Annual Sustainability Report for FY2013

Stonehill is committed to building a culture of sustainability, and also embraces innovation and thinking outside of normal boundaries.

This report illustrates the many initiatives undertaken in Stonehill's commitment to sustainability.

Environmental Stewardship Council (ESC)

The ESC is responsible to leading Stonehill's sustainability efforts through its diversified membership. The ESC met seven times during the year as follows: September 10, 2012, October 15, 2012, November 12, 2012, December 10, 2012, February 4, 2013, March 13, 2013, and April 18, 2013.

I. Sustainability Education Efforts and Events

- ➤ SIFE Furniture Fair- SIFE raised \$1,267 for My Brother's Keeper, which is a phenomenal haul, breaking previous year's records. This group sold around 30 refrigerators, multiple bed risers, rugs, desk lamps, plastic storage bins, shelves, fans and TVs. Everything sold was in used or good condition and would have been unnecessarily thrown out, contributing to an escalating yet often unseen problem that plagues our civilization.
- New England Campus Sustainability Forum- On September 21, 2012 several members of the Environmental Stewardship Committee attended the New England Campus Sustainability Forum. This Forum explored the Organization and Coalition Building, Financial Strategies and the Campus as a Living Laboratory. The event was designed to foster conversation and linkages between all stakeholders: administrators, staff, faculty and students in order to provide new insights on ways to think about and initiate campus sustainability programs.
- Martin Institute Events which focused on Environmental Justice, Sustainability, and Economic Development.
 - <u>Keynote Address on Environmental Justice, Sustainability, and Economic Development</u> <u>delivered by former Governor Christine Whitman</u>
 - The event was on September 19, 2012- Christine Whitman is the President of The Whitman Strategy Group, a consulting firm that specializes in energy and environmental issues. They offer a comprehensive set of solutions to problems facing businesses, organizations and governments; they have been at the forefront of helping leading companies find innovative solutions to environmental challenges. Whitman served in the cabinet of President George W. Bush as Administrator of the Environmental Protection Agency. She was the $50^{\rm th}$ Governor of the State of New Jersey serving as its first woman governor.
 - O Plenitude: The New Economics of True Wealth A Conversation with Juliet Schor

 The event was on October 3, 2012- Juliet Schor is Professor of Sociology at Boston College. Before joining Boston College, she taught at Harvard University for 17 years, in the Department of Economics and the Committee on Degrees in Women's Studies. A graduate of Wesleyan University, Schor received her Ph.D. in economics at the University of Massachusetts. Her most recent book, Plenitude, "offers a groundbreaking intellectual statement about the economics and sociology of

ecological decline, suggesting a radical change in how we think about consumer goods, value, and ways to live."

- Green Fund Event- The Martin Institute hosted an event introducing students to the Green Fund and how they can apply for Green Fund grants.
- O <u>A Climate Reality Presentation</u>- The event was on Jan. 22 at 7:00 p.m and was given by Prof. Lisa Boragine, Department of Communications and a member of the Climate Reality Leadership Corps, a grassroots network of more than 4,000 trained volunteers who live and work all over the world. She has been personally trained by the Climate Reality Chairman, former Vice President Al Gore. Her presentations both educate people about climate change and build local networks of climate activists who work in their own communities and countries demanding solutions.
- On January 29th at 7:00 p.m. in the Martin Auditorium, students were able to attend a showing of, *An Inconvenient Truth*, the documentary in which Director Davis Guggenheim eloquently weaves the science of global warming with former US Vice President Al Gore's personal history and lifelong commitment to reversing the effects of global climate change. A longtime advocate for the environment, Gore presents a wide array of facts and information in a thoughtful and compelling way. Students left the screening with the message that we are amidst a major global climate crisis that requires us to wisely act now.

o Majora Carter- Sustainability in Urban Areas

On February 11th at 7:00 pm Majora Carter presented her experiences on how she redefined the field of environmental equality, starting in the South Bronx. Now she is leading the local economic development movement across the USA managing to bring the South Bronx its first open-waterfront park in 60 years, and scoring \$1.25 million in federal funds for a greenway along the South Bronx waterfront, that brought the neighborhood open space, pedestrian and bike paths, and space for mixed-use economic development.



