College House RA/GA Sustainable Living Manual

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Abstract
The University of Pennsylvania's Green Campus Partnership is the umbrella department for all sustainability initiatives on campus; developed once Penn President Amy Gutmann signed the American College and University Presidents' Climate Commitment and planted the seeds for the University's Climate Action Plan. Through established student outreach programs similar to those at peer institutions, the University's undergraduate population has the opportunity to learn about environmental issues and encouraged actions. The Resident Advisor or Graduate Associate position in the College Houses is a critical leadership role to provide model engagement with students who are building independent lifestyle choices. As an explanatory tool of resources at the University, the creative College House RA/GA Sustainable Living Manual provides a refreshing educational component for training, unique amongst peer institutions, which can be valuable for guiding residents towards lessening their environmental footprints, and living closer to zero-impact.

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SUSTAINABLE LIVING MANUAL
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ABSTRACT

“COLLEGE HOUSE RA/GA SUSTAINABLE LIVING MANUAL”

Marissa Rosen
Daniel Garofalo

The University of Pennsylvania’s Green Campus Partnership is the umbrella department for all sustainability initiatives on campus; developed once Penn President Amy Gutmann signed the American College and University Presidents' Climate Commitment and planted the seeds for the University’s Climate Action Plan. Through established student outreach programs similar to those at peer institutions, the University’s undergraduate population has the opportunity to learn about environmental issues and encouraged actions. The Resident Advisor or Graduate Associate position in the College Houses is a critical leadership role to provide model engagement with students who are building independent lifestyle choices. As an explanatory tool of resources at the University, the creative College House RA/GA Sustainable Living Manual provides a refreshing educational component for training, unique amongst peer institutions, which can be valuable for guiding residents towards lessening their environmental footprints, and living closer to zero-impact.
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Background to Sustainability in Higher Education

Practical education through hands-on training in residential systems of higher education is imperative for students to comprehend environmentally sustainable lifestyle tactics, and to aid in the formation of these habits at the initial point of independent living. Daily regimes established during the years of college or university attendance have the potential to impact a student’s actions through the years of adulthood, and potentially into guiding years of parenthood.

Monumental documents of sustainability regulation in higher education shaped the foundation of university policies and academics in recent decades. The Stockholm Declaration of 1972 was the first international political pact on the “human environment” which exclaimed that “education in environmental matters, for the younger generation as well as adults… is essential in order to broaden the basis for an enlightened opinion and responsible conduct by individuals, enterprises and communities.” This Declaration resulted in the formation of the United Nations Environmental Program (UNEP.org).

The Tbilisi Declaration recognized the need to develop initiatives for sustainability with faculty, students and support staff with an international approach. These sentiments first became widely understood during the powerful emergence of the environmental movement, when in 1977, UNESCO-UNEP stated “Environmental education… is necessary for students in all fields… because the relationship between nature, technology, and society mark and determine the development of a society” (Calder, 2002, p.2).

The international Talloires Declaration was created by the intercontinental
Association of University Leaders for a Sustainable Future in 1990 at a conference in Talloires, France. This ten-point action plan was the first official statement made by university administrators of a commitment to environmental sustainability in higher education, and has been signed by over 350 university presidents and chancellors in over 40 countries. The rationale of the declaration is: “we believe that the success of higher education in the twenty-first century will be judged by our ability to put forward a bold agenda that makes sustainability and the environment a cornerstone of academic practice” (ULSF, 2008).

The Rio de Janeiro Earth Summit’s 9th Round Table meeting issued a call to action to its 650 university members, and the 1993 Kyoto Declaration declared “Education [should achieve] ethical awareness and [promote] behavior consistent with the sustainable use of natural resources and sustainable development,” (IISD, web). Further significant higher education legislative documents are highlighted in Table 1 (Wright, ULSF).

<table>
<thead>
<tr>
<th>YEAR</th>
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<tbody>
<tr>
<td>1972</td>
<td>The Stockholm Declaration On The Human Environment</td>
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<td>1977</td>
<td>Tbilisi Declaration</td>
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<td>1990</td>
<td>University Presidents for a Sustainable Future: The Talloires Declaration</td>
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<td>1991</td>
<td>The Halifax Declaration</td>
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<td>1993</td>
<td>Ninth International Association of Universities Round Table: The Kyoto Declaration</td>
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<td>1993</td>
<td>Association of Commonwealth Universities' Fifteenth Quinquennial Conference: Swansea Declaration</td>
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<td>1994</td>
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University of Pennsylvania’s Green Campus Partnership

The Green Campus Partnership (GCP) was unveiled at Penn in 2007 to plan for sustainability on campus by developing policies and coordinating outreach programs. The GCP is comprised of Facilities and Real Estate Services, Business Services, and the Environmental Sustainability Advisory Committee (ESAC) as well as faculty and student groups, including the Penn Environmental Group (PEG) which was founded in 1971. The GCP now is the umbrella group to all environmental-related events and organizations on campus, and strives to raise awareness through research and practice.

