

ALBRIGHT COLLEGE
SUSTAINABILITY ASSESSMENT
FY2010



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EXECUTIVE SUMMARY

The sustainability assessment of Albright College began in the summer of 2011. Data were collected on various aspects of sustainability from 2005 to 2010, when possible. The assessment was a logical extension of the Albright College Sustainability Plan that was created in late 2009. In order to comprehensively assess all of the elements (environmental, social and economic) of sustainability, the Association for the Advancement of Sustainability in Higher Education's (AASHE) Sustainability Tracking and Rating System (STARS) was used. In addition, the Cool-air, Clean Planet Campus Carbon Calculator, which is the standard reporting tool for the American College & University Presidents' Climate Commitment, was used to determine Albright's carbon footprint.

The overall goal of the assessment is to establish baseline data that can be used in future assessments of sustainability. One of the main aspects of the Albright College Sustainability Plan was to continuously monitor and track sustainability. This assessment is the first step in the monitoring process. In order to more efficiently track and monitor sustainability, however, an assessment needs to be completed every three to five years. This document should serve as the starting point in a continuously ongoing assessment of sustainability at Albright. This and each subsequent sustainability assessment should be followed by the creation of an action plan that lays out specific goals and implementation strategies. This action plan should be created by the Committee on Sustainability and Stewardship (CSS). It is also strongly recommended that the College hire a sustainability coordinator that becomes the chair of the CSS and oversees all sustainability initiatives and goals.

The format of this assessment follows the STARS measurement tool by assessing sustainability across three sectors: Education and Research; Operations; and Planning, Administration and Engagement. All of the credits within each STARS sector are assessed in order and recommendations for action are included for each. Tabular scores for each sector can be found at the beginning of each

respective section. In addition, the overall STARS score can be found in the chapter following the results section. A summary of the assessment’s highlights and major recommendations can be found in the recommendation summary chapter. More detailed results from the Cool-Air Clean Planet Campus Carbon Calculator can be found in Appendix B. In addition, results from the recently completed survey of incoming students at their freshmen orientation can be found in Appendix C. The overall findings of the assessment are also listed in Table 1 below. The highest scoring category was by far the Education and Research with over 42 percent of the possible credits being earned. The overall STARS score, which is the average of the three percentages earned in all three categories, was found to be 33 percent. This places Albright at the Bronze level of sustainability, according to STARS. This is a positive result, but one that also leaves much room for improvement.

Table 1. Points possible, earned and percentage of points awarded for each of the three STARS categories. The overall STARS rating is included.

STARS Category	Points Possible	Points Earned	%
Education and Research	95.75	45.26	42.05
Operations	95.75	25.07	26.19
Planning, Administration and Engagement	93.00	29.20	31.40
Overall STARS Score		33.21	
STARS Score Level		Bronze	

As future improvement is possible, a list of the major recommendations for furthering sustainability at Albright can be found in Table 2. In addition, Table 2 also lists some of the major accomplishments in each sector or category of STARS.

Table 2. Major accomplishments and recommendations stemming from the Albright Sustainability Assessment.

STARS Category	Accomplishments	Recommendations
Education and Research	<ul style="list-style-type: none"> • Highest scoring category, which reinforces the educational experience provided at Albright • Successful recycling outreach campaign • Inventory of sustainability focused and related courses • Sustainability incorporated into new student orientation 	<ul style="list-style-type: none"> • The creation of formalized learning outcomes for the sustainability focused courses • Implementation of a process that ensures a new major sustainability initiative is created every year • An outreach campaign is created around each year's initiative • Continue to find ways to incorporate sustainability into freshmen orientation • Implement a 'Green Fund' that is used by students to create and implement sustainability related initiatives (see Appendix D)
Operations	<ul style="list-style-type: none"> • Baseline measurements of energy usage prior to the new Science Center and Co-generation plant • Reduction of overall energy consumption by 4% between 2005 and 2010 	<ul style="list-style-type: none"> • Development of a comprehensive plan to reduce carbon emissions (net increase of 12.7% between 2005 and 2010) • Incorporation of carbon footprint reduction plan into Albright Master Plan • Develop strategies to reduce water consumption including outreach to students about the importance of water conservation • Begin utilizing the Electronic Product Environmental Assessment Tool (EPEAT) in electronic purchasing decisions
Planning, Engagement and Administration	<ul style="list-style-type: none"> • Creation of the Committee on Sustainability and Stewardship and Albright Sustainability Plan (see Appendix A) • Level of community service engaged in by Albright students 	<ul style="list-style-type: none"> • Hire a sustainability coordinator • Exploration into more sustainable investment options • Develop policy to mandate consideration of the social and/or environmental impacts of investment decisions, in addition to financial considerations • Create a student managed socially responsible investment fund • Add a clause into the master plan that environmental concerns and education are a goal of Albright College

INTRODUCTION*

Sustainability Defined

The current use of the term sustainability stems predominantly from the 1987 publication by the United Nations World Commission on Environment and Development (WCED) called the Brundtland Report (aka Our Common Future), which focused on the sustainable development of the developing world. The central focus of sustainable development, as stated in the WCED report, was “development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts: 1) the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and 2) the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs.” More contemporary use of the term sustainability has built off this conceptual foundation to emphasize the interconnectedness of the social, environmental and economic dimensions that are present in our daily decision making. This three legged stool approach to the concept of sustainability implies that all three dimensions must be given due consideration or the system that it supports will collapse due to imbalance. As the understanding of the importance of examining the interconnections between these dimensions increases, more and more institutions and organizations are undertaking sustainability assessments. Colleges and Universities are no exception and in many ways are leading the way toward a sustainable future through education and leadership. For Albright College, sustainability implies a concept, which recognizes the finite nature of our planet and therefore seeks to assess and maintain our needs without jeopardizing the needs of future generations. Achieving sustainability requires a balancing of environmental preservation, social equality, and economic needs. As a small residential liberal arts college, Albright attempts to educate its

*This assessment was conducted by the Committee on Sustainability and Stewardship and authored by Dr. Brian Jennings. Any questions, concerns or requests for additional information should be sent to the Committee on Sustainability and Stewardship at css@alb.edu.

students on the interconnections between their daily existence and the local, regional and global communities. As such, Albright believes that the search for knowledge should not be separated from the search for wise and just solutions in human affairs and in the conservation of the natural world.

Albright College Background

Albright College is a nationally ranked private-liberal arts college founded in 1856. The campus is located in the College Heights residential community of Reading, Pennsylvania, which is home to some 88,000 people and is within three hours of Philadelphia, New York, Baltimore and Washington DC. The main campus is situated on 126 acres and is home to 1670 day students from 22 states and 14 countries. Albright's core values are described in its mission statement, which reads "our mission is to inspire and educate the scholar and leader in each student, building on a strong foundation in the liberal arts and sciences and a commitment to the best of human values, fostering a commitment to a lifetime of service and learning."

History of Sustainability at Albright

The history of environmental concern and action at Albright College extends at least as far back as the inception of the Environmental Science and Environmental Policy Programs which both began in the 1990's. A student environmental club was begun in the early 2000's. There were efforts by faculty and some students to enhance a limited recycling program in the first half of the 2000's. In 2003, the Environmental Policy concentration, which had been a segment of the political science department expanded to become a comprehensive interdisciplinary environmental studies concentration.

The second half of the 2000's marked a significant improvement in Albright's commitment to the environment. This increased emphasis came about due to changes at all levels of the institution from students to the Board of Trustees. As both the Environmental Studies and Environmental Science programs began to grow, the student environmental club grew and became more active. The

Environmental Studies and Science Program was able to add additional faculty to help contribute to both the academic and administrative efforts on campus. Newly appointed President McMillan was supportive of efforts to improve campus sustainability. The newly appointed director of facilities was both knowledgeable and committed to sustainable practices. Influential members of the Board of Trustees actively promoted pro-environmental programs on campus.

A number of notable actions arose out of these developments. At the bequest of the President, an administrative committee was formed to explore a motion to sign the President's Climate Commitment to reduce greenhouse gases. That commitment had been forwarded to many college presidents and President McMillan wanted to establish a committee to explore the option. At that point an existing committee that had recently been formed by concerned faculty members was transformed to explore this issue. While exploring the merits of the President's Climate Commitment, this committee (Committee on Sustainability and Stewardship CSS) developed a set sustainable objectives for Albright. It also worked with the President to significantly upgrade our recycling program. At the insistence of a member of the Board of Trustees, the college committed itself to ensuring that the new science building would be LEED certified.

All of these and other efforts have marked a huge improvement in support and commitment for sustainable actions at Albright, and they have sent a message to the students that the environment is a significant issue which needs to be supported. In spite of these improvements there is much more to be accomplished. At this point the biggest obstacle to moving ahead on improving sustainability at Albright College is the lack of a sustainability coordinator, whose main focus would be on improving Albright's environmental efforts.

METHODOLOGY

STARS Methodology

Assessing the current state of campus sustainability is a daunting and difficult task. The first step is to identify an appropriate methodology. Fortunately, the Association for the Advancement of Sustainability in Higher Education (AASHE) has created a thorough methodological tool specifically for colleges and universities to assess their overall campus sustainability. The Sustainability Tracking, Assessment and Ranking System (STARS) is a comprehensive framework for assessing and tracking sustainability over time and across all dimensions of the concept. STARS uses a credit scoring system to compute an overall campus score and each credit was created with the following questions in mind: “1) Does the credit speak to improved environmental, social, and/or financial impacts?; 2) Is the credit relevant and meaningful for diverse institutions?; 3) If the credit is based on the presence of a strategy, is a performance-based indicator not available or appropriate?; and 4) Is the credit measurable, objective, and actionable?” Based on these questions credits were vetted and placed into three broad categories including Education and Research, Operations, and Planning, Administration and Engagement. The STARS 1.1 technical documentation that explains the criteria and scoring for each credit can be found at <https://stars.aashe.org/pages/about/technical-manual.html>. Tables 3, 5 and 6 provide a list of all credits and Albright’s associated score within each of these three broader categories of STARS.

Clean Air Cool Planet Campus Carbon Calculator Methodology

The Clean Air Cool Planet Campus Carbon Calculator is a tool developed to determine a campus’ overall greenhouse gas emissions. The calculator is extensive and measures three scopes of emissions. Scope 1 emissions are “Direct emissions from sources that are owned and/or controlled by your institution. This includes combustion of fossil fuels in college-owned facilities or vehicles, fugitive emissions from refrigeration, and emissions from on-campus agriculture or livestock husbandry. Your

institution has complete control over these emissions, and they are no-one else's responsibility." Scope two emissions include "Indirect emissions from sources that are neither owned nor operated by your institution but whose products are directly linked to on-campus energy consumption. This includes purchased energy: electricity, steam, and chilled water. Although your institution is not directly responsible for these emissions, it is strongly implicated. These emissions come from converting energy sources that release greenhouse gas emissions when used (fossil fuels) to energy sources that do not (electricity, steam, or chilled water). Although your institution did not burn the coal to make the electricity you use, someone had to, and although the electricity producer emitted the gasses, they did not use any of the energy produced." Finally, scope 3 emissions are "other emissions attributed to your institution, deemed "optional" emissions by corporate inventories. This includes emissions from sources that are neither owned nor operated by your institution but are either directly financed (i.e. commercial air travel paid for by the institution) or are otherwise linked to the campus via influence or encouragement (i.e. air travel for study abroad programs, regular faculty, staff, and student commuting). Many Scope 3 emissions are considered "upstream" like the emissions associated with making and transporting plastic silverware. To prevent institutions from accounting for too many upstream emissions, most campuses define distinct financial or control boundaries to distinguish which Scope 3 emissions they are indeed responsible for" (CA_CP Carbon Calculator Users Guide V5).

Data collection for the Albright campus included contacting an array of campus constituents in order to determine the location of needed data. While vast amounts of data were entered into the calculator there were still gaps that need to be filled in during future assessments. The data collected and the gaps that need to be filled in will be discussed in the greenhouse gas emissions results section.

RESULTS

This section will discuss each STARS credit individually. The score and justification for each credit will be given and recommendations for future improvements will be made. Information about each of the individual credit rationale, criteria, applicability and scoring can be found in the STARS technical manual at the following address: <https://stars.aashe.org/pages/about/technical-manual.html>. The information obtained from the Clean Air-Cool Planet Carbon Calculator will be presented under the STARS credit for greenhouse gas emissions inventory (OP Credit 4).

Education and Research

Table 3 provides the possible score for each credit with the Education and Research category of STARS. In addition, the points earned by Albright are found in the rightmost column of the table. The total points earned for this category is found at the end of the table with the percentage of points earned being the final piece of information presented in the table. This percentage is an important piece of information as the average percentage of the three categories within STARS is the final sustainability score for Albright.

Table 3. AASHE’s STARS Education and Research credits, points possible and points earned by Albright College.

Category 1: Education & Research (ER)			
Credit Number	Credit Title	Possible Points	Points Earned
Co-Curricular Education			
ER 1	Student Sustainability Educators Program	5	0
ER 2	Student Sustainability Outreach Campaign	5	5
ER 3	Sustainability in New Student Orientation*	2	2
ER 4	Sustainability Materials and Publications	4	2
Co-Curricular Education Tier Two Credits			
ER T2-1	Student Group	0.25	0.25
ER T2-2	Organic Garden*	0.25	0
ER T2-3	Model Room in Residence Hall*	0.25	0
ER T2-4	Themed Housing*	0.25	0
ER T2-5	Sustainable Enterprise	0.25	0

ER T2-6	Sustainability Events	0.25	0.25
ER T2-7	Outdoor Program	0.25	0.25
ER T2-8	Themed Semester or Year*	N/A	N/A
Co-Curricular Education Total Points		17.75	9.75
Curriculum			
ER 5	Sustainability Course Identification	3	3
ER 6	Sustainability-Focused Courses	10	7.45
ER 7	Sustainability-Related Courses	10	4.88
ER 8	Sustainability Courses by Department*	7	5.19
ER 9	Sustainability Learning Outcomes*	10	0
ER 10	Undergraduate Program in Sustainability*	4	4
ER 11	Graduate Program in Sustainability*	N/A	N/A
ER 12	Sustainability Immersive Experience*	2	2
ER 13	Sustainability Literacy Assessment	2	1
ER 14	Incentives for Developing Sustainability Courses	3	0
Curriculum Total Points		51	27.5
Research			
ER 15	Sustainability Research Identification*	3	1
ER 16	Faculty Involved in Sustainability Research*	10	0
ER 17	Departments Involved in Sustainability Research*	6	0
ER 18	Sustainability Research Incentives*	6	0
ER 19	Interdisciplinary Research in Tenure and Promotion*	2	2
Research Total Points		27	3
Total ER Points		95.75	40.3
% ER Score			42.0

ER Credit 1-Student Sustainability Educators

Score

Albright did not earn any of the five possible points for this credit. Currently there is no program in place that coordinates peer-to-peer sustainability outreach.

Recommendation

A peer-to-peer sustainability outreach program could be implemented in one of two ways. First, RA training could be developed that enable all RAs to be certified as sustainability educators who would have a responsibility to inform their respective residence hall students of ways to increase their sustainability. The second possibility would be to create student sustainability educators who would be responsible for training the RAs as well as other campus communities (Clubs, SGA, Athletics, etc.). Either of these options could start with issues of energy and water conservation, and recycling. The cost of training students to become student sustainability educators could be easily nullified through savings in reduced energy costs. Progress could be tracked through yearly energy records.

ER Credit 2-Student Sustainability Outreach

Score

The maximum points possible were received for this credit. The main focus of the sustainability outreach was on an increased awareness of recycling. The thrust of the campaign was to standardize the color of recycling bins on campus (blue) and increase the volume by adding bins in both indoor and outdoor locations. Outdoor bins had never been used on campus prior to 2010 (with the exception of the athletics stadium). In addition to the increasing and standardization of bins, flyers were created to inform all students, faculty and staff that Albright was committed to recycling and that our new system was one of comingling. Prior to 2010 recycling had to be sorted by type. Emails were sent to all campus members using various listserves and the CSS divided up the campus by constituencies in order to continue the information campaign. In order to assess program success, information was obtained from Allied Waste, the college's waste provider. Between 2009 and 2010 the percentage of total waste recycled increased from an estimated 2% to an estimated 2.4% in 2010. Preliminary data from the first 4 months of 2011 indicates that the percentage has increased drastically with the percent of total waste recycled standing at 9%. One issue remains with regard to the recycling campaign. The waste provider

was not able to provide data in a way that was easily interpretable and therefore the numbers given upon should be used with caution. In the future Albright should work with Allied to standardize its data reporting and request a quarterly report of waste tonnage as part of their contract.

Recommendation

While Albright was successful in their recycling endeavor, future outreach campaigns need to be undertaken. It should be a priority of the CSS to develop a new campaign each year and focus on obtaining tangible data in order to assess their actions in regard to the campaign.

ER Credit 3-Sustainability in New Student Orientation

Score

Full score was given for this credit. As part of the orientation for the class of 2014, an experience event was held that focused on our society's addiction to plastic. A film by the same name was shown and all students took part in a question and answer session with the director of the documentary. In addition, as part of the recycling campaign the student environmental group informed students taking part in orientation about the new recycling rules and increased bins across the campus.

Recommendation

Unfortunately, the full score for this credit was limited to the current assessment year if further institutionalization of sustainability principles in new student orientation does not occur. Therefore it is recommended that some time is carved out of the already busy new student orientation schedule to include providing information about how to make more sustainable decisions at a time when these young adults are experiencing a new found independence. It is a crucial time in the formation of campus behavioral patterns.

ER Credit 4-Sustainability Outreach and Publications

Score

For this credit there are numerous outreach and publication venues that, if completed, each score 0.5 points. The maximum score is 4. The total score received for Albright was 2. Credit was given for the following items: central sustainability website

(<http://www.albright.edu/sustainability/index.html>), the Fusion and the Reporter as a venue to publish and disseminate student research on sustainability, regular coverage of sustainability in the Albrightian and the posters and signage created for the recycling campaign.

Recommendation

There were several possibilities that Albright could pursue in the future.

- 1) A sustainability newsletter informing the campus community of new initiatives and the activities of the CSS would go a long way to spread the word about the importance of campus sustainability and help foster a sustainability community. Perhaps communication concentrators could be incorporated into this process and given practical experience by writing a quarterly newsletter.
- 2) Create new signage that emphasizes 'green' building and ground features. As the new science center will be LEED certified a possibility for a plaque commemorating that accomplished could be created.
- 3) Food signage and brochures explaining where the food comes from, its nutritional contents, etc. could be incorporated into the dining experience of students. The new partnering with Aramark may already provide some of these features, but the full extent needs to be explored.

- 4) A commuters guide to alternative transportation needs to be created for the college community. This information could include a ride sharing board, information provided to all new students and faculty about the local bus system, etc.
- 5) A green guide for the residence halls could be created by Housing to increase the outreach to the student population regarding making intelligent decisions that helps preserve the environment.

ER Co-Curricular Tier Two Credits

Score

Of the possible 1.75 points Albright earned 0.75. The points came from having a student environmental club (Environmental Campus Outreach), sustainability event (the Bioneers lecture series hosted by ECO) and a newly formed outdoors program created by Alison Camlin in the Schumo Center, which provides opportunities for students to engage in outdoor off campus activities such as hiking and backpacking.

Recommendation

Other possible points that could be earned include creating an organic garden and creating a model sustainability room in the residence hall, both of which currently have some institutional support and will likely be developed in the near future. A great location to create the model sustainability room would be one of the Woods buildings as those units are individually metered and could be assessed in terms of their energy and water usage.

ER Credit 5-Sustainability Course identification

Score

All three points were earned for this credit. The definition of sustainability in the curriculum was passed by the CSS on August 23, 2011. The definition creates two distinct categories of courses

dealing with sustainability; courses that are focused on sustainability and courses that are related to sustainability. The definition is as follows:

Sustainability implies a concept, which recognizes the finite nature of our planet and therefore seeks to assess and maintain our needs without jeopardizing the needs of future generations. Achieving sustainability requires a balancing of environmental preservation, social equality, and economic needs. As a small residential liberal arts college, Albright attempts to educate its students on the interconnections between their daily existence and the local, regional and global communities. As such, Albright believes that the search for knowledge should not be separated from the search for wise and just solutions in human affairs and in the conservation of the natural world.

Sustainability-focused courses concentrate on the concept of sustainability, including its social, economic, and ecological dimensions, or examine an issue or topic using sustainability as a lens.

Sustainability-related courses incorporate sustainability as a distinct course component or module or concentrate on a single sustainability principle or issue.

Courses focused on or related to sustainability include one or more of the following components:

- Examining historical patterns that have created contemporary sustainability issues
- Exploring philosophical or theoretical frameworks related to environmental and sustainable issues
- Understanding the complex system of local, regional, and global inequality that creates and is simultaneously shaped by sustainability issues
- Analyzing literature, media, and fine arts for their connection to sustainability
- Examining the permeable boundaries between academic disciplines and their connections to sustainability
- Examining how human nature affects our ability to engage in sustainable actions
- Understanding how the ecology is affected by both man-made and natural actions
- Integrating basic and applied knowledge from multiple disciplines, including natural and social sciences, and humanities, to analyze human-environment interactions
- Analyzing the trade-offs or co-benefits of the “triple bottom line” (people, planet and profit) for current and future generations
- Recognizing the need for and seeking the development of alternative strategies for the use of natural, human, and fiscal resources that are compatible with the constraints on these resources in a finite world
- Exploring practical solutions to socioeconomic and environmental challenges, including those that relate to energy, technology, natural systems, social transformations, food systems, policy and governance
- Encouraging systems thinking or the view that solutions to problems should be sought using a lens that recognizes the problem as a part of a larger system rather than reacting to an individual part or component

After creating the definition of suitability in the curriculum the courses that met the criteria were located using two different methodologies. First, students in the Environmental Studies Senior Seminar course compiled a list of syllabi used over the past two years. They then created a list of search terms that would enable them to identify courses that would fit the definition. The second step was to read the course descriptions in the campus catalog and create a list of courses that appear to fit the criteria. Finally, an attempt was made to verify every course identified with their respective departments and/or instructors to ensure that the course did indeed meet the criteria. If individual departments did not respond the methodology described above was assumed accurate. Table 4 presents the inventory of sustainability related or focused courses. In attempt to make the campus and larger community more aware of Albright’s sustainability offerings, the identified courses will become publicly available on the sustainability and stewardship website (<http://www.albright.edu/sustainability/index.html>).

