

SIERRA

Sierra, the award-winning magazine of the Sierra Club, is compiling information for our fourth annual "Coolest Schools" issue, which will rate American colleges and universities according to their environmental practices, green initiatives, and caliber of sustainability-oriented education.

Schools that score highly in these realms may be contacted for further discussion and will receive recognition in the magazine's September/October issue. Please fill out this interactive PDF as thoroughly as possible, save it with your responses as "2010_coolschools_ your school's name" and email it to cool.schools@sierraclub.org no later than **March 20, 2010**.

Note that this questionnaire will become a public document and that we will not be altering your responses before publishing them online. Please answer as thoroughly as possible. Questions left blank will receive no credit, and if a question requests a percentage, you must provide a percentage. The scoring key will be available online once the issue is published.

As the publication of the nation's oldest and largest environmental nonprofit, *Sierra* has a readership of more than 1 million engaged and educated citizens.

Many thanks for your participation.

School name: Rochester Institute of Technology

Contact name and title: James H. Watters, Senior Vice President, Finance & Administration

Contact phone: 585-475-2269

Contact email: marjorie.bricks@rit.edu

School's city and state: Rochester, NY

Number of students: 16,773

HONOR PLEDGE: By completing and submitting this questionnaire, you are certifying that all statements in this document are true to the best of your knowledge.

INITIAL: JW/mb

DATE: 3-19-10

Rochester Institute of Technology
Sierra Club Cool Schools Submission - Revised
March 19, 2010

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.

___% Coal ___% Wind ___% Biomass
___% Natural Gas ___% Solar ___% Geothermal
___% Nuclear ___% Hydro ___% Other _____

The university has made a great commitment to purchasing green energy. It currently purchases 10% of its total electricity from Green E certified sources, which is comprised of both wind and solar. The university has an objective to move to 14%.

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

___% Coal ___% Biomass
100 % Natural Gas ___% Geothermal
___% Electricity ___% 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?

60 %

Note whether the certification is higher than silver.

All LEED processed buildings are certified at LEED Gold level and one building is certified as LEED Platinum.

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

10 %

RIT's ecoswales and rain gardens use captured water, as does the new LEED certified College of Applied Science and Technology Building. Several wetlands and retention ponds on campus also capture runoff from parking lots

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)?

90 % of campus lighting fixtures are energy efficient (non-incandescent) on overall campus, and up to 98% in the academic buildings and the offices. All new buildings constructed in the last 4 years are equipped with occupancy sensors and the majority of exterior offices are equipped with daylight harvesting, energy saving control systems.

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

41 %

5. Does the institution have underway a program of energy-efficiency retrofitting projects, such as improving building insulation or sealing heating and cooling ducts?

RIT has several projects underway concerning energy efficiency. We are currently performing an energy audit of the Field House. This will provide a list of Energy Conservation Measures that we can review and prioritize. We will also be implementing a rebalancing of the existing air distribution systems in two of our large buildings (Gannett and Booth). These buildings use a significant amount of energy through their supply and exhaust systems. Rebalancing them based on today's use will save us almost \$100,000 per year. We have also started a large energy program to replace our standard belts on fan motors to a synchronous belt that saves between 3-7% of energy costs per fan. We have made significant progress with insulating piping throughout campus. This was done under the large heating and cooling project.

The university is completing a \$35 million project to completely overhaul its heating/cooling plant and distribution systems. This will eliminate over 100 pieces of old and inefficient boilers and air handlers, greatly improving energy efficiency.

Category 3: Food

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

34 % Local produce is served whenever it is in season and available in bulk quantities.

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

<1 % Two convenience store locations have added organic sections (Crossroads and Corner Store). Fair trade coffee is available in the Student Alumni Union cafeteria as well as several other locations on campus.

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?

No, however, all canned tuna used on campus is certified as being caught "dolphin free".

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.

85 %

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

Yes

6. Is bottled water sold or distributed on campus?

Yes, but this use has been reduced. Only tap water is used for events at the President's home. Catering now uses large water pitchers at catered functions whenever possible.

Last year RIT students conducted a blind taste test which actually showed that more people prefer the taste of tap water to bottled water. They did this to promote environmental awareness and we have widely communicated these results to the Community.

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

Yes, RIT does have a campus garden. The RIT Community Garden is a grassroots project initiated by a group of RIT employees and students to cultivate a garden on campus. The group shares a garden plan, plants and maintenance. The harvest is divided by garden members and distributed to participants, RIT Food Services and Rochester community food banks.

