

Going Green on Campus: Sustainability in Offices at Santa Clara University



Sociology 170

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Executive Summary

A group of students enrolled in Santa Clara University's Applied Sociology course Fall 2007 conducted both a survey and individual interviews with office administrators to collect data on what is being done, what needs to be done, and best practices to make university offices more "green."

The results of the survey and interviews with administrative assistants illustrate the current practices, barriers to sustainability, and future program suggestions for offices at Santa Clara University. The survey specifically yielded information about sustainable practices already being done and those which are most commonly ignored. The most common practices being performed around campus offices are the acts of turning off computers, monitors, and printers overnight. However, the least common sustainable practice was demonstrated to be not using or turning off power strips at night or over weekends. In terms of reducing waste, the most common sustainable practice was recycling batteries and ink cartridges while the least common sustainable practice was using refillable pens and pencils. Regarding the environment, administrative assistants make an effort to keep live plants in the offices and use non-toxic cleaners.

Interviews conducted with administrative assistants illustrated that the most commonly recognized barrier to sustainable practices is a lack of education and awareness of best practices for not only office personnel, but faculty, staff, and students as well. Other commonly cited barriers were the necessity of paper usage around campus and the difficulty in breaking other less sustainable practices. Recommendations have also been made with the resulting data from both the survey and interview data, which include cutting back on paper usage through the implementation of electronic resources, and implementing more ways to educate people on campus about best practices.

Introduction

Santa Clara University is committed to making the campus a sustainable environment. It has put effort into recycling programs in the residence halls, building energy-efficient buildings, and educating the campus about sustainability programs. One area that has not been studied in regards to the best practices for “going green” has been the offices of the various departments on campus. To assess how individual offices manage waste, participate in recycling, and conserve energy, a survey was created to gauge the practices of sustainability within campus offices. Administrative assistants were chosen as the target audience for the surveys due to their central role in handling various material products going through campus offices, and their coordination of events and resources. In addition to the survey, an interview was conducted with a smaller group of administrative assistants to understand their personal insights and opinions about barriers to creating more sustainable office environments as well as future best practices in which the university could engage. The data from both the surveys and interviews were compiled to assess what practices Santa Clara University offices currently participate in, and what further activities they could undertake to become even more conscious of resources.

Methodology

For the purpose of this research, qualitative and quantitative data were collected and analyzed over a six-week period. A total of 96 administrative assistants from different on-campus departments were invited to participate in the on-line survey created by Lindsey Cromwell, SCU’s sustainability coordinator. Overall, 67 administrative assistants ultimately participated, resulting in a survey response rate of 70%. The administrative assistants ranked their energy use, waste, environmental and resource practices according to the degree in which they engaged in the practices: (*Never, Hardly Ever, Sometimes, Often, or Always*). All questions in which respondents marked *Not Applicable* as an answer were omitted from the response rate, and percentages were recalculated. In addition to the on-line survey, 50 of the administrative assistants were also interviewed regarding green office practices, current barriers to greener offices, and future policy and/or sustainability program implementation. The response rate for the interviews was 74%. The interview was constructed to last no longer than 15 minutes on average, due to the time constraints and busy schedules of the respondents. All administrative assistants who participated in this study were ensured anonymity, and consent was obtained before any interviews were conducted. To see a copy of the interview and survey instruments, see Appendices A and B.

During this study, both quantitative and qualitative data were collected from a wide range of on-campus departments so that researchers could obtain insight into current practices and barriers to sustainability on campus. Qualitative interviews complimented the quantitative survey data by offering examples and illustrations of difficulties encountered, and possible explanations for low participation in sustainable practices. To see a copy of the consent form signed by the informants in the interviews, please refer to Appendix C.

Quantitative Survey Findings

Charts 1 and 2 summarize practices among administrative assistants in terms of their energy use.