Table 4. Courses by department that are either focused on or related to sustainability.

Department	Focused	Related
Biology	BIO 101-Concepts and Connections in Biology BIO/EVS315-Watershed Hydrology BIO/EVS316-Conservation Biology	BIO334-Vertebrate Natural History BIO311-Ecology BIO/EVS312-Wetland Ecology BIO317-Ecophysiology BIO318-Marine and Aquatic Science BIO491-Seminar on Special Topics
Chemistry and Biochemistry	Che100-Chemistry and Society CHE200-Health, Safety, and Asset Protection CHE420-Environmental	
EVSS	EVS101-Introduction to Environmental Issues EVS260-Latin American Environmental Issues EVS298-Field Study in Peru EVS310- Pollution: Effects & Remediation EVS400-Environmental Seminar	EVS205-Introduction to Physical Geology EVS280-Martinique Studies EVS365-Remote Sensing EVS325-Geographical Information Systems SPPJ51-Marine Mammals
Business		BUS 210-Production Management BUS 346-Management Principles BUS 368-International Management BUS 374-International Marketing
Economics	ECO224-Environmental Economics	ECO 105-Principles of Economics ECO 233-Comparative Economics

		ECO 301-International Economics & Finance ECO337-Public Finance
Art		ART 105-Art History I
Fashion		FAS 112-Fashion Technology
History	HIS311-US Social	HIS 135-World History I HIS153-US 20 th Century HIS224-Latin America HIS256-Modern Middle East HIS265-Modern France HIS270-Modern Germany HIS312-US Econ History HIS322-US Urban History HIS340-Women Latin America HIS493-Seminar US Topics
Philosophy	PHI270-Environmental Ethics	
Religion	REL280-Religion and the Environment	
Political Science	POS299-Politics of Global Health POS320-Politics/Environment POS321-Environmental Politics POS340-Topics for Political Analysis	POS202-International Politics POS214-Public Policy POS242-Human Rights POS273-Globalization POS345-Latin American Politics POS352-International Law & Organizations
Psychology	PSY350-Ecological Psychology	PSY100-General Psychology PSY290-Diversity Issues PSY406-Seminar
Sociology & Anthropology	SOC262-Social Stratification SOC291-Environmental Sociology ANT206-Food and Culture ANT265-Ecological Psychology	SOC333-Sociology of Religion SOC385-Violence and Victims SOC307-Organized Crime ANT 204-Introduction to Anthropology ANT270-People of the World
English		ENG250-Mass Communication/Society
IDS	IDS206-Food and Culture IDS212-Educational Theatre IDS260-Latin American Environmental Issues IDS265-Ecological Psychology	IDS205-Physical, Human, and Environmental Geography IDS225-Intro Latin America IDS273-Globalization IDS275-Dominican Republic IDS285-Human Animal IDS298-Field Study in Peru
Theatre		THR212-Theatre Electrics THR312-Designing with Light THR315-Costume Design

Recommendation

It is important to keep this list of courses up to date by ensuring that new courses that meet the criteria are included in the list of sustainability courses. In addition, if any courses cease to exist due to personnel changes or lack of demand then those courses should be removed. Future sustainability assessments should be tasked with maintaining the sustainability course list. It may also be necessary to have the curriculum committee assist with the identification of these courses as they approve all new courses.

ER Credit 6-Sustainability Focused Courses

Score

A total of ten points were possible for this credit if courses focused on sustainability comprise 10 percent or more of all courses offered. Of the 376 courses offered at Albright, 28 are sustainability focused courses. This earns Albright 7.45 points on this credit.

Recommendation

Currently Albright is doing very well in regard to their sustainability focused course offerings. In the future any new courses developed that focus on sustainability should be added to the catalogue of sustainability courses (Table 2).

ER Credit 7-Sustainability Related Courses

Score

As with the sustainability focused course credit, the sustainability related course credit has a total of 10 possible points based on how close the related courses come to comprising 30 of the overall course offerings. Albright has 55 courses listed as related to sustainability and therefore earned 4.88 points.

Recommendation

It is recommended that a more thorough investigation into courses that have a module or component related to sustainability be completed. A qualitative investigation where each department chair is visited and asked about their offerings may reveal even more sustainability related courses.

ER Credit 8-Sustainability Courses by Department

Score

This credit provides points for determining the total number of departments that offer a course focused on or related to sustainability. A total of 7 points are possible if 90 percent or more of academic departments offer one such course. Albright has 24 total departments and of those 24, 16 offer a course focused on or related to sustainability. Therefore, a total of 5.19 points were awarded for this credit.

Recommendation

The recommendation for the previous credit would also serve this credit well.

ER Credit 9-Sustainability Learning Outcomes

Score

This credit seeks to identify how many students graduate from Albright in a concentration that has at least one sustainability learning outcome. Unfortunately this credit was not scored due to time constraints associated with the project and therefore by default the STARS score is recorded as a zero.

Recommendation

As more and more of the departments across campus complete their five year reviews it will become easier to identify each department's exact learning outcomes. By compiling all of these learning outcomes and the identifying the number of students graduating in any given year from each department a score could be calculated. This task would be most easily accomplished by Academic

Affairs as they are responsible for the departmental reviews and should have departmental files indicating their respective learning outcomes. Future sustainability assessments should ask Academic Affairs for assistance with scoring this credit.

ER Credit 10-Undergraduate Program in Sustainability

Score

Albright receives all four points for this credit through the Environment Studies and Sciences program. Both tracks within the program, Environmental Studies and Environmental Sciences, deal with the environmental, economic and social dimensions of sustainability. The overall program has been established with the precise understanding of the importance of an interdisciplinary understanding of the world.

Recommendation

The Environmental Studies and Sciences program should continue to focus on all three dimensions of sustainability while also attempting to provide a few additional emphases within the two respective tracks in an attempt to draw more students to concentrate in this program.

ER Credit 11-Graduate Program in Sustainability

This credit does not apply to Albright College as we have only one graduate degree granting program and therefore is excluded from the points possible.

ER Credit 12-Sustainability Immersive Experience

Score

Full score is awarded for this credit. Students at Albright have a few options to obtain an immersive experience in sustainability. First, the campus partners with the School for Field Studies, an organization that provides students with opportunities to study environmental and sustainability issues in various locations around the world. Second, all four of the core faculty members in the

Environmental Studies and Sciences program have developed courses that also take students to various locations across the world to study environmental aspects. These locations include South America, the Caribbean and Australia.

Recommendation

It is recommended that the college maintain its relationship with the School for Field Studies and also provide additional mechanism to assist faculty members interested in developing study away courses, especially those focused on sustainability. A semester abroad that enables various Albright faculty to teach Albright students at an institutionally owned facility would be the most desirable.

ER Credit 13- Sustainability Literacy Assessment

Score

Half of the possible points were earned for this credit. The credit is broken into two components each worth one point. Part one requires an assessment of current student knowledge related to sustainability. This assessment was conducted by Drs. Jennings and Ghosh during the class of 2015's freshman seminar. The results of this assessment revealed that the vast majority of incoming freshman have little knowledge related to sustainability and have yet to form any kind of world view regarding the role of humans on the planet (see Appendix C). The second part of this credit requires a follow up assessment of the same cohort. As this was the first year freshmen were surveyed, this portion of the credit has yet to be completed.

Recommendation

Drs. Jennings and Ghosh plan to revisit the same cohort in their senior year to determine if their level of sustainability literacy has increased. This longitudinal research will be an excellent opportunity to assess the College wide general studies requirements in terms of their ability to educate the student body about sustainability issues.

ER Credit 14-Incentive for Developing Sustainability Courses

Score

No points were awarded for this credit. The current institutional structure does not provide incentives for developing courses specifically related to or focused on sustainability.

Recommendation

While there are no current incentives for sustainability course development, there is a possibility of future funding for course development in general. This situation would enable faculty interested in developing these sorts of courses to apply for funding to do so. There is currently administrative support for this sort of funding program, and it is recommended that the grants be implemented when budgetary constraints are lifted.

ER Credit 15- Sustainability Research Identification

Score

Of the three points possible for this credit, Albright has earned one point. The point was awarded for definition of sustainability in research passed by the CSS on August 23, 2011. The definition states:

Sustainability research focuses on a key principle of sustainability (such as social equity or environmental stewardship), addresses a sustainability challenge (such as climate change or poverty); or furthers our understanding of the interconnectedness of societal and environmental challenges. Sustainability research leads toward solutions that support economic prosperity, social well-being, and ecological health.

The remaining two points left unearned required an inventory of sustainability research across campus. This inventory would then need to be made publicly available. The scope of this task was outside of the current assessment.

Recommendation

It is recommended that serious thought be given to the best mechanism to complete such an inventory. Once the appropriate mechanism is developed the information should be regularly updated and made available via the sustainability and stewardship website. One possible mechanism for completing the inventory may be to involve the IRB process, which should theoretically review all of the research conducted by campus constituents.

ER Credit 16-Faculty Involved in Sustainability Research

Score

None of the 10 possible points were awarded for this credit. In order to complete the scoring for this credit an inventory of sustainability research needs to be first conducted. As no such inventory was completed during this assessment the total percentage of faculty conducting research related to sustainability could not be completed.

Recommendation

It is recommended that this credit be revisited after completing the inventory needed to score ER Credit 15.

ER Credit 17-Department Involved in Sustainability Research

Score

As this credit also requires the completion of the sustainability research inventory no points were awarded.

Recommendation

The scoring of this credit could be easily completed following the scoring of the previous two STARS credits. When the previous two credits are incorporated into future assessments this credit should be included.

ER Credit 18-Sustainability Research Initiatives

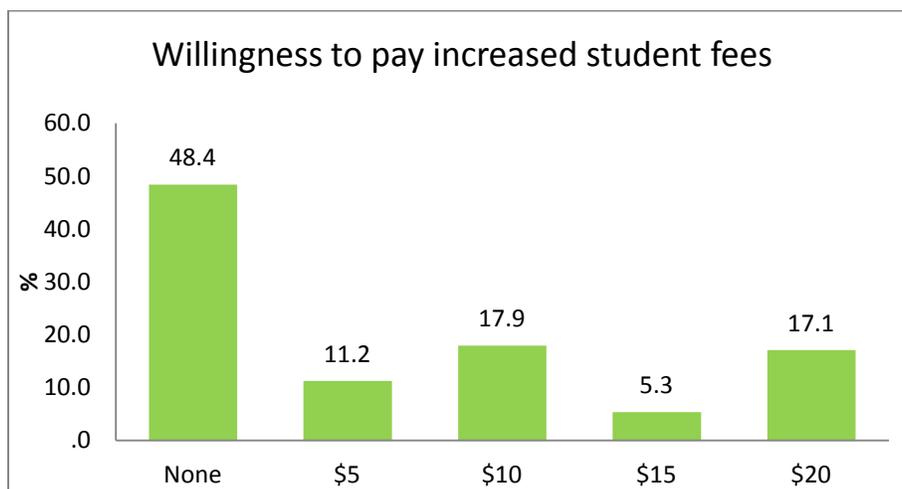
Score

This credit is scored in two parts with each part worth 3 points. The first part provides credit for ongoing programs to encourage students in multiple disciplines to conduct sustainability research, while the second part focuses on encouraging faculty to do the same. No points were awarded for this credit.

Recommendation

While Albright does have programs to encourage research in general by both students and faculty, it would be misleading to indicate that these programs focus on sustainability research. It is therefore a recommendation that CSS continue to seek the implementation of a Green Fund program (see Appendix D for Green Fund proposal) that would provide funds specifically for research and projects related directly to sustainability. In the recent sustainability survey, over half of all freshmen indicated they would be willing to pay five dollars or more per semester in student fees to support such a sustainability program (Figure 1). Over 40 percent indicated they would be willing to pay ten dollars or more per semester.

Figure 1. Respondent responses to the following question: “How much would you be willing to pay in additional student fees (currently you pay \$400 per semester) to make Albright a more environmentally friendly campus?”



ER Credit 19-Interdisciplinary Research on Tenure and Promotion

Score

This credit (2 possible points) seeks to ensure that promotion and tenure decisions give equal weight to interdisciplinary research. The full two points were awarded for this credit. All tenure and promotion decisions are made by the ACRT committee, which works hard to provide equal weight to all interdisciplinary research.

Recommendation

The only recommendation is to check with the chair of the ACRT each time an assessment is completed.

Operations

This section of the assessment focuses on the daily operations of Albright. The individual credits, points possible and points earned can be found in Table 5. As with the Education and Research section the information presented at the end of table five provides Albright’s total points earned and its respective percentage for the Operations category.

Table 5. AASHE’s STARS Operations credits, points possible and points earned by Albright College.

Category 2: Operations (OP)			
Credit Number	Credit Title	Possible Points	Points Earned
Buildings			
OP 1	Building Operations and Maintenance	7	1.3
OP 2	Building Design and Construction*	4	1.5
OP 3	Indoor Air Quality	2	1.8
Buildings Total Points		13	4.6
Climate			
OP 4	Greenhouse Gas Emissions Inventory	2	1.5
OP 5	Greenhouse Gas Emissions Reduction	14	0
Climate Tier Two Credits			
OP T2-1	Air Travel Emissions	0.25	0

OP T2-2	Local Offsets Program	0.25	0
Climate Total Points		16.5	1.5
Dining Services			
OP 6	Food and Beverage Purchasing*	6	1.8
Dining Services Tier Two Credits		2.5	
OP T2-3	Trayless Dining	0.25	0.25
OP T2-4	Vegan Dining	0.25	0.25
OP T2-5	Trans-Fats	0.25	0.25
OP T2-6	Guidelines for Franchisees	N/A	N/A
OP T2-7	Pre-Consumer Food Waste Composting	0.25	0
OP T2-8	Post-Consumer Food Waste Composting	0.25	0
OP T2-9	Food Donation	0.25	0
OP T2-10	Recycled Content Napkins	0.25	0.25
OP T2-11	Reusable Mug Discounts	0.25	0.25
OP T2-12	Reusable To-Go Containers	0.25	0
Dining Services Total Points		8.25	3.1
Energy			
OP 7	Building Energy Consumption	8	0.7
OP 8	Clean and Renewable Energy	7	0
Energy Tier Two Credits			
OP T2-13	Timers for Temperature Control	0.25	0.25
OP T2-14	Lighting Sensors	0.25	0.25
OP T2-15	LED Lighting	0.25	0.25
OP T2-16	Vending Machine Sensors	0.25	0
OP T2-17	Energy Management System	0.25	0.25
OP T2-18	Energy Metering	0.25	0.25
Energy Total Points		16.5	1.95
Grounds			
OP 9	Integrated Pest Management*	2	2
Grounds Tier Two Credits			
OP T2-19	Native Plants*	0.25	0.25
OP T2-20	Wildlife Habitat*	0.25	0.25
OP T2-21	Tree Campus USA*	0.25	0
OP T2-22	Snow and Ice Removal*	0.25	0.25
OP T2-23	Compost*	0.25	0.25

Grounds Total Points		4.25	3
Purchasing			
OP 10	Computer Purchasing	2	0
OP 11	Cleaning Product Purchasing	2	1
OP 12	Office Paper Purchasing	2	0.5
OP 13	Vendor Code of Conduct	1	0
Purchasing Tier Two Credits			
OP T2-24	Historically Underutilized Businesses	0.25	0
OP T2-25	Local Businesses	0.25	0
Purchasing Total Points		7.5	1.5
Transportation			
OP 14	Campus Fleet	2	0
OP 15	Student Commute Modal Split	4	2.7
OP 16	Employee Commute Modal Split	3	0
Transportation Tier Two Credits			
OP T2-26	Bicycle Sharing	0.25	0
OP T2-27	Facilities for Bicyclists	0.25	0
OP T2-28	Bicycle Plan	0.25	0
OP T2-29	Mass Transit	0.25	0.25
OP T2-30	Condensed Work Week	0.25	0.25
OP T2-31	Telecommuting	0.25	0.25
OP T2-32	Carpool/Vanpool Matching	0.25	0
OP T2-33	Cash-out Parking	0.25	0
OP T2-34	Carpool Discount	0.25	0
OP T2-35	Local Housing	0.25	0.25
OP T2-36	Prohibiting Idling	0.25	0
OP T2-37	Car Sharing	0.25	0.25
Transportation Total Points		12	3.95
Waste			
OP 17	Waste Reduction	5	0
OP 18	Waste Diversion	3	0.1
OP 19	Construction and Demolition Waste Diversion*	1	0
OP 20	Electronic Waste Recycling Program	1	0.5
OP 21	Hazardous Waste Management	1	1

Waste Tier Two Credits			
OP T2-38	Materials Exchange	0.25	0
OP T2-39	Limiting Printing	0.25	0
OP T2-40	Materials Online	0.25	0.25
OP T2-41	Chemical Reuse Inventory	0.25	0
OP T2-42	Move-In Waste Reduction*	0.25	0.25
OP T2-43	Move-Out Waste Reduction*	0.25	0.25
Waste Total Points		12.5	2.35
Water			
OP 22	Water Consumption	7	0
OP 23	Stormwater Management	2	2
Water Tier Two Credits			
OP T2-44	Waterless Urinals	0.25	0.25
OP T2-45	Building Water Metering*	0.25	0.25
OP T2-46	Non-Potable Water Usage	0.25	0.25
OP T2-47	Xeriscaping*	0.25	0.25
OP T2-48	Weather-Informed Irrigation*	0.25	0.25
Water Total Points		10.25	3.25
Total OP Points		95.75	25.08
% OP Score		26.19	

OP Credit 1-Building Operations and Maintenance

Score

A total of 1.3 of the seven points possible were earned for this credit. The credit seeks to recognize existing buildings that either follow or are certified using the Leadership in Energy and Environmental Design (LEED). There are four levels of LEED certification and the STARS score represents an increasing point structure for building space certified at the varying levels. Currently there are no buildings on campus certified by LEED standards. However, half of all buildings on Albright’s campus follow LEED guidelines or policies. The total building square footage for Albright is 864,512 with 432,256 following LEED guidelines were applicable. This square footage was determined in consultation with the

Head of the Facilities department. The points earned from this credit represent the building space following the LEED guidelines.

Recommendation

An important consideration is newly constructed science center which represents slightly more than 75,000 square feet of space. This new structure is expected to be LEED certified with the exact level to be determined at a later date. The building is exempt from this credit until the LEED certification process is complete. Upon completion of the LEED certification process it will be important to update the score on this credit. In addition, consideration should be given to beginning to follow the LEED guidelines for the remaining buildings not currently following them.

OP Credit 2-Building Design and Construction

Score

This credit examines new building construction and design over the last three years using the same LEED scoring as the previous credit. In the past three years approximately 153,000 square feet of building space was constructed (Schumo Center). While this structure is not LEED certified, it does follow LEED guidelines. For this reason, a score of 1.5 of the 4 points possible was earned.

Recommendation

As with the previous credit, the new science center is not included at this point in time. It will need to be included upon LEED certification. More importantly, the administration should give strong preference to design (both new and renovation) that incorporates LEED policies in all future endeavors. While the initial cost may be slightly higher, the savings from energy efficiencies should cover the cost in the long term. It is highly recommended that long term financial consideration be given due consideration.

OP Credit 3-Indoor Air Quality

Score

It was estimated by the facilities department that 90 percent of all building space on campus is covered by an indoor air quality (IAQ) plan. Albright contracts with an outside testing company who monitors and tests indoor air quality on a regular basis. In addition, the clean air principles established by the National Air Duct Cleaners Association (NADCA) are followed. As such, Albright earned 1.8 of the two possible points for this credit.

Recommendation

Albright's current practice is more than adequate and should be maintained. Any future indoor space constructed should be incorporated into the plan and if possible the remaining 10 percent of campus indoor air space should be monitored.

OP Credit 4-Greenhouse Gas Emissions Inventory

Score

Of the two possible points, a total of 1.5 was earned. One point was earned for the inventory that covers scopes one and two and a quarter of a point each was earned for inventorying the total study abroad and student commute travel (scope 3 emissions). The results of the inventory can be found in Appendix B of this report.

Recommendation

Future inventories will need to track the new co-generation plant and the energy use of the new science center. In addition, the number of gallons of fuel used by the campus fleet should be a standard record that is kept in a centralized location. Moreover, to fully complete the scope 1 emissions of Albright, information on the pounds of refrigerants and chemicals, and fertilizer applications should be maintained by facilities. Other scope 3 information that could be used to fully understand the emissions

of the College include information on the distances of faculty and staff commutes as well as their mode of transportation, the amount (gallons) of wastewater generated, the pounds of paper purchased and the directly financed travel of faculty, students and administration.

The information on the total pounds of paper purchased is problematic because of a lack of centralized purchasing on campus. This information would be very difficult to tally unless a centralized purchasing system is established.

OP Credit 5-Greenhouse Gas Emissions Reduction

Score

No points were awarded for this credit. As a whole, net emissions per campus user increased at about 12.7% between 2005 and 2010. The goal of this credit is to reward campuses that have reduced their greenhouse gas emissions from a 2005 baseline.

