

Category 1: Energy Supply

1. Please break down the energy types that your campus uses for electricity by percentage. If the school purchases its electricity from a utility company, this information should be available from that company.

52.9% Coal
0% Wind
0% Biomass
8.4% Natural Gas
0% Solar
0% Geothermal
35.4% Nuclear
1.1% Hydro
1.3%
0.4% Other

Swarthmore College purchases wind credits from our electricity supplier (PECO, an Exelon Company) equal to 42% of its kilowatt hour use per year. This purchase provides a substantial contribution of credits toward the College's joint effort with the neighboring Swarthmore Borough to participate in the EPA's Green Power Partnership, enabling our community to be listed as the only Green Power Community on the east coast. Additionally our 42% wind credit purchase enables us to be listed on the EPA's Green Power Leadership Club.

2. What type(s) of energy does your campus use for heating buildings (e.g., natural gas, biomass, coal)?

0% Coal
0% Biomass
90% Natural Gas
0% Geothermal
0% Electricity
10% Fuel Oil

If cogeneration, please explain.

Category 2: Efficiency

1. What percentage of campus buildings completed within the past three years have a LEED certification of at least silver?

_____ %

Note whether the certification is higher than silver.

Swarthmore College has completed 2 buildings in the past three academic years. The Wister Education Center and Greenhouse was recently completed and is currently under review for LEED silver certification. In 2008 Kemp Residence Hall was completed to LEED standards; the College elected to not seek certification and instead dedicated the money that would have been spent on pursuing certification toward installing a green roof on the building.

2. What percentage of water used for campus landscaping is from recovered, reclaimed, or untreated sources?

70%

3. What percentage of campus lighting fixtures are energy-efficient (e.g., compact fluorescent, LED, or equipped with motion sensors, automatic daylight shutoff, or other energy-saving features)?

30%

4. What percentage of campus appliances are Energy Star-rated?

20%

5. Does the institution have underway a program of energy-efficiency retrofitting projects, such as improving building insulation or sealing heating and cooling ducts? Swarthmore College is developing a sustainability plan which will include a host of retrofit guidelines. We are currently instituting a program of lighting retrofits.

Category 3: Food

1. What percentage (in dollars) of food served at cafeterias is grown or raised within 100 miles of the campus?

28%

2. What percentage (in dollars) of food served at campus cafeterias is USDA-certified organic?

5%

3. Do campus cafeterias source seafood that is deemed sustainable by the Marine Stewardship Council, the Monterey Bay Aquarium's Seafood Watch Program, or a similar program?

Occasionally.

4. What percentage of entrées served in campus dining locations include meat? If the meat is produced sustainably (for example, free-range or grass-fed), explain.

20%

5. Are nutritionally complete vegetarian and/or vegan options available at every meal? Yes, nutritionally complete vegetarian and vegan entrees are available at every meal.

6. Is bottled water sold or distributed on campus?

A minimal amount of bottled water is sold on campus, but it is discouraged. Swarthmore

College provides coolers of water and paper cups at major events, water is provided in carafes at meetings and bag lunches no longer have bottled water provided. Thanks to these initiatives the College has cut its purchases of bottled water by 90%.

7. Does your school maintain a campus farm or garden? Does it use organic methods? Please describe the garden and methods used.

The student-run Good Foods Project has a garden that it maintains with organic practices; Dining Services maintains an herb garden with organic practices. The Scott Arboretum of Swarthmore College maintains community garden for members of the surrounding community who each make their own choices about garden management practices.

Category 4: Academics

1. Does your school offer any environmental- and/or sustainability-related majors, such as environmental studies, ecology, or sustainable agriculture? If so, please list them all. Swarthmore College offers a special interdisciplinary major in environmental science and students pursuing a B.S. in engineering may elect to focus their studies on civil and environmental engineering.

2. Does your school offer classes about clean technologies, including topics such as energy efficiency and solar-wind energy engineering? If so, please list them all.

Engineering 035. Solar Energy Systems

Engineering 063. Water Quality and Pollution Control

Engineering 066. Environmental Systems

3. Does your school provide students with a list of environmental and/or sustainability classes to make such courses easy to identify? Please provide a link, if available.