<http://www.rit.edu/news/?pa=spotlight&view=photo&datePhoto=2009-09-08>

Our senior living community affiliate, known as Rivers Run, also maintains a community garden. They use organic methods in this garden project.

In addition, RIT's Better Me Program is now offering a class for interested gardeners as follows:

Gardening for Wellness:

Gardening is a great way to be physically active. Learn how to garden while remaining active in RIT's very own Community Garden with College of Science's Lecturer and Master Gardener Dr. Dawn Carter. Dr. Carter will discuss the following topics through this 11 week interactive wellness course; planning a garden, crop selection, starting seeds, soil testing, composting, crop rotation, harvesting, natural pest control methods, etc. Learn everything you need to know to start and maintain your very own garden. This course will meet inside for the first several weeks and then meet in the RIT Community Garden when weather conditions improve.

Other Initiatives at Rochester Institute of Technology:

In addition, RIT recently implemented trayless dining in its Grace Watson dining hall. This has resulted in a reduction of food wastes of approximately 14,000 lbs per year as well as a significant reduction in chemical, water and energy usage as a result of less ware washing.

A program is also in place in most of the dining services facilities where a discount is offered on fountain drinks when bringing in a reusable cup or mug. This program has reduced our paper cup usage by 16,500 cups annually.

RIT's SportsZone has started off 2010 with a New Year's resolution to increase recycling within their location. We have partnered with a regional distributor to convert as many food and drink containers as possible to PET #1 and #2 plastics. "RIT Green" stickers are placed on all recyclable materials informing and reminding customers to recycle their containers appropriately. Student workers also act as "green advocates" and are proactively reminding guests to recycle when they checkout.

Recycled napkins are available at most tables, which has been shown to reduce napkin usage as compared to napkins at a central location.

Our pre-consumer vegetable matter is composted in all of our kitchens. We compost approximately 55 tons of vegetable scraps annually.

** Please note that information gathered was based on 150 miles from campus.*

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.

Sustainability-related Programs and Options

Ph.D programs

- Sustainability
- Computing and Information Sciences (environmental informatics focus)
- Microsystems Engineering (alternative energy or energy efficiency)

Master's programs

- Business Administration (environmentally sustainable management concentration)
- Environmental, Health and Safety Management
- Environmental Science
- Facility Management
- Packaging Science (sustainable packaging track)
- Science, Technology, and Public Policy (environmental policy concentration)
- Sustainable Engineering (MEng)
- Sustainable Engineering (MS)
- Sustainable Systems (pending NYS approval)

Bachelor's programs*

- Chemical Engineering (alternative energy and environmental tracks)
- Chemistry (environmental chemistry option)

- [Civil Engineering Technology](#)
- [Electrical Engineering Technology](#) (power systems concentration)
- Environmental Sustainability, Health and Safety**
- [Environmental Science**](#)
- [International Studies](#) (science, technology, and society track)
- [Mechanical Engineering](#) (energy and environment option)
- [Packaging Science](#) (sustainable packaging track)
- [Polymer Chemistry](#) (sustainable/renewable materials focus)
- [Public Policy**](#) (environmental policy concentration)

Undergraduate minors and concentrations

- [Environmental Modeling](#)
- [Environmental Science](#)
- [Environmental Studies \(minor\)](#)
- [Environmental Studies \(concentration\)](#)
- [Historical Perspectives in Science and Technology](#)
- [Industrial Environmental Management](#)
- [Science and Technology Studies](#)
- [Science, Technology and Policy](#)
- [Science, Technology, and Society](#)
- [Sustainable Product Development](#)
- [Urban and Community Studies](#)

*A dual degree (combined BS/MS or MEng) is available in industrial engineering and sustainable engineering.

**Dual degree option (combined BS/MS) available

See: <http://www.rit.edu/sustainability/education.php>

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.

RIT offers a number of classes about clean technologies. Here is a representative sample:

Sustainability (Ph.D. program), see the following link:

http://www.rit.edu/programs/program_detail.php?id=700

Clean Energy Partnership, see the following link:

<http://www.rit.edu/news/?v=46856>

Sustainable Energy Management:

0304-633 Sustainable Energy Management

This course, Sustainable Energy Management and the Built Environment, provides an overview of mechanical and associated control systems within buildings with an emphasis on sub-systems which possess the most visible energy signature in terms of energy usage, energy inefficiency, and societal/global impact. Fundamentals of system operation are explored as well as energy management techniques. Using domestic and international case studies which highlight energy management within the built environment, students will explore methods by which engineers have achieved solutions aligned with sustainability.