 Ronald Prinn- The MIT Integrated Global System Model: A guide for Environmentally and Economically beneficial Development of Energy, Food and Water Resources

On March 13th at 7:00 pm Ronald Prinn from MIT presented and explained his climate model which



incorporates economics, climate dynamics, and land and ocean ecosystems to eradicate uncertainties in climate predictions. He works with social scientists to link the science, economics, and policy aspects of global change and leads the AGAGE network that measures rates of changes of the concentrations of trace gases involved in the greenhouse effect and ozone depletion. He is pioneering the use of inverse methods using AGAGE measurements and 3D models to determine trace gas emissions and

understand atmospheric chemical processes.

- ➤ **Waterfest 2012-** "Take Back the Tap" was held on Wednesday, November 7, from 8pm to 11pm in the Dining Commons. At this event, numerous student groups set up presentations and demonstrations that raised awareness of water use and conservation.
- ➤ **Environmental Studies "Walk of Time"-** Professor Kristin Burkholder and her ENV200 classes presented "Walk of Time" where marker signs were part of an activity in which students (and faculty/staff/friends/etc) walked "through time" from the formation of Earth (4.5 billion years ago) up

to the present day. Signs along the route illustrated the age of the earth and described conditions at various points in Earth's long history. The route began on the North side of the quad and stretched all the way to Shields Science Center.

- > **Sustainability Harvest Fair-** On October 15th over 300 students and faculty attended the fair which displayed the presentations of over 20 student groups and vendors committed to supporting sustainability efforts on campus. The band Melodeego, whose performance is completely powered by attendees that generate electricity from pedaling stable bikes, also attended the event.
- Easton's Green Communities Committee- Jessa Gagne was invited to speak at the Green Communities Committee meeting held on October 15, 2012 from 5:00-6:15PM. At this meeting she provided the committee with an update on the status of the solar panel installation at the Clock Farm. She also spoke to them about other initiatives including the heating oil to natural gas conversions, electrical submetering, centralizing and expanding the energy management system, and the campus sustainability plan's goal of reducing energy consumption by twenty percent by FY2019. As one of the largest users of energy in Easton, it is important that Stonehill College communicate its energy efficiency initiatives and metrics with the GCC.
- > **Food Politics Learning Community** On November 12th students in the Food Politics Learning Community, co-taught by Bridget Meigs and Chris Wetzel, gave presentations about their research on Stonehill's food system. Presentations included information about the production, preparation, marketing, distribution, and disposal of food at the college. A small reception followed the presentations where the audience could engage in informal conversations with the students.
- **Earth Day Party-** The campus celebrated Earth Day on April 22nd by hosting a sustainability fair focused on campus sustainability efforts. Over 25 on and off campus groups participated in this awareness raising activity.
- > **Grab the Green week-** Sponsored by Compost Committee, during this week Dining Services suspended the use of all to-go containers, and only reusable to-go containers were allowed. The group had students in the main Dining Commons all week educating and spreading the message of sustainability, showing the community how to get by without using plastic to-go containers.

II. Green Campus Initiatives

- **Composting-** Composting in the Roche Dining Commons began on September 5, 2012. Posters on what to compost and how to compost were put on composting bins. In addition, students were encouraged to sign up to learn how to compost.
- **Reusable to-go containers** In September, first year students received free reusable to-go containers in an attempt to curb the use and habit of using plastic to-go containers.
- ➤ **Turtle Crossing Signs-** Turtle crossing signs were installed around Campus.

III. Sustainability Plans and Opportunities

➤ **GreenerU Visit-** On February 27th Father Mark T. Cregan and Jeanne Finlayson met with the organization GreenerU including its Chairman and CEO Robert Pratt to discuss a potential partnership with the college. GreenerU focuses on energy efficiency implementation and behavioral change

initiatives that can help campuses achieve sustainability and energy goals. GreenerU clients include Assumption College, Babson College, and College of the Holy Cross.