Chart 1: Energy Saving Practices Currently Being Done

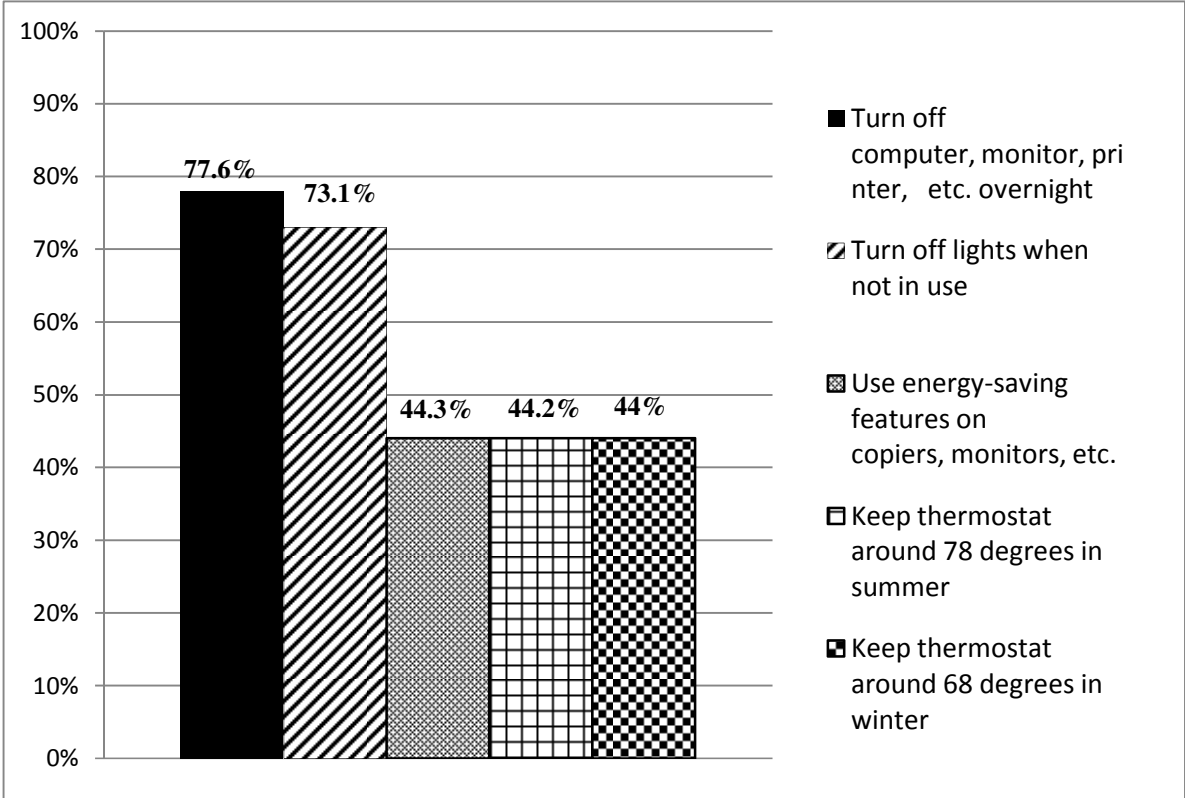
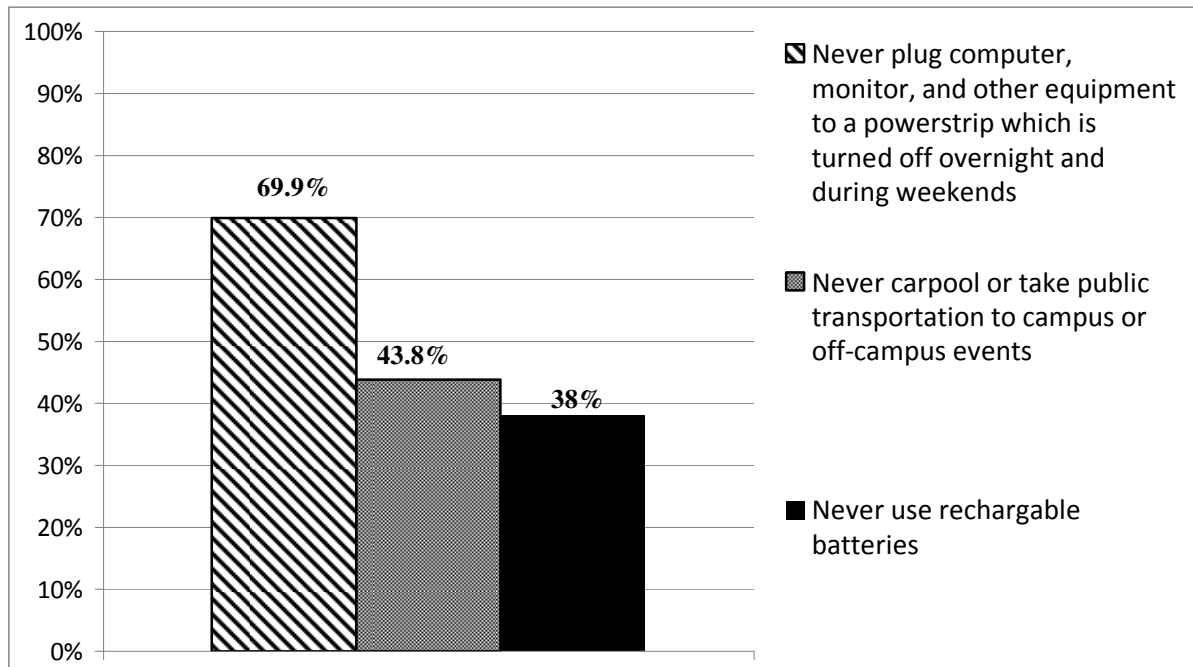


