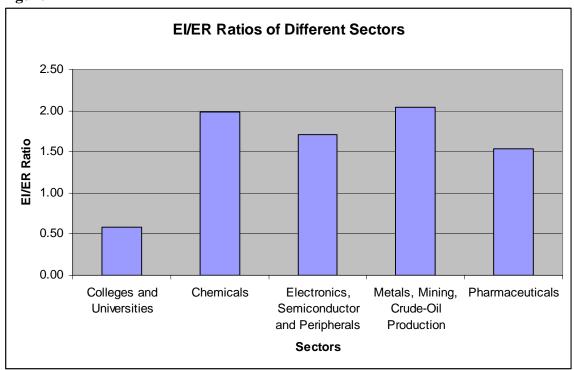
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¹⁵ Best Management Practices for Colleges and Universities: Institutional Communication, 1.

Newport, Chesnes, and Lindner, 359.

commitment to sustainability. One must also notice, however, that the opposite conclusions may also have merit. If <u>In Our Backyard</u>, which was researched by individuals without institutional support, was able to achieve environmental reporting scores on par with the most expensive industrial reports, maybe corporations have as much to learn from universities as vice-versa.

Figure 11



The EI/ER ratio can offer more information if one separates the Colleges and Universities sector into different categories. For this analysis, HEI reports are categorized by their intended goals. Reports which focus almost entirely on offering a baseline presentation for administrative decision-making include Princeton, UCLA, Bowdoin, University of Michigan, Carnegie Mellon, Michigan State, the University of Pennsylvania and Macalester College. Reports from Yale, the University of California – Berkeley, UNC - Chapel Hill, Duke, Cornell and the University of Florida all attempt to

transmit information to a wider group of stakeholders. Finally, some reports seem to be primarily concerned with fulfilling the requirements of a class rather than either of the above mentioned goals and are only included in the sector average of the EI/ER ratio analysis. It should be noted that this categorization is subjective and the boundaries between the different categories are far from precise. Nevertheless, most reports explain their intent, thus allowing such classification. Even though reports with high and low PSI scores are represented in both of the first two categories, obvious trends emerge when one looks at their average EI/ER ratios, shown in Figure 12. One can see that institutions focusing efforts on outsiders will spend more time explaining the policies at the heart of environmental impacts. This same trend is seen when evaluating the HEIs on an individual basis, as seen in Figure 13. Only one report targeting diverse stakeholders falls below the sector average of the EI/ER ratio. Similarly, only two reports addressing their institution's administration rise above the sector average.

Figure 12

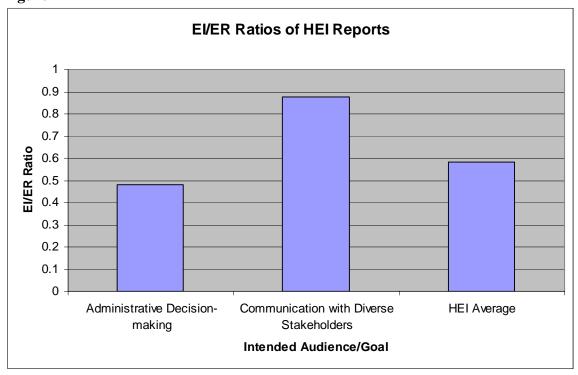
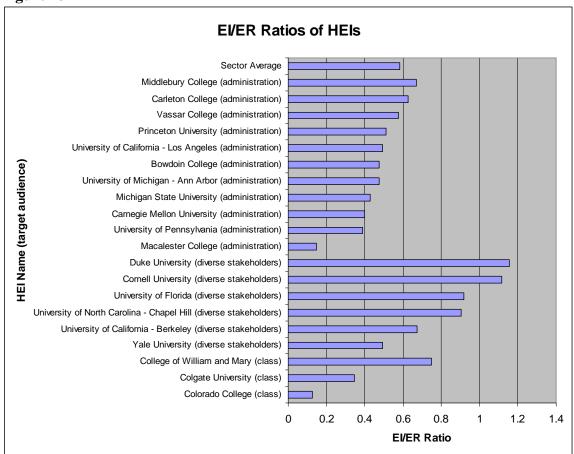