Recommendation

This should be one of the highest priorities of the institution. A comprehensive strategy should be developed to reduce our overall greenhouse gas emissions. While the cost of continuing to produce greenhouse gases is externalized and does not increase overall costs, this externalization is paid for by society as whole. Albright should seek to show leadership on this issue by developing a plan to drastically reduce its carbon footprint over the next 10 years. A goal should be established and supported by the President and the entire campus community should be engaged and asked to assist in obtaining the greenhouse reduction goal.

It is also important to note that with the construction and utilization of the on campus Co-generation Plant the design engineers have estimated the college will reduce its carbon footprint from approximately 5,876 tons to 3,336 tons or 43.23%. The assessment should be able to verify this prediction.

OP Climate Tier Two Credits

Score

No points were awarded for these tier two credits. Albright does not currently have any programs or policies in place to reduce air travel emissions or offset greenhouse gas emissions by partnering with the local community.

Recommendation

The feasibility of developing these sorts of policies or programs should be explored. The priority of developing programs to earn these credits, however, is low.

OP Credit 6-Food Purchasing

Score

The criteria for this credit include the following types of food and beverage purchasing: 1) grown and processed within 250 miles of the institution or 2) third party certified (USDA Certified Organic, Marine Stewardship Council Blue Ecolabel, Food Alliance, Fair Trade, Certified Humane Raised and Handled). A maximum of six points can be earned if the institutional purchases that meet these criteria equal 50 percent or more of all purchasing.

The assessment of the food and beverage purchasing was conducted in consultation with the Head of Food Services. In the meeting it was clear that these sorts of measures are very difficult to exactly quantify. While the largest supplier may be within 250 miles, the food that is provided by that company is more difficult to assess in terms of its source. Therefore, conservative estimates were created based on the aforementioned meeting and percentages provided by food services. Based on these conservative estimates, it was determined that slightly over 15 percent of all food purchased meets the criteria listed above. This provided Albright with a score of 1.83 for this credit.

Recommendation

As food service has recently been taken over by an outside provider (Aramark) it is highly recommended that Aramark be asked to maintain records that would enable a more precise assessment of this credit. The current score, however, does provide Albright with a baseline, pre Aramark, measure to assess the sustainability of this new provider.

OP Dining Services Tier 2 Credits

Score

The tier two credits for dining services revealed many positive accomplishments by Albright Food Services. Of the 2.25 points possible, 1.25 were earned. The earned points stemmed from providing trayless, vegan and trans fat free dining, the use of recycled content napkins and discounts for reusable mugs at Jake's Java. Points that were not earned included composting pre and post consumer waste, donation of unused food and the use of reusable to go containers.

Recommendation

The main recommendation is to ensure that Aramark continue with the positively scored credits above and also that they consider implementing the practices that would fulfill the other credits not received to date by Albright.

OP Credit 7-Building Energy Consumption

Score

This credit sums the gas, oil and electric consumption by converting each to million British thermal units (MMBTUs) and examines that consumption based on building square footage. Points are earned based on a reduction of energy consumption from the baseline year of 2005. In 2005, Albright consumed 75,377 MMBTUs of energy across its 712,085 square footage of building space. In 2010, consumption increased overall to 87,444 MMBTUs, but the campus square footage also increased to

864,512. Based on these numbers, energy consumption per square foot of building space decreased by 4.4 percent. While this is a positive step, the small decrease in consumption provided only .7 points of the 8 possible.

Recommendation

The main recommendation is to reassess and determine the effect the new science center and co-generation plant has on campus energy consumption. This assessment provides great baseline data for which to compare future energy consumption. It is highly recommended that policies and programs be implemented to reduce energy consumption further. The reduction of energy consumption should be a main part of a goal that seeks to reduce the campuses greenhouse gas emissions.

OP Credit 8-Renewable Energy

Score

Currently Albright does not earn any points for this credit as no energy is being used/purchased from clean and/or renewable sources.

Recommendation

The positive aspect of this credit is that during the next sustainability assessment, points will be earned for this credit. The current construction of the co-generation power plant will provide a clean source of energy that can be counted for this credit in the future.

OP Energy Tier 2 Credits

Score

Of the possible 1.5 points, Albright has earned 1.25. Points were earned for the following: timers for temperature control, lighting sensors in some buildings, a few LED lighting elements across campus, the centralized energy management system used by facilities, and energy consumption metering for at least one building. The buildings with individual energy metering include Albright Court,

Rockland and the all of the Woods Apartment buildings. The one tier two credit not earned was for motion sensors on vending machines.

Recommendation

The main recommendation is to increase the number of lighting sensors, LED lights and temperature control times across all buildings on campus. A goal should be developed that sets a target number of upgrades per year. In addition, the vending machine contract should be revisited and a provision for machines that have motion sensors included.

OP Credit 9-Integrated Pest Management

Score

Of the 126 acres that comprise the Albright main campus, all are managed using an integrated pest management plan (IPM). Therefore the total 2 points possible were earned. The IPM plan was established and is managed by the facilities department.

Recommendation

The recommendation for this credit is to maintain the use of the IPM plan.

OP Grounds Tier 2 Credits

Score

The tier two credits for grounds are worth a total of 1.25 points. Albright qualifies for all of these credits with the exception of the official designation of a Tree Campus USA. The use of native plants in landscaping, composting of landscaping waste, the promotion of wildlife habitat on appropriate campus grounds, and environmentally friendly snow and ice removal techniques earned Albright a total of 1 point.

OP Credit 10-Computer Purchasing

Score

To earn points for this credit there must be an institution wide preference to purchase Electronic Product Environmental Assessment Tool (EPEAT) Silver or higher products. Full credit is then given to institutions that implement this preference in their purchasing of standard computers. Upon consultation with the information technology department it was determined that Albright does not have said preference for EPEAT products and therefore does not purchase those products. No points were therefore earned for this credit.

Recommendation

Some research should be conducted by the IT department to determine if EPEAT is a feasible option for electronic purchasing in the future.

OP Credit 11-Cleaning Product Purchasing

Score

This credit is scored in two parts, totaling a possible 2 points. The first part is an institutional wide preference to purchase Green Seal and/or EcoLogo certified cleaning products. The second part measures the proportion of actual expenditures on these products. Albright does have an institution wide preference for Green Seal or EcoLogo products, which earned 0.5 points. In terms of expenditure on these products, approximately 30 percent of total expenditures are spent on Green Seal or EcoLogo cleaning products. This earned Albright another .45 points bringing the total earned points for this credit to 0.95.

Recommendation

While the preference for the Green Seal and EcoLogo cleaning products is commendable, the goal should now be to increase the actual purchasing of said products on an annual basis. A reasonable

goal of 5-10 percent yearly increases in total expenditures should be implemented and assessed by the facilities department.

OP Credit 12-Office Paper Purchasing

Score

This credit is also scored in two parts, totaling 2 possible points. The first part is worth .5 points if there is an institution wide preference for recycled content paper. The second part is worth 1.5 points and measures how much recycled content paper is actually purchased. Albright earned .5 points total for this credit due to the recently established preference for recycled content paper. Unfortunately, due to the lack of centralized purchasing of paper products it was impossible to determine the actual amounts of recycled content paper being ordered.

Recommendation

A centralized paper ordering system would enable an assessment of the proportion of recycled content paper to non recycled content paper being ordered. A centralized system for paper ordering would also reduce Albright's cost as larger orders could be purchased at lower prices. Albright could purchase large amounts of paper and have individual building secretaries request paper through a centralized location on campus which would then ensure that the appropriate departments are being billed. An economic analysis of such a system should be conducted to determine its feasibility.

OP Credit 13-Vendor Code of Conduct

Score

No points were earned for this credit as Albright does not have a vendor code of conduct to ensure that their vendors meet minimum standards of environmental and social responsibility.

Recommendation

The administration should strongly consider developing a vendor code of conduct; as such a code would indicate to students and the community that Albright implements its own vision. A section of the vision statement reads:

We aim to educate individuals of integrity who possess intellectual competencies and personal qualities that will enable them to take up positions of leadership and service whatever their chosen fields and thereby add to the richness, diversity and welfare of our global society.

The values that guide the Albright College community shape both classroom practice and institutional culture. In daily decisions, attitudes and relationships, the entire community models the values, virtues and skills that should be practiced by educated, discerning citizens of the world.

A vendor code of conduct would lead by example through a documented code that ensures the welfare of local and global communities and sets an example for how to be “discerning citizens of the world” that students could emulate.

OP Credit 14-Campus Fleet

Score

No points were awarded for this credit. Albright does not maintain any vehicles in its fleet that are powered with an alternative to gas or diesel. It is important to indicate that Albright has attempted to reduce its consumption of gasoline by reducing the number of large fuel inefficient vehicles with more efficient ones when possible.

Recommendation

A strong recommendation is given to perform a cost/benefit analysis on the option of purchasing more fuel efficient vehicles. Such purchases may save the college money in the long run through reduced operational costs.

OP Credit 15-Student Commute Modal Split

Score

Of the maximum four points for this credit, Albright earned 2.65 points. The credit seeks to quantify the number of students getting to and from campus using alternative modes of transportation such as walking, biking, taking public transportation, etc. Of the 1677 on and off campus students at Albright, an estimated 1,100 of them walk to class. This calculation assumed that all residence hall students walk to class, that slightly less than one third of students living in the Woods also walk to class, and of the 510 off campus students, 60 walk to campus from their residences in the local neighborhood. These numbers were determined in consultation with Student Affairs.

Recommendation

It is highly recommended that mechanisms be put into place to encourage more students who live in the Woods apartments to walk to class. One way that this may be accomplished is to begin a bike sharing program that would enable students to use a bike as transport back and forth from campus. Another recommendation is to begin collecting more data on the number of students using the campus shuttle service. A simple occupancy log every time the shuttle leaves the parking lot would provide valuable data on the number of students utilizing this service.

OP Credit 16-Employee Commute Modal Split

Score

A score of zero was awarded for this credit. The credit seeks to understand the number of employees who use alternative means of transportation for getting to campus. Unfortunately, no records are kept relating to this issue. The only possible means of identifying how far employees are traveling would be by analyzing their home zip codes. This information does not give any indication of their means of transportation to work though as they could be driving two blocks or carpooling from Philadelphia.

Recommendation

It is recommended that the Human Resources department consider surveying faculty in an attempt to find out about transportation practices. Other sustainability related themes could also be included in the survey.

OP Transportation Tier 2 Credits

Score

There are a total of 12 transportation tier two credits, each worth 0.25 points. Albright earned a total of 1.25 points for the having the following programs in place: First, a car sharing program was started last year through a partnership with Enterprise Rent-a-Car that enables members of the Albright community to use a shared fuel efficient vehicle. Second, public safety provides a shuttle service that provides mass transit opportunities for students to various places in the community. Third, a form a condensed work week is possible under certain circumstances when approved by human resources. Fourth, telecommuting is possible for many of the campus community through technology employed by the College such as shared computer drives and course software, which enable many in the Albright community to work from home if so desired. Finally, Albright owns and offers housing to various employees within a few blocks of the campus.

The points that were lost were due to a lack of programs involving bicycles (bike sharing, facilities for bicyclists and a bicycle plan), carpool matching and discounts, cash-out parking and the prohibiting of vehicle idling.

Recommendation

The main recommendation is to continue with the programs in place all while becoming a more bicycle friendly campus. A bicycling component should be incorporated into the Master Plan. Dedicated facilities could be established in the Schumo center for employees who would like to use bicycles for their work commute, additional bicycle racks could be installed across campus in a way that is

aesthetically pleasing and a bicycle sharing program could be put in place for students. Also, a program that would enable employees and commuter students to establishing carpools would be very valuable. This could be accomplished via a bulletin board in the campus center or on the CSS's website. This program could also be valuable for students who may be able to share rides on trips to hometowns, vacations, etc.

OP Credit 17-Waste Reduction

Score

This credit awards points for institutions that have reduced their overall waste from a 2005 baseline. Unfortunately, no points were awarded to Albright due to a lack of data going back to 2005. The current waste and recycling contract for the campus utilizes Allied Waste and was entered into in the 2009-2010 academic year. Obtaining information on waste and recycling from periods prior to Allied Waste was not possible.

Recommendation

It is highly recommended that Albright's yearly waste generation be closely monitored. A modest goal of reducing total waste by one percent per year should be established and promoted. An important part of this will be to make sure that Allied Waste provides accurate and timely information on waste and recycling tonnage collected. When completing this report, Allied did not appear to have the ability to provide accurate information in a timely manner. Therefore, it is recommended that Albright formally request a quarterly report indicating waste and recycled totals from Allied Waste.

OP Credit 18-Waste Diversion

Score

A maximum of three points can be earned for this credit that awards institutions that divert waste from landfills by recycling or composting. In the 2010 fiscal year, Albright created nearly 609 tons

of waste, of which slightly over 15 tons (2.4%) were recycled. This amount earned Albright .07 points for this credit. Composting is currently not being utilized and therefore food waste is going into the waste receptacles.

Recommendation

The first recommendation is to make sure Allied Waste provides timely and accurate information going forward. Second, more emphasis should be placed on recycling across campus. The outreach campaign conducted by the CSS proved to have little effect in the first year of the new recycling campaign, but current estimates indicate that the current year's percentage will be drastically increased. A reevaluation should be conducted at the end of the 2011-2012 fiscal year to confirm these estimates.

OP Credit 19-Construction and Demolition Waste

Score

Albright currently does not maintain records on the amount of construction and demolition waste being recycled or landfilled. For this reason no points can be awarded for this credit.

Recommendation

It is highly recommended that the facilities department explore ways to maintain records on the amount of construction and demolition waste produced and the amount that is recycled. In past projects, Albright has made great efforts to ensure that these materials are indeed recycled but without the steps in place to maintain accurate records of such activities. In one such example, the college did track the demolition of the Armory and in fact 95% of the structure, steel, concrete etc. was recycled. Additionally the demolition/renovation of the boiler room to make way for the Co-generation Plant was also tracked and the figures released to the DEP show 8,154 kilograms of steel and 10,986 kilograms of

light iron were recycled. The tracking of all construction and demolition waste would surely gain additional STARS points for Albright.

OP Credit 20-Electronic Waste Recycling Program

Score

Half of the one point possible was earned for this credit. Upon consultation with the IT department, it was determined that a program is in place to recycle the institutionally purchased electronics. The half of a point that was lost on this credit was due to a lack of a similar program designed to allow students to recycle their electronic waste.

Recommendation

It is highly recommended that the college find a way to partner with the Environmental Campus Outreach (ECO) club in their efforts to provide electronic recycling to students. ECO has initiated a fund raising campaign this semester by collecting and recycling various e-wastes. The college should find ways to help with the collection of this sort of waste on a year-round basis and then partner with ECO to recycle the collected e-waste. This sort of partnership would first of all recycle much of the campuses e-waste, which has been shown to be extremely toxic, while raising funds for the student environmental club who could use those funds to further campus and community sustainability.

OP Credit 21-Hazardous Waste Management

Score

The full one point was earned for this credit. Hazardous waste disposal on campus is conducted by a faculty member in the Chemistry department.

Recommendation

As full points for this credit are currently earned, the only recommendation is to continue with our current system of hazardous waste disposal.

OP Credit Waste Tier 2 Credits

Score

Of the possible 1.5 points for these tier two credits, Albright earned 0.75. These points were earned for the programs to reduce move-in and move-out waste associated with the residence halls. These programs provide students with the ability to donate, recycle or sell goods they no longer need (move-out) and recycle waste created from move-in. In addition, credit was given because of the Professional Council's new policy of putting as much information as possible online rather than creating longer documents that are printed for all faculty, administration and staff.

Points that were not earned include credit for possessing a surplus department that facilitates the reuse of materials, maintaining a limited printing policy for students, and possessing a chemical reuse inventory.

Recommendation

All of the earned points should continue, especially the move-in and move-out waste reduction programs as greater success is possible for those programs. In terms of the limited printing policy, it should be noted that while Albright does not currently have one in place, double sided printing is occurring by more than 60% of campus computers. Nevertheless, a policy that charges students for printing beyond a certain number per semester should be examined.

OP Credit 22-Water Consumption

Score

No points were earned for this credit. Albright has seen a 15.6% increase in water consumption per capita (Weighted campus user) between 2005 and 2010. Points are earned by reducing consumption per capita.

Recommendation

Albright should explore strategies to reduce its water consumption. This recommendation should be given immediate attention as the increase in water consumption is unsustainable at the current rate.

OP Credit 23-Stormwater Management

Score

Full points (2) were earned for this credit. The facilities department has plans in place for both new construction and ongoing operations. Albright College has for several years utilized a rainwater collection system in several areas that experience significant run-off during heavy rains. The primary area is the large sloped roof on the Lifesports Center, but recent efforts at the college owned off-site properties to utilize barrels for a smaller scale effect have also been undertaken. With all new construction and renovation efforts the College has made a commitment to looking at the feasibility of grass pavers including the recent construction of the new Science Center. In addition, over the past 3-4 years Albright has converted its primary irrigation areas from conventional to drip irrigation and plans to continue this effort wherever possible.

Recommendation

Albright should be sure to maintain both of these plans moving forward.

OP Water Tier 2 Credits

Score

All of the 1.25 points possible for these tier two credits were earned. Albright uses waterless urinals in Smith Hall, has individual building water metering in various stand alone houses (Geiser, former CELAR, etc.), uses water collected from the turtle dome for irrigation, which is informed by using 10 day weather forecasts, and prioritizes zeriscaping techniques.

Recommendation

These earned tier two credits are another success story for sustainability on Albright’s campus and should be maintained.

Planning, Administration and Engagement

This section of the assessment focuses on planning and administration as well as engagement with the larger community. The individual credits, points possible and points earned can be found in Table 6. As with the previous two sections, the information presented at the end of table six provides Albright’s total points earned and its respective percentage for the Planning, Administration and Engagement category.

Table 6. AASHE’s STARS Planning, Administration and Engagement credits, points possible and points earned by Albright College.

Category 3: Planning, Admin. & Engagement (PAE)			
Credit Number	Credit Title	Possible Points	Points Earned
Coordination and Planning			
PAE 1	Sustainability Coordination	3	3
PAE 2	Strategic Plan*	6	2
PAE 3	Physical Campus Plan*	4	0
PAE 4	Sustainability Plan	3	3
PAE 5	Climate Plan	2	0
Coordination and Planning Total Points		18	8

Diversity and Affordability			
PAE 6	Diversity and Equity Coordination	2	2
PAE 7	Measuring Campus Diversity Culture	2	2
PAE 8	Support Programs for Underrepresented Groups	2	2
PAE 9	Support Programs for Future Faculty	4	0
PAE 10	Affordability and Access Programs	3	0
Diversity and Affordability Tier Two Credits			
PAE T2-1	Gender Neutral Housing*	0.25	0
PAE T2-2	Employee Training Opportunities	0.25	0.25
PAE T2-3	Student Training Opportunities	0.25	0
Diversity and Affordability Total Points		13.75	6.25
Human Resources			
PAE 11	Sustainable Compensation	8	8
PAE 12	Employee Satisfaction Evaluation	2	0
PAE 13	Staff Professional Development in Sustainability	2	0
PAE 14	Sustainability in New Employee Orientation	2	0
PAE 15	Employee Sustainability Educators Program	5	0
Human Resources Tier Two Credits			
PAE T2-4	Childcare	0.25	0.25
PAE T2-5	Employee Wellness Program	0.25	0.25
PAE T2-6	Socially Responsible Retirement Plan	0.25	0.25
Human Resources Total Points		19.75	8.75
Investment			
PAE 16	Committee Socially Responsible Investment*	2	0
PAE 17	Shareholder Advocacy*	5	0
PAE 18	Positive Sustainability Investments*	9	0
Investment Tier Two Credits			
PAE T2-7	Student-Managed SRI Fund*	0.25	0
PAE T2-8	Socially Responsible Investment Policy*	0.25	0
PAE T2-9	Investment Disclosure*	0.25	0
Investment Total Points		16.75	0
Public Engagement			
PAE 19	Community Sustainability Partnerships	2	0
PAE 20	Inter-Campus Collaboration on Sustainability	2	2
PAE 21	Sustainability in Continuing Education*	N/A	N/A

PAE 22	Community Service Participation	6	1.8
PAE 23	Community Service Hours	6	2.4
PAE 24	Sustainability Policy Advocacy	4	0
PAE 25	Trademark Licensing *	4	0
Public Engagement Tier Two Credits			
PAE T2-10	Graduation Pledge	0.25	0
PAE T2-11	Community Service on Transcripts	0.25	0
PAE T2-12	Farmer's Markets	0.25	0
Public Engagement Total Points		31.75	6.2
<i>Total PAE Points</i>			
		93	29.2
% PAE Score			
		22.8	

PAE Credit 1-Sustainability Coordination

Score

Coordination of sustainability efforts at Albright College is handled by the Committee on Sustainability and Stewardship, a committee that was established by and reports to the President of the College. This committee earns Albright the full three points for this credit.

Recommendation

It is recommended that the committee continue to pursue sustainability initiatives on campus and create an action plan, based on the results of this and future assessments, in order to prioritize key outcomes that further sustainability on campus. As such, the administration should also indicate sustainability as a priority by supplying an operating budget to the CSS to be used to promote and increase sustainability across all sectors of the campus.

PAE Credit 2-Strategic Plan

Score

This credit is worth of total of six points, with two points each for environmental, social and economic dimensions of sustainability being included in the College's strategic plan. Upon reviewing the strategic plan, it was determined that no points could be awarded for either the environmental or economic dimensions of sustainability. The social dimension of sustainability was included in the strategic plan however.

Recommendation

It is highly recommended that future revisions to the Albright's strategic plan include elements that specifically address environmental and economic sustainability. As a liberal arts college, Albright needs to show its students the importance of understanding and reflecting upon the larger picture that entails elements more important than the overall bottom line. This is not to insinuate that economic factors should not be considered, but rather to indicate that social and environmental elements should be considered on equal terms when decision are made. The best choice economically may have negative implications environmentally or socially. The administration of the College needs to set an example for their students by considering all factors equally.