- ➤ Energy Manager Hired- On August 14, 2012 Jessa Gagne was hired as the College's first energy manager to coordinate the College's efforts to reduce energy consumption and costs. Some of efforts have included:
 - TNZ Energy Consulting Survey- From December 6, 2012 to January 17, 2013 Jessa Gagne and TNZ surveyed the campus and created eight separate walkthrough reports that provide context for moving forward with the College's energy reduction targets by identifying the most cost effective energy conservation improvements.
 - o **Energy Plan-** Jessa Gagne presented her energy plan and initiatives on January 25, 2013 to the Quarterly Management Group.
 - Energy Presentation to Residence Life- Jessa Gagne gave a presentation on January 28, 2013 at the monthly RA training session from 6:30PM to 8:00PM in the Holy Cross Library. Over 50 RAs were in attendance along with 10+ RDs, Area Coordinators, and Kristen Pierce, the Director of Residence Life. The presentation covered the reasons for energy efficiency, current projects, and ways students can make their rooms more energy efficient.
 - Lecture to Principles of Environmental Science- Jessa Gagne lectured to a Principles of Environmental Science class on April 24, 2013 discussing what Stonehill is doing to become more sustainable and what students can do to live more sustainable lives.
- > Sustainability Plan Draft Fall 2012 presented to Division Heads and to the Planning Committee.
- > Campus Energy Management Systems— Jessa Gagne implemented a new energy management system on campus called Tridium. For those buildings that already have controls and wiring, this software will monitor and track issues and usage. Energy conservation practices such as reducing temperatures while the buildings are not occupied and determining the optimal energy usage for a heating system based on outside air temperatures are being implemented as control of each building is transferred from Metasys to Tridium. Buildings that can connect to our EMS include the Shields Science Center, New Residence Hall, Cushing-Martin Building, Merkert-Tracy Building, and The Hill. Merkert-Tracy went live in Tridium in June 2013. Without a year's worth of electrical consumption data on these buildings, it is difficult to calculate savings. However, estimates of each building's electrical consumption were made as part of the recent energy audits. At this time we estimate that electrical consumption will be reduced by a minimum of 10% in these buildings, which will save the College at least \$30,000 annually.
- ➤ **Boland Hall Oil to Natural Gas Conversion** The original oil fired cast iron hot water boilers in Boland Hall were replaced with natural gas fired high efficiency condensing boilers. The total project cost was \$117,580. Columbia Gas provided \$16,000 in incentive funding, which lowered the final cost to the College to \$101,580. Natural gas consumption will be monitored over the next year to determine the reduction in energy use.
- ➤ Water Fixture Upgrade During winter recess all of the showerheads and sink aerators in the residence halls and athletic facilities were replaced with low flow fixtures. The project saves an estimated four million gallons of water per year. Approximately 80% of the water used in sinks and showers is heated. Therefore, the project will also reduce natural gas consumption by 28,356 therms

and electricity by 23,280 kilowatt-hours. The total annual savings based on FY13 rates is \$97,093. The total project cost was \$23,827. Columbia Gas provided \$12,387 in incentive funding; therefore, the total cost to the College was \$12,387. The simple payback for this project was only 47 days.

- **Electrical Submetering**—Over 95% of the College's electrical consumption is captured on one electric meter, which makes it difficult to determine the effectiveness of energy efficiency projects. In order to address this problem, electrical submeters will be installed to capture consumption by building. In FY13. electric submeters were installed in Boland Hall, Cushing-Martin, Ice Rink Garage, Martin Institute, Merkert-Tracy, New Residence Hall, O'Hara Hall, O'Hara Village, Roche Dining Commons, and Shields Science Center. Over 45% of the College's electrical usage is consumed by these ten buildings. Additional submeters will be installed over the next three years.
- **Real Food Advocates-** In February, Bridget Meigs, Prof. Chris Wetzel and five members of the Class of 2015: Andrew Curran, Sean Davenport, Breanne Penkala, Catie Barros, and Christine Moodie attended a Real Food Summit at Johns Hopkins University. Committed to a healthier, greener, and fairer food system, they want to bring more real food to the College. At the summit, they learned how to work with our purchasing office and Sodexo on how to offer more real - local, fair and sustainable food options to diners at the College. The



trip was underwritten by a Green Fund Grant from the Environmental Stewardship Council.