Chart 2: Energy Saving Practices NOT Being Done



Survey Findings: Energy-Use

In regards to energy use, it appears as though most departments on campus practice basic energy conservation. However, a closer look at the survey responses uncovers specific practices that require attention and modification. In terms of energy conservation, 78% of administrative assistants reported always turning off their computer, monitor, printer, speakers, and similar devices overnight. Similarly, 73% turn off the lights when not in use, and 44% use energy-saving features on copiers and monitors with sleep modes or screen savers. Although the temperature of a room also plays a large role in energy use, survey responses determined that only 44% of administrative assistants always maintain their thermostat at or around 78 degrees in the summer, and dress appropriately for the season. Likewise, 44% maintain their thermostat at or around 68 degrees in the winter, while dressing appropriately for that season as well.

In addition to the issues already mentioned, there are some energy use practices still being neglected by many departments. For example, 70% of administrative assistants admitted never plugging their computer, monitor, printer, or speakers into a power strip that is turned off overnight and during weekends. Also, 38% reported that they never use rechargeable batteries. Lastly, in terms of transportation, 44% of administrative assistants never carpool or take public transportation to campus or off-campus events.

Chart 3 summarizes the most common practices among administrative assistants in terms of waste management. Chart 4 summarizes areas that still need improvement in terms of waste management.