Figure 13



When a similar social intent to social reporting ratio analysis is conducted in the few reports which contain social reporting sections, greater imbalances are found. The University of Florida which had a relatively high environmental EI/ER ratio as well as a section devoted to social impacts fails to spend the appropriate time explaining social intent. This shows that even HEIs which do emphasize reporting of social indicators fail to adequately discuss the official policies behind such reports. Two recurring themes are highlighted by this observation. First, HEIs typically fail to discuss social issues at the level necessary for true sustainability reporting. More importantly for the current discussion, low EI/ER and SI/SR ratios show that HEIs are still conducting rudimentary

analyses, merely presenting data issue by issue rather than showing a comprehensive vision of sustainability.

The failure to report intent may also be due to a complete absence of such a comprehensive vision of sustainability among HEIs. Audits conducted by third parties frequently complain of a lack of explicit policies on the part of the institution. Good Company's analysis of Vassar notes that:

Vassar's many policies, master plans and other governance mechanisms do not incorporate sustainability issues in all of the areas where they are relevant. In general, Vassar lacks clear goals and policies (and therefore governance) for most sustainability issues. As the campus seeks to improve its sustainability performance, this gap represents an important potential source of future improvement. In achieving campus-wide aims of any kind, there is nothing more valuable than a strong institutional ethic, represented and reinforced by relevant governance.¹⁷

Similar complaints at other institutions imply that universities may have low EI/ER ratios simply because they have no policies to present in their sustainability or environmental reports. This, obviously, is an important failure but would require detailed analysis of HEI policies beyond the scope of this study to prove.

¹⁷ <u>Sustainability Assessment of Vassar College: Analysis</u> Good Company, 2003). www.goodcompany.cc. 10/01/05, 16.

Chapter 5

Conclusion

Higher education institutions have a great deal of work to do in order to bring sustainability up to par with industrial sectors. First and foremost, schools *must* embrace the opportunities offered by comprehensive reporting. A comprehensive report can improve communication between departments as well as with external stakeholders. Comparison between institutions is nearly impossible when data is spread throughout various campus departments. Comprehensive reporting also has the benefit of presenting the bigger picture. The recognition of the interconnectedness of diverse issues has been a frequent cause of great successes in the sustainability movement. The authors of *In Our* Backyard, realized the importance of showing, "as graphically as possible," the total impacts of the university on the environment. The comprehensive report sparked widespread debate on the campus and resulted in several changes to campus policies. By creating comprehensive reports, the institutions evaluated in Chapter 4 have begun the important process of increasing both data availability and general awareness surrounding environmental issues. As university and college administrations become more conscious of sustainability issues they will need comprehensive reports to both understand what is happening on campus as well as communicate these issues with the diverse stakeholders of a modern HEI.

1 Roark.

Related to the issue of comprehensiveness is the need to expand environmental reports to include social and economic issues. Although all of the HEIs studied in Chapter 4 have recognized the need for comprehensive environmental reports, very few have expanded their focus to include social and economic issues. In order to collect momentum from diverse campus and community groups, HEIs must recognize that their future success depends on self-evaluation of all three "legs of sustainability." If institutions which already conduct environmental reports expand their research to evaluate social indicators, they "can bring to life the links between social issues and their fiscal and environmental costs." This important bridge helps to guide administration, trustees and donors. As a result, it should be an important next step for authors of environmental assessments.

Even within pure environmental reporting, however, important factors are missing. Although many institutions have released comprehensive reports, these are often little more than a collection of individual focused reports. Careful analysis of campus environmental assessments through the use of the PSI has shown that many reports do an admirable job of reporting environmental impacts. Nevertheless, total PSI scores are typically much lower than in other industries because of a failure to report intent. Whether due to a lack of official policy or an unwillingness to report such policies, these low intent scores signal a failure to achieve the transparency necessary for confrontation of sustainability issues.

The problems in defining environmental intent can most likely be tied to the greatest failure of HEI sustainability reporting. More HEIs need to conduct official and

² Newport, Chesnes, and Lindner, 358.

institutionalized reporting. The lack of official sustainability reporting among top HEIs is surprising. Since third parties are incapable of determining the intent of an institution, official reporting offers a powerful tool both for the development and communication of sustainable policies. Only after such reporting becomes commonplace can prospective students use environmental or sustainability information to guide their purchasing decisions. Furthermore, the regular release of reports directed towards all stakeholders can do a great deal to raise awareness of environmental and social issues on campus and in the surrounding community.