“You don’t have to wait until you graduate to determine the kind of future you want to see. If Penn is to set the standard for how communities meet environmental challenges, it will be because you decide that it matters enough to change the way we act,” Penn Sustainability Coordinator Dan Garofalo stated in the opening of the Student Eco-Reps Manual. One cornerstone group of the GCP is Penn’s Eco-Reps program, a leadership-based organization which focuses on raising awareness of environmental issues and strengthening positive behaviors of students, faculty, and staff. Student Eco-Reps have active representation in the College Houses, Green Houses, Hillel, and Athletics, thus a wide catchment of the student population can be impacted by these green leaders. Penn’s Student Eco-Rep program, founded in 2009, is one of the largest programs of its type in the United States, and it continues to grow annually.

The Student Sustainability Alliance at Penn (SSAP) is the umbrella group for student environmental organizations on campus, and currently includes 15
members clubs such as PennCycle, PennSolar, Penn Vegan Society, and others. SSAP started in 2010 to foster partnership between the rising number of green groups on campus which “were competing for members.” (M. Roberts, Co-Director). All student environmental groups are encouraged to send a representative to the monthly SSAP meeting who can relay the news and information to peers within their respective groups, and garner further involvement in the individual groups’ events.

In addition to student outreach through the Eco-Rep program or SSAP member organizations, the GCP is coordinates the Green Fund Grant, Green Office and Green Dorm Room Certifications, sponsors events such as Move-In Green, the Power Down Challenge, and RecycleMania, and contains a wealth of documents and sustainability information on its website platform. All of these unique outreach tactics can foster student involvement and peer-to-peer education around environmental causes and sustainable living on campus.

**American College and University Presidents’ Climate Commitment**

The American College & University Presidents’ Climate Commitment (ACUPCC) is a highly-visible effort to address global climate change in colleges and universities, where institutions commit to incrementally eliminating net greenhouse gas emissions and promoting research efforts to re-stabilize the earth’s climate. Its mission is to “accelerate progress towards climate neutrality and sustainability by empowering the higher education sector,” (ACUPCC, website). On February 13, 2007, Penn became the first Ivy League institution to sign the document, and President Amy Gutmann declared:
“I am proud to sign on and promote higher education as a leader in addressing global climate change through research, education and reduction of greenhouse gas emissions. At Penn, we must recognize the impact of a research institution of our size and acknowledge that our actions extend beyond our campus and have global consequences.” (Climate Action Plan, 2009).

The ACUPCC says that “colleges and universities must exercise leadership in their communities and throughout society,” and it is therefore important that students leave their institutions with a solid understanding of today’s global climate change issues, and the knowledge and dedication to strive to work to change the pattern. After signing the Commitment, all institutions are required to produce an individual University-specific Climate Action Plan.

University of Pennsylvania’s Climate Action Plan

The initial Climate Action Plan was written over the course of two years by the Environmental Sustainability Advisory Committee and released in 2009 with benchmark goals for 2014. The recommendations of the *Climate Action Plan* are organized into six themes, with target goals assigned in each category:

1. Utilities and Operations
2. Physical Environment
3. Waste Minimization and Recycling
4. Transportation
5. Academics
6. Communications

Many positive changes have taken place on Penn’s campus since the release of the initial Climate Action Plan, including but not limited to: composting food waste in campus dining halls, the initiation of the Green Fund Grant and launching of the Eco-Reps program, the establishment of an undergraduate
minor in Sustainability and Environmental Management, the opening of Penn’s first LEED Gold building, the granting of Climate Action research awards, the expansion of Penn’s recycling options to include plastics 1-7, and more.

The ACUPCC committed Penn to developing plans for the long-term reduction of its emissions of climate-altering greenhouse gases. The graph below shows the total emissions from Penn for fiscal year 2007 through 2011. While the total level was highest in 2011 at 294,209 MTCDE, renewable energy credits purchased through wind power balanced the portfolio to be at net-zero increase in emissions over four years (Climate Action Plan, Progress Report, 2011).