Chart 3: Most Common Waste Reducing Practices Being Implemented

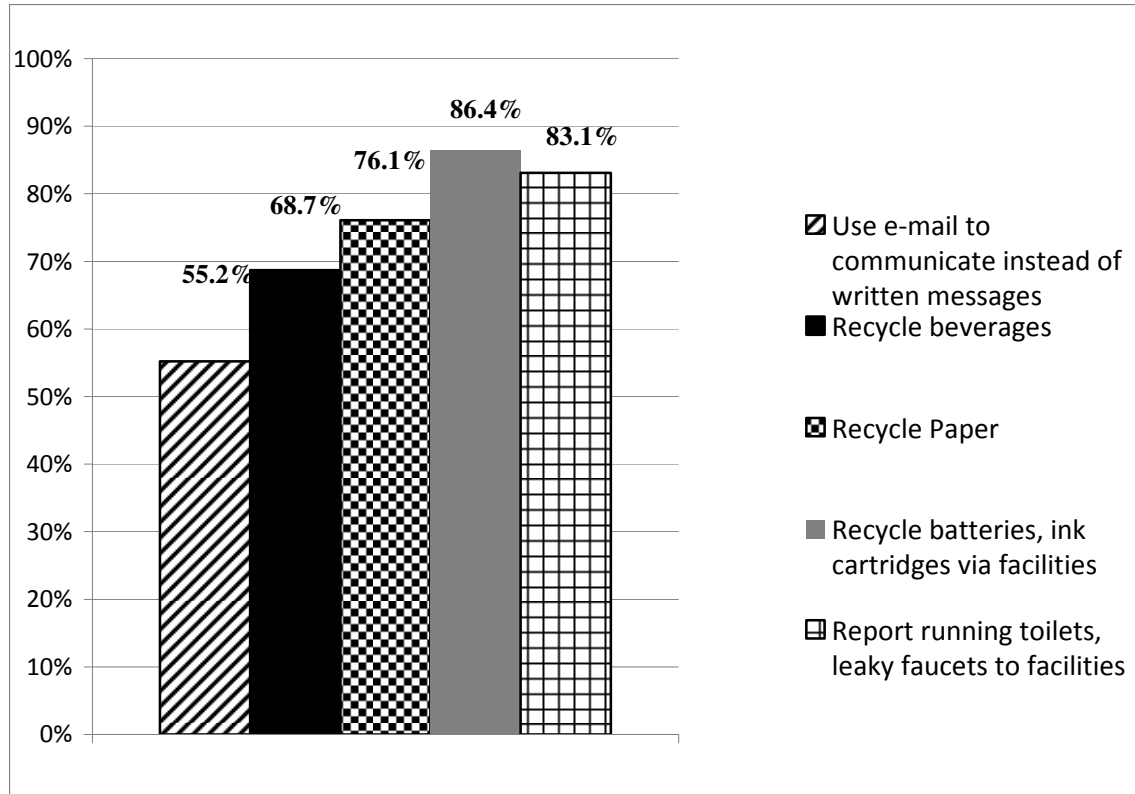
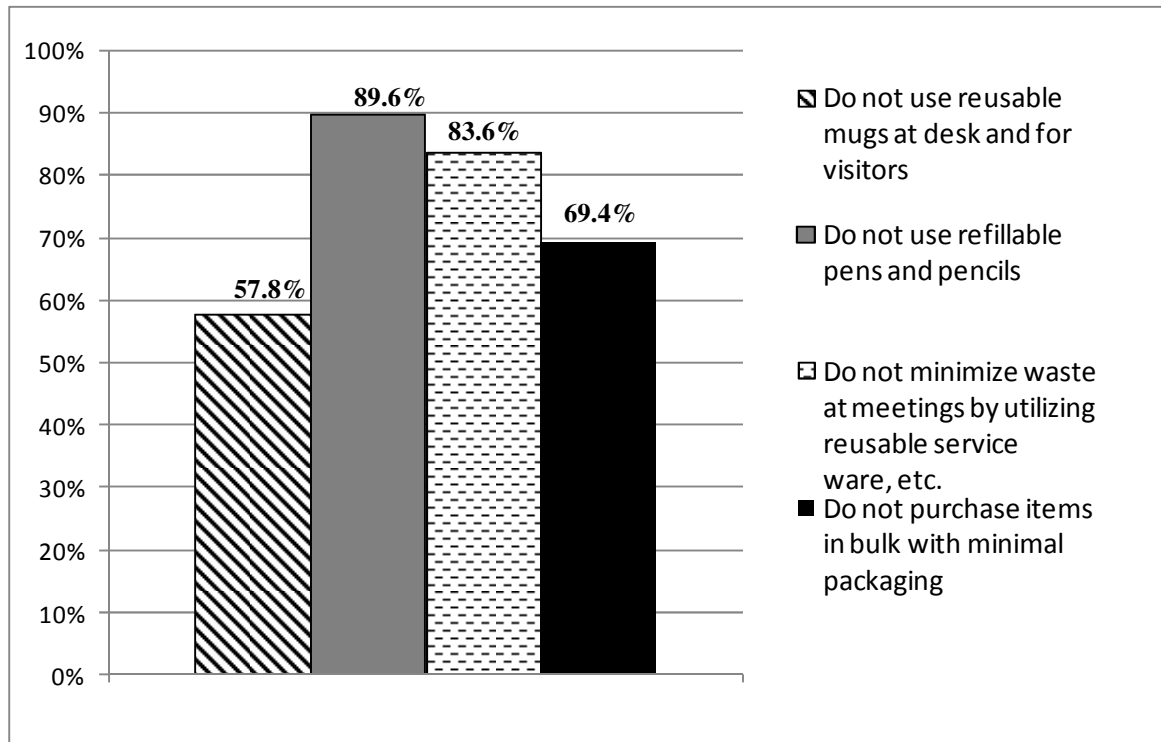