The Swarthmore College sustainability Web site

[<http://www.swarthmore.edu/sustainability>] features courses that are offered on environmental topics including energy, food, green building, natural environment, policy and social action, transportation, waste management, and water.

4. Please provide names of standout professors who work on environmental and/or sustainability issues and list their accomplishments, including awards, honors, and publications.

E. Carr Everbach, professor of engineering, is currently surveying members of several local communities to measure and understand energy use in our region. The goal of this research project is to identify ways in which our communities can reduce energy consumption and greenhouse gas emissions and improve livability and economic viability. This research is funded by a grant from the Department of Environmental Protection's Local Government Greenhouse Gas Pilot Grant Program

Jose-Luis Machado, associate professor of biology, is an expert in plant physiological ecology at the organism, population, and community level. His research focuses on

understanding the processes controlling the structure and dynamics of temperate and tropical forest communities. His research requires a broad understanding of ecological processes such as carbon, water, and nutrient cycling, light use, above and belowground productivity, biodiversity, and their associated feedback mechanisms. His most recent curricular grant came from the National Science Foundation, Course, Curriculum, and Laboratory Improvement (CCLI) for a project titled *Stoichiometry of the soil-plant-atmosphere continuum: a long-term ecological field-based curriculum for biology undergraduates*. It is supporting a long-term field study demonstrating the mechanistic and experimental nature of ecological science in which undergraduates can engage at all levels of instruction, from freshman to senior year. The setting for this research is the Crum Woods, a tract of 236 forested acres (95 ha) adjacent to the College. Professor Machado is leading students researchers as they investigate the balance of multiple chemical elements, and their influence on distribution and productivity of plant populations, community structure, and ecosystem functions and services.

Mark Wallace, professor of religion describes his research and writing as "an exercise in the emerging field of religion and ecology." He is the author of *Finding God in the Singing River: Christianity, Spirit, Nature* (Fortress, 2005).

5. Do you have environment- and/or sustainability-related centers, programs, or research institutions associated with your school? If so, please provide their names and a description.

The Lang Center for Civic and Social Responsibility coordinates sustainability education and communication on Swarthmore's campus.

6. Is an environment-themed class a core curriculum requirement? If yes, please provide the name(s) of the course(s).

No, Swarthmore College does not have a core curriculum.

7. What percentage of academic departments offer environment- or sustainability-related classes?

41%

Category 5: Purchasing

1. Does your school have a sustainable-purchasing policy? If yes, briefly explain.
No.

2. What percentage of paper used on campus is made from at least 30% postconsumer recycled content?

All paper towels and toilet tissue used on campus are 100% postconsumer recycled content. 80% of paper used for photocopies is comprised of at least 30% postconsumer recycled content.

Does your school purchase paper that is Forest Stewardship Council-certified?

Yes, approximately 60-70% of the publications produced by the Communications Office are printed on FSC-certified paper. The publications that use the most paper, including the quarterly *Bulletin* (alumni magazine) and admissions view book are both printed on FSC-certified paper.

3. Does your school have a policy to purchase Electronic Product Environmental Assessment Tool (EPEAT)-certified (or similar) electronics? If yes, please describe.
No.

4. Do you have packaging agreements with suppliers that minimize waste? If yes, please describe.
No.

5. Does your school specify in its purchasing contracts that products with energy-saving features be installed or delivered with these features enabled?
No.

Category 6: Transportation

1. Does your school provide a free shuttle service around campus and town? If yes, briefly explain.

Yes. Swarthmore College offers free shuttle service to students on-campus, to local movie theaters, the local grocery store and Target, to our Tri-College Consortium partner campuses (Bryn Mawr College and Haverford College), and to the nearby cities of Chester, Pa. and Philadelphia. The campus is served by regional transit rail and bus services (SEPTA) and students taking courses at the University of Pennsylvania are provided free SEPTA transport for travel related to their class.

It is also important to note that the Swarthmore College campus is a pedestrian zone. Roads circle, but do not run through the campus and parking lots are limited to the perimeter of the campus.