Energy and the Environment:

0508-482 Energy and the Environment

This course will examine contemporary energy issues, with particular emphasis placed on the environmental implications associated with energy consumption and production. Students will learn about various energy technologies and fuels (including nuclear, coal, oil, natural gas, solar, biomass, and wind) and

the environmental tradeoffs associated with each of these energy systems. Part of the environmental studies concentration and minor; the science, technology, and policy minor; the sustainable product development minor; and may also be taken as an elective.

Mechanical engineering (alternative energy, environmental tracks)
Chemical engineering (alternative energy, environmental tracks)

For course descriptions, please see:

http://www.rit.edu/upub/pdfs/Undergrad_Course_Descriptions.pdf

RIT's Clean Energy Incubator is a joint effort by the Golisano Institute for Sustainability and RIT's Venture Creations business incubator that assists early stage clean energy companies in product development, business and marketing planning, and technology commercialization. The incubator enhances continued economic development in a host of areas, including wind energy, solar power, and fuel cell development.

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.

Yes, please see: <http://www.rit.edu/sustainability/education.php>

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

See the following link for profiles on some of our faculty and researchers in the Golisano Institute for Sustainability:

<http://www.rit.edu/sustainability/research-profiles.php>

Profiles include:

Nabil Nasr, Assistant Provost and Director of the Golisano Institute for Sustainability and Center for Integrated Manufacturing Studies.

Also see: http://www.rit.edu/~w-aa/nasr_about.php

Amit Batabyal, Arthur J. Gosnell Professor of Economics.

Karl Korfmacher, Director, Environmental Science Program and Professor of Biological Sciences.

Christy Tyler, Assistant Professor, School of Biological Sciences

John Morrelli, Russell C. McCarthy Professor, Civil Engineering Technology, Environmental Management and Safety Department

Gabriell Gustard, Assistant Professor, Golisano Institute for Sustainability

Matt Fronk, Director of Center for Sustainable Mobility

Sandra Rothenberg, Associate Professor, Zutes Faculty Fellow, E. Philip Saunders College of Business

Elizabeth Hane, Associate Professor, School of Biological Sciences

Callie Babbitt, Assistant Professor, Golisano Institute for Sustainability

In addition, other renowned faculty in these fields include:

<http://www.rit.edu/sustainability/education.php>

James Winebrake, Professor and Chair of the Department of Science, Technology, & society/Public Policy

For his CV, publications, awards, etc. please visit the following links:

<http://people.rit.edu/jwgpt/>

<http://www.rit.edu/news/?v=46466>

<http://www.rit.edu/news/?v=46907>

<http://www.rit.edu/news?v=47253>

Brian Thorn, Associate Professor in the Department of Industrial and Manufacturing Engineering;

<http://www.rit.edu/~w-ise/people/CVs/thornCV.pdf>

Andres Carrano, Associate Professor in the Department of Industrial and Systems Engineering

<http://www.rit.edu/sustainability/education.php>

Ann Howard, Associate Professor, Science, Technology & Society/Public Policy

<http://www.rit.edu/news/index.php?p=experts&action=viewexpert&id=60>

Maureen Valentine, Associate Dean and Paul A. Miller Professor

Maureen S. Valentine, P.E., serves as Associate Dean and Paul A. Miller Professor for the college. As Associate Dean, Professor Valentine is responsible for faculty affairs and selected operational administrative activities of the college. As the Paul A. Miller Professor, Professor Valentine will pursue several special projects, including strengthening the efforts of the Women in Technology program and incorporating sustainability and green design into the college's programs. The former chair of the civil engineering technology, environmental management and safety (CETEMS) department, Maureen is a tenured professor and earned her BS in Civil Engineering from Tufts University and MS in Geotechnical Engineering from Virginia Tech. Professor Valentine remains active in student clubs and local professional societies.

