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Dear President Skorton,

As requested in the original charge of the President’s Sustainable Campus Committee (PSCC) the committee has prepared a 2011 Annual Report of the accomplishments to date and goals for the year ahead. We are proud to report that although 2011 was the first full year of work since the committee was launched considerable progress has been made and Cornell is today widely considered a national leader in sustainable operations and research. While early successes are exciting, there is a long road ahead for Cornell to become truly sustainable in campus operations and culture.

The 10 areas of accomplishment from 2011 detailed below are each wide-ranging in their impact and position Cornell for future success. The final section briefly outlines nine strategic priorities for calendar year 2012. In the year ahead we will continue to strive for excellence in the implementation of the University’s strategic plan to “make environmental sustainability a guiding principle in the stewardship of the university's facilities and resources and in assessments of its impact on the community and region.”

Thank you for your leadership in the formation of the PSCC and your continued support for making Cornell a leader in campus sustainability.

Sincerely

Tim Fahey and Kyu-Jung Whang

1. **Launch of the PSCC Focus Team Strategy –** [**Chronicle Story**](http://www.news.cornell.edu/stories/March11/FocusInitiative.html)

Given the broad charge of the PSCC a new subcommittee structure, or Focus Teams Strategy, was developed and launched in March of 2010. The Focus Team Strategy was designed to simultaneously advance campus sustainability while enhancing the core academic and outreach mission of the university through investments in collaborative teams of faculty, students, and staff. In alignment with new national standards developed by the Association for the Advancement of Sustainability in Higher Education, ten critical areas of campus operations (Building, Climate, Energy, Food, Land, People, Purchasing, Transportation, Waste, and Water) were identified as Focus Areas. The PSCC worked closely with the Sustainability Office to develop a new flexible team structure in each Focus Area for faculty, students, and staff to effectively collaborate in the planning, implementation, monitoring, and reporting of campus sustainability initiatives. The Focus Teams are each co-chaired by a staff member and a faculty member, and are required to recruit student members. Each Focus Team was charged with:

* Planning and/or implementation of the campus sustainability activities
* Data collection and internal reporting
* Collaboration between the academic community, operations, and external partners
* Promotion and communication of activities and opportunities
1. **Charter member of the national Sustainability Tracking, Assessment, and Rating System (STARS) -** [**website**](https://stars.aashe.org/)

For several years Cornell has participated in a variety of national higher education sustainability surveys developed by the Sierra Club, Princeton Review, the Sustainable Endowments Institute, and others. While these surveys helped communicate Cornell’s efforts to the public they were rarely useful for measuring internal progress. In 2010, the PSCC recommended to the senior administration that Cornell become a charter member of a new national reporting system that could support both public and internal reporting. STARS is a transparent, self-reporting framework for colleges and universities to measure their sustainability performance. The Sustainability Office has managed the data collection and submission process and the PSCC has provided oversight of the data quality. University Communications will work with the President’s Office to complete the review process. The Cornell submission will be complete in January 2012 and will be submitted in February.

1. **Annual PSCC Campus Sustainability Summit –** [**Chronicle Story**](http://www.news.cornell.edu/stories/Nov11/PSCCAnnualMtng.html)

After 9 months of team development and planning over 130 staff, faculty, and students were actively engaged in one or more of the Focus Teams. On November 17th, 2011 the PSCC reconvened the 10 Focus Teams at Cornell Plantations’ new LEED Gold, Brian C. Nevin Welcome Center for the first annual PSCC Campus Sustainability Summit. Over 75 Focus Team members attended and participated in a half day of speakers, planning, and networking. From feedback surveys all respondents requested that the PSCC continue hosting an annual summit and requested additional networking opportunities.

1. **Partners in Sustainability Awards –** [**Chronicle Story**](http://www.news.cornell.edu/stories/Nov11/CUPSA.html)

Beginning in 2010 the PSCC has given out an annual award to external partners that have helped advance sustainability at Cornell. NYSERDA (2010) and Tompkins County Climate Protection Initiative (2011) were the past recipients. This fall the PSCC introduced two new categories of awards for students and staff. There was an open nomination process in October and the award ceremony was held at the closing of the PSCC Campus Sustainability Summit on November 17th. Natural Resources major and Sustainability Hub President, KC Alvey, received the student award and Spring Buck, R5 Operations Manager received the staff award.