PAE Credit 3-Phsyical Campus Map

Score

"This credit recognizes institutions that have made a formal commitment to developing and maintaining their physical campuses with sustainability in mind by including the principle at a high level in their campus master plan." A total of four points are possibly earned for this credit. Albright's current master plan does include much discussion of sustainability principles anywhere in the document, let alone at a high priority level. Therefore, the College earns no points for this credit.

Recommendation

It is highly recommended that the administration and the Board of Trustees consider creating an addendum to the current Master Plan that directly states the importance of utilizing sustainability principles whenever possible. Without this sort of system wide mandate from the leaders of the College, the principles of environmental and social sustainability will often be ignored through traditional economic decision making unless these principles have the greatest effect on the bottom line. In order for Albright to show that it truly possesses “a different way of thinking” the consideration of the social and environmental costs and benefits to any project need to be given more than superficial discussion.

PAE Credit 4- Sustainability Plan

Score

The CSS created a sustainability plan in 2010 which earns Albright all three points on this credit. The plan can be found in Appendix A of this report.

Recommendation

It is recommended that the sustainability plan be revisited upon the completion of this campus sustainability assessment. The recommendations made in this assessment may help to formulate the most important parts of the sustainability plan and therefore allow the CSS to focus their work on the most pressing needs and concerns.

PAE Credit 5-Climate Plan

Score

This credit rewards institutions that have developed a strategy for reducing their greenhouse gas emissions. There are two possible points earned for this credit. At the current moment Albright does not have a climate action plan and therefore earns no points.

Recommendation

As part of this sustainability assessment, an inventory of greenhouse gasses has been created. This inventory now enables a strategy for reducing emissions to be created. It is highly recommended that in the coming three years, Albright develop a climate action plan that seeks to reduce its greenhouse gas emissions by set amount over a given time period. These sorts of goal setting enables the administration and campus community as a whole to engage in reflection on their actions that are having a negative effect on the local and global communities as well as provide an opportunity to share and celebrate successful greenhouse gas reduction endeavors.

PAE Credit 6-Diversity and Equity Coordination

Score

This credit acknowledges positive work towards coordinating campus diversity. When the current President of Albright, President Lex McMillan, began his tenure at Albright he created the President's Council on Diversity and Community. This council coordinates activities, outreach and promotion of diversity across all campus arenas. For this reason, the full two points are earned for this credit.

Recommendation

The work of this council should be given more focus and its work discussed more openly throughout campus.

PAE Credit 7-Measuring Campus Diversity Culture

Score

This credit acknowledges positive work towards measuring the campus' diversity culture. The full two points were earned for this credit. Work continues through special training of our Affirmative Action (AA) Representatives who serve on all our search committees as impartial representatives in

support of an unbiased and thorough review of the credentials of all candidates for positions. The affirmative action training for both faculty and staff includes a 3 hour session where the responsibilities, procedures and inherent value of this service is fully detailed and discussed. The Affirmative Action Committee meets annually to review diversity issues relating to recruitment and the search process as well as examining the various pools of applicants that have applied during the course of the year. Relevant issues relating to AA service on search committees is also discussed in an effort to improve the process. These efforts are in support of continuing to broaden the pool of applicants for various positions at the College, both faculty and administrators.

In addition, all new Albrightians are offered Diversity Awareness Training, which entails a 3 hour session where similarities and differences are discussed, the strength and richness of a diverse community is celebrated and the M.E.E.T. on Common Ground program on dealing with inappropriate behavior is introduced. At the end of the program, participants are asked to complete (anonymously) a checklist entitled "Signs of Stereotypes and Prejudices" that provides insight into how our community is perceived through the eyes of new members.

Recommendation

These programs should be maintained and new ways to measure the culture of campus, related to diversity, should be explored in order to reinforce the programs in place.

PAE Credit 8-Support Programs for Underrepresented Groups

Score

At the time of this assessment student affairs employed a person whose job it was to directly create such programs. Therefore the full two points were awarded for this credit.

Recommendation

By the time this assessment was completed the aforementioned person was no longer employed by Albright. This credit should therefore be carefully reassessed in the future.

PAE Credit 9-Support Programs for Future Faculty

Score

Albright continues to support the training and development of our faculty who serve as Affirmative Action Representatives on ongoing faculty searches. These AA representatives, who are trained to encourage, support and, at times, recommend applicants who may “self identify” as members of a protected group who require scrutiny for open positions based on equal or greater qualifications as others being considered. This process is done in a way that is fair and equitable and discreet and is geared to informing the Chair of the committee should it become necessary. Recruitment in support of building a diverse faculty includes selecting appropriate advertising venues that enhance the pool of applicants as well as special networking opportunities through professional organizations and consortiums. While these programs are all important for the recruitment of obtaining a diverse population, they do not qualify for this credit and therefore no points were awarded.

Recommendation

Albright should examine the feasibility of developing a program that supports undergraduate and graduate student populations in seeking terminal degrees. These programs should have the goal of increasing the pool of potential applicants from diverse backgrounds.

PAE Credit 10-Affordability and Access Programs

Score

A total of three points were possible for this credit with no partial points possible. Upon interviewing a representative from Admissions it was determined that Albright does not have adequate

programs in place make it more accessible and affordable to low-income students. Albright is a need-blind institution that does not use financials as a consideration for admission or scholarship. While recruitment is completed in many urban and rural locations and students from low-income families are not discriminated against in any way, they are also not provided additional assistance that may make Albright more accessible to them.

Recommendation

Albright should consider providing some scholarships specifically for low-income students. An analysis of household incomes for incoming freshman would provide a way to determine if low-income families are being systematically excluded. If a disproportionate number of students from low-income families are enrolling in Albright, a scholarship to establish a pathway for those individuals should be created. This is especially important as the City of Reading has been recently shown to have the highest poverty rates in the country. A common expression heard at Albright is “As goes Reading, so goes Albright.” If this is indeed true, more efforts need to be made to encourage local youth to enroll through scholarships for low-income students.

Diversity and Affordability Tier Two Credits

Score

Of the 0.75 points possible, 0.25 points were earned. The .25 points were earned for cultural competency training for employees through the Human Resources Department. The points lost include .25 points each for gender neutral housing and cultural competency training and activities being made available to all students.

Recommendation

Cultural competency training for students should be considered. Also, gender neutral housing may be something that the College should provide in the future. At the current time there does not

seem to be a demand for such housing, although the demand very well may materialize if the option was offered. One potential option for achieving this particular aspect would be to use one of the Woods apartment complexes as gender neutral housing.

PAE Credit 11-Sustainable Compensation

Score

All eight points were awarded for this credit. The College continues to review competitive and equitable compensation plans through both internal and external equity reviews annually. Based on budgetary allowances, the College routinely will provide cost of living adjustments as well as possible merit pay awards for both faculty and staff. The College regularly reviews the market place through participation in compensation surveys with CUPA and Yaffe & Company as well as local Chamber of Commerce information relating to support staff benchmarks. Additional compensation is also extended in a more indirect fashion through the offerings of low cost medical insurance as well as a generous retirement plan through TIAA-CREF. Over the past 3 years the College has made a strong commitment to increase the hourly wage rate of the lowest paid staff members and have successfully increased the starting wage rate for all of them, moving the lowest paid to a minimum that is at least 20% above the minimum wage rate, with plans to increase it by another 5 % during the new fiscal year in June, 2012. This will allow the College to offer a beginning wage that is both competitive in the market place as well as sustainable for our support staff. These adjustments to our compensation plan, coupled with affordable health insurance programs, helps in achieving the sustainability goals the College has established.

Recommendation

Future assessments should pay special attention to the outside entities employing individuals on campus. These entities may or may not pay a sustainable wage in the same way that most Albright employees are paid.

PAE Credit 12-Employee Satisfaction Evaluation

Score

Two points are awarded to institutions who conduct an anonymous survey of employee satisfaction at least every five years. Albright did not earn any points for this credit as no such survey is conducted.

Recommendation

Human resources should consider whether such a survey would be useful to their mission.

PAE Credit 13-Staff Professional Development in Sustainability

Score

No points were awarded for this credit. However, Albright College has instituted an ongoing Leadership Development Program for its staff, which focuses on supervisors and current managers as well as future ones. This 12 hour leadership development training is conducted through the Human Resources Department and has been in place for the past 5 years. All totaled, over 75 employees have taken part in these leadership development sessions and the College has actually conducted the sessions for area community groups as well, including all managers employed with the City of Reading. This is a testimonial to the content and success of the program. In addition, ongoing training sessions are offered for computer skills, dealing with difficult co-workers and stress management. In addition, service excellence training and ongoing sexual harassment training as well as safety training are a staple that is ongoing throughout the year.

Recommendation

The programs described above should find ways to incorporate sustainability themes. If sustainability is incorporated into these programs a large portion of campus could be integrated into a model that seeks to spread sustainability awareness.

PAE Credit 14-Sustainability in New Employee Orientation

Score

No points were awarded for this credit.

Recommendation

Albright does offer an extensive new employee orientation that could incorporate sustainability. The human resources department should consult with the CSS on ways to include sustainability in new employee orientation.

PAE Credit 15-Employee Sustainability Educators Program

Score

This credit, worth 5 points, recognizes institutions that coordinate programs in which faculty and staff members educate and mobilize their peers around sustainability initiatives and programs.

Currently no such peer to peer employee program is in place and therefore no points are earned for this credit.

Recommendation

The CSS should give consideration to the employee sustainability educators program as way to further their future sustainability outreach initiatives. This sort of program may be an effective means for reaching more of the entire campus community.

Human Resources Tier Two Credits

Score

The full 0.75 points were earned by Albright. These points include credit for the Albright Early Learning Center, the various well being services offered to employees, and the socially responsible investment option under the TIAA-CREF retirement savings. The Albright Early Learning Center provides a 10% discount to employees of Albright for their childcare and educational services offered. Finally, the Social Choice option offered by TIA-CREF provides employees the ability to investment their retirement dollars in a mutual fund that invests in socially and environmentally responsible businesses.

Recommendation

All of these programs should be continued. The 10% discount at the Albright Early Learning Center should be reexamined for a possible increase as to make the college more family friendly, a current initiative of the a large grant awarded to the College.

PAE Credit 16 Committee Socially Responsible Investment

Score

“This credit recognizes institutions with an established and active committee on investor responsibility (CIR) with multi-stakeholder representation. Establishing a CIR provides a structure for fostering dialogue on investment decisions, and can help campuses make responsible investment decisions that promote sustainability. Drawing CIR membership from multiple sectors of the campus community provides educational experiences for involved students, faculty, alumni, and staff. In addition, a multi-stakeholder CIR is consistent with the sustainability principle of shared governance.” A total of two points are possible for this credit. Albright does not have a CIR or similar entity and therefore earns no points for this credit.

Recommendation

It is highly recommended that a CIR or similar entity be formed and that additional transparency in investment decisions be considered as Albright operates under a shared governance system.

PAE Credit 17-Sharholder Advocacy

Score

“This credit recognizes institutions that use their investment power to promote corporate sustainability. This could take the form of withholding investments from companies or industries that are particularly unsustainable or engaging with companies in which they hold investments. Divestment can be an important tool in safeguarding human rights, protecting the environment, and promoting social responsibility.” As with the previous credit, none of the five possible points were earned by Albright.

Recommendation

After meeting with the College Controller, it was determined that Albright is not currently pursuing options related to sustainability in investment. According to the controller, there was some talk of socially responsible investing a few years ago but it was decided that increasing the endowment was the most important thing at the time. It is highly recommended that discussion about sustainability be reincorporated into investment discussions. Albright has recently had successful financial campaigns such as the “Fund for Albright” and other capital campaigns and has therefore increased the overall endowment. These successes should be celebrated. At the same time, awareness that the argument about putting off sustainable investing in the name of an increased endowment is an easy argument to make in perpetuity. Instead, strong consideration needs to be given to sustainability principles, such as STARS credits 16 through 18. It will take solid leadership that is willing to critically examine the role the College’s financial investments have on environmental and social sustainability.

PAE Credit 18-Positive Sustainability Investments

Score

“This credit recognizes institutions that seek positive investments that promote sustainability.

Positive investing supports socially and environmentally responsible practices and the development of sustainable products and services.” Institutions may invest in any of the following:

- Sustainable industries, such as renewable energy or sustainable forestry
- Businesses selected for exemplary sustainability performances
- Sustainability investment funds, such as a renewable energy investment fund
- Community development financial institutions (CDFI)
- Socially responsible mutual funds with positive screens.

A total of nine points are possible for this credit. Albright does not currently possess any investments that promote sustainability and therefore earned zero points for this credit.

Recommendation

As stated in the previous credit’s recommendation, Albright should pursue investments that promote sustainability.

Investment Tier Two Credits

Score

None of the 0.75 points were earned by Albright. Currently, Albright does not possess a student managed socially responsible investment (SRI) fund, have a socially responsible investment policy, or disclose its investments publicly.

Recommendation

It is highly recommended that Albright develop a policy or directive to consider the social and/or environmental impacts of investment decisions, in addition to financial considerations. This policy or directive would be a logical first step in designing a framework for improving sustainability in investing. In addition, the creation of a student managed socially responsible investment fund would be extremely beneficial as a teaching tool for the business and economics faculty as well as an invaluable experiential

component for students. These sorts of considerations are imperative in business curricula so that future business leaders understand their role in an interconnected global society.

PAE Credit 19-Community Sustainability Partnerships

Score

This credit rewards institutions that have developed formal partnerships with the local community to advance sustainability. Two total points are possible for this credit. At the moment Albright does not have any current partnerships with local entities that would qualify for this credit and therefore no points are earned.

Recommendation

Collaboration with local community organizations and entities that promote sustainability should be explored. Albright is part of the City of Reading and the County of Berks and should find ways to formalize partnerships. Currently there are various informal partnerships that could become more formalized. The Environmental Studies and Science program often partners with the Berks County Conservancy to provide senior seminar projects that benefit the BCC and the local community. This is only one example of partnerships that could become more formalized. This sort of formalization would be beneficial to all parties involved through media attention alone and more importantly beneficial to the local community socially and environmentally.

PAE Credit 20-Inter-Campus Collaboration on Sustainability

Score

“This credit recognizes institutions that collaborate with other colleges or universities to help build campus sustainability broadly.” Albright earned the full two points for this credit through their membership in the Pennsylvania Environmental Resource Consortium (PERC). PERC is a consortium of

colleges and universities in the state of PA who share and collaborate on important environmental issues facing college campuses.

Recommendation

It is recommended that the CSS strongly consider the pros and cons of membership in PERC as compared to the membership in the larger Association for the Advancement of Sustainability in Higher Education (AASHE). A membership in at least one of these organizations is essential, but membership in both may be unnecessary.

PAE Credit 21-Sustainability in Continuing Education

Score

This credit does not apply to Albright and is therefore dropped from the overall sustainability assessment.

PAE Credit 22-Community Service Participation

Score

“This credit recognizes institutions that engage their student bodies in community service, as measured by the percentage of students who participate in community service.” A maximum of six points are earned if all students at an institution engage in community service. Albright earned 1.8 points through a total of 486 student volunteers out of the total student body of 1660. These volunteers were calculated by determining the number of Shirk and Coleman scholars (scholarships require community service), the number of fraternity and sorority members, and the number of students participating in the Alternative Spring Break club.

Recommendation

A more formalized way of maintaining records of community service performed would be helpful in developing a more accurate picture of the community service projects Albright students are

involved in. The points earned on this credit are more than likely conservative of the actual number of community service volunteers across the student body.

PAE Credit 23-Community Service Hours

Score

“This credit recognizes institutions where many students devote time to community service, as measured by average hours contributed per full-time student per year. Institutions earn the maximum of 6 points available for this credit by engaging their students in an average of 20 hours of community service per year.” According to data obtained for this assessment, Albright students volunteered 13,511 hours during the 2010-2011 academic year for an average of slightly more than eight hours per student. This earned Albright 2.4 points.

Recommendation

The amount of volunteer time spent per student is commendable. This accomplishment should be shared more universally across campus to spur even more participation in community volunteerism. As with the previous credit, the estimate here is more than likely conservative as well. This speaks volumes for the students of Albright.

PAE Credit 24-Sustainability Policy Advocacy

Score

Albright has not promoted sustainability through public policy advocacy and therefore did not earn any of the four possible points for this credit.

Recommendation

The CSS should explore ways to foster public policy advocacy. Perhaps the Political Science department could be approached and asked for advice about how to accomplish such a task.

PAE Credit 25-Trademark Licensing

Score

This credit is worth 4 total points broken into two sections worth 2 points each. The first section awards points if the institution is member of Fair Labor Association or Worker Rights Consortium, while the second section awards points if the institution has signed on to participate in the Designated Suppliers Program. Currently, Albright is not a member of the associations listed in section one and has also not signed on to participate in the program listed in section two. Therefore no points were awarded for this credit.

Recommendation

Albright should examine these associations and programs and give due consideration to their merit.

Public Engagement Tier Two Credits

Score

None of the 0.75 points were earned by Albright for this credit. While a graduation pledge that asks students to pledge to consider social and environmental responsibility in the future has been considered, it is not yet in place. Similarly, community service is not listed on students' transcripts. Finally, the college does not coordinate a local farmer's market for community members.

Recommendation

It is recommended that both the graduation pledge and community service on student transcripts be incorporated in the future. The graduation pledge needs to make sure that students are learning about such social and environmental responsibility first though as any such pledge otherwise would be meaningless.

OVERALL STARS SCORE

The overall STARS score is calculated by taking the average of the percentages of the three categories. Table 7 shows the points possible, points earned and percentage of points awarded for each of the three STARS categories. Albright was determined to have the highest level of sustainability in the education and research category, with 42.05 percent of possible points in this category earned. The campus operations category earned 26.19 percent of possible points, while the Planning, Administration and Engagement category earned 31.40 percent. Overall, Albright earned a STARS score of 33.21 percent which equates to a bronze rating.

Table 7. Points possible, earned and percentage of points awarded for each of the three STARS categories. The overall STARS rating is included.

STARS Category	Points Possible	Points Earned	%
Education and Research	95.75	45.26	42.05
Operations	95.75	25.07	26.19
Planning, Administration and Engagement	93.00	29.20	31.40
Overall STARS Score		33.21	
STARS Score Level		Bronze	

RECOMMENDATION SUMMARY

While all of the recommendations found in this report are truly important, there are some that require attention sooner than others. This section of the assessment will focus on those recommendations, but before turning attention to those concerns there are many positive findings from the assessment that need to be highlighted. Therefore each of the individual sections of the assessment will be discussed separately starting with the highlights and then focusing on the important recommendations moving forward.

Education and Research

Highlights

First and foremost is the broad accomplishments achieved in the Education and Research section of the assessment. The total points earned for this section was much higher than the points earned in the Planning, Administration and Engagement section as well as the points earned in the Operations section of the assessment. As Albright College is a small liberal arts college that prides itself on the educational experience afforded its students, this is an accomplishment that deserves praise. A noteworthy credit earned was for the outreach campaign undertaken to promote recycling on campus. The recycling campaign focused on the implementation of a new recycling program that featured new indoor and outdoor bins. The program was promoted through various means such as all campus emails, new signage explaining the recycling policy (co-mingling), reports in the campus media, and postings on the Albright's sustainability and stewardship website. As a result of these measures there was a slight initial increase in the amount of materials being recycled on campus, with an indication of much larger gains being made in the current year.

A few other highlights from the Education and Research section of the assessment include the inventory of sustainability focused and related courses. The list of these courses will be placed on the Sustainability and Stewardship website. The inventory was created specifically because of this

assessment process and symbolizes a movement toward recognizing the importance of sustainability in the overall educational experience provided at Albright. Finally, the last highlight is the incorporation of sustainability in the new student orientation over the previous two years. Two years ago students were introduced to the dangers of plastics through the documentary “Addicted to Plastic” which featured a question and answer session with the film’s director. This year, students took part in the sustainability knowledge assessment survey, which was designed to longitudinally assess the development of sustainability related knowledge via an Albright education.

Recommendations

There are four main recommendations for improving sustainability associated with Education and Research at Albright. First, is the creation of a “Green Fund” through either a modest increase in student fees or outright administrative funding. Figure one in this report shows that the majority of students would support an increase in their student fees that goes to making Albright more sustainable. This fund would be utilized by students through submitted proposals for projects that would further sustainability on campus. This sort of fund would not only support sustainability on campus, but also teach students about various aspects of project design and implementation as the proposal would require them to explicitly state how funds would be used and how future carrying costs would be handled. Second, formalized learning outcomes need to be developed for the courses that are focused on sustainability. The formalization of these types of outcomes would not only increase the STARS points earned, but more importantly would provide a mechanism for assessing sustainability education at Albright. The third recommendation is for the implementation of a process that ensures a new sustainability initiative and outreach campaign will be created each year. By creating an initiative each year, Albright will ensure that sustainability is a priority and that progress towards the end goal of a sustainable campus is maintained each year. Similarly, this outreach campaign will ensure that sustainability remain in the public eye and increase awareness of the importance of incorporating

sustainability into daily decision making. The fourth and final recommendation is that the outreach campaign be continuously incorporated into the new student orientation to ensure that incoming students know that Albright prioritizes sustainability.