John Waud, Professor, Biological Sciences

<http://www.rit.edu/cos/biology/Waud.html>

<http://www.rit.edu/news/?v=46819>

Joshua Goldowitz Professor, Science Advisor, Environmental Management and Safety (EMS) Program Chair

[https://honors.rit.edu/student_projects/greening/greening_report_ResLife_2007-](https://honors.rit.edu/student_projects/greening/greening_report_ResLife_2007-08.pdf)

[08.pdf](https://honors.rit.edu/student_projects/greening/greening_report_ResLife_2007-08.pdf)

Scott Wolcott

<http://www.rit.edu/cast/cetems/scottbio.shtml>

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.

Yes, see below:

<http://www.rit.edu/sustainability/research.php>

<http://www.rit.edu/sustainability/research-integrating.php>

<http://sustainable.print.rit.edu/>

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

No, but we do incorporate various sustainability topics into our Orientation Program for all freshmen students.

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

34 %

Category 5: Purchasing

1. Does your school have a sustainable-purchasing policy? If yes, briefly explain.

Yes, RIT's Purchasing Policy is as follows:

RIT will strive to conduct its activities in an ecologically and economically sound manner and will promote responsible consumption and environmentally sound practices among all members of the University community. We recognize that sustainable purchasing is a critical component of preserving our natural resources, lowering operating costs, and minimizing waste, and to this end we will:

1. Specify, whenever possible and reasonable, the use of sustainable, environmentally friendly systems, equipment and materials.
2. Ensure that all supplies, materials, equipment and services are procured at the lowest possible cost.
3. Comply with all relevant procurement and environmental regulations.
4. Investigate resource conservation, reuse and recycling options and encourage adoption by all members of the University community.
5. Promote and maintain activities that encourage exchanges, swaps and resale of surplus products and supplies.
6. Commit to purchasing the Energy Star certified appliances and products.
7. Promote business with suppliers that consistently demonstrate sustainable and socially conscious business practices.
8. Work within the University and in the broader community in which we reside to share experiences and encourage the adoption of sustainable practices.
9. Develop and implement the use of assessment tools designed to evaluate the effectiveness of this policy and make changes where necessary.

<http://www.rit.edu/fa/ritgreen/procurement.html>

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

6 %

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

Yes, paper purchased by the University is Forest Stewardship Council-certified.

3. Does your school have a policy to purchase Electronic Product Environmental Assessment Tool (EPEAT)-certified (or similar) electronics? If yes, please describe.

The standard electronic products purchased by RIT comply with the Electronic Product Environmental Assessment Tool as per the EPEAT table at <http://www.epeat.net/>.

4. Do you have packaging agreements with suppliers that minimize waste? If yes, please describe.

Merkel Donahue -- package-free building furnishings are delivered unpacked to the RIT customers. Also, all new furnishings are delivered package-free to new construction sites.

5. Does your school specify in its purchasing contracts that products with energy-saving features be installed or delivered with these features enabled?

Building electrical components, occupancy sensors, variable speed drives and control systems are energy-savings enabled and commissioned to confirm energy saving performances. PCs are delivered with a default sleep-mode which allows PCs to "hibernate" during the times of no keyboard activities, resulting in a decrease in energy consumption.

Category 6: Transportation

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

RIT provides a free campus shuttle for all RIT community members around campus, to all RIT residences, and to certain local retail and entertainment. The shuttle runs seven days a week from morning to late in the evening.

The university also includes adjoining private residential housing units on its pick up schedules for students.

2. What has your school done to promote bicycling as a transportation method?

RIT purchased many new bicycle racks as a temporary solution for bicycle parking. RIT promotes bicycle usage by offering free National Registration of bicycles, markets the idea of bicycles as alternative modes of transport through our Transportation Website, and is in development of shared use paths and bicycle shelters to promote safer and more direct pathways to and from residences and academic spaces.

<http://facilities.rit.edu/pats/transportation/alternative/bicycle.html>

The university will be building a dedicated bikeway this summer designed by a naturally recognized bikeway expert.

RIT participates in annual Rochester Bike Summit <http://www.rit.edu/news/?r=47084>

University is a host of annual Green Vehicle challenge
<http://www.in.com/videos/watchvideo-dr-destlers-green-vehicle-challenge-4662755.html>

RIT's student bike group conducts free bike adjustments.

RIT's President and his wife are vocal supporters of biking. They commute on electric bikes in appropriate weather, a fact that is widely known and publicized.

RIT provides shower/changing facilities at various locations on campus for those that bike to work.

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?

RIT publicizes alternative modes of transportation such as public transit and carpooling. RIT is actively working with the Genesee Transportation Council to promote an employer portal that would be specific to the RIT community members as part of a regional carpooling system. Since optimal public transportation is not available, RIT subsidizes a public transit bus for 8 additional trips to campus during business days so that public transit is more convenient and frequent.