Chart 4: Areas that Still Need Improvement



Survey Findings: Waste

In terms of office waste, it appears that most departments on campus are aware of basic practices of recycling and what to do to reduce the amount of garbage they generate. For example, 68% of office administrators said they recycle beverage containers and 76% recycle paper products. To cut back on the amount of waste produced, 55% of office administrators said that they use e-mail instead of written messages to communicate. When waste does occur, such as when a leak in a faucet or toilet happens, 83% of administrators will immediately report the problem to facilities to be fixed. When there is hazardous material to be recycled, such as batteries and ink cartridges, 86.4% said that they will also request facilities to pick them up and recycle them. It appears as though the administrative assistants are aware of the basic recycling practices in terms of everyday items and that they report visible signs of waste such as leaky faucets.

There are activities that more than 50% of office administrators do not participate in regarding waste management. These areas have more to do with the departmental actions rather than individual behavior. For example, 69% of administrative assistants said they do not purchase items in bulk, and 83% said that they do not minimize waste at meetings. Also, 57% said that they do not use reusable mugs for themselves and their guests. In addition, the highest number reported for waste was that almost 90% of office administrators never use refillable pens and pencils. These numbers could be high as some of the products must be ordered from facilities, while other products the administrative assistants order from outside the university based on departmental need.

Survey Findings: Environment and Resources

Environmental Practices & Resource Use

Environmental practices and use of resources varied greatly among administrative assistants. The most common environmental practice, with over 45% departments participating, was the maintenance of live plants in the office. Also, the use of non-toxic cleaners is a practice found to be commonly done with nearly 40% of administrative assistants reporting their use.

While apparent effort is being made by administrative assistants to 'go green,' the survey section studying environmental practices revealed a need for better communication regarding sustainability. Over 60% of survey participants reported that they do not subscribe to sustainability emails, websites, and or newsletters. Just over 50% of survey participants reported never contacting the sustainability coordinator.

Open-Ended Comments on the Surveys:

At the end of the sustainability survey, an area was provided for additional responses from the informants. Seventeen of the total participants responded with comments, and of those seventeen a number expressed an inability to speak for co-workers regarding practices in their offices. Sustainable responsibility seems to be strong but as one respondent wrote, "I left some items blank as I am not sure what those on the other end of the floor might do," which implies more communication within/between offices could lead to a more successful and coordinated effort. Additional comments also brought to light certain barriers to sustainability that respondents have no control over. Two comments mentioned offices with no windows or natural light which makes temperature control through natural practices obsolete

Interview Findings- Barriers to Sustainability

Section 1: Education

When observing the findings of the interviews with the office administrators around campus, it is clear that a few topics stand out to be the most common barriers to creating a greener office environment at SCU. Lack of education and awareness of sustainable practices were the most commonly cited barriers. Many felt that people around campus, staff and students alike, are generally unaware what sustainable practices are and the little steps they could each personally take to make the campus a greener environment; said one respondent: "I think that if people were educated in what they can do simply to help, it will create and foster a lot more participation."

Section 2: Paper

The second most frequently addressed barrier was the need for paper usage in campus offices. Because hard copies of documents are often necessary for records, the use of paper is unavoidable; "Here in the office we need the original backup of everything that comes in, the government requires it." However, many noted that some paper is being used when it does not have to be. For example, not printing double-sided wastes more paper. Respondents felt that the practice of using paper when it is not

necessary is one of the largest barriers to sustainability on the Santa Clara University campus and could easily be overcome through the implementation of electronic tools such as email.