“Penn is setting precedents for how a living and learning environment can respond to global climate change,” President Amy Gutmann stated in the Progress Report. This report shows that the University has excelled in some
areas, while other areas require extra attention moving forward. Penn identified the 2042 as the goal year to achieve climate neutrality, and moving forward, the University’s main strategies include capital investment, teaching behavior change, improved low-carbon energy sourcing, and the purchasing of renewable energy credits and offsets (Climate Action Plan, 2009).

Comparative University Sustainability Initiatives

Many higher education campuses, including Penn’s peers in the Ivy League, now have a department dedicated to sustainability initiatives. Most of these universities have a website similar to that of Penn’s GCP, which showcase prominent documents or manuals that highlight sustainability efforts to the public.

- Brown University published a unique Virtual Green Room tour on their “Brown is Green (BiG)” website highlighting potential sustainability steps.
- Cornell University’s Sustainable Campus department created a manual titled “One small Act, One big Impact” to demonstrate responsible living.
- Dartmouth College’s creative hand-drawn website format brings original design to thought-provoking information as it answers “What can I do?” through clickable interactive webpages.
- Columbia University has a traditional, informative webpage on their Housing website that explains sustainability initiatives in which students are encouraged to participate while living on campus; Columbia produced a basic text-only online “Guide to Green Living at Columbia” too.
Yale’s “Imagine Sustainability” brochure is not a comprehensive manual but is a concise overview of the importance of green practices on campus; Yale, like Penn, also offers many sharable posters online and various links to academic research on sustainability to advertise ways to be involved.

- Harvard has an extensive sustainability website, but focuses on web pages for information, rather than sharing a manual from which to learn.


The Ivy League universities all promote a green campus and student involvement, but none yet have a specific RA/GA Manual for Sustainable Living on their main campus sustainability website.

Some non-Ivy American institutions really stand out with new sustainable leadership programs, such as the University of Colorado at Boulder which offers an intensive three-day course on fostering sustainable behavior with community-based social marketing. Portland State University in Oregon has an urban campus that is a “living laboratory for green practices”, where students don’t just read about sustainability but plant green roofs, test solar arrays, track transportation systems, and more. Also at Portland State, freshmen can choose a year-long Living-Learning community option, where students live together on campus and participate in group sustainability projects throughout the year.

**External Campus Environmental Organizations**

Numerous associations now exist in America and internationally, whose sole purpose is to increase campus recognition and involvement in sustainability
issues. Each group has a unique mission which ultimately results in strengthened environmental learning by students and campus residents.

The College and University Recycling Coalition (CURC) is a membership-based non-profit organization that facilitates the exchange of best practices on waste reduction and recycling programs by 900 members who are program managers, student interns and others involved with promoting waste reduction on college campuses. CURC created a webinar series sponsored by AASHE and other groups to inform campus leaders on “management such as material collections and processing, education and promotion and procurement,” (2012).

The Association for the Advancement of Sustainability in Higher Education created a STARS rating program in 2009 for the purpose of campus recognition for sustainability leadership. “Housing and residence life departments play an important role in advancing campus sustainability and can contribute to achieving several STARS credits” (AASHE, 2010). There are currently 210 colleges and universities participating in this certification program, one of which is not Penn.

Non-profit organizations like Second Nature are creating a powerful shift in the landscape of sustainability in academics. Second Nature believes that in order for “society to move in a sustainable direction, higher education must develop a new framework in which the sector and individual institutions operate as fully integrated communities.” The organization coordinates the Higher Education Associations Sustainability Consortium, an information-sharing and co-learning network. Second Nature also launched the “Advancing Green
Building in Higher Education program; and works with hundreds of colleges and universities, creating individualized sustainability plans (Second Nature, 2011).

**Building Sustainable Living Communities at Penn**

Four years ago, a National Wildlife Federation survey found that sustainability-related academics at colleges and universities across America declined since 2001; just over half of colleges and universities offered either an undergraduate major or minor in environmental studies. However, in 2008, the cost effectiveness of sustainability improvements was a much stronger motivator than it was in 2001. This revelation points to the need for education to occur not only in the classroom, but in college students’ daily living spaces as well. The Penn College Houses can be a prime location to casually or formally raise sustainability discussion, create green events, and remind residents of best environmentally-friendly practices. The NWF “Campus Environment 2008: A National Report Card” evaluated the sustainability practices at 1,068 universities in the United States, rating each school according to a report card including 18 criteria. The University of Pennsylvania rated “exemplary” for its transportation program (p. 63) and green landscaping (p. 68).