By analyzing HEI sustainability reports with the PSI, one finds that academia has spent too little time defining its environmental policies and presenting a clear picture of social impacts. Although In Our Backyard, the Campus Earth Summit and pressure from the EPA have all pushed HEIs to accept more responsibility in documenting specific environmental impacts such as energy usage and waste patterns, they are still far behind corporations in directly addressing all of their stakeholders with assurances of sound environmental policy. "Strong leadership that appreciates this emerging trend, sees the big picture, understands inter-relationships among its constituencies and bridges the communication gap between academia and the rest of the world, is in order to achieve (the HEI's) central mission of maintaining a cutting edge." Official, institutionalized and comprehensive sustainability reporting is the important first step HEIs need to take to ensure their future success.

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³ Newport, Chesnes, and Lindner, 362.

Appendix A

Pacific Sustainability Index 2.0^{TM}

Revised 10

Colleges and Universities Sector Base Scoring Sheet

Quali	tative Data	0 points if there is discussion of the t	no information; 1 point it there is partial information; 2 points if there copic.	is a thoroi
A. Company Profile				
1	Company financials		Public reporting of company financials, most often reported in the annual report or 10-K.	!
2	Products, services, b	rands, and markets	Identification and description of major types of products, brands, and services offered.	
3	Divisions, facilities,	and activities	Identification and description of major divisions, subsidiaries, and facilities, along with the business activities - such as manufacturing, research, and administration - taking place in them.	
4	Report contact perso	n	Identification - name and title - and additional contact information such as address, e-mail address, or telephone number, of a knowledgable person able to answer questions regarding the report.	
B. Visi	on			
5	Environmental Visio	nary statement	Brief, clear visionary statement expressing a corporate commitment to being the best it can environmentally.	!
6	Environmental impe	diments and challen	Description of realistic impediments and challenges faced by the company in attempting to realize its environmental vision and commitments.	
7	Commitment to mini	imize consumption	Pledge to minimize consumption of resources. May include commitments to minimize energy, water, and materials consumption, to use recycled materials, and to recycle internally.	
8	Commitment to mini	mize environmental	Pledge to minimize general environmental impacts.	
C. Poli	icy			
9	Environmental policy	y statement	A formal statement of the company's environmental policy or plan.	
10	Climate change or gl	obal warming policy	A statement regarding the company's policy on climate change and/or global warming.	
11	Habitat/ecosystem co	onservation policy	A statement concerning the company's policy towards habitat conservation.	
12	Biodiversity policy		A statement regarding the company's policy on biodiversity.	
13	Green purchasing		Purchasing that places preference on products which have reduced environmental impact in their life cycle (development, manufacturing, use, recycling, and disposal), or which are designated as eco-friendly by firms that are active proponents of environmental preservation.	
14	Environmental goals		Specific targets and goals for improved environmental performance.	[
15	Supplier screening b	ased on environment	Efforts to select suppliers having superior environmental performance.	[

Pacific Sustainability Index 2.0 TM Revised 10 Colleges and Universities Sector Base Scoring Sheet 16 Environmental education Attempts to promote environmental education and awareness. May include education of the general public, children, or employees. Voluntary memberships in internal or ext Voluntary membership and adherence to environmental standards or ratings. These are voluntary codes of conduct that do not involve certification, including Alliance for Global Sustainability, World Energy Council, Business Council for Sustainable Development, World Resources Institute Green Power Market Development, Responsible Care, etc. 18 Voluntary environmental certifications The company's position and progress with respect to auditable industry-standard environmental certifications, such as Sustainable Forestry Initiative for Forest Products Sector of Responsible Care for Chemicals Sector. 19 Environmental organization and strategy A description of the organizational structure and plan for carrying out the company's environmental policy. 20 Environmental management system A description of the specifications for environmental management which enable companies to approach the subject in a systematic and efficient manner. If the company is pursuring ISO 14001 certification, no additional description required. Effort to legitimize environmental vision and commitments by 21 Environmental accounting, business case explaining why they are beneficial from a business standpoint and are good for the company's own sustainability. May include quantitative description of money saved through environmental activities. Any unrequired activity beneficial to the environment by the company Voluntary environmental initiatives inclu

Environmental Reporting and Performance

I point if there is a mention of the topic; **Quantitative Data**

Stakeholders, consultation with, on envir

Stakeholders, external, use of environme

25 Stakeholders, internal, use of environme

2 points if there is a discussion of the topic that includes numerical data.