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

55 % or about 8,800 (using 16,000 FTE as a basis).

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

95 % This is an approximate number; we observe some carpooling, public transit use, and other alternative means as mentioned above. RIT is actively working with the Genesee Transportation Council to promote a regional carpooling program.

Category 7: Waste Management

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

In 2008 42 %. In 2009 diversion rate was 37.6%.

2. Does your campus provide recycling receptacles wherever there are trash cans?

Yes, it is an initiative of the campus to have recycling receptacles wherever there is a trash can, with exception of classrooms.

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

Receptacles are supplied at all sporting events.

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

Every dining hall composts its pre-consumer waste.

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

RIT has set the goal of reaching a 50% waste-diversion rate. In 2009, our diversion rate was 40%.

RIT participates in Recyclemania. In 2008, RIT ranked #1 in New York in three categories: the largest amount of recyclables per person, the largest amount of total recyclables, and the highest recycling rate.

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?

During move-out of each quarter, residence halls students are encouraged to bring leftover goods directly to their residence life area offices. These goods are then packed and delivered to the area Goodwill office by RIT staff

A Student Care and Relief Fund (SCARF) program was developed several years ago and has been very successful. Each Fall, a winter clothing drive takes place at collection sites around campus. The winter clothing is then distributed to needy students.

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.

RIT's President signed the American College and University Presidents' Climate Commitment in April 2009. The University has made real progress on its pledge of tangible actions, completing the Greenhouse Gas Inventory (GHG) Inventory and preparing for the Climate Action Plan study. The University provides transparent reporting and is a 'good standing' member with ACUPCC. For more details, please check: <http://www.rit.edu/fa/ritgreen/pcc.html>

RIT Sustainability Policy is noted below.

See: <http://www.rit.edu/fa/ritgreen/strategy.html>

The Institute recognizes that the sustainable choices made by faculty, staff, and students will resonate for generations throughout the Upstate New York area and beyond. Those that work and study at RIT also live and raise families in the area. By making the campus more environmentally friendly and by engaging in and learning more about sustainable practices, the RIT community is improving the cleanliness of the greater environment in real and measurable ways.

Rochester Institute of Technology (RIT) is committed to conducting its operations in a sustainable way that prevents pollution, complies with applicable environmental laws and regulations, and improves its environmental performance. RIT believes that proactive environmental management and fostering sustainability are fundamental components in educating our students and future leaders. RIT is committed to integrating this

environmental stewardship into its academic programs. RIT will strive to conduct its activities in an ecologically and economically sound manner and will promote responsible consumption and environmentally sound practices among all members of the university community.

RIT values its relationships with the local, regional and global communities and is committed to developing opportunities that share and expand the environmental expertise of its faculty, staff and students.

To assure our being a good steward of the land and its ecological permanence, we will maintain the following sustainable focus points:

1. Excellence of sustainable curriculum
2. Advancement of sustainable research and development of technology
3. Maintenance of Institute's environmental commitments
4. Improvements of Institute's operational energy efficiencies
5. Lowering of campus emissions
6. Harvesting of renewable energy
7. Continuous advancement of Green Building technology
8. Improvements in transportation, infrastructure and institutional commuting
9. Pollution prevention
10. Excellence in recycling
11. Sustainable business methods and purchasing
12. Well-being of stakeholders
13. Stewardship of land air and water
14. Full transparency and representation of stakeholders
15. Community involvement

A vision statement has recently been added to RIT's strategic plan which includes the following:

- G7. Grow RIT's reputation in sustainability.
 - a. Grow Golisano Institute for Sustainability to 40 students, 10 full-time faculty, and 20 research/extended faculty by 2012.
 - b. Increase students enrolled in other sustainability-related programs by 100 by 2012.

President Destler recently presented his vision for the University which included six pillars, one of which addresses sustainability at RIT. <http://www.rit.edu/president/vision2025/six-pillars.php>

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?

RIT's **Committee for Sustainable Practices (CSP)** has been in operation for approximately two years. The mission of this committee is to contribute to the development and propagation of policies, practices and ideas in an effort to protect the natural environment and foster the sustainable use of our material, energy and natural resources.

The committee is chaired by the Senior Vice President of Finance and Administration. Members of the committee include administrators, faculty, staff and students.