2. What has your school done to promote bicycling as a transportation method?
Bike racks are conveniently located throughout the campus. The student council is currently exploring the feasibility of a bike share program.

3. Does your school encourage its students and employees to use public transit, carpool, or use some other form of alternative transportation? If yes, what are the incentives?

Swarthmore College participates in the SEPTA TransitCheck program that enables participants to purchase vouchers for public transportation with pre-tax wages. A train station and bus stops are on the edge of Swarthmore's campus.

4. Approximately what percentage of students drive to school in a car?
1%

5. Approximately what percentage of faculty and staff drive to work in a car?
90%

Category 7: Waste Management

1. What is your campus's current waste-diversion rate (i.e., percentage of campus waste being diverted from landfills)?

We do not have volume/weight for trash that gets collected, so we are not able to provide an exact waste-diversion percentage, we estimate the amount to be around 50%.

2. Does your campus provide recycling receptacles wherever there are trash cans?
Yes, recycling receptacles are provided alongside trash cans.

3. Are recycling bins readily available at large events such as football games?
Yes.

4. Does your school compost? If yes, are compost receptacles available at all or most on-campus dining locations?

Yes, all coffee bars and the dining hall have compost receptacles. Ecotainer cups, Greenware "plastic" cups, plates, containers, and napkins are recycled from compost bins in the coffee bars. Pre-consumer fruit and vegetable scraps as well as post-consumer fruit remnants are composted in Sharples Dining Hall. Compost is collected and sorted daily by student Compost Managers.

5. Is your school committed to waste-reduction goals, such as zero waste? Please explain.

A specific target has not yet been established.

6. Does your campus administer a donation program for clothing and other used goods when students are moving out of student housing? If so, are bins located in every dormitory?

Yes, *Trash To Treasure* [<http://www.swarthmore.edu/x26377.xml>] is an annual event in which students collect donated goods from every residence hall as students move out. The donations are then sold in a tag sale and the proceeds are donated to charity. Last year more than \$20,000 was donated to our local United Way chapter. Items not sold are also donated to local charities.

Category 8: Administration

1. Is environmental sustainability part of your institution's mission statement, guiding principles, or similar document? If so, please provide the text or link.

"Swarthmore students are expected to prepare themselves for full, balanced lives as individuals and as responsible citizens through exacting intellectual study supplemented by a varied program of sports and other extracurricular activities. The purpose of Swarthmore College is to make its students more valuable human beings and more

useful members of society. Although it shares this purpose with other educational institutions, each school, college, and university seeks to realize that purpose in its own way. Swarthmore seeks to help its students realize their fullest intellectual and personal potential combined with a deep sense of ethical and social concern.”

2. Does your school employ at least one person dedicated to overseeing campus environmental initiatives, such as a sustainability coordinator, or have a sustainability task force or committee? Is the coordinator position a part-time or full-time position? While an individual is not employed for this purpose, the dedicated members of Swarthmore’s Sustainability Committee [<http://www.swarthmore.edu/x21356.xml>] are charged with making recommendations to the President and to the College community regarding policies to promote environmental sustainability on campus. The focus of the Committee's work is to identify policies that promote the most efficient use of College resources, and to coordinate and consolidate sustainability efforts on campus.

3. Has your school made an official commitment to reducing its impact on climate change by setting goals of emission reductions by a certain date? If yes, does your school have a plan for achieving these reductions? If so, briefly explain the plan. No reduction target has been set.

4. Has your school conducted a complete greenhouse-gas-emissions audit of its campus?
Yes.

5. Has your school achieved a reduction in total annual carbon emissions? If yes, please explain and provide the benchmark year and percentage. Swarthmore College hasn’t set a benchmark, but efforts at the heat plant have reduced the carbon emissions at the plant by 29% from our all time high in 2004.

Category 9: Financial Investments

1. Is all information about your endowment fund publicly available? Briefly explain.

Information on the Swarthmore’s endowment investment policy, asset allocation, spending policy, and returns is in the College’s Annual Financial Report which is available online

[http://www.swarthmore.edu/Documents/administration/finance_investment_office/FinancialReport_08-09.pdf]. The College is restricted by the terms of our contracts with our investment managers from publically posting specific holdings. However, upon request, the Investment Office can let interested parties know if a specific company is held by the endowment. The list of companies is also shared with members of the Committee on Investor Responsibility.