Operations

Highlights

As mentioned above, the amount of materials recycled has increased over the previous year, which is a major highlight associated with this assessment. The other major highlight worth mentioning is the process of the assessment itself. This is an important step for two main reasons. First, it provides a baseline for future assessments to be compared against. Second, there have been a few major developments on campus that relate to sustainability. One development is the construction of the new Science Center, which is expected to be a LEED certified building. The second is the construction and implementation of a co-generation facility on campus. This facility will greatly reduce the footprint of the campus through its ability to generate power from byproducts of other operational processes. Both of these developments are very positive steps forward in terms of sustainability. Neither, however, has been accounted for in this assessment process due to their in-construction phases during data collection for the assessment. Therefore, all information presented here provides a pre science center and pre co-generation analysis and offers a chance for the next assessment to fully understand the impact both of these facilities have on sustainability at Albright. It is expected that the co-generation plant will offset the footprint of the new science center, which was expected to greatly increase Albright's overall carbon footprint. Similar to the baseline data, which will enable an assessment of campus post science center and co-generation plant, Albright also recently outsourced their food services to Aramark. The data on food operations in this assessment is pre Aramark and therefore will provide a way to assess future sustainability efforts by Aramark against previous accomplishments completed by Albright's in-house food services.

Recommendations

The most important recommendations to take away from the Operations section of this assessment focus on the use of energy and water and the effect those resources may have on the campus' carbon footprint. As a whole, net emissions per campus user increased at about 12.7% between 2005 and 2010. This increase is troublesome and strategies to reduce the campus footprint should be one of the highest priorities of the institution. A comprehensive strategy should be developed to reduce our overall greenhouse gas emissions. This comprehensive strategy should be incorporated into Albright's master plan. An addendum to the current master plan should be made when the campus carbon reduction plan is created. In order for such a plan to be successful it is imperative that the administration of the College show support by providing the necessary funding, both for the creation and implementation of said plan. A committee, similar to the CSS that has representatives from all sectors of campus, needs to be organized and tasked with finding the best and most creative ways of reducing the carbon footprint of the campus, both in the short term and long term. While the cost of continuing to produce greenhouse gases is externalized and does not increase overall college costs this externalization is paid for by society as whole. This is exactly why Albright should seek to show leadership on this issue by developing a comprehensive plan to drastically reduce its carbon footprint.

One major way for a carbon emission reduction plan to be successful is to find a way to reduce energy consumption further. In 2005, Albright consumed 75,377 MMBTUs of energy across its 712,085 square footage of building space. In 2010, consumption increased overall to 87,444 MMBTUs, but the campus square footage also increased to 864,512. Based on these numbers, energy consumption, per square foot of building space, decreased by 4.4 percent. While this is a positive step, the small decrease in consumption had no discernable effect on Albright's overall greenhouse gas emissions. The main recommendation is to reassess and determine the effect the new science center and co-generation plant has on campus energy consumption.

The final major recommendation from this assessment is to explore ways to reduce water consumption on campus. Albright has seen a 15.6% increase in water consumption per capita (Weighted campus user) between 2005 and 2010. The incoming student survey also revealed that the respondents gave very little consideration to their water usage. If strategies are not developed to combat this problem Albright will likely continue to see its water consumption increase. As water becomes scarcer across the world this may very well prove to be one of the most important issues of the 21st century. As an institution of higher learning, Albright has a responsibility to educate its students on the importance of this issue. One way to determine if education on the importance of water in the 21st century is being comprehended by the student population is to determine if water consumption is decreasing across campus. Future sustainability efforts should focus heavily on this aspect.

Planning, Engagement and Administration

Highlights

The most obvious highlight from this sector of the STARS assessment is the creation of the Committee on Sustainability and Stewardship. The creation of this committee shows that Albright does care about sustainability and is willing to make some effort to increase it on campus. The second most important highlight is the creation of the Albright Sustainability Plan in 2010. This plan was created by the CSS and approved by the President and Board of Trustees. The purpose of the document is to clearly articulate the importance of sustainability across the various sectors of campus and to provide broad strategies and philosophies that could be utilized to increase sustainability.

The other major highlight worth mentioning is the successful amount of community service engaged in by the Albright student body. While the overall STARS score is not terribly impressive, it is still commendable that over 25% of Albright students engage in community service of some sort. In fact, over 13,500 hours of community service was logged in the 2010 academic year. This is certainly a worthy number of community service hours and most likely a conservative estimate. Therefore it is also

recommended that a more formalized process for tracking community service hours by students (for scholarships, through fraternities and sororities, etc.) be created. This is certainly an aspect of Albright student life that should be promoted more.

Recommendations

The first recommendation is for the financial administrators, President and Board of Trustees to explore more sustainable investment options. This assessment determined that Albright is not currently pursuing options related to sustainability in investment. While some talk of socially responsible investing occurred a few years ago an increased endowment was decided upon as the most important element at the time. Albright has recently had successful financial and capital campaigns and has therefore increased the overall endowment. These successes should indeed be celebrated as they are extremely important steps for the overall success of Albright College. However, awareness that the argument about putting off sustainable investing in the name of an increased endowment is an easy argument to make in perpetuity. Instead, solid leadership is needed to critically examine the role financial investments have on environmental and social sustainability. Some recommendations to accomplish this sort of task include developing a policy or directive to consider the social and/or environmental impacts of investment decisions, in addition to financial considerations. This policy or directive would be a logical first step in designing a framework for improving sustainability in investing. Some mechanisms for achieving these goals can be found in the documentation above for PAE credits 16-18.

Finally, the creation of a student managed socially responsible investment fund would be extremely beneficial as a teaching tool for the business and economics faculty as well as an invaluable experiential component for students. These sorts of considerations are imperative in business curricula so that future business leaders understand their role in an interconnected global society. If future leaders of the business world continue to see only dollars and cents and not the effect externalized

factors have on the global environment and world society then it would be a disservice to not only our students, but society as a whole.

APPENDIX A:

ALBRIGHT COLLEGE SUSTAINABILITY PLAN

I. MISSION STATEMENT & OBJECTIVES FOR ENVIRONMENTAL SUSTAINABILITY AT ALBRIGHT COLLEGE

Albright College recognizes the College's responsibility for stewardship of our environment and the importance of working to sustain the environment both on local and worldwide levels.

This commitment to environmental stewardship and care of the earth is one of the core values of the College, stemming from our United Methodist heritage. The College seal depicts the lamp of knowledge, books and the words "truth and justice." These signify not only the value we place on wisdom and knowledge, but the interrelatedness of all things and our belief that the search for knowledge should not be separated from the search for wise and just solutions in human affairs and in the conservation of the natural world.

Although Albright may not have the largest carbon footprint, it has a very large educational footprint. Our mission to prepare our students to be aware and socially responsible citizens and leaders includes an understanding and respect for the natural world.

With this understanding, President McMillan created the President's Committee on Sustainability and Stewardship to lead our commitment to make decisions and take actions that recognize our obligation to stewardship, respect for our resources and sustainability and improvement of our environment.

Environmental stewardship and sustainability is a strategic objective for the College. While it may not always be possible that every decision in College operations is also the optimal environmental decision, the College is committed to making sustainability and stewardship a key factor in decision making and policy

setting. However, sustainability and stewardship efforts by the Albright community should particularly take place in all of the following areas:

A. Energy Use – Albright will strive to reduce the amount of energy used and the amount of emissions produced. We will also be cognizant of the multitude of ways that energy development, transmission and use can be detrimental to the environment and we will make decisions that attempt to increase the overall positive impacts on the environment, both locally and globally. This should result in consideration of using alternative forms of sustainable energy.

B. Waste disposal – Waste can include emissions into the air and water as well as solid municipal and toxic or hazardous waste. **Albright will strive to adopt the strategy that is most beneficial to the environment in terms of each type of emissions.** Each of these types of waste requires a different approach in order to minimize their impact on the environment. In many cases, this requires an examination of the processes involved in the creation of waste so that we can minimize the use of a substance and thereby minimize its emissions. Sometimes reuse of a substance is most beneficial environmentally, while in other cases recycling may be the appropriate strategy.

C. Purchasing – Albright will strive to purchase materials, which have more beneficial effects on the environment. For instance, Albright has the choice of using recycled as opposed to non-recycled materials, non-toxic versus toxic substances, or energy-efficient versus less energy-efficient machines. Because of the decentralized ordering system at Albright, a concerted effort will be required to contact decision makers to emphasize that it is a priority to consider environmental issues in their decision-making process. The long-term goal is to have a more centralized purchasing system in place and enable one individual to ensure that all purchases include environmental considerations.

D. Education/Communication – Education can come in many forms--through courses, institutional programs, special events, residential policies, informal communication among professors, administrators, staff, students, etc. The presence or absence of certain programs or policies sends a message to all members of its community. In all these venues, **Albright will work to educate all members of its community about**

the importance of actions, both as individuals and as an institution, that are environmentally beneficial locally and globally.

In addition, we encourage faculty to enhance courses so that students can gain insights into the environmental problems that we face both locally and globally. Finally, faculty should strive to connect their educational programs with other activities on campus such as facilities, food service, etc. so that their students can witness first hand how Albright College is affecting the environment as an institution.

E. Food Production, Consumption, Disposal – How we prepare our food, as well as how we consume and dispose of it, can have significant effects on the environment. All individuals responsible for food production, including directors, managers and staff should strive to manage food production, consumption and distribution at Albright in a manner beneficial for the environment.

F. Residential Life – Students make up the majority of the community at Albright College and their **residential life can have significant impact on the environment.** Therefore, policies and infrastructure in the dormitories and other aspects of residential life should be made with two general goals in mind. First, decisions and policies that promote environmental sustainability should be actively fostered as part of the education of students who are making daily decisions about living in an environmentally sustainable or non-sustainable manner. Second, the direct impact of students on the environment should be considered and factored into policies, programs, etc. in order to promote more beneficial environmental effects. Finally, environmental sustainability objectives should be promoted through training of RAs.

G. Construction/Renovation – How a building or structure is constructed or renovated can have a significant impact on the environment not only in terms of the materials and processes used, but also in future operational efficiencies. Albright will strive to construct and renovate in ways that are most beneficial to the environment. The new Science Center is being built to qualify for LEED certification, and this certification, along with other environmentally responsible practices, should be a consideration for all future buildings and renovation projects.

H. Facilities/Buildings/Grounds – The facilities program at any institution plays a major role in that institution’s overall environmental impact. **The Facilities Department at Albright College will naturally be a primary guardian of the objectives laid out in this document and will make decisions with consideration of the environmental consequences of all choices.** Whenever possible, the solution, which most benefits the environment, will be given equal or higher priority.

I. Personnel – The College’s **environmental objectives should be communicated to all employees of Albright College** so that they understand that Albright College, as an institution and community, is committed to environmental sustainability. This objective should be reflected in their work and interactions. Through this process a culture of sustainability in decision-making will be established in the Albright College community.

J. Assessment – As part of the commitment to environmental integrity, **Albright College believes that it must have some means of assessing decisions and actions.** Periodically (annually or every two to three years) the College should conduct a review of each of the areas above to determine how well we are achieving our mission of creating a more sustainable environment. The first assessment will be a baseline that can be used to determine areas that need additional sustainability measures going forward.

II. IMPLEMENTATION OF SUSTAINABILITY OBJECTIVES AT ALBRIGHT COLLEGE

Implementation of the objectives in this plan is based on a process that will involve individuals making decisions, which could have either beneficial or detrimental effects on the local or global environment. Each vice president will be asked to produce a plan for incorporating environmental decisions into their particular division. They will also produce biannual reports to document environmental benefits.

The hope is that this procedure will be flexible enough to enable different divisions to develop procedures to address environmental concerns in a manner most appropriate for their department and activities. In addition, the reports will encourage ongoing environmental considerations as well as provide a means for monitoring improvements.

- A. Identify the areas of decision-making on campus for which we need to promote environmental considerations.
- B. Send division/program directors/coordinators/supervisors the list of environmental objectives and request that they not only read it themselves, but go over it with all faculty and staff in their areas.
- C. Request that the heads of the areas of concern develop a written plan for addressing environmental considerations and submit the plan to CSS for review and approval.
The plan should specifically explain how the group will ensure that environmental considerations are considered in their decision-making as an important factor along with financial, educational, and other concerns. (We could include some of the suggestions above as a means of achieving the desired results – check-list, general guidelines, etc.)
- D. Biannual environmental reports should be completed and submitted to the CSS for review. These reports should document area progress in considering environmental issues as well as changes, which have had positive and/or negative effects on the local or global environment. A divisional representative from each of the three academic divisions (natural science, social science, humanities & fine arts.) should serve on the CSS and act as the liaison between the CSS and the departments in their division. (See “F”

below.) These representatives will put together the biannual reports that reflect beneficial or detrimental environmental activities in their academic divisions.

- E. The CSS will supervise and direct the sustainability plan. CSS will be responsible for monitoring overall sustainability efforts on campus – initially by supervising the completion of the STARS review on a yearly basis. CSS responsibilities also include assessing sustainability reports and working to make improvements in these areas.

CSS will be charged with the task of identifying new areas of need and initiating new actions to improve environmental sustainability on campus. Finally, CSS will continue to report biannually to both the president and the Property, Land, and Equipment subcommittee of the Board of Trustees.

- F. CSS members should come from each of the areas identified in Part I of this plan. There should be a representative from student government as well as the student environmental club on campus. At least four faculty members should also be on the committee, with three representing the disciplinary perspectives of their academic divisions (natural science, social science, humanities & fine arts.) At present the CSS will continue to be chaired by a faculty member or administrator devoted to the ideals of this plan, however, the long term goal is to create the position of Sustainability Coordinator who will serve as Chair of the CSS and promote and manage environmental sustainability as outlined in this plan.

III. ASSESSMENT & MONITORING OF ENVIRONMENTAL SUSTAINABILITY AT ALBRIGHT COLLEGE

Assessment of any facet of a community is difficult and often time-consuming. These problems are increased when the criteria for the assessment of a particular facet have wide-reaching implications and connections across the entire community. In addition, the problem can be complicated when the community is composed of diverse units and has no staff position for conducting the assessment. This is precisely the problem the CSS faced when attempting to develop a plan for assessment of the state of the environment at Albright on an ongoing basis.

We have developed a two-point plan to deal with these challenges. The first part helps to create uniform criteria by using a college sustainability assessment framework from the Association for the Advancement of Sustainability in Higher Education (AASHE.) Their Sustainability, Tracking, Assessment and Rating System (STARS) appears to be a well conceived checklist and scoring rubric which will enable colleges to assess their level of environmental sustainability. To complete the process, data will have to be collected from different departments. Based on an initial review, it appears as though the data can be collected without overtaxing personnel who are involved.

For \$1,400 Albright can send the data we collect to STARS and have them post a score for Albright College. Because of the cost, and because this data will be our first effort to create a benchmark, we are reluctant to post our scores right away. CSS recommends that we use the STARS assessment tool on a trial basis over the next year, administering and scoring it ourselves. After the trial basis, we will determine the feasibility of continuing to administer the instrument ourselves, pay the fees and have STARS provide an overall sustainability score, or cease to use it and search for a new assessment tool.

The second part of our assessment plan would incorporate the annual/biannual review(s) of the environmental reports requested as part of the Implementation Plan. These would be reviewed to determine how well environmental decisions are being made. In addition, a review of progress in environmental activities would be made. This data would be included in a qualitative review of the College, which could complement the more quantitative assessment of the STARS tool. Combined, these assessment frameworks

will provide the college with not only a measure for success in sustainability efforts, but also the ability to highlight the areas that are most in need of additional support and guidance.

Appendix B: Greenhouse Gas Emissions Inventory Results

Figure B1 below shows the increase in total greenhouse gas emissions over the previous five years. The figure reveals that Albright College has seen an increase in emissions in the previous half decade. While this figure is not a definitive source of long-term carbon emissions trends, it does provide a solid starting point for maintaining and assessing future emissions against the baseline year of 2005. Future projects should seek to minimize the total emissions for Albright College and work to reduce the total emissions for the campus.

Figure B1. Total emissions of Carbon Dioxide equivalent for Albright College over previous five years.

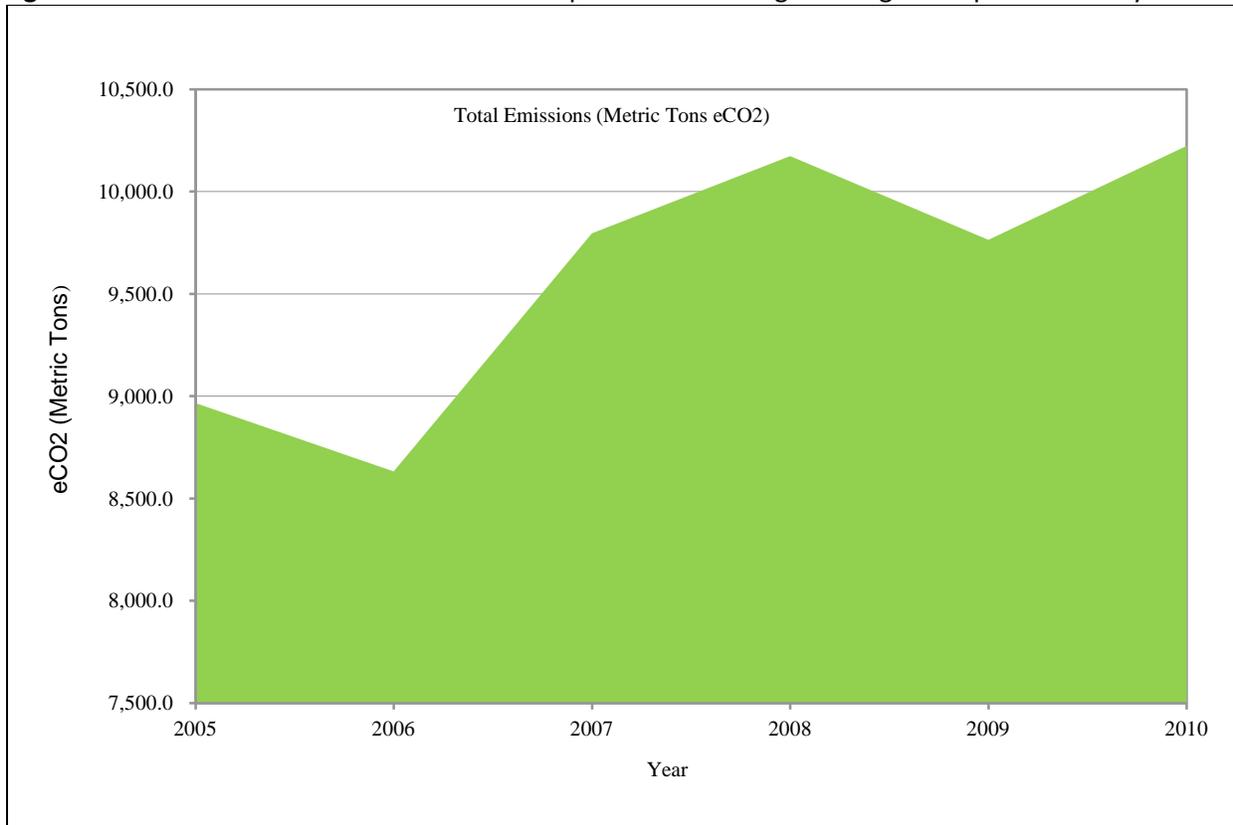


Figure B2 represents a more detailed examination of greenhouse gas emissions for Albright College by examining the sector in which emissions are created. The vast majority of greenhouse gas emissions released by Albright come from one of two sources. The first and largest source is through

purchased electricity from outside power providers. Those providers emit greenhouse gases, of which the purchaser can be held directly responsible for. The second largest emission source is on-campus stationary. This source accounts for the emissions through the combustion of natural gas and oil used by on-campus sources. The final sources of emissions include student commuting, study abroad air travel and transmission and distribution losses (Scope 2 T&D losses). Albright purchases its electricity and transports it through a T&D system, and therefore T&D losses are included in Scope 2 emissions, since the losses are a portion of direct emissions from the “use” (loss) of purchased electricity (Cool Air-Clean Planet User Guide 2010).

Figure B2. Total Carbon Dioxide equivalent emissions (in metric tonnes) by type 2005-2010.

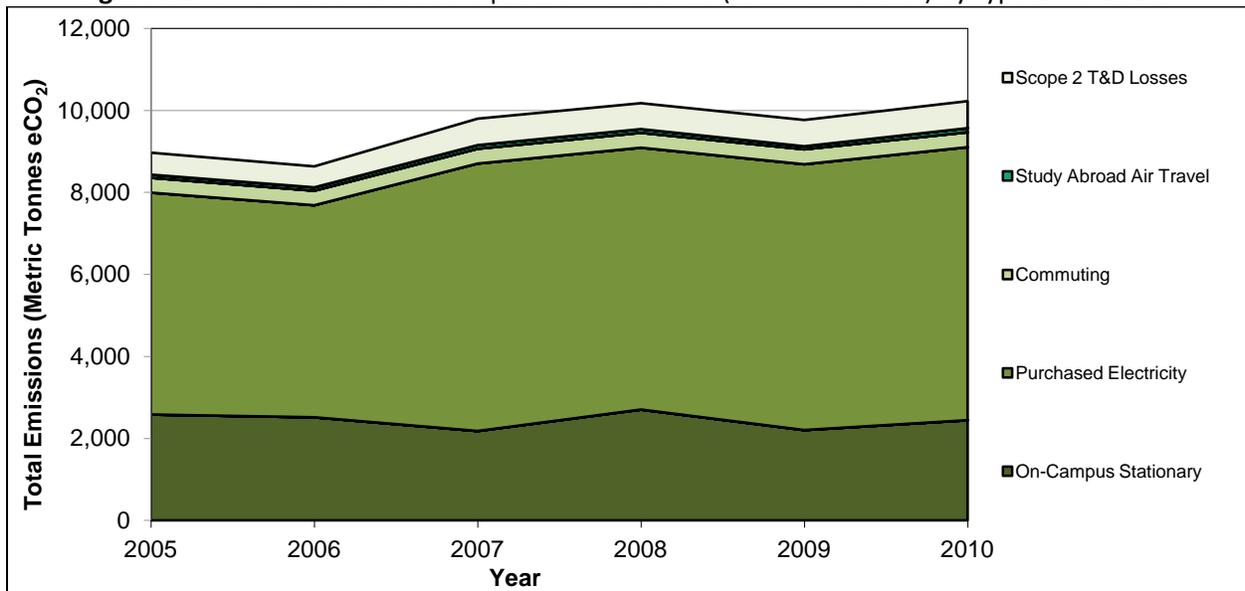


Figure B3 shows the total emissions by scope. Scope 1 emissions include “direct emissions from sources that are owned and/or controlled by your institution. This includes combustion of fossil fuels in college-owned facilities or vehicles, fugitive emissions from refrigeration, and emissions from on-campus agriculture or livestock husbandry. Your institution has complete control over these emissions, and they are no-one else’s responsibility.” Scope 2 includes “indirect emissions from sources that are neither owned nor operated by your institution but whose products are directly linked to on-campus energy

consumption. This includes purchased energy: electricity, steam, and chilled water. Although your institution is not directly responsible for these emissions, it is strongly implicated. These emissions come from converting energy sources that release greenhouse gas emissions when used (fossil fuels) to energy sources that do not (electricity, steam, or chilled water). Although your institution did not burn the coal to make the electricity you use, someone had to, and although the electricity producer emitted the gasses, they did not use any of the energy produced.” Finally, scope 3 emissions are “other emissions attributed to your institution, deemed “optional” emissions by corporate inventories. This includes emissions from sources that are neither owned nor operated by your institution but are either directly financed (i.e. commercial air travel paid for by the institution) or are otherwise linked to the campus via influence or encouragement (i.e. air travel for study abroad programs, regular faculty, staff, and student commuting (Cool-Air, Clean Planet Carbon Calculator User Guide 2010).” The emissions by scope for Albright College shows that the majority come from Scope 2 emissions or emissions created by purchased energy. This result indicates that one way for Albright to make inroads into reducing its greenhouse gas emissions is to examine the purchasing of alternative energy sources such as wind and solar power.