The charge of the committee is as follows:

- To advise the University's administration on University sustainability matters.
- To bring together members who share interest, knowledge, expertise or strategic positions that impact our sustainable policies, practices, and physical development.
- To be a conduit for information and represent faculty, staff, and students from across the University who are involved in activities related to sustainability.
- To emphasize communication to the University and the Community at large on universal practices which have been identified, evaluated, and endorsed by the Committee and the President's Office.

The **Campus Environment Committee** is an academic committee whose members strive to promote sustainability and make recommendations on environmental matters within the University. Their committee charge includes monitoring the physical state of the university as it influences the academic mission and report to the Academic Senate on deficiencies and proposed initiatives. See the following link:

<http://www.rit.edu/academicaffairs/academicsenate/standing/campusenvironment/charges.php>

There are several student committees as well, including the Student Environmental Action League (SEAL) and others. For a list of other sustainability related groups on the RIT campus, please go to: http://www.rit.edu/fa/ritgreen/get_involved.html

RIT employs the following:

- Sustainability Manager -- full time position
- Sustainability Assistant – part time assignment
- Commissioning Agent – part time assignment
- Recycling Coordinator – part time student position
- Sustainability Assistants (2) – part time student positions
- Academic Director of the Sustainability Institute - A search is currently underway for this full-time position.

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.

Yes, see <http://www.rit.edu/fa/ritgreen/pcc.html>

As previously mentioned, RIT is a signatory to the American College and University Presidents' Climate Commitment (ACUPCC). The details of the commitment, its tangible actions and the calendar of progress are listed at <http://www.rit.edu/fa/ritgreen/pcc.html>

Accordingly, the University is finishing its first Greenhouse Gas Inventory. The inventory is completed and will be submitted to ACUPCC before its due date of May 15, 2010. The Commitment also mandates RIT to prepare its first Climate Action Plan (CAP), which is due to ACUPCC on May 15, 2011. The consulting firm is already engaged to prepare the CAP with an anticipated completion by the end of the year.

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

Yes. Our first GHG inventory is completed and will be submitted to ACUPCC before the commitment due date of May 15, 2010.

5. Has your school achieved a reduction in total annual carbon emissions? If yes, please explain and provide the benchmark year and percentage.

The benchmark will be established as part of the Climate Action Plan (CAP), which is anticipated to be completed by the end of the year.

The University has completed a \$34 million project to revamp the central heating and cooling plant. Early statistics show significant energy conservation has been achieved through installation of higher efficiency equipment. A 37% decrease in natural gas usage has occurred from July through November 2009. In addition, our electrical usage is down 5% even though we have increased building square footage.

Category 9: Financial Investments

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

The university does make information about its endowment fund publically available to the extent that it is legally possible. Various investment managers retained by the university have contractually segmented their information from public access. Additional endowment fund information is made publicly available through the University's participation in various surveys such as the NACUBO-Commonfund Study of Endowments, the Sustainability Report Card, etc.

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

Although RIT does not have an investment-responsibility committee specifically charged, the university does provide investment managers with guidance regarding proxy voting as it relates to human health and the environment and reviews such matters through its established Endowment Committee of Trustees.

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

RIT has investments in various private markets that explore and invest in renewable-energy funds and sustainable-investment vehicles including, but not limited to, future fuels and chemicals, and advanced generation, premium power efficient and energy consumption reduction products. RIT has several large investments through its endowment in these areas.

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.)

Examples of our students' impact have occurred both on and off campus. See, Making a Difference: <http://www.rit.edu/sustainability/practice-difference.php>

Habitat for Humanity and RIT Build Sustainable Housing

<http://opl.rit.edu/inews/articles/habitat-humanity-rit-build-sustainable-housing>

Many student environmental clubs exist on campus. These groups work to instill awareness and develop responsibility for making sound environmental choices that will have a positive effect on our future.