Add one point if historical data are presented; Add one point if there is a positive data trend;

or by its employees.

environmental issues.

Add one point if data are better than peer average, if the company is clearly taking a leadership pos the sector, or if data are at maximum performance (e.g. 100% recycling rate, 0 emissions, 0 injuries

Efforts to promote consultation and dialogue with stakeholders regarding the company's environmental impacts and aspects.

Use of information gathered from stakeholder consultation on

Use of information gathered from internal stakeholder consultation.

A. En	ergy		
26	Energy used	Sum of the energy used by a company in all different forms, including electricity, fuel, natural gas and others.	
27	Energy used, from renewable sources	Energy used from renewable sources such as wind, solar, hydroelectric, or other renewable sources.	
28	Electricity consumption	The total amount of electricity consumed by a company during operations.	

B. Water

D. Management

Pacific Sustainability Index 2.0 TM

Colleges and Universities Sector Base Scoring Sheet

29	Water used	Sum of all water used during operations.	i I
C. Rec	cycling		
30	Waste recycled	Sum of all waste recycled.	
31	Hazardous waste recycled	Sum of all hazardous waste recycled.	[
22	0.00		
32	Office recycling rate	The recycling of paper, cardboard, metal, and plastic in an office setting.	<u> </u>
D. Wa	ste		
33	Waste produced	Sum of all waste produced from company operations.	
34	Waste disposed of	Includes hazardous and non-hazardous waste landfilled, incinerated,	
υ.	waste disposed of	or waste transferred.	<u> </u>
35	Hazardous waste produced	Sum of all hazardous materials remaining after production.	
26	TT 1		F
30	Hazardous waste disposed of	Hazardous waste disposed of, hazardous waste transferred (to a disposal company), or hazardous waste landfilled.	L
E. Em	issions to air		
37	Hazardous waste released, total (TRI, PR	The amount of hazardous materials released into the environment.	
		Depending on the nationality of the company, this is labeled differently; American companies call this "TRI" (Toxic Release Inventory), many European companies call it "substance releases".	
F. Mai	nagement and Misc.		
	Environmental notices of violation [NO	The total number of NOVs (notice of violation) per year for land, air,	
20	2	and water combined.	L
39	Environmental expenses and/or investme	An accounting of money spent or invested specifically to decrease	
		environmental damange or to benefit the environment	
40	Environmental fines	The amount of money charged to and/or spent by a company for government-imposed environmental fines. 2 points if no fines were levied.	
41	Protection & enhancement of natural env	Efforts to enhance, protect, and conserve the natural environment beyond what is required.	
Soci	ial Intent		
Quali	tative Data 0 points if there is discussion of the	s no information; 1 point it there is partial information; 2 points if there topic.	is a thorou
A. Vis	ion		
42	Social visionary statement	Statement of social ideals, principles, and values pursued by the corporation. Commitment to being the best it can be for its employees, shareholders, its other stakeholders, and for society as a whole.	
43	Social impediments and challenges	Description of realistic impediments and challenges faced by the company in attempting to realize its social vision and commitments.	
44	Commitment to minimize staff turnover	Commitment to minimize staff turnover and emphasize job security and employee retention.	
R Doli	lov.		