2. Does your institution have an investment-responsibility committee that considers and acts on environmental issues?

The Committee on Investor Responsibility [<http://www.swarthmore.edu/x21996.xml>] is an advisory committee to the Investment Committee of the Board of Managers. It was

formed in 1997 as a result of student interest in investor responsibility. The committee's primary responsibility is making recommendations on voting shareholder resolutions in specific areas of interest such as environmental and labor issues.

3. Does your school make environmentally responsible investments? If so, briefly explain what they are and whether they're made on an ongoing basis.

The Swarthmore College endowment has several investments in companies pursuing environmental initiatives. For example, one of the College's venture capital investments is a fund which invests in start-up clean technology companies.

Category 10: Other Initiatives

1. Have any of your school's students effected positive environmental change on a campus, state, or national level? If so, please describe. (To nominate a specific student for greater attention in our coverage, please email cool.schools@sierraclub.org with his or her name, accomplishments, and contact information.)

Student initiatives often result in positive environmental changes on the Swarthmore Campus. A student campaign led to a significant increase in the amount of wind credits that the College purchases, students initiated and run the Good Foods Project garden and compost program, students also initiated and coordinate the annual Trash to Treasure sale of items donated by students moving out of residence halls at the end of the academic year, and within the last year the Student Council established a Renewing Fund for Resource Conservation to be used as a revolving green loan fund.

2. Have students participated in environmental challenges or events such as the Solar Decathlon, environmental design contests, or environmental debates? If so, which events and how did they do?

No.

3. Has your school set aside part of its campus as natural habitat, stipulated limited campus development, or enacted programs preserving its land? If so, please explain. The Crum Woods, which comprise approximately half of Swarthmore College's 399-acre campus, are preserved from development. The entire campus serves as the grounds of the Scott Arboretum at Swarthmore College.

4. Does your school adhere to an indoor air-quality policy (e.g., the mandated use of nontoxic cleaning supplies)? If yes, describe the policy.

The campus buildings provide a smoke-free workplace. At present, 95% of Swarthmore College cleaning supplies are green seal certified.

5. Does your school offer outdoor- or nature-based programs, classes, or extracurricular activities to students and/or faculty? If yes, please list and describe.

Yes, many courses make use of the Crum Woods as a laboratory; the Scott Arboretum regularly offers walks, classes, and workshops featuring the campus grounds; and extracurricular activities such as The Good Foods Project Garden, and the Cross Country teams make rich use of the College's grounds.

6. What specific actions has your school taken to improve its environmental sustainability since spring 2009? Please list all improvements.

In 2009, after a after a vote of the student body, the Student Council established a Renewing Fund for Resource Conservation. This fund will be used as a revolving green loan fund to support projects that will pay back loans with cost savings realized by taking environmentally conscious steps. Projects supported in the first year of the fund include:

Organic Lawn Care for 5 acres of lawn on the primary campus green.

Replacement of 6-watt decorative lamps in the architectural light fixtures in Sharples Dining Hall with 1.9-watt LED lamps.

Replacement of T-12, 40-watt fluorescent lamps with 28-watt T-8 bulbs in fixtures all over campus.

Installation of light-sensing switches in hallways/foyer areas with large window openings so that hall lights only turn on when natural light falls below a set threshold.

Installation of occupancy sensors/switches in bathrooms. Along with sensor/switch installation, a signage campaign will seek to involve occupants in increasing personal responsibility for manually turning off light switches.

Installation of a test drying locker in a dormitory laundry room, to cut down on use of electric powered laundry dryers.

7. Please use this space to address any other unique or interesting sustainability initiatives that have not been previously mentioned:

*Swarthmore presently has 14,330 sq ft of green roof, with plans to add another 590 sq ft in spring 2010.

*The 399-acre campus grounds are managed sustainably with an integrated pest management program.