Section 3: Other

Some other respondents pointed to long-standing habits as well as personal wants and needs as the source of barriers to sustainability around campus. They said that “we have been conditioned” to participate in unsustainable practices and that “people are lazy” and do not want to take a little extra time to find a recycle bin or turn off a light when they leave a room. They had ideas such as that people are just not used to these practices yet and are “hesitant” to change their previous ways of doing things

Interview Findings: Making Offices More Green

Section 1: Recycling Bins

Across departments, there is a need to recycle and administrative assistants want to recycle but some of them do not have the opportunities to do so in their offices. Most of the administrative assistants said that they need more recycling opportunities: “Part of it would be the more convenience the more often the pick ups”. If there are more opportunities to recycle and “things get picked up on a daily basis, then people would probably be more willing to recycle”. Administrative assistants felt that taking little steps towards getting people to recycle more would be helpful, such as putting recycling bins next to trash cans thus forcing people to “stop being lazy” and to start throwing away trash in the trash bin and recycling in the recycling bin. “When planning [for] new offices, include space for recycling containers for each office”. Also in terms of having everyone across the university be on the same page as far as recycling, every building or office needs to have recycling opportunities.

Section 2: University Wide Green Buildings

Another finding that respondents noted was that new buildings on campus being built or remodeled are being made from recyclable products. Respondents noted that progress is being made with those buildings that are being made with recyclable products such as Kennedy Commons and the new library.

Recommendations

Recommendation: More Education on Sustainability

As mentioned in the findings section, respondents noted that a lack of education seems to be the greatest obstacle standing in the way of making Santa Clara University a more green-friendly environment. Lindsay Cromwell, the director of sustainability on campus, makes a concerted effort to go out to different offices and classes and give talks about being more sustainable. She also sends emails at least every week to get the word out. Unfortunately, not everyone reads their emails before discarding them and Ms. Cromwell cannot reach every staff member and student on a personal basis. Thus, it might be beneficial to implement campus-wide programs that are both fun and educational and that could reach a larger number of people. As one respondent said: “I

think education is the key to overcoming these barriers. We need to inform people, knowledge is power!”

Although specific sustainability programs differ across universities, the *Sustainability Report Card*, implemented by the Sustainable Endowments Institute, assesses a broad range of green practices from universities across the country. This report card stands as an evaluation of current practices and an educational tool. See Appendix D.

Recommendation: More Opportunities for Recycling

One major problem with why people do not recycle is because it is not convenient. Having more opportunities to recycle would be helpful in allowing people across campus to recycle. Giving incentives was another recommendation by respondents, such as implementing “department budgets” because “so much money is spent on paper that can be reused or printed double-sided. Also, money [is spent] to keep lights on all day and all appliances and electronics plugged in when they are not in use. If SCU and its offices knew just how much money they would be saving just by saving paper and conserving energy, money they can spend on other things, they would probably be more willing to do it.” The biggest recommendation that most interview responses discussed related to recycling was education. If there were more educational campaigns or programs, recycling would increase.

Recommendation: Electronic Resources

Based on interviews, it appears as though offices are beginning to implement saving data electronically rather than in a paper format. The majority of office administrators also reported sending emails rather than writing written messages. Offices could keep up these practices and seek to extend them. For example, an electronic copy could be saved for documents which are not required by the government to have a hard copy.

Conclusion

The results of the survey questionnaire and interviews with administrative assistants illustrate the current practices, barriers to sustainability, and future program suggestions for offices at Santa Clara University. The survey specifically yielded information about sustainable practices already being done and those which are most commonly ignored. The most common practice being performed around campus offices are the acts of turning off computers, monitors, and printers overnight. However, the least common sustainable practice demonstrated by the survey was using and turning off power strips at night or over weekends. In terms of reducing waste, the most common sustainable practice is recycling batteries and ink cartridges while the least common sustainable practice is using refillable pens and pencils. In addition, offices make an effort to keep live plants in the offices and use non-toxic cleaners. Interviews conducted with administrative assistants illustrated that the most commonly recognized barrier to sustainable practices is a lack of education and awareness of best practices for not only office personnel, but teachers and students as well. Other commonly cited barriers were the necessity of paper usage around campus and the difficulty in breaking older and less sustainable practices. Recommendations have also been made with the resulting data

from both the survey and interview, which include cutting back on paper usage through the implementation of electronic resources, recycling, and employing more ways to educate people on campus about best practices.