Revised 10

Pacific Sustainability Index 2.0^{TM}

Revised 10 **Colleges and Universities Sector Base Scoring Sheet**

45	Social policy statement	A formal statement of the company's social policy or plan.	
46	Social goals	Specific targets and goals for improved social performance.	
47	Code of conduct or business ethics	Written corporate code of conduct or business ethics.	
48	Code of conduct compliance monitoring	g Efforts to monitor and ensure compliance with codes of conduct.	[
49	Supplier screening based on social per	for Efforts to evaluate and select major suppliers on their ability to meet the requirements of the company's social policy and principles.	
50	Sustainable society	A statement regarding the company's policy on creating a sustainable society.	
C. Mai	nagement		
51	Social organization and strategy	Description of the social management organization including health and safety management.	
52	Demographic nature of the workforce	Description of workforce in terms of demographics such as age, gender, race, etc.	
53	Emergency preparedness program	An emergency preparedness program is a procedure to prepare workers or the public to cope with natural or man-made disasters.	
54	Third party validation of environmenta	al a Report audited or validated by a qualified external third-party source.	
55	Social initiatives, including donations	an Corporate giving and social initiatives. Commonly includes community programs, donations, grants, and scholarships.	
56	Stakeholders, external, use of social in	for Practical implementation and use of information gathered from external stakeholder consultation.	
57	Stakeholders, internal, use of social in	Or Practical implementation and use of information gathered from internal stakeholder consultation.	
Soci	ial Reporting and Perfe	ormance	
	titative Data 1 point if ther 2 points if the Add one point Add one point Add one point	e is a mention of the topic; re is a discussion of the topic that includes numerical data. if historical data are presented; if there is a positive data trend; if data are better than peer average, if the company is clearly taking a lead if data are at maximum performance (e.g. 100% recycling rate, 0 emissions	
Quanti	itative Social Performance		
71	Customer satisfaction	Efforts to compile, validate, track, and analyze customer complaints.	
72	Employee voluntarism	Efforts to promote employee voluntarism in social projects.	
73	Compliance with code of business con	du Compliance with code of conduct or business ethics policies.	
74	Incident Case Rate - TICR	The total number of employee incidents or accidents, typically normalized per a certain number of employees or work hours.	
75	Lost Workday Case Rate - LWCR	The total number of employee injuries or illnesses that resulted in one or more lost workdays, typically normalized per a certain number of employees or work hours.	

Pacific Sustainability Index 2.0^{TM}

Revised 10

Colleges and Universities Sector Base Scoring Sheet

76	Health and safety citati	ons	The number of health and safety citations or notices of violation given by the government in a given year.	
77	Health and safety fines		The total amount levied against a company for health and safety violations.	
78	Employees, females in	management	The percentage of all management employees who are female.	1
79	Employees, women and	d minorities in ma	The percentage of all management employees who are minorities.	
80	Employment for individ	duals with disabili	The percentage of all employees who are disabled.	
81	Social community inve	stment	The amount of money spent on community outreach, including all education grants, donations, and relief effort funds.	
82	Employees, trained		Percentage or number of total employees who have attended training programs in general, including health and safety prevention training.	
Qualit	ative Data	2 points if there is Add one point if th Add one point if th	a mention of the topic; a discussion a program/policy the company uses to implement the prog here is a discussion on the benefits or advantages from the program; he program is continuously being monitored or improved by the compan he company is a leader or role model as evidenced by external recogoni	y;
Qualita	ative Social Performan	ce		
66	Community Developme	ent	Efforts to participate in social activities that improve the quality of life of communities including that of indigenous people, where the company operates.	
67	Employee satisfaction		A statement about efforts to enhance employee satisfaction.	
68	Community education		Efforts to support education in the communities where the company is located.	!
69	Customer health and sa	afety	Efforts to help improve the user's health and safety in using the products or service provided by the company. Some companies provide Material Safety Data Sheets (MSDS) with health and safety information about each product.	
70	Employee health and sa	afety	Efforts to provide a safe and healthy working environment at all sites.	
Ideolo	gical Data	2 points if there is Add one point if the deals with this part Add one point if the principle such as a whistleblower pro	a mention of the ideology (e.g. use of corporal punishment) a discussion on the company's position on the ideology he company subscribes to at least one internal or external social progra- ticular issue (e.g. Company's own code of conduct or Global Compact) here is an active (action required) program/policy the company use to et a compliance mechanism, zero-tolerance ruling for non compliance, ext- gram, certification program, etc. he company explicitly states that these guidelines or principles are being	nforce this ernal audi
Human	Rights Performance			
58	Business ethics / Anti-G	Corruption practic	Efforts to uphold the highest standards of business ethics and integrity. May be found under a Code of Conduct.	
59	Corporal punishment o	f employees	Commitment to oppose any corporal/hard labor punishment, mental/physical coercion, or verbal abuse.	