According to the College Sustainability Report Card of 2011, produced by the Sustainable Endowments Institute, Penn received an “A-minus” overall, with a “D” in transparency and an “A” in the remaining topics. Out of the 300 schools surveyed for the report, five Ivy League schools made the top 15: Brown, Columbia, Dartmouth, Harvard, and Penn (Environmental Leader, 2008). Penn is
known for being a leader in many realms of academics, and the University strives to continue this trend with programs and initiatives from the GCP.

**RA/GA Role in the Department of College Houses and Academic Services**

There are eleven individual undergraduate College Houses and two graduate residence halls at the University of Pennsylvania, each with a unique population makeup, staff size and roles, building capacity and layout, and program culture. In total 6,600 bed spaces encompass the on-campus housing units, which is approximately 66% of all freshmen through senior students. The Resident Advisors (RA) and Graduate Associates (GA) in each House are responsible for social and educational programming for the students on their floor or hall, so naturally, this is an opportunistic time to guide meaningful sustainable living education in practice. The RA or GA of each College House has a role of planning activities and assisting “students with a wide range of issues. They also serve as academic mentors and guides to campus resources.” (College House and Academic Services, 2012-2013 Brochure).

As a part of compensation for the RA/GA role in the College Houses, each staff member is awarded a meal plan for the dining halls. Most College House Deans encourage RA/GA staff to dine with their hall residents, and this can be a perfect learning opportunity, as our food service management company Bon Appétit uniquely positions itself as a sustainable supplier. “Bon Appétit was the first food service company to address the issues related to where our food comes from and how it is grown. We are still the largest restaurant company with such a
high level of commitment to socially responsible practices.” Initiatives from Bon Appetit have included antibiotic reduction, cage-free shell eggs, trans-fat free oils, mercury awareness, food waste reduction, and fair trade chocolate, amongst many others. The company has won numerous prestigious awards including Ecological Society of America Corporate Award, the Humane Society of the United States Excellence in Food Service Award, and the Food Alliance Keeper of the Vision Award. Education around food is just one of many favorable occasions when College House staff can encourage green behavior change.

The RA/GA Sustainable Living Manual will include a “top ten” list for incorporating further green living practices into House programming, as well as an appendix resource guide of Penn-specific opportunities to which staff can and should alert their residents.

Advice of Campus Organizations & Published Green Dorm Guides

While not too many RA/GA-specific guides exist, there are numerous paper and online sustainability manuals which have been published by environmental businesses and non-profits for green dorm living.

A well-renowned green resource, Treehugger, states “Your dorm room is your castle, while you're at school, at least, so there's no better time to learn some green lessons that you can apply to living the rest of your green life,” (2008). This site gives green shopping advice, suggests books on green campus living, and shares a top ten tips list for incorporating sustainability into the dorm room. Top ten lists are an easily digestible and logical format for such
information, and the University of Pennsylvania RA/GA Sustainable Living Guide will have a similar final format.

“The Green Dorm Room” is a short recommendation book written by university student Lily Berthold-Bond. Her advised college living “Shopping List” includes items such as 100% natural or organic cotton, wool, or bamboo sheets and pillows, stainless steel travel mugs, water filter for sink tap, chemical-free dish soap and laundry detergent, TV and computer that meet or exceed Energy Star ratings, non-toxic air freshener, recycled content notebooks, pens, pencils, and remanufactured ink cartridges. She wittily states “you can be green in college without fitting to the stereotype of “green” (p.5).

**Necessity of RA/GA Sustainability Guide**

According to Herman Miller, “colleges and universities in the U.S. teach approximately 14.5 million students each year; these citizens and future leaders will play a critical role in helping move to a more sustainable future” (2005, p. 2). As the issue of global climate change appears more critical with each generation, or even each decade, it is necessary to educate the “future global citizens” to question the status quo and consider eco-friendly alternatives daily.

A study at the New York University Office of Sustainability compared similar American campuses of higher education, and examined their individual green grant programs. The percentage of eligible campus members who submitted applications at the University of Pennsylvania was .05%, compared to .26% at NYU. While parameters of the analysis, including funds and grants
available, vary greatly, this is an indicator that student leaders at Penn could be more invested (Seaward, 2011). There are educational opportunities abound in Penn’s College Houses, and the RA/GA Sustainable Living Manual will include a robust quantity of specific engagement points for conversation to spark action.

Contents for Penn RA/GA Sustainability Guide

This creative capstone project is the following 20-page easy-to-read print and online manual, designed to highlight simple steps that Resident Advisor and Graduate Associate staff can take while leading the University of Pennsylvania undergraduates through their daily lifestyle choices in the College House system.

The University’s Green Campus Partnership intends to develop this Capstone project and publish it for future use by Penn’s College House Staff.
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