APPENDIX A: Survey Instrument

1. Office Sustainability Survey

Thank you for your time and expertise in filling out this survey.

Please answer the questions below for yourself, and if you can, your impressions of the general practices of the other members who are part of your department/division. Feel free to skip any questions you feel you are unable to answer.

Be assured that your answers are completely anonymous.

1. To what degree do you (and most people in your office) do the following in regards to energy use?

	You (admin/office asst.)	Office (most others in depart/div)
Turn off your computer, monitor, printer, speakers, etc. overnight	<input type="text"/>	<input type="text"/>
Plug computer, monitor, and other equipment to a powerstrip which is turned off overnight and during the weekends	<input type="text"/>	<input type="text"/>
Turn off lights when not in use	<input type="text"/>	<input type="text"/>
Use natural lighting whenever possible	<input type="text"/>	<input type="text"/>
Use rechargeable batteries	<input type="text"/>	<input type="text"/>
Purchase Energy Star electronics	<input type="text"/>	<input type="text"/>
Purchase Energy Star compact fluorescent light bulbs for desk lamps	<input type="text"/>	<input type="text"/>
Use energy-saving features	<input type="text"/>	<input type="text"/>

on copiers,
monitors, etc.
(sleep mode, not
screen saver)

Carpool or take
public
transportation to
campus or off-
campus events

Maintain the
thermostat at or
around 78
degrees in the
summer, and
dress
appropriately for
the season

Maintain the
thermostat at or
around 68
degrees in the
winter, and dress
appropriately for
the season

2. To what degree do you (and most people in your office) do the following in regards to waste?

You

Department/Division

Use e-mail to
communicate instead
of written messages

Circulate or post one
copy of
flyers/documents
rather than distribute
one per person

Minimize paper use
by reducing margins
and/or font size

Minimize paper use
by using the "print
preview" feature
before printing your
documents

Use both sides of paper (print double-sided and take notes on old one-sided documents)

Recycle beverage containers

Recycle paper, magazines, junk mail

Recycle cardboard boxes by flattening them and placing them behind blue paper recycling bags or near trash bins

Recycle batteries, ink cartridges via intercampus mail or Facilities pick-up requests

Recycle electronic waste (anything with an electric cord or battery) via Facilities pick-up requests or near trash bins

Donate furniture/supplies if no longer needed (campus e-mails, Goodwill, etc)

Cancel junk mail and unwanted publications

Send announcements through campus via e-mail (rather than distribute flyers to every department/employee)

Use reusable mugs at your desk and have extras on-hand for

visitors

Use refillable pens/pencils

Minimize waste at meetings, conferences, and events coordinated by your department (reusable service ware, etc)

Report running toilets, leaky faucets, broken sprinklers

Purchase items in bulk, with minimal packaging, and/or packaging that can be reused later

3. To what extent do you/people in your office do the following in regards to the environment?

You

Department/Division

Use non-toxic cleaning products (hand soap, dishwashing liquid, etc)

Serve and consume fair trade/organic teas, coffee, sugar, and other food products

Maintain live plants in the office

Use natural fertilizers for those plants

Turn off air conditioning and open windows on nice days

4. To what degree do you/others in your department/division do the following in regard to resources?

	You	Department/Division
Share ideas and best practices with others in your department/office	<input type="text"/>	<input type="text"/>
Share ideas and best practices with other departments and offices on campus	<input type="text"/>	<input type="text"/>
Read SCU Sustainability Updates (monthly e-newsletter)	<input type="text"/>	<input type="text"/>
E-mail the Sustainability Coordinator with questions and/or ideas	<input type="text"/>	<input type="text"/>
Subscribe to sustainability-related e-mails/newsletters/websites	<input type="text"/>	<input type="text"/>

5. Please add any additional comments you have:

Thank you for your participation. A student may be e-mailing you in the next 2 weeks to ask you to complete a short, 10-15 minute open-ended interview about this topic. We appreciate your time and for sharing your expertise with us.

Done >>

APPENDIX B: Interview Questions

Interview Questions: Sustainable Office Practices

1. What do you think are the greatest barriers to creating a greener office environment at SCU?

-are the barriers individual, organizational, university-wide?