Pacific Sustainability Index 2.0 TM

Revised 10

Colleges and Universities Sector Base Scoring Sheet

60 Equal opportunity/Elimination of Discri

Commitment not to engage in any kind of discrimination based on ethnicity, caste, religion, disability, sex, age, sexual orientation, union membership, or political affiliation in hiring practices or employee treatment.

Statement regarding the rejection of child labor by the company or its

treatment.

61 Free association and collective bargainin

62 Compensation of employees

63 Forced labor of employees

64 Working hours

65 Efforts to respect the right of employees to form and join trade unions of their choice and to bargain collectively.

66 Efforts to ensure that wages paid meet or exceed legal or industry minimum standard.

67 Forced labor of employees

68 Assurance that all employees enter employment with the company of their own free will, not by compulsion.

69 Compliance with applicable laws and industry standards on working hours, including overtime.

Memberships, Guidelines (categorical variables not used in scoring)

65 Use of illegal child labor

Categorical Data1 point if the report references the organization or set of principles or guidelines and indicates conc with them.

83	AA1000, AccountAbility	AA1000 framework is designed to improve accountability and performance by learning through stakeholder engagement, based in U.K., founded in 1999, www.accountability.org.uk.	
84	Business for Social Responsibility (BSR)	BSR promotes cross-sector collboration and contributes to global efforts to advance the field of corporate social responsibility, based in U.S., founded in 1992, www.bsr.org	
85	Centre for Environmental Assessment of	CPM is a national competence center dedicated to sustainable product development - Chalmers University of Tech, Gothenburg, Sweden, based in Sweden, founded in 1996 , www.cpm.chalmers.se	
86	Global Environmental Management Initi	An organization of 42 leading companies dedicated to foster global environmental, health, and safety excellence.	
87	Global Reporting Initiative	GRI works to build a consensus around a set of sustainability reporting guidelines with the aim of achieving worldwide acceptance, based in Netherlands, founded in 1997, www.globalreporting.org	
88	Global Village Energy Partnership (GVE	GVEP is to build a coalition to work on urban and rural communities, based in U.S., founded in 2002 , www.gvep.org	
89	ILO Core Labor Standards	Since 1919, the International Labour Organization has maintained and developed a system of international labour standards aimed at promoting opportunities for women and men to obtain decent and productive work, in conditions of freedom, equity, security and dignity. In today's globalized economy, international labour standards	

are an essential component in the international framework for ensuring that the growth of the global economy provides benefits to

all, www.ilo.org.

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Pacific Sustainability Index 2.0^{TM}

Colleges and Universities Sector Base Scoring Sheet

90	International Organization for Standardiz	ISO is responsible for standardization in all fields except electrical and electronic engineering. ISO 14001 is an international standard designed to provide companies a structured approach for improving environmental performance, with emphasis on environmental protection and pollution prevention, based in Switzerland, founded in 1906 , www.iso.ch	
91	OECD Guidelines for Multi-National Ent	The Organisation provides a setting where governments can compare policy experiences, seek answers to common problems, identify good practice and work to co-ordinate domestic and international policies. It is a forum where peer pressure can act as a powerful incentive to improve policies and implement "soft law" – non-binding instruments such as its Guidelines for Multinational Enterprises – and can on occasion lead to formal agreements or treaties, based in France, founded in 1961, www.oecd.org.	
92	Oikos International	oikos is an international student organization for sustainable economics and management, based in Switzerland, founded in 1987, www.oikosinternational.org	
93	Pew Center on Global Climate Change	PEW Charitable Trust is to bring together "ingenuity and experience" of all sectors of our society to address global climate change, based in U.S., founded in 1998, www.pewclimate.org	
94	SA8000, Social Accountability Internati	The SA8000 standard and verification system is certification system to assure decent working conditions throughout the supply chain, based in U.S., founded in 1996, www.cepaa.org.	
95	Transparency International	A global non-governmental organization dedicated to fighting corruption, based in Germany, founded in 1993 , www.transparency.org	
96	United Nations Global Compact, Univers	The Compact is a platform for encouraging and promoting good corporate practices and learning experiences in the areas of human rights, labor, and environment., based in U.S., founded in 2000, www.unglobalcompact.org	
97	World Business Council for Sustainable	Committed to promote sustainable development via economic growth, ecological balance, and social progress., based in Switzerland, founded in 1995, www.wbcsd.ch	
98	World Energy Council	Non-governmental energy-policy forum to promote sustainable supply and use of energy, based in U.K., founded in 1923 , www.worldenergy.org	
99	World Wide Fund for Nature (WWF)	WWF is committed to the conservation of nature, based in Switzerland, founded in 1985 , www.wwf.org	
1E+04	UN Basic Principles on the Use of Force	Does the report endorse the UN Basic Principles on the Use of Force and Firearms by Law Envorcement Officials?	