Figure B3. Total greenhouse gas emissions by Scope 2005-2010.

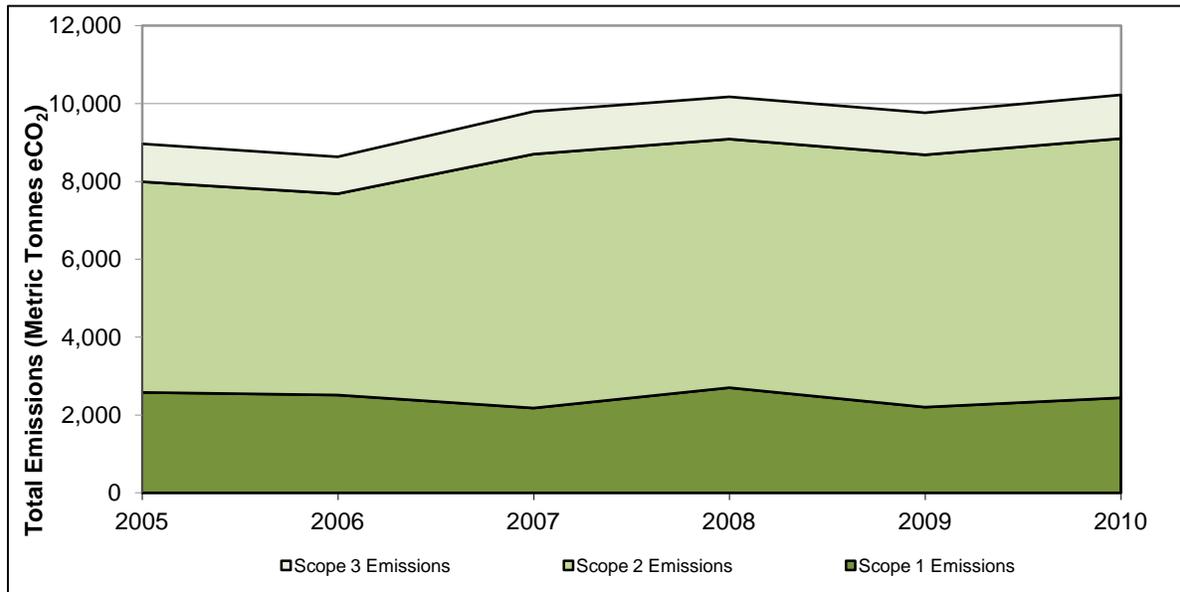
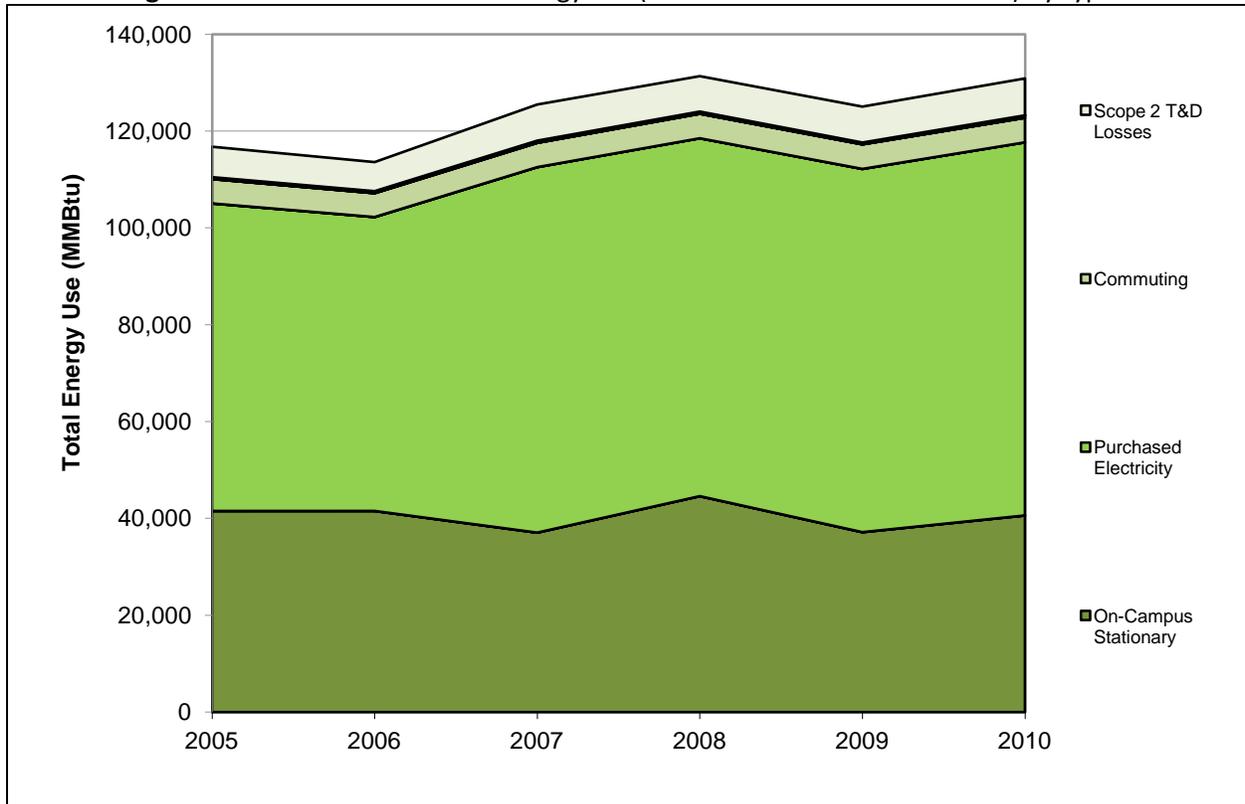


Figure B4 shows the total amount of energy used in a standardized unit (millions of British Thermal Units). The figure reveals the same trend as in the previous figures, but provides the total

amount of energy used by sector. Purchased electricity accounts for the largest amount of energy used, followed by the on-campus stationary sources. Transmission and distribution losses as well as student commuting account for the smallest portion of energy used and has remained relatively stable over the five years examined.

Figure B4. The total amount of energy use (in million British Thermal Units) by type.



Figures B5-B8 show various measures of energy use across campus. Figure B5 reveals the total energy use per operating dollar amount. Over the previous five years, the thousands of BTUs per each dollar spent at the College have shown only minor fluctuation. The current year (2010) remains similar to the baseline year (2005) with minor increases in the intermediate years. Figure B6 portrays the total amount of energy used (in thousands of BTUs) per each dollar spent on energy costs. The general negative trend here indicates that Albright is actually improving energy efficiency for every dollar spent on energy. This is a positive accomplishment and should be monitored in the near future to make sure

these strides are not lost. A per student energy usage rate (in millions of BTUs) is shown in Figure B7. Per student energy use increased from 2005 to 2008, but has since shown a mild decline and stability over the last year. This is one way to symbolize energy use that often resonates with the general public as reflection about individual energy consumption is often prompted through such statistics. It is recommended that this indicator be shared with the campus community on a yearly basis as an incentive to reduce the overall energy use at Albright. Finally, figure B8 shows energy use by square feet of building space on campus. This graph reveals that on a per square footage basis Albright has stayed reasonably stable in its energy use per utilized building space. The overall increase in energy use may actually be related to increased campus square footage over the study years.

Figure B5. Energy usage per operating dollar estimating the overall energy efficiency of the institution.

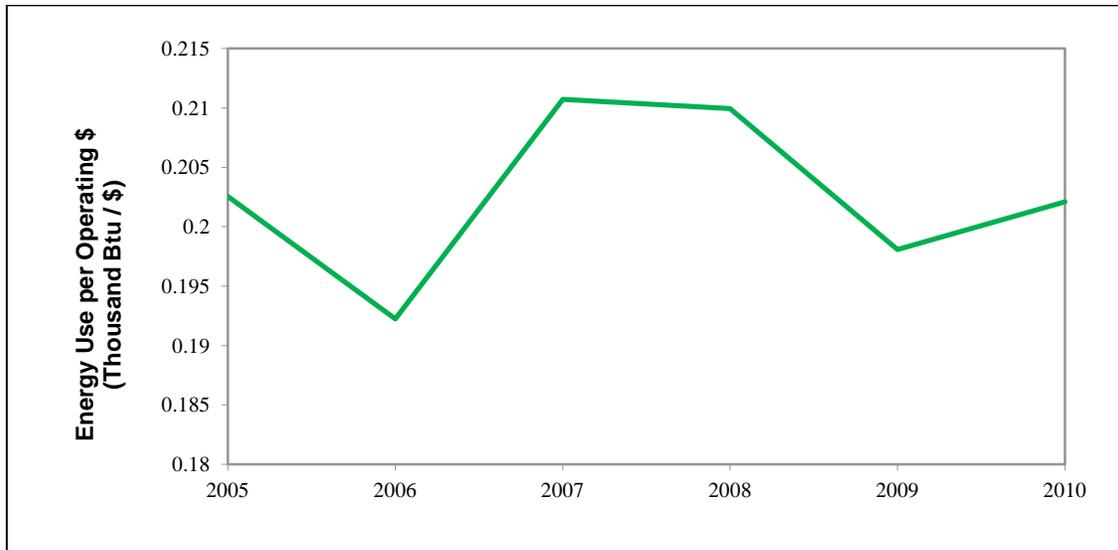


Figure B6. Energy use per energy dollar estimates the overall energy efficiency of the institution's energy production.

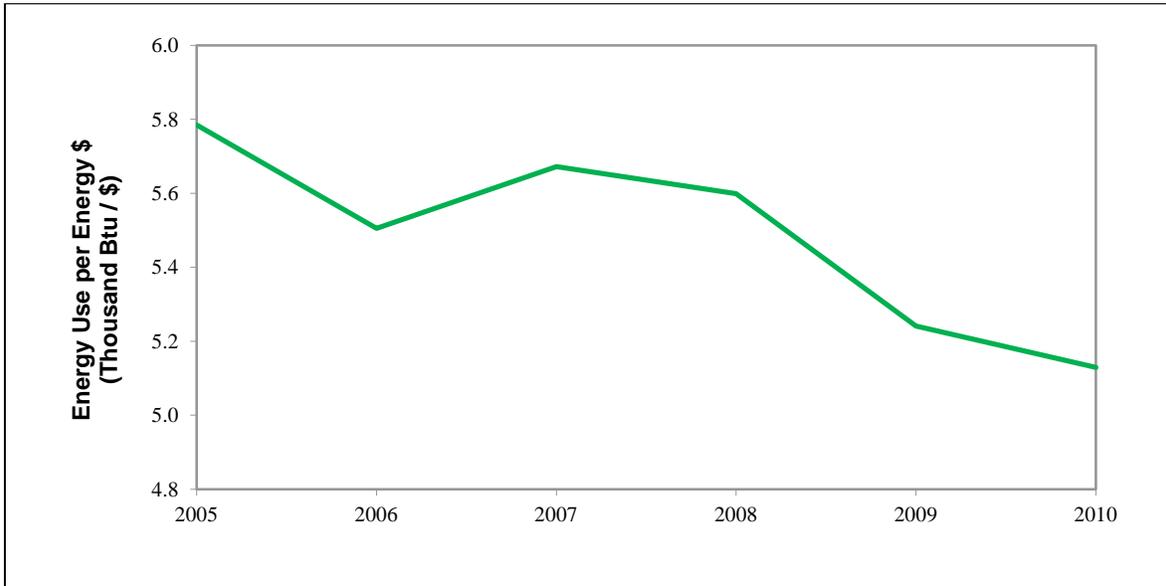


Figure B7. Energy use per student normalizes the total energy use by the size of the student body.

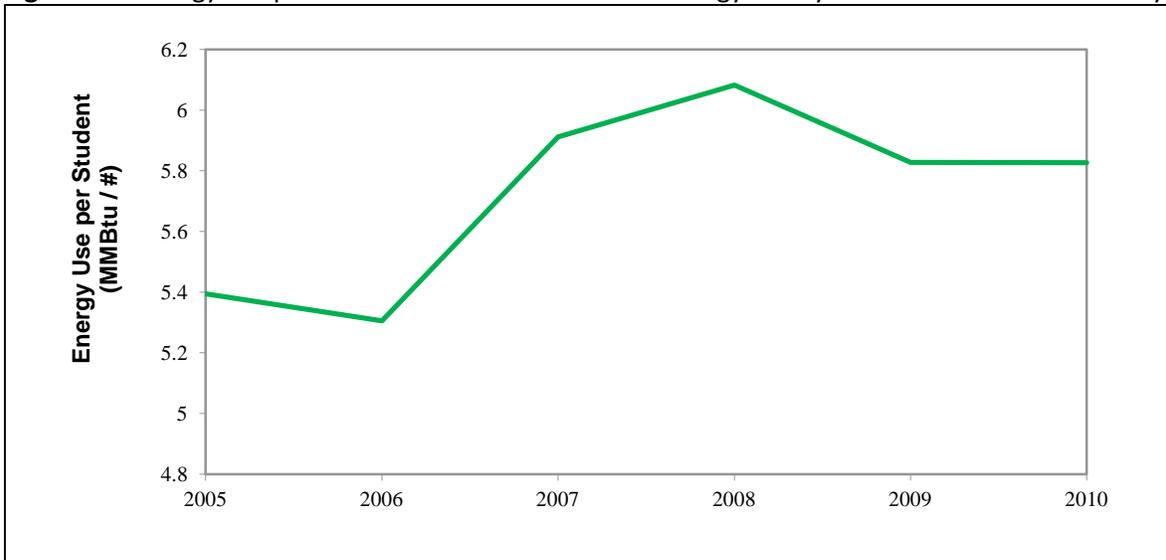
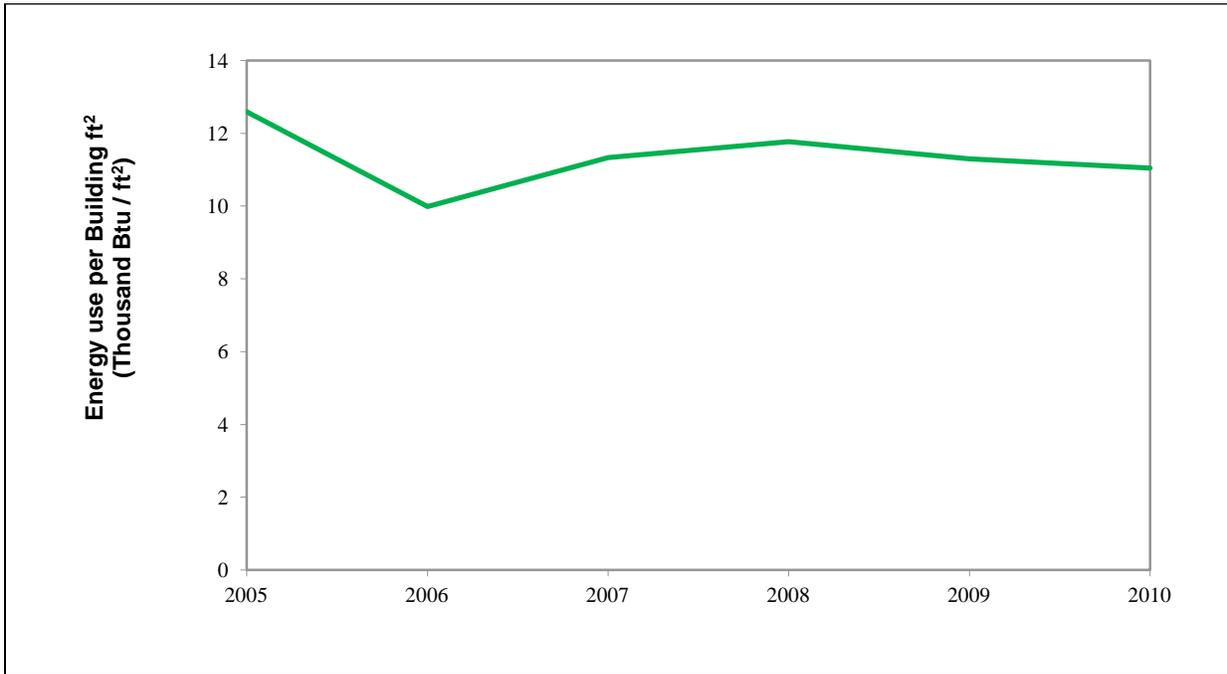


Figure B8. Energy use per square foot of building space is another estimate of the overall energy efficiency of the institution.



Appendix B: Freshman Sustainability Survey Results

A survey of all freshmen was conducted during the 2011 orientation. In total, 383 surveys were completed. Pairwise deletion[†] was used to compile the initial results below. The survey consisted of four components; demographics, sustainability related knowledge, sustainability related behaviors and an environmental worldview orientation measure. All univariate results from the survey are found below. More detailed analyses of the results will be compiled in the form of conference papers and eventual peer-reviewed publications. Contact Drs. Jennings and Ghosh for additional information.

Respondent Demographics

Figures C1 through C6 show the demographic information for the freshmen respondents. In general, there were more female respondents (55.7%) than males and the majority of respondents were white (62.9%). It is worth noting that over ten percent of respondents were African American. Figure C3 shows that nearly 60% of students are coming to Albright from within PA, while almost 40% are coming from other states, with only one percent being international students. As Albright College is a residential liberal arts college it is not surprising that nearly 96% of incoming students are living in the residence halls on campus. Figure C5 indicates that nearly 40% of incoming freshmen are first generation college students. Finally, figure C6 reveals a diverse annual household income of the families of incoming freshmen. The income category with the highest percentage was \$25,000 to \$49,999. It is worth noting that this question asks the incoming freshmen to provide an estimate of their family's annual income and therefore should be used with caution as many 18 year olds do not have adequate information or frame of reference to answer this question accurately.

[†] Pairwise deletion involves deleting only the case from analysis only if the respondent did not answer the exact questions under investigation.

Figure C1. Gender of respondent (N=379).

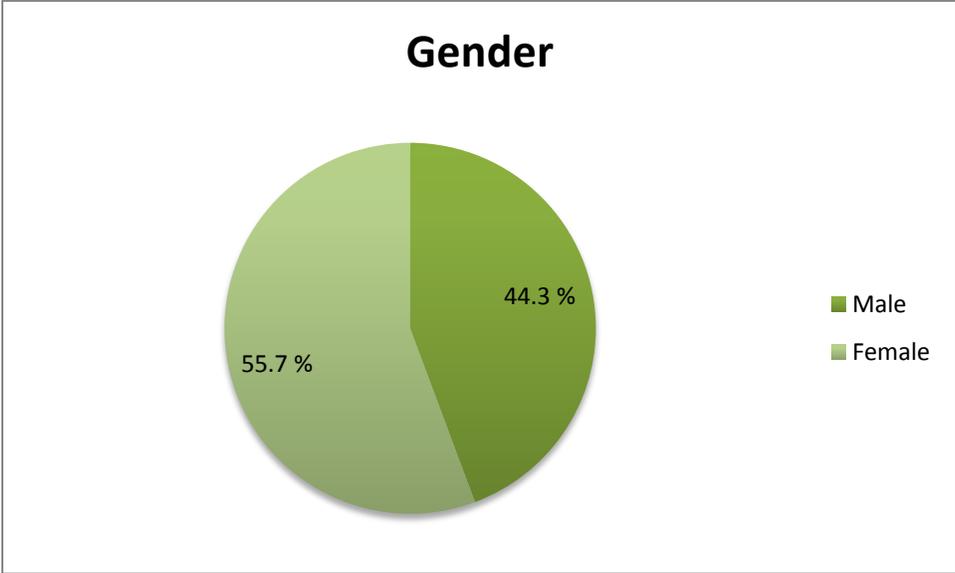


Figure C2. Self-reported race/ethnicity of freshmen respondents (N=377).