Recyclemania: http://www.rit.edu/fa/ritgreen/recycle_mania.html

Student Environmental Action League (SEAL): <http://www.rit.edu/sg/seal/about.php>

Electric Bike Club:

<http://campuslife.rit.edu/main/clubs/details?clubId=436&clubName=Electric%20Bike%20Club>

Engineers for a Sustainable World:

<http://campuslife.rit.edu/main/clubs/details?clubId=375&clubName=Engineers%20for%20a%20Sustainable%20World>

Habitat for Humanity Club:

<http://campuslife.rit.edu/main/clubs/details?clubId=188&clubName=Habitat%20for%20Humanity>

Human Powered Vehicle Club:

<http://campuslife.rit.edu/main/clubs/details?clubId=191&clubName=Human%20Powered%20Vehicle%20Team>

Innovate Design Experiment Apply Club:

<http://campuslife.rit.edu/main/clubs/details?clubId=933&clubName=Innovate%20Design%20Experiment%20Apply>

RIT Green Vehicle Team:

<http://campuslife.rit.edu/main/clubs/details?clubId=450&clubName=RIT%20Greenvehicle%20Team>

The Honors course, the Greening of RIT, conducts group projects focusing on campus sustainability. Examples of past projects can be found at https://honors.rit.edu/student_projects/.

A graduate student was hired on a co-op assignment to write a series of articles on sustainability at RIT. The articles were widely distributed on campus to all students. Copies of these articles are attached. He also implemented a Twitter account to bring together individuals across campus with this common interest. <http://twitter.com/RITgreen>

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?

RIT students participated in the Recyclemania and we are pleased to report the results of their hard work: In 2008, RIT ranked #1 in New York in three categories: the largest amount of recyclables per person, the largest amount of total recyclables, and the highest recycling rate.

<http://facilities.rit.edu/aboutus/departments/recycling/events/mania.html>

Green Vehicle Challenge: <http://www.rit.edu/news/?v=46806>

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.

RIT designated approximately 17 acres within boundaries of the main campus, on which several man-made natural ponds were created to support wildlife and aquatic life. Separately, in addition to each LEED certified building, a specific plot of land is set aside as 'forever green', and therefore, off limits to construction, road infrastructure, or other future modification. A small wooded area near the Quarter Mile Walkway has been designated as a 'natural laboratory' where various class exercises are conducted with students exploring environmental ecology. Lastly, a completed North Pond project created approximately 7 acres of preserved land, configured to naturally control quality and quantity of the stormwater runoff, to protect the Genesee River from excessive turbidity of added rain water.

John Waud, professor of environmental sciences, and David Mathiason, professor emeritus, spend many hours at the RIT Bird Observatory located on the edge of campus near the Astronomical Observatory. The Army Corps of Engineers and RIT have agreed that the 32 acres of land around it will not be developed but will be kept as a conservation area for wildlife. It is at the observatory that Waud, Mathiason, and their group of students and volunteers band birds. In fast urbanizing landscapes, birds' migratory stopovers are often replaced by the newest mall or parking lot, depriving flocks of the nourishment and rest they need during migration. About 95 percent of mortality in birds occurs during migration. "By banding birds, we are able to track their stopovers during migration and determine the characteristics that make natural stopover habitats effective," says Waud.

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.

RIT implemented a commercially available Green Cleaning technology program, including the use of certified green product and methods, mandatory training requirements for its cleaning personnel, and introduction of routine process operations to assure continuation of this practice. <http://finweb.rit.edu/grms/ehs/environmental/>

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 in programs require field study. As an example, please see our environmental science program:

<http://www.rit.edu/cos/environmental/>

<http://www.rit.edu/cos/environmental/sa/>

The RIT Community Garden is a grassroots project initiated by a group of RIT employees and students to cultivate a garden on campus. The group shares a garden plan, plants and maintenance. The harvest will be divided by garden members and distributed to participants, RIT Food Services and Rochester community food banks.

<http://www.rit.edu/news/?pa=spotlight&view=photo&datePhoto=2009-09-08>

Our Campus Environmental Committee works to monitor and report on wildlife activity on campus. As part of this effort, the group recently consulted an authority on wetlands, purchased appropriate plants, and with the help of many students, planted new species that should survive and support wildlife. More planting is planned for spring. In addition, funding has been obtained to support students to work this summer (field work, inventories, etc.).

In addition, various student organizations offer outdoor activities throughout the year, such as ski trips, bike activities, etc.

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

Our President, William Destler, recently presented a paper entitled, The Cooling of RIT, which outlines many of our initiatives. See:

<http://sgvote.rit.edu/president/papers/Cooling%20RIT.pdf>

The RIT Green website has undergone major upgrades this year to provide green news items, green events, a green glossary, real time data, etc.