Revised 10

Appendix B

Pacific Sustainability Index 2.0^{TM}

Revised 11

College and Universities Sectors Specific Scoring Sheet

Env	ironmental Ir	ntent			
Qualitative Data		2 points if there if Add one point if Add one point if	1 point if there is a mention of the topic; 2 points if there is a discussion a program/policy the company uses to implement the program. Add one point if there is a discussion on the benefits or advantages from the program; Add one point if the program is continuously being monitored or improved by the company; Add one point if the company is a leader or role model as evidenced by external recogonition or away.		
D. Mai	nagement				
999	Procedures for identic environmental stakeh		Does the report describe the process or rationale for identifying environmental stakeholders?		
1099	Description of environstakeholders	onmental	Does the report identify the company's environmental stakeholders?		
F. Env	ironmental Performa	nce Indicators			
2499	Procedures for selecti performance indicato company		Does the report define the procedures used by the company to select its environmental performance indicators?		
G. Env	rironmental Initiative	s and Mitigations			
2599	Rationale for environ and mitigations	mental initiatives	Does the report describe the reasoning behind selecting particular environmental initiatives and mitigations?		
J. Env	ironmental Goals and	l Targets			
5499	Rationale for goals ar	nd targets	Does the report provide a rationale for selecting particular environmental goals and targets?	[
Env	ironmental R	eporting an	nd Performance		
Quali	ative Data	0 points if there is discussion of the	is no information; 1 point it there is partial information; 2 points if there topic.	e is a thorou	
F. Mai	nagement and Misc.				
164	Comparative Reporti	ng	Company looks for industry "best practices" or performance of peer corporations in its reporting		
Quant	2 points if there i. Add one point if h Add one point if t Add one point if a		s a mention of the topic; is a discussion of the topic that includes numerical data. historical data are presented; there is a positive data trend; data are better than peer average, if the company is clearly taking a lea lata are at maximum performance (e.g. 100% recycling rate, 0 emission:		
D. Wa	ste				
110	Waste water released		The amount of liquid waste released to natural waters.		
E. Emi	ssions to air				
111	Greenhouse gases, to	tal	The sum of all greenhouse gases released, which could include CO2, CH4 (methane), N2O (nitrous oxide), SF6 (Sulphur hexafluoride), PFCs (Perfluorocarbons) and HFCs (hydrofluorocarbons). The report should label this indicator as "greenhouse gases released" or similar.	[
F. Mai	nagement and Misc.				

Pacific Sustainability Index 2.0 ™ Revised 11 College and Universities Sectors Specific Scoring Sheet 165 Land Use What amount of land is kept as "green space" in contrast to paved or developed areas? H. Materials usage 146 Green Material Used Materials used in production generated from recycled materials or easily recyclable or reusable after product life. 161 Pesticide Use Total amount of pesticides used for landscaping. 162 Fertilizer Use Total amount of fertilizer used for landscaping **Qualitative Data** 1 point if there is a mention of the topic; 2 points if there is a discussion a program/policy the company uses to implement the program. Add one point if there is a discussion on the benefits or advantages from the program; Add one point if the program is continuously being monitored or improved by the company; Add one point if the company is a leader or role model as evidenced by external recogonition or awa F. Management and Misc. 163 Transportation Initiatives Programs to encourage carpooling, mass transit or other reductions in total commuting.

What amount of food purchases come from local or organic sources?

H. Materials usage

166 Green Food Purchasing

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