-what would make you more able/willing to overcome these barriers? – (beyond money or time)

2. What do you think the university could do to help make offices on campus more green (environmentally friendly)?

-programs, money, incentives, education, etc.

3. Have you heard of any best practices that others do or things that you do in this area that you think others might benefit from?

-what might be some good programs/policies to try, etc.

Thank you so much for your time and help.

APPENDIX C: Consent Form for Interviews

Participant Consent Form
Interviews on Sustainable Office Practices–Fall 2007

You have been asked to participate in a study on barriers to sustainable office practices at SCU. For the study you will be interviewed for 10-15 minutes.

The interview will be tape recorded or your responses will be entered directly on a laptop computer. Tape recorded interviews will be transcribed. After the transcription is complete the tape will be erased. Your name, or any identifying information, will not be included on the transcription.

The written transcription from the interview will be joined with other interviews (approximately 60 to be conducted) and used by students who are part of the research team studying this issue to write up a policy brief of the overall findings as well as prepare a presentation about the results. Your responses may also be used in future publications or reports for the university. At no time will your name or departmental/division association be associated with anything that you say. The interviewer agrees that he/she will never reveal your identity to the instructor, other students in the class, or anyone else that they know.

We foresee no risk to you in answering these questions. You may refuse to answer any question at any time. You may also ask that the full or certain parts of the interview not be taped.

If you have any questions about this study, the results, the interview that was conducted with you, or this consent form please feel free to contact the instructor for the class, Dr. Laura Nichols, 551-7131; Lnichols@scu.edu.

In signing this form you are saying that you understand the conditions stated above and that you agree to participate in this study. On behalf of the students and instructor of the class, we thank you very much for your willingness to participate.

Signature of research participant

Date

B -
\$698 million

SANTA CLARA UNIVERSITY

- Administration** **A** President Locatelli has signed the Presidents Climate Commitment. The university has a sustainability policy, a task force, and a sustainability coordinator. There is a monthly e-newsletter that highlights the campus’s achievements in sustainability. Campus Sustainability Day is celebrated yearly, showcasing campus projects and research. Additionally, a workshop titled “Green Practices in the Workplace” educates staff about sustainability. There are several active student groups and programs, including the Sustainable Living Undergraduate Research Project.
- Climate Change & Energy** **A** The university has pledged to reduce its carbon dioxide emissions to 20 percent below 1990 levels by the end of 2010. In July 2007, the university amplified its commitment to renewable energy by increasing its annual wind power purchase to 8,040 megawatt-hours. The university recently dedicated a 50-kilowatt solar array.
- Food & Recycling** **A** Eighty percent of the produce served in the dining halls comes from local farms. Fair-trade coffee, cage-free eggs, and hormone-free milk are served. Students can use their meal points to buy locally grown produce at the campus farmers market. The university is in the process of developing an in-house food waste composting program. There is a comprehensive, university-wide recycling program, including green waste and the majority of construction materials.
- Green Building** **B** All new projects and major renovations follow LEED standards, including the new business school and library. The newly opened Commons at Kennedy Mall is a sustainable design demonstration building. Older buildings are being retrofitted to improve energy efficiency.
- Transportation** **B** The university has replaced SUVs once used by campus gardeners with electric golf carts. Campus safety uses gas and electric vehicles. Altogether, more than 30 electric vehicles are used by various departments on campus. Carpools receive free parking. Public transportation passes are available at a 25 percent discount. The campus is designed to be pedestrian- and bike-friendly.
- Endowment Transparency** **D** The university makes its proxy voting records and a list of endowment holdings available to trustees, senior administrators, and other select members of the school community.

**Investment
Priorities**

B The university aims to optimize investment return and is currently exploring renewable energy investment funds or similar investment vehicles. Environmental factors are included in the socially responsible investment guidelines.

**Shareholder
Engagement**

F The university asks that its investment managers handle the details of proxy voting.

Data compiled from independent research as well as through a campus sustainability policy survey, a dining services survey, and an endowment shareholder practices survey. Endowment size in upper right corner is as of June 30, 2007. For information on data collection and evaluation, please see the Methods section on page 228.