1. **Ithaca Campus Sustainability Plan –** [**Chronicle Story**](http://www.news.cornell.edu/stories/Nov11/SustPlan.html)

Over the last 6 years of campus sustainability efforts various planning processes have been used to encourage new practices, document progress, and set goals. The Advancing Sustainability Action Plan (2007-2009) and the Climate Action Plan (2008-2009) each had distinct planning processes and reporting frameworks. Given the proliferation of initiatives underway, the PSCC decided it was appropriate to develop a new comprehensive Campus Sustainability Plan that could communicate the breadth of initiatives underway. The Ithaca Campus Sustainability Plan was endorsed by the PSCC during the summer, reviewed by senior administration, and publicly announced at the 2011 Trustee-Council Annual Meeting. The PSCC has committed to updating the plan annually. The plan can be downloaded at [www.sustainablecampus.cornell.edu/sustainabilityplan](http://www.sustainablecampus.cornell.edu/sustainabilityplan)

1. **Task Forces and Reports**

The PSCC has overseen the 2011 update to the Climate Action Plan which will be made public in January 2012 at [www.sustainablecampus.cornell/climate](http://www.sustainablecampus.cornell/climate), and the work of the Take Back the Tap Task Force that completed its report to the President in December. Both projects involved multiple Focus Teams and considerable time to coordinate. In both cases, the report development team was temporary and the actions recommended in each report will be implemented by the Focus Teams or specific units specified in the documents.

1. **AASHE Sponsorship and Delegation**

The AASHE annual conference is the largest conference in Higher Education sustainability and this year was held in Pittsburgh, PA. The PSCC agreed to support this important national effort and was a Regional Sponsor. The Cornell brand was displayed on the conference website, program, and throughout the conference. A highly visible sponsorship booth was developed in collaboration with University Communications and was seen by over 2000 attendees.

1. **Living Laboratory Course Projects**

Training students to be researchers, leaders, and professionals is critical to Cornell’s mission. The PSCC Focus Teams Strategy aims to support faculty and staff collaborations that lead to class-based projects. Student Projects with faculty direction that help advance campus sustainability have both academic and operational benefits. Beginning in 2010 the Sustainability Office began surveying faculty to document the variety and quantity of such ‘living laboratory’ course projects. A course list is provided in the appendix.

1. **Advisory Support**

Throughout the year, the PSCC has offered advisory support to a variety of campus and regional sustainability initiatives. In most cases, leaders from these initiatives would contact the PSCC and request support and the PSCC would host a presentation and discussion on the topic. These efforts include:

The CALS Green behavior change campaign, Cornell Outdoor Education’s Sustainability Leadership Development project, the Finger Lakes Climate Fund. In one instance, PSCC discussions on leadership development led to the development of a new sustainability module in the Cornell Management Academy.

1. **Sustainability Month –** [**Chronicle Story**](http://www.news.cornell.edu/stories/March11/SustainabilityMonth.html)

April 2011 marked Cornell’s fourth Sustainability Month and the PSCC has taken on the responsibility of coordination and communication of the month-long awareness campaign. Each year, the Atkinson Center for a Sustainable Future coordinates the Iscol Lecture and related events, and the Sustainability Hub coordinates a week of student-focused events, Earth Week, culminating in Earth Day. The PSCC oversees the coordination among these efforts and promoting a uniquely branded calendar of the months events.

**Presidents Sustainable Campus Committee’s 2012 Priorities:**

1. Ongoing strengthening and development of the 10 Focus Teams
2. Update the Climate Action Plan (January)
3. Achieve a STARS Gold Rating (February)
4. Update Ithaca Campus Sustainability Plan (October)
5. Support the senior administration’s Sustainability Forum in the development of strategic goals and objectives
6. Host the 2nd Annual Campus Sustainability Summit (November)
7. Host additional networking events for teams and stakeholders
8. Award the Partners in Sustainability Award to staff, student, and external partner
9. Coordinate a delegation to the NECSC Campus Sustainability Conference and 2012 AASHE Conference (October)
10. Participate in the planning of sustainability components for CornellNYC Tech

**APPENDIX**

**Living Laboratory Course List**

**ALS 4770: Environmental Stewardship in the Cornell Community**

Prof: Joe Regenstein

Each student or team of students undertakes an original project to improve the environment at Cornell or in Tompkins County. Often the projects involve working with the Cornell infrastructure. Students present a final oral report at a public forum to which senior Cornell administrators and others are invited. Last year projects included composting by restaurants in Collegetown, educational material for orientation, and replacements for triclorosan in campus sales outlets.