See http://www.rit.edu/fa/ritgreen/green_glossary.html

In addition, we are launching an energy optimization program that will calibrate and tune-up our central heating and cooling plants; the project will be completed this fall. We are completing a retrofit project through which every building will be separately metered to monitor their total heating and cooling performances. Each renovation project in the existing buildings includes equipment upgrades, ductwork modifications, improved motor

efficiencies and scaled down energy requirements. We have completed conversion of 65 fume hoods in which existing hoods were equipped with new sensors, controls and modified programming, limiting amount of the energy waste associated with operating excessive building exhaust.

Our newest LEED Platinum certified building received highest energy rating and scored maximum 10 energy points available in the LEED system.

The University initiated a Pollution Prevention Institute, focusing on education and research in related fields.

Work is underway to build a Green Data Center with the goal to create a model for sustainable computing.

Student groups were recently involved in aerial photography of Haiti after the earthquake, to help assess the extent of urban damage.

Campus was involved in a week long awareness campaign and celebration associated with 350.org movement.

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

RIT was selected as a Campus Sustainability Leader in the 2009 College Sustainability Report Card survey: <http://www.rit.edu/sustainability/practice-leader.php>

RIT recently conducted an investigation on electric energy reduction on campus. This focused on replacing the standard space heaters with a very low voltage mat. The results indicated a 3 month payback. This is still in review. The program would require the space heater to be brought to a certain location and it would be traded in for a more efficient mat.

University is launching a new building to house the Golisano Institute for Sustainability with a target of LEED Platinum certification. The Institute will house several sustainable programs including the new Ph.D. in sustainability.

RIT is redesigning the main transit hub to incorporate a better bus shelter, better bicycle and pedestrian movement, and a better drop off point for carpoolers. In addition, this project incorporates adding more native vegetation and some bio-filtration components to the project of the transit plaza. Also, part of this project is a proposal to build a boardwalk pathway through a wetland area promoting education and awareness of this environmentally friendly component of our campus.

RIT created an ecoswale as part of a renovation project. The article from the local paper describes this project:

RIT goes ecological as it upgrades sewer | [View Clip](#)

09/03/2008

Democrat and Chronicle

When Rochester Institute of Technology looked at upgrading its Perkins Green student apartments, college officials sought ways to incorporate green construction.

One of the enhancements included an ecological improvement to its storm drain system now being transformed into the Henrietta campus' first eco-swale.

An eco-swale is a man-made biofiltration system that utilizes different size aggregates and vegetation to purify storm water.

RIT's eco-swale, which will stretch about 800 feet along the Perkins Green complex on the eastern edge of campus, will feature stones, aquatic plants, shrubs and trees that will act as natural filters against motor oil, pesticides and fertilizer that previously entered the old pipe drains that seeped into nearby wetlands.

"RIT is surrounded by wetlands and we really want to start incorporating them into our design now," said Quent Rhodes, senior project manager at the college.

Two types of plants being introduced are emergent wetland plants, such as sedges, rushes and native grasses, and plants such as asters and cardinal flowers. The roots of these plants have microbe bacteria that cleanses or breaks down pollutants typically found in stormwater runoff.

Designers also introduced native trees and shrubs as part of the system that would provide a canopy and support some of the plants' growth and stability.

"We can get more diversity in the swale if we have some areas of sun and shade," said Tom Robinson, landscape architect, Environmental Design & Research PC in Rochester.

Wetlands and swales play a much larger role in the environment than most people give them credit for, said Laurie Broccolo, owner of Broccolo Tree & Lawn Care, the Henrietta company that is installing the eco-swale.

"Wetland areas are very sensitive because we have such a high water table and heavy clay soils," she said. "It's important that we don't get a lot of silt and pollutants into those streams and wetlands because it can possibly change the ecology of the environment."

The eco-swale is the first line of defense when water rolls off the parking lot. The bio-filtration system is supposed to mimic nature's cleaning force and natural system of balance. That water eventually will spill into the Genesee River.

Most of RIT's swales are just grass, but the eco-swale offered an innovative way to

make the swale both attractive and economically feasible. The swale is part of a \$1.5 million renovation project that includes parking lot restructuring, new sidewalks, bus stations and sitting areas for the Perkins Green complex.

"We want to send water back to the wetlands as clean as possible," added Rhodes.

The eco-swale is expected to be completed this month, and will yield immediate results, according to Broccoli. Within three to five years, most of the plants will have reached a maturity stage that will produce significant benefits to the water quality.

According to EDR, engineers estimate the eco-swale will help cleanse about 1.2 million gallons of water per year.

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