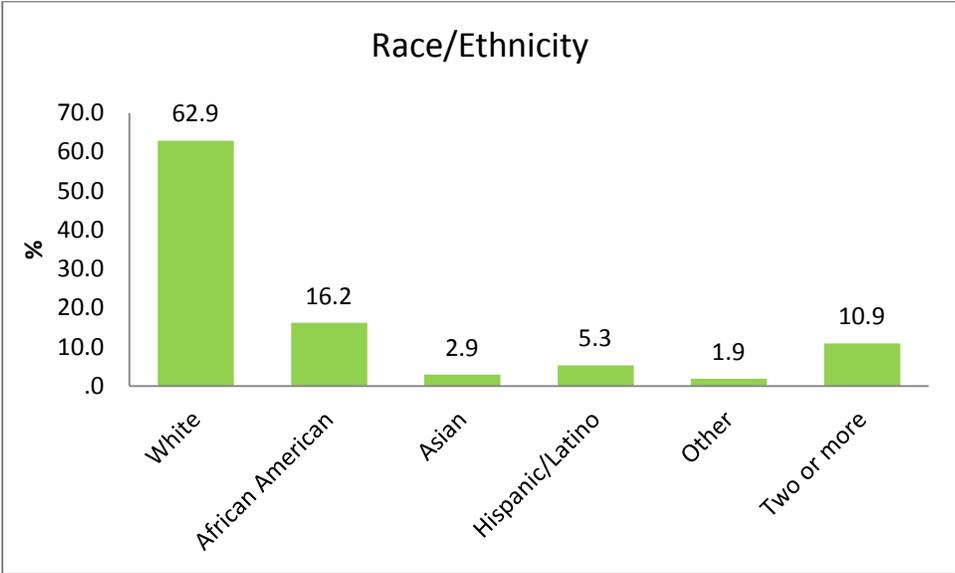


Figure C3. Location of freshmen respondents' family home, categorized as in-state (PA), out of state, or international (N=378).

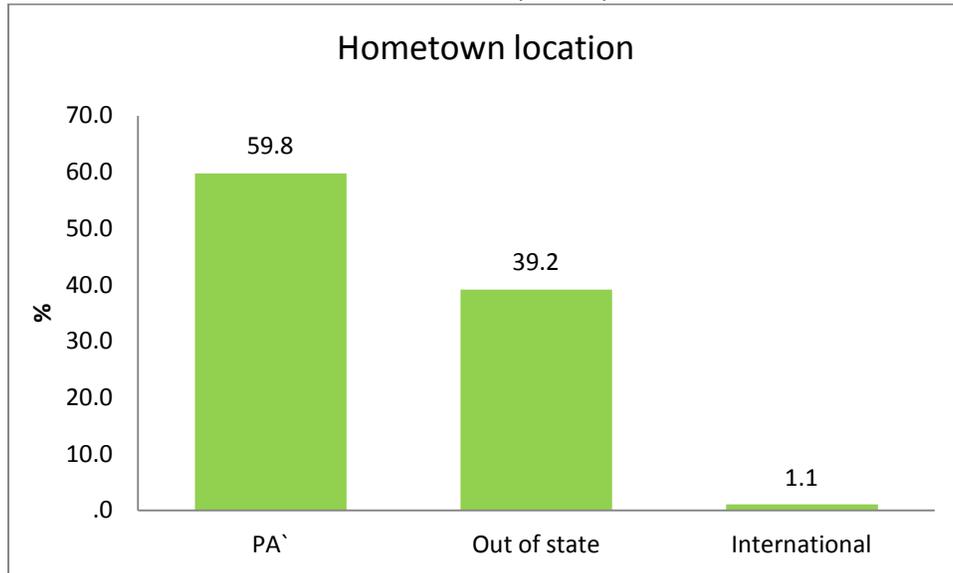


Figure C4. Location of student residence, either on campus residential or off campus commuter (N=379).

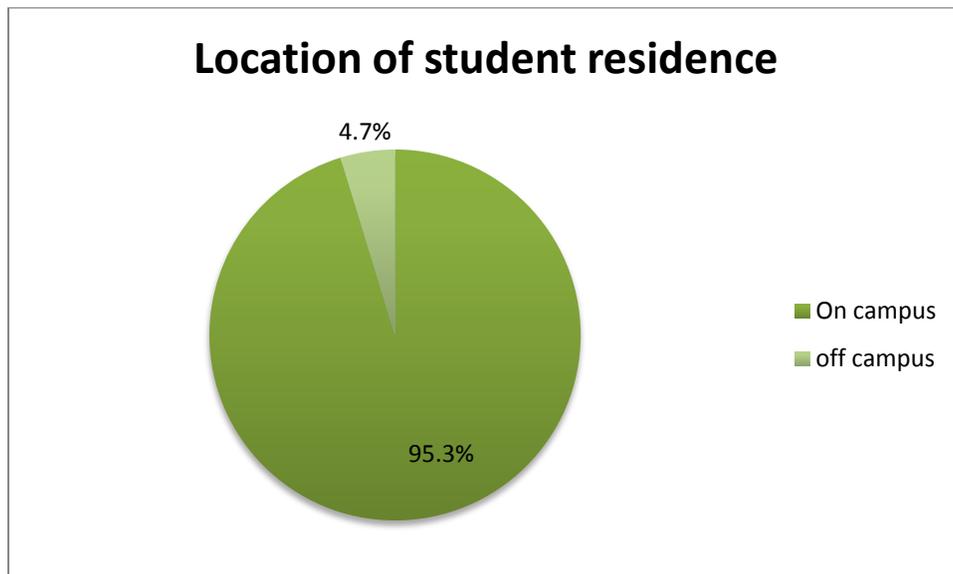


Figure C5. Shows the results of the survey question “Are you a first generation college student?” (N=378).

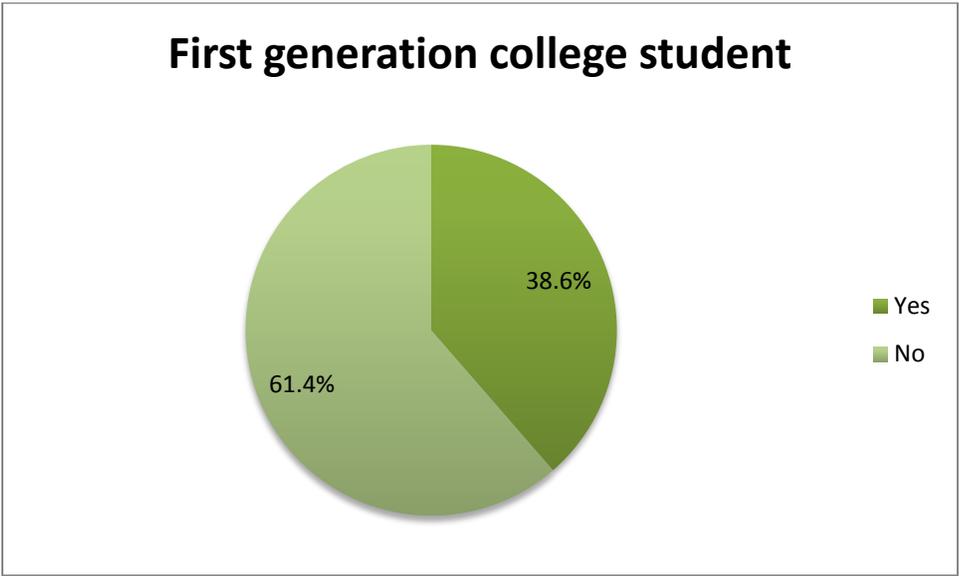
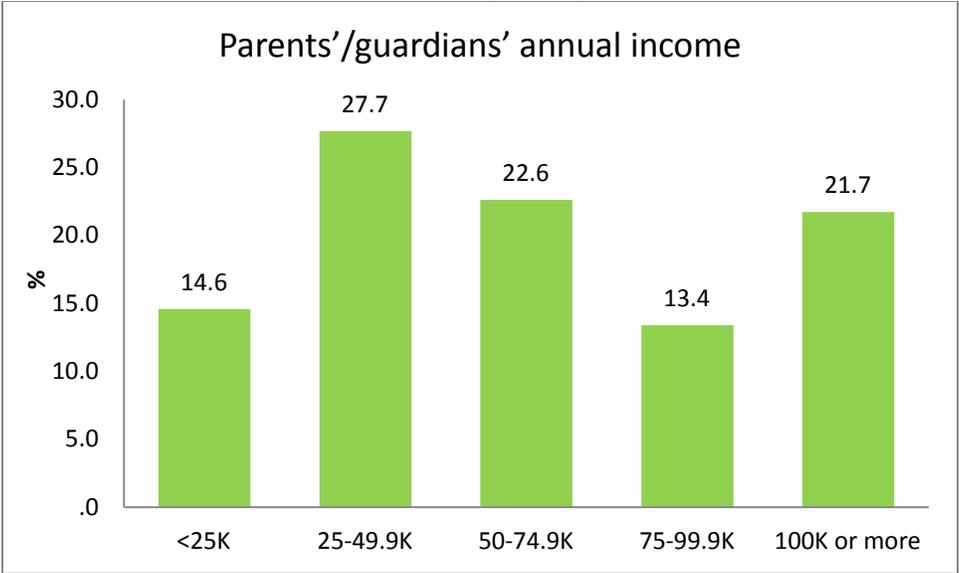


Figure C6. Responses to the question “What is your best estimate of your parents’/guardians’ annual income?” (N=336).



Sustainability Related Knowledge Assessment

Table C1 shows the percentage of respondents who correctly answered each of the five questions geared toward assessing knowledge about sustainability in general. Each of the questions were posed using a multiple choice format with only one correct answer choice. In addition, the national average of correct responses by the general republic is reported[‡]. For four of the five questions, incoming freshmen scored lower than the national average. The most commonly missed question, as shown by only a quarter of respondents answering correctly, asked about the cause of water pollution. The correct answer was from run-off of impervious surfaces. The most common answer given by freshman was from factory waste (29.4%), followed by dumping of garbage by cities (26.5%). The next most commonly missed question asked freshman the source of electricity in the United States. Less than half (43%) of freshman answered the question correctly by identifying the burning of coal, wood and oil. The most common incorrect answer was nuclear (29.5), followed by nearly 14% that simply had no idea how electricity was generated. The third most missed question prompted respondents to identify the biggest source of carbon monoxide. Nearly half of respondents (49.6%) answered correctly by identifying vehicles as the biggest source. Factories and businesses were the most commonly chosen incorrect answer (36.2%), followed by nearly 10% that simply did not know the answer. Finally, two of the five sustainability questions did receive correct answers by over half of all respondents. The first question asked, which of the following is a renewable resource, with oil, iron ore, trees and coal as the possible answers. Just over half of respondents (53.2%) identified trees as the correct answer. Surprisingly, nearly 25% chose either oil or iron ore as the renewable resource, with near 13% indicating they simply did not know the answer. The final question, with the highest correct response rate, asked respondents to identify where most of the garbage in the United States ends up.

[‡] Coyle, K. 2005. Environmental Literacy in America. What Ten Years of NEETF/Roper Research and Related Studies Say about Environmental Literacy in the US. Published by the National Environmental Education and Training Foundation.

Over 65% of respondents chose landfills as the correct answer, while the most common incorrect answer was oceans (21.3%). As a whole, these questions show very little knowledge about sustainability related issues by incoming freshmen. One of the goals of this research is to reevaluate this cohort at the end of their senior year to see if sustainability related knowledge has increased due to the educational experience afforded by Albright College.

Table C1. The number of respondents who answered the questions dealing with knowledge about sustainability correctly.

Sustainability Knowledge Questions	% Correct	National Average	N
Carbon monoxide is a major contributor to air pollution in the U.S. Which of the following is the biggest source of carbon monoxide? Is it...	49.6	65.0	381
How is most of the electricity in the U.S. generated? Is it...	42.4	33.0	380
What is the most common cause of pollution of streams, rivers, and oceans? Is it...	26.5	28.0	378
Which of the following is a renewable resource? Is it...	53.2	65.0	380
Where does most of the garbage in the U.S. end up? Is it in...	66.5	85.0	376

Sustainability Related Behavioral Assessment

Figures C7-C19 shows the extent to which incoming freshmen engage in sustainability related behaviors. Behaviors related to saving energy through reduced electrical use are shown in Figures C7-C9. Respondents are nearly evenly split in regard to how often they report switching appliances off rather than leaving them in standby mode (Figure C7). Over half of respondents (54.6%) indicated they either always or often switch appliances off. Figure C8 revealed the most sustainable electricity saving behavior by students with over 80% of all respondents indicating they always or often turn off lights when leaving a room. This finding is not surprising as this is the most common strategy for reducing electricity usage. Figure C9 indicates that knowledge about the concept of ‘phantom charge’ is much less known. Phantom charge is associated with usage of electricity from equipment that is left plugged in but is not currently being used for any benefit. The easiest example is a cell phone charger. A cell phone charger that is plugged into the wall outlet but does not have a cell phone attached and charging

is still drawing electricity from the outlet. Survey results show that 61.8% of incoming freshmen rarely or never unplug these sorts of devices and therefore are wasting electricity.

Figure C7. Percentage of respondents indicating the frequency with which they switch off appliances rather than leaving them on standby (N=379).

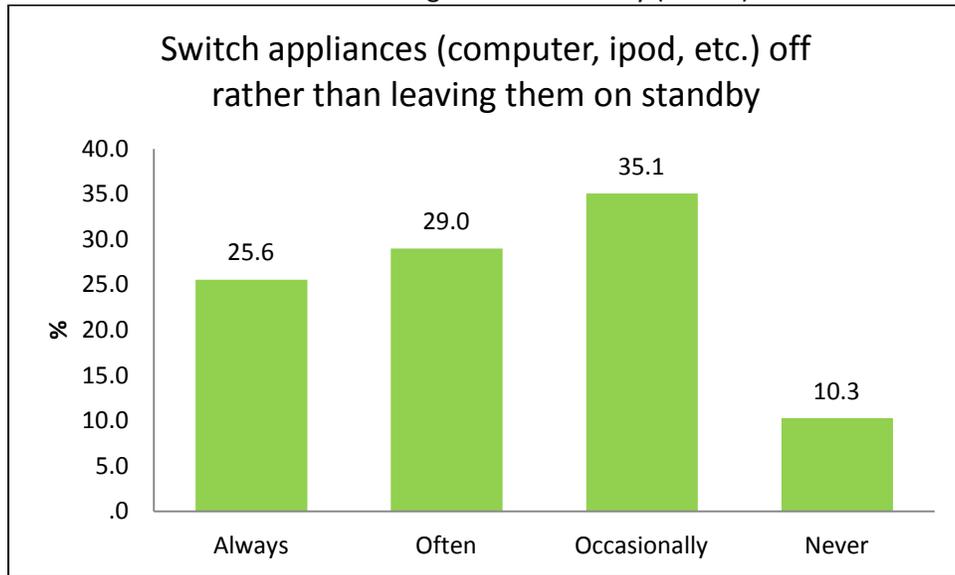


Figure C8. Percentage of respondents indicating the frequency with which they switch lights off when leaving the room (N=379).

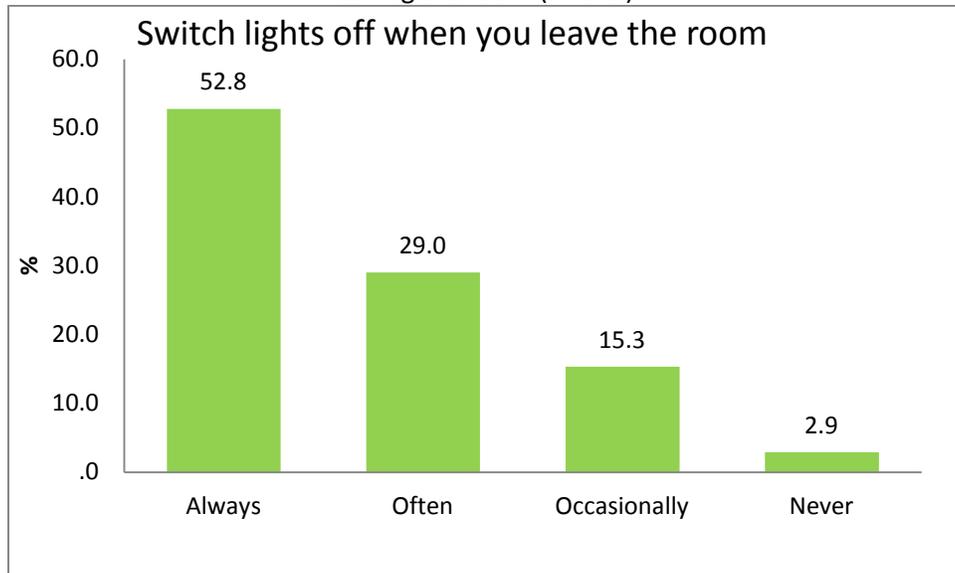
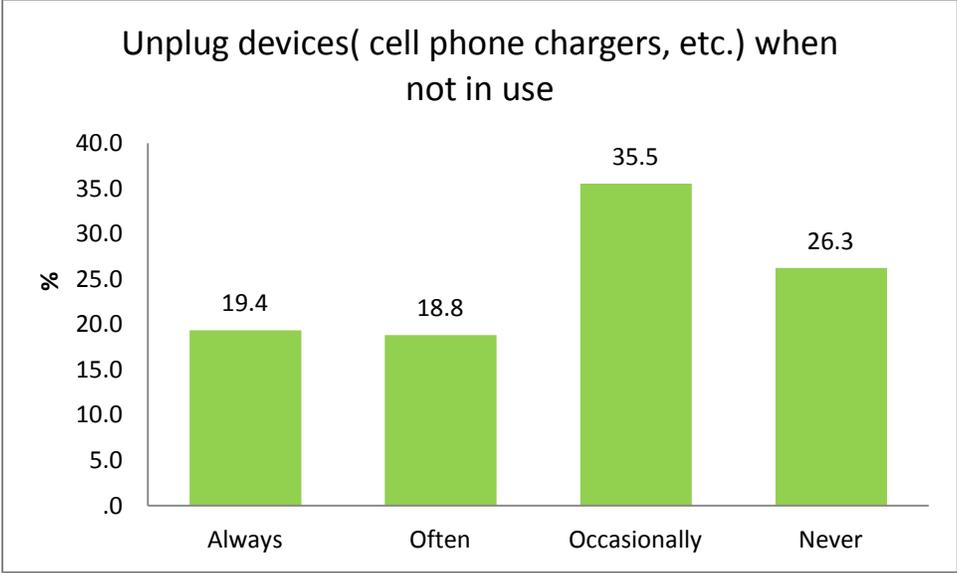


Figure C9. Percentage of respondents indicating the frequency with which they unplug devices such as cell phone chargers when not in use (N=377).



Figures C10-11 examines printing behaviors. The results are mixed with nearly 70% of respondents indicating they only occasionally or never print off materials that could be read online (Figure C10). However, nearly the same percentage report that their printing behavior does not commonly utilize paper saving technologies, such as double sided printing or printing multiple pages per paper (Figure C11).

Figure C10. Percentage of respondents indicating the frequency with which they print off the internet rather than reading the information online (N=371).

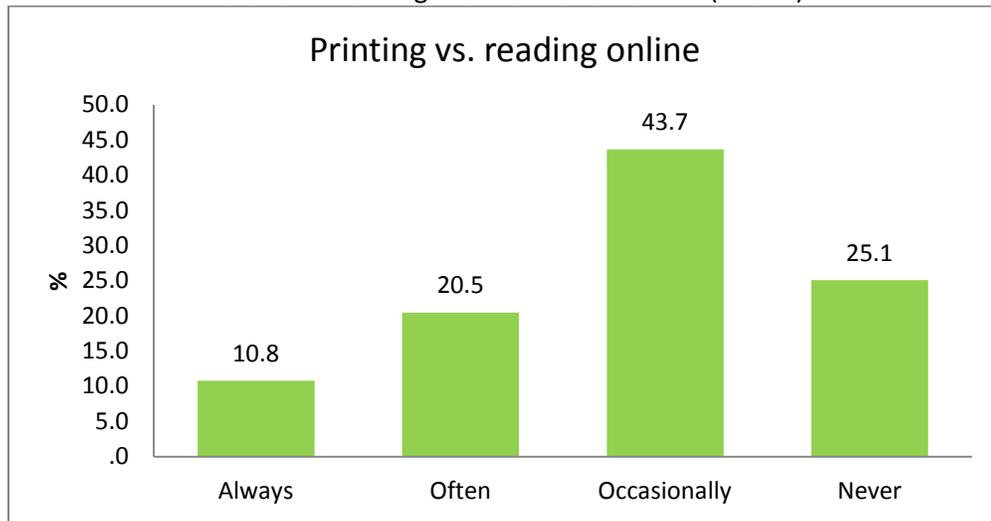


Figure C11. Percentage of respondents indicating the frequency with which they print double sided or multiple pages per paper (N=369).

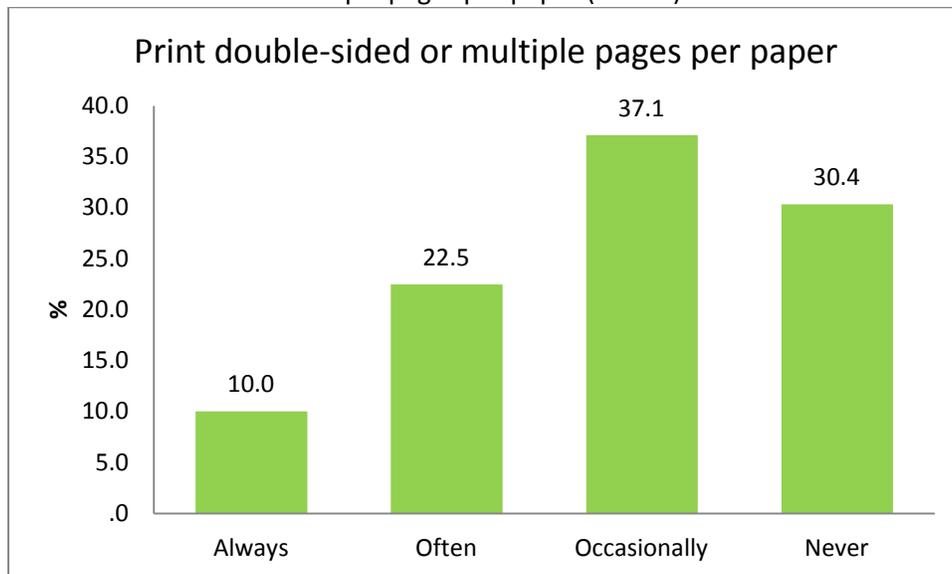


Figure C12 shows another behavior that could be improved. Freshmen respondents were most likely to report occasionally or never using reusable shopping bags. It is important to remember that most Albright freshmen reported living in the residence halls and therefore are most likely walking to one of the two grocery stores within a very short distance of the residence halls. A strategy that may be considered by Albright is to provide incoming students with an Albright tote bag that could be used to transport their groceries.