**CEE 4920 Engineers for a Sustainable World**

Prof: R.E. Richardson, P. Doing

In 2009-10 students were involved in a project investigating possibilities to improve building performance in academic halls around the College of Engineering, through analysis of energy consumption and cost data, assessment of possible technological improvements, and responses to surveys from building occupants. Students worked with College of Engineering Director of Facilities as well as E&S. <http://tinyurl.com/4t8efas>

**CHEME 5650: Design Project**

Design study and economic evaluation of a chemical processing facility, alternative methods of manufacture, raw-material preparation, food processing, waste disposal, or some other aspect of chemical processing.

**COMM 3760: Planning Communications Campaigns**

Prof: Katherine McComas

In the of Fall ’07 the class helped plan Cornell’s carbon neutrality campaign associated with the release of Cornell’s Climate Action Plan (CAP). Students helped gauge the environmental attitudes and feelings of Cornell’s student community.

**CS 5150: Software Engineering**

Prof: William Arms

In Fall ’10 a team of students worked with E&S staff member Sarah Zemanick to make improvement to the Lights Off Cornell website, allowing LOC volunteers to input data via their smart phones. (b) As part of an NSF funded project, in Fall '11 a team of students worked with David Schneider in Systems Engineering to develop a games framework for teaching Middle School students about Computational Sustainability. <http://www.cs.cornell.edu/courses/cs5150/2011fa/>

**DEA 3030: Interior Materials and Sustainable Elements**

Prof: R. Gilmore

This course provides an introduction to sustainable sources of materials, finishes, and furnishings for the built environment and asks students to manipulate materials, understand performance testing, use building codes, create a life-cycle cost analysis, and complete interior specifications. Field trips provide an overview of the manufacturing process, and group projects culminate in the presentation of research on current “green” products and resources.

**DEA 6250: Collaborative Sustainable Building Practice**

Prof: Ying Hua

Recognized by the USGBC Excellence in Green Building Curriculum Incentive, this course is designed to respond to the significant non-technological barriers to the transformation of the building sector toward sustainable practice. Students are introduced to a series of forces and key players in the building delivery process that have different magnitudes of impact on the adoption of sustainable practice and the complex stakeholder network in the building life cycle.

**ECE 6930-6931: Master of Engineering Design Project**

Prof: Hsiao-Dong Chiang

In Spring ’11, one sub group is working on a load flow map of our campus grid.  Another group is working on metering and voltage reduction. Another group is studying better utilization of the Hydro plant.  One of the goals is to combine all of the information and verify that our existing electrical model is accurate and update it with any corrections.

**Geothermal Utilization System Technology Optimization (GUSTO) Group**

Prof: Jefferson Tester

Objective: Students are working on the EGS (Enhanced Geothermal System) concept, with a focus on the top-side utilization, with funding provided through the multi-institution DOE grant. Ph.D. students Koenraad Beckers and Maciej Lukawski are working at a sustained and detailed level to help develop the EGS utilization option for Cornell. Furthermore, Koenraad Beckers is developing numerical model of the geothermal heat pump system that serves the Verizon Wireless cellular tower which will be built on campus early next year. Research projects will be available for undergraduate or MEng students to either participate in developing this model or to gather the field data of the heat pump system operation.

**CHEME 6660: Analysis of Sustainable Energy Systems**

Prof: Jefferson Tester

In Fall ’11 some of the projects students are working on are to design a net zero energy house in Ithaca, improve the sustainability of Cornell campus, predict the effects of a carbon tax on renewable energy in NY, and design a small, self-sufficient community in upstate NY.

**Horticulture/LandscapeArchitecture 4910-4920: Creating the Urban Eden**

Prof: Nina Bassuk and Prof. Peter Trowbridge

The class analyzes a part of campus, and designs a sustainable landscape. Class culminates in the construction of a real new landscape on the Cornell campus every year. In Spring ‘11 this class was responsible for renovating the Roberts Hall entrance landscape and Malott Hall green roof terrace.

<http://tinyurl.com/4payuv7>

**NTRES 4940-003: Solid Biofuels and Sustainability Options For Cornell**

Prof: Tim Fahey, David Weinstein

Objective: Cornell is evaluating options for using solid biofuel (e.g., wood, grass) in its Central Heating Plant (CHP). This seminar consists of a series of about 10 invited lectures and follow up sessions in which students and instructors will synthesize available information to inform the CHP planning.