Figure C12. Percentage of respondents indicating the frequency with which they use reusable shopping bags (N=374).



Over seventy percent of incoming freshmen report that they always or often recycle materials. This is a positive finding and one that reinforces the recent recycling campaign on campus. It is still important to note, however, that some respondents' recycling behaviors could be improved (Figure C13).

Figure C13. Percentage of respondents indicating the frequency with which they recycle (N=380).

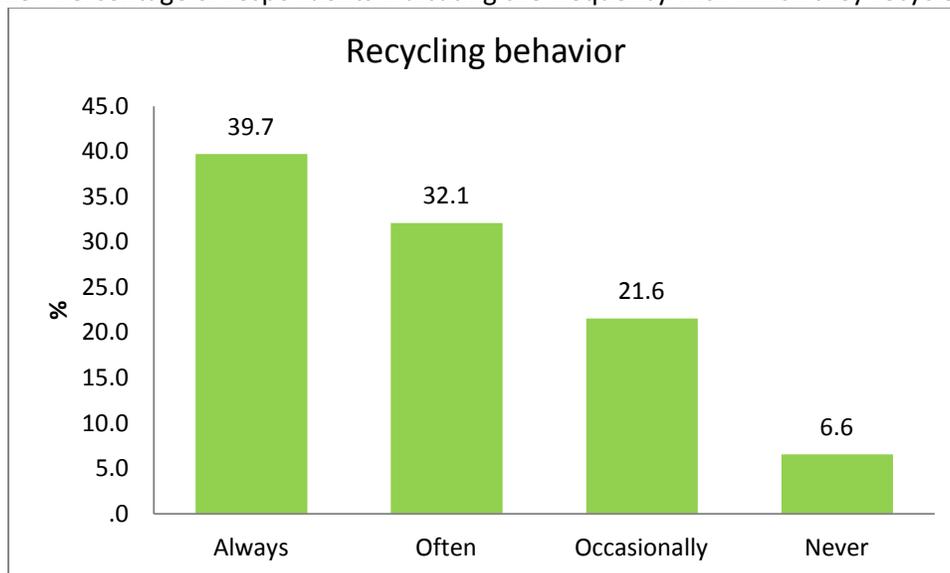
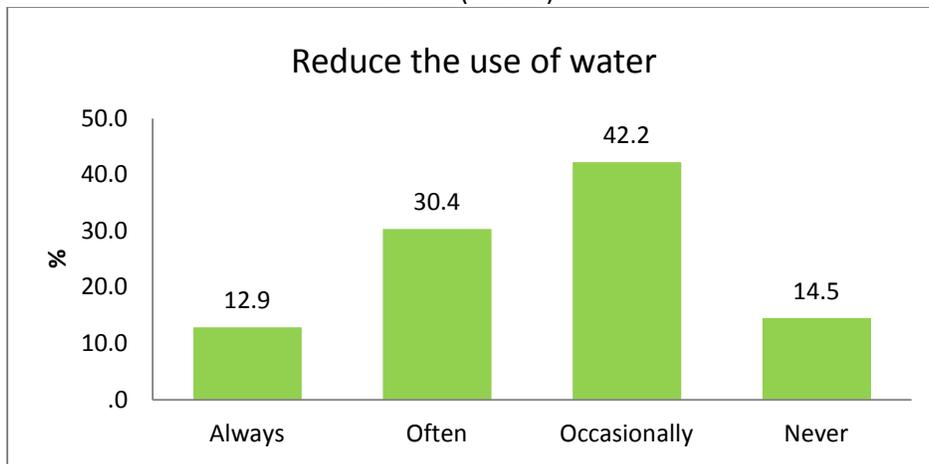


Figure C14 reveals one of the most challenging hurdles that Albright College will face for improving its sustainability. This assessment has shown that water usage has steadily been rising and is the most unsustainable practice at Albright. One reason water consumption is so high is because of the ways students use the resource. According to survey results, over 55% of incoming freshmen give little thought to their use of water. If Albright is to be successful in reducing water consumption on campus, a campaign aimed at students is needed.

Figure C14. Percentage of respondents indicating the frequency with which they reduce the use of water (N=372).



Figures C15 and C16 explore energy efficient behaviors associated with reducing the use of air conditioning in the summer and heat in the winter. In general both figures show that the majority of incoming freshmen do not give much thought to energy savings through reducing the use of air-conditioning and heating. This is an important behavior for Albright students as many of the residence halls are currently inefficient in terms of heating and cooling, which often leads students to run air conditioning units at inappropriate times of the year. This is another example of an area where Albright will need a sustained information campaign to reduce the inappropriate use of heating and air conditioning.

Figure C15. Percentage of respondents indicating the frequency with which they reduce the use of air conditioning in the summer (N=375).

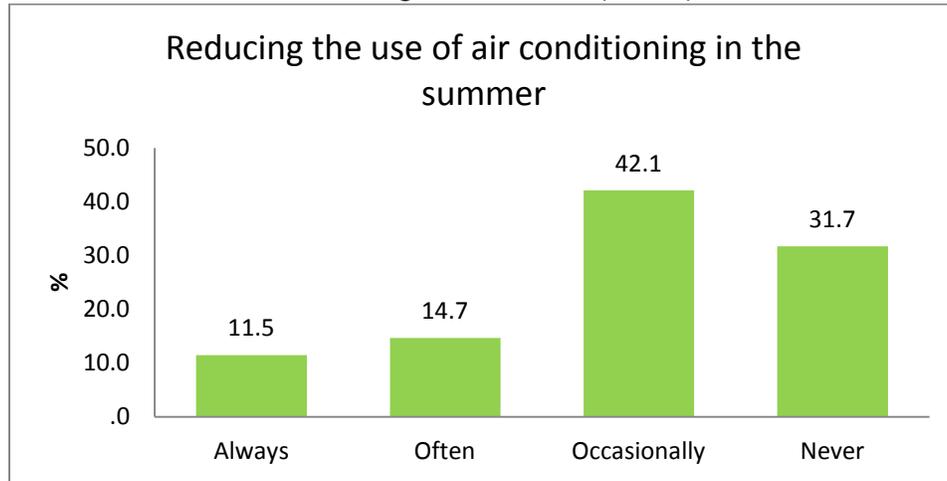
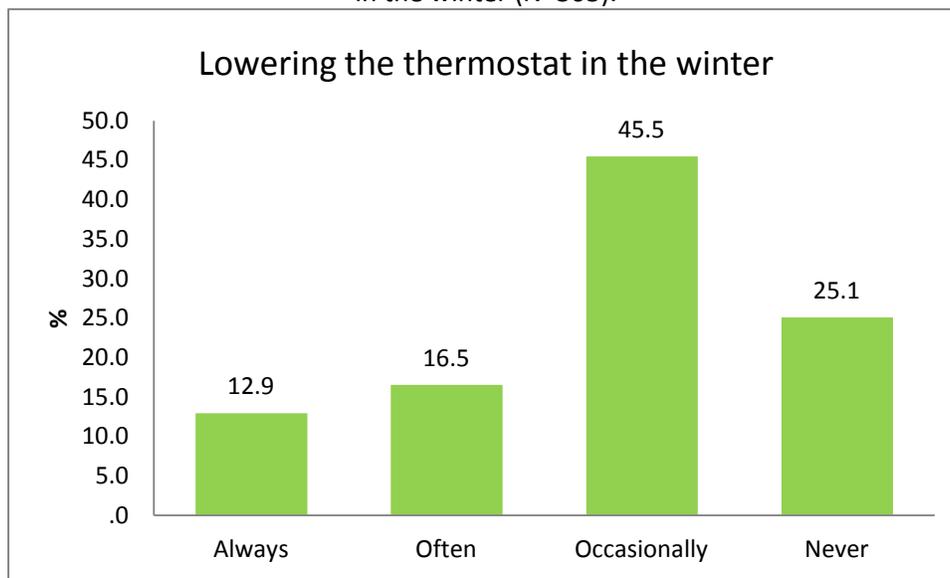


Figure C16. Percentage of respondents indicating the frequency with which they lower the thermostat in the winter (N=363).



The next two figures (C17 and C18) deal with food related sustainable behavior. Food related sustainable behavior appears to be an area that is not given much consideration by incoming Albright students. Very few respondents reported frequently buying or eating local or organic foods (Figure C17). Even more troubling is the fact that 36% of respondents reported always or often having food remaining on their plate when finishing a meal (Figure C18). This is troubling because of the buffet style

meals they will be served during their time at Albright. Buffets will often lead individuals who do not give immediate thought to their food choices taking more than is needed, which creates food waste.

Figure C17. Percentage of respondents indicating the frequency with which they buy or eat organic or local food (N=373).

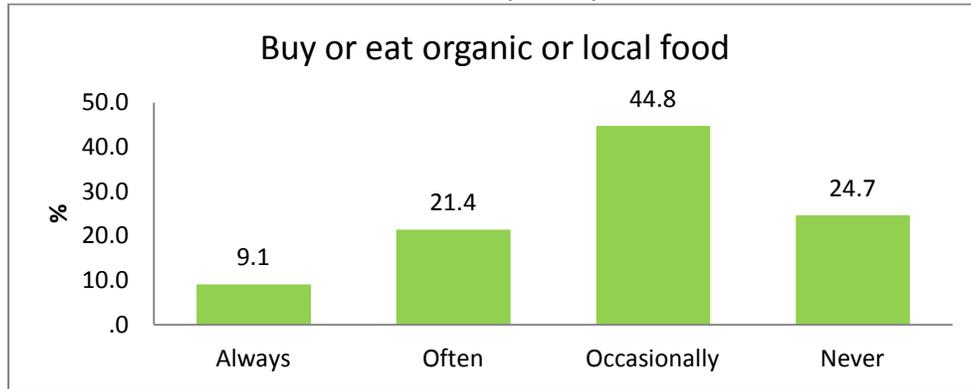
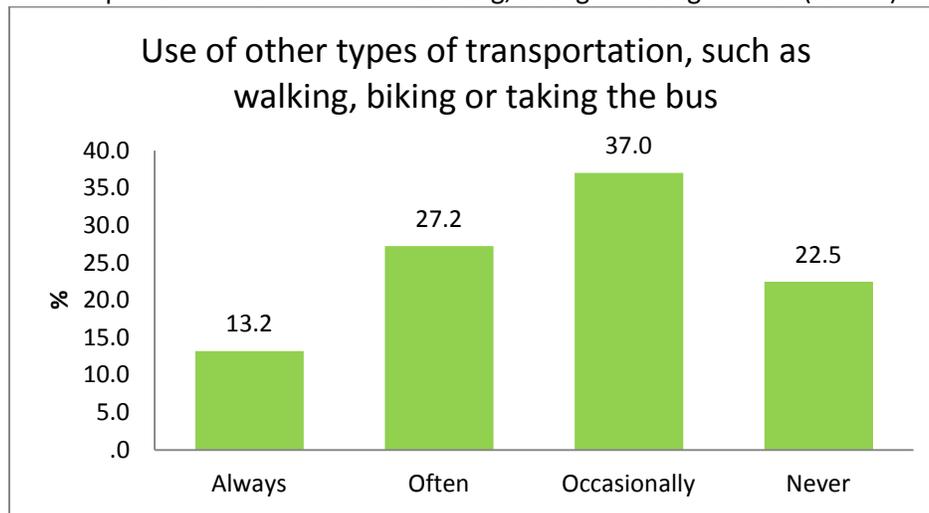


Figure C18. Percentage of respondents indicating the frequency with which they have food left over on their plate following meals (N=375).



The final behavioral figure explores the use of alternative transportation (other than cars). Not surprisingly, nearly 60% of respondents reported only occasionally or never using alternative transportation. This statistic may be able to be improved through the incorporation of a bike sharing program on campus that would reduce the amount of students who are driving from the Woods apartments to their classes and meals on campus.

Figure C19. Percentage of respondents indicating the frequency with which they use alternative transportation sources such as walking, biking or taking the bus (N=378).



Environmental Worldview Assessment

The assessment of the incoming freshmen’s environmental worldview was measured using the revised New Ecological Paradigm (NEP)[§], which is a well established tool for the assessment of a person’s worldview along a continuum from human centered (anthropocentric) to a view that incorporates the knowledge that the world is finite. The revised NEP is composed of 15 statement requiring respondents to answer on a five point scale (strongly disagree, somewhat disagree, neither agree nor disagree, somewhat agree and strongly agree). Table C2 shows the 15 statements used in the subsequent analysis.

[§] Dunlap, R. E., Van Liere, K. D., Mertig, A. G., & Jones, R. E. (2000). Measuring endorsement of the new environmental paradigm: A revised NEP scale. *Journal of Social Issues*, 56, 425-442.

Table C2. The New Ecological Paradigm statements used in the assessment of environmental worldview.

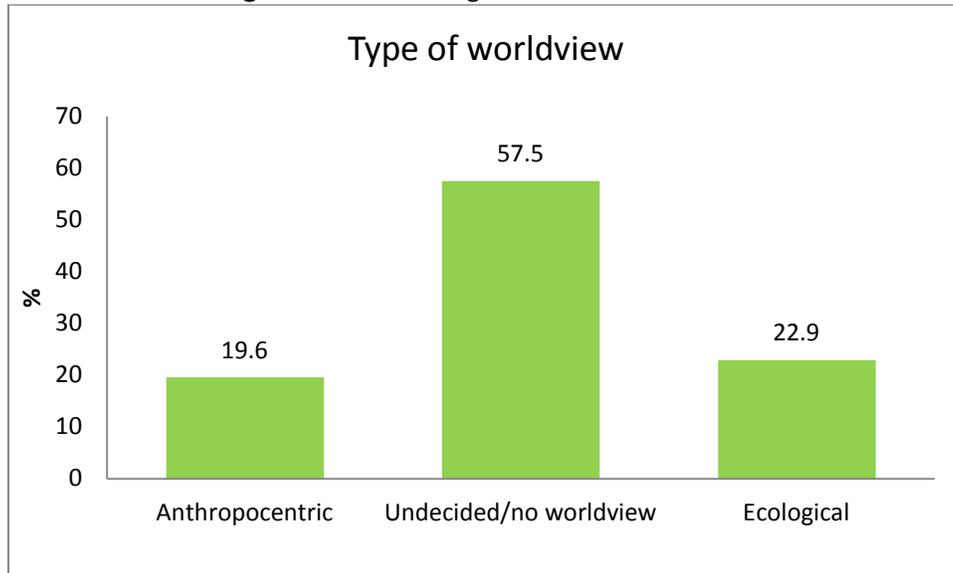
Revised New Ecological Paradigm
We are approaching the limit of the number of people the earth can support.
Humans have the right to modify the natural environment to suit their needs.
When humans interfere with nature it often produces disastrous consequences.
Human ingenuity will insure that we do NOT make the earth unlivable.
Humans are severely abusing the environment.
The earth has plenty of natural resources if we just learn how to develop them.
Plants and animals have as much right as humans to exist.
The balance of nature is strong enough to cope with the impacts of modern industrial nations.
Despite our special abilities humans are still subject to the laws of nature.
The so-called 'ecological crisis' facing humankind has been greatly exaggerated.
The earth is like a spaceship with very limited room and resources.
Humans were meant to rule over the rest of nature.
The balance of nature is very delicate and easily upset.
Humans will eventually learn enough about how nature works to be able to control it.
If things continue on their present course, we will soon experience a major ecological catastrophe.

The following analysis summated the answers to all of the questions (with the even number questions reversed coded) as a unidimensional concept. The Chronbach's alpha for the scale was appropriate at .75. The overall mean for all statements was 3.3, which is lower than the vast majority of other studies using the same measurement procedure **. Figure C20 examines the worldviews possessed by incoming freshmen to Albright. These three worldviews were determined based on an individual's score on the composite index. Students who scored less than 45 are considered to have an anthropocentric worldview, while students who scored between 45 and 55 are categorized as having not yet formed any opinion on the items and therefore have no real worldview. Finally, students who scored greater than 55 are considered to have an ecological worldview in that they understand the relationship between humans and a finite planet. As figure C20 shows the majority of students (57.5%) have not yet developed any real worldview. The remainder of the students are relatively evenly split between ecological and anthropological worldviews. This finding shows the importance of environmental education at Albright. As a liberal arts college it is important to ensure that our students

** Hawcroft, L. & Milfont, T. (2010). The use (and abuse) of the new environmental paradigm scale over the last 30 years: A meta-analysis. *Journal of Environmental Psychology*, 30, 143-158.

understand the connections between the natural world and their own existence. The overall goal of this research is to reassess students' worldviews in their senior year to determine what effect an Albright education has on the development of an ecological worldview.

Figure C20. Incoming freshmen worldviews.



APPENDIX D: GREEN FUND PROPOSAL

Albright College Green Fund Proposal

Background and Motivation

As an institution of higher education, we are poised to play a leading role in helping students understand the complex connections and interdependencies between the environment and social responsibility. Campus sustainability is an excellent theme for inspiring and educating the scholar and leader in each student, and engaging students in every aspect of this multi-faceted opportunity is an obligation that can no longer be ignored. Albright students are demanding action and are ready for their college to enable them to lead the way to a sustainable future^{††}.

The Committee for Sustainability and Stewardship (CSS) formally requests a \$20,000 budget to implement the **Albright Green Fund** program. The fund will provide grants, advice and support to students for projects that promote sustainability on campus and provide short-and long term cost savings to the College. This fund is the next step in Albright's commitment to sustainability and brings sustainability to the doorsteps of students; allowing us to actively engage this money to shape the sustainable future of our students and the Albright Community.

Goals and their purposes

^{††} Students in the Environmental Studies Senior Seminar recently conducted a random survey of students living in Albright's residence halls and found that 68% of the 229 respondents indicated they believed that Albright should "definitely" pursue green and environmentally friendly initiatives, while only 3.5% indicated no support for these types of initiatives. Moreover, approximately 95% of students sampled indicated they would be "definitely" or "somewhat" be willing to change their behaviors based on future green and environmentally friendly initiatives. Finally, more than 75% of student respondents indicated that it was either somewhat or very important to them that Albright conserve energy. In an open ended question asking, "Is there anything you would like to see Albright College do to make the campus more sustainable?", the most common answer provided related to the purchasing of renewable energy. It is clear from this recent student survey that students are interested in furthering campus sustainability and would support the proposed Albright Green Fund program.

The goal of the Albright Green Fund would be to provide a source of funding for students who are interested in implementing on-campus projects related to sustainability as well as provide the CSS with a small operating budget. This goal would serve the following purposes:

- The first, and most important, would be to engage students in motivated inquiry of sustainability issues that directly impact our campus and the community. These grants would require students to develop specific proposals that include a description of the goals and outcomes of the project, a description of how the project fits into Albright's Sustainability Plan, a detailed budget for how the money would be spent, future carrying costs, etc.
- The second purpose is to provide a mechanism for funding projects that may not provide short term economically benefits to the college, but do provide environmental and social benefits to the College and the community. This purpose seeks to make sure that all aspects of projects are given due consideration, especially ones that have large non-economic benefits for the College and the community.
- The third purpose is to provide a small budget for CSS operating costs and assessment of the Albright College Sustainability Plan. At no time will the sustainability plan assessment and CSS operating budget exceed 25% of the yearly total allocated budget, with the exception of assessments and projects coordinated with any year-end unused monies.

Topics for Project Proposals

Possible examples of student proposals may include but are not limited to:

- Improved recycling and composting systems: more and better located bins and more publicity
- Energy efficiency upgrades: motion sensors for lighting, LED lamps and lights
- Energy efficient exercise equipment
- Shower Minders- tracking shower water usage in bathrooms
- Real-time energy monitoring equipment in residential halls
- Designing, implementing, and tracking the outcomes of residence hall sustainability competitions
- Reduced use of bottled water and water refilling stations
- Bike sharing programs
- Green roofs
- Community gardens

Allocation of project funds

The awards will be allocated by a subcommittee of the CSS, which will judge project proposals by their relevancy, impact and financial viability. This subcommittee ideally would consist of 3 students (SGA representative, ECO representative and an at large member), a faculty representative, a facilities representative and the chair of the CSS. As with all programs that require a yearly budget, the Green Fund program would evaluate the success, or lack thereof, each year. Associated with this assessment would be an evaluation of the economic, social and environmental impacts on sustainability from the types of projects proposed and accepted.

Outcomes and Significance

The main purpose of this fund is to put a strong emphasis on student involvement in campus sustainability. Furthermore, finding the answers to campus sustainability questions will develop critical thinking skills, may involve a multidisciplinary approach, and could lead to extended student research projects, honors theses, and community-based research. Moreover, these funds could be used in conjunction with ACRE projects, which would further enhance that program as well.

In all, it is the CSS's belief that this proposal would provide a mechanism for Albright to further its institutional goal of increasing sustainability while maintaining the student centered approach that has come to be a hallmark of our institution. We believe all parties, especially students, would benefit from the Albright Green Fund program.