- **Food Recovery and Real Food Challenge Programs-** College staff and students began to review these two sustainability programs which have been well recived and follow up has been planned for both programs focusing on data collection from the schools Dining Services. Dining Services will work with the groups to provide information to start baseline data gathering for these programs. Food Recovery focuses on efforts to reduce food waste on campus while Real Food works to incorporate local, sustainable and fair sources of food into the college dining experience.
- Recyclemania Beginning on February 3rd 2013, Recyclemania was an 8 week program of friendly competition between colleges and universities to promote waste reduction through recycling programs on campus. Overall, Stonehill ranked 187 out of 273 schools that participated this year with a 22.6% recycle rate.
- **Food Truth Approval-** The student formed group "Food Truth" has been approved as a provisional SGA group for the fall semester. Food Truth will encompass all aspects surrounding the food system: production, purchasing, menu planning, composting and waste disposal. Food Truth will also serve as an umbrella group combining the groups Real Food, Compost Committee, and No To-Go.
- **Environmental Coffeehouse (M.O.S.S)-** Students and faculty were invited to perform on May 2nd at the environmental coffeehouse at The Hill, presented by Sue Mooney's Environmental Ethics class. The class also gave a presentation entitled, "Movement of Stopping Stuff" (M.O.S.S), on how to stop buying and start living anti-materialistically. The students also created a non-religious version of the St. Francis pledge that students could sign online to begin reducing their consumption of "stuff." Here is a link to the incredible presentation: http://prezi.com/jn76cba1wfee/moss-movement-of-stopping-stuff-environmentalcoffeehouse/
- **Solar Sync: Smart Irrigation** New weather monitoring devices are being installed for the irrigation on campus. The Solar Sync sensor is a sensor that is attached to buildings and is able to adjust water usage based on current weather conditions.

- ➤ **Single Stream Recycling-** Starting June 24, 2013 the College began a single stream recycling system where all recycled materials can be mixed in the same container. The recycling containers across campus are being relabeled with new labels to aid in the recycling process. Single stream recycling will hopefully make it easier for the community to recycle and increase recycling efforts.
- ➤ ENACTUS (SIFE) Collection Drive -- Residence Life has partnered with a few student organizations to run an end of year collection drive. There will be boxes in all of the halls, monitored by the RDs for food and items for the dining hall. ENACTUS (SIFE) will be doing their furniture drive, but they are working on being much more organized this year and will be picking up items through the next two weeks. The Epilepsy Foundation dropped off 3 large bins (one in each Court and one by the Heights) as well as large barrels in each of the halls.
- ➤ Laundry Monitoring- the College and MacGray laundry services installed devices to track and monitor washing machine usage in Residence Halls. This is a two year project installing LaundryView in almost all Resident Halls. The average laundry loads per student per month will be communicated to raise awareness about use of laundry on campus.
- Foreen Fund- The Stonehill Green Fund was established in the fall of 2012 to provide seed funding to students and student groups for projects that contribute to Stonehill's campus sustainability goals. Areas of sustainable focus include: energy and water reduction, waste and resource reduction, and community awareness. In FY13, the Green Fund provided funding for thirteen separate student led projects and initiatives. The combined cost of the projects was \$9,953.20. The Eco-Reps were awarded nearly \$2,000 to provide supplies for Green Kits that will be given to all incoming freshman in September of 2013. The Green Kits include recycling bins, recycled pens and paper, reusable bags, cups, to-go containers, and towels. Several other projects were centered on reducing waste by providing reusable to-go containers and cups. Most of which were distributed during the Grab the Green week during which time the Dining Commons did not provide single use to-go containers. Other projects included attending various conferences and prizes for sustainability themed contests.
- Campus Green Kit program- Initiated via the Green Fund, Green Kits will contain various green items in a kit that each freshman student will receive in the Fall, along with materials explaining the College sustainability efforts and ways that students can lower their carbon footprint, and market groups they can join. Items include a recycling basket for student rooms, hot and cold beverage to go containers, a re-usable to go container, laundry detergents pods, recycled pens, notebooks and other items from College vendors and supporters.
- Sustainable Recycled Paper- The Paper Subgroup of the ESC met and reviewed various options for a sustainable recycled paper as the default with the College's paper supplier. These included paper from eucalyptus trees, FSC certified papers, and paper produced at regional paper mills. They are currently researching ways to measure the carbon footprint of all the options to choose the paper with the most sustainable impact.
- ➤ **Meatless Monday-** The College Dining Services started a Meatless Monday program to highlight the benefits of a non-meat diet. A subgroup of the ESC and students met with Dining Services to show their support for Meatless Mondays where they coordinated menus and marketing to create a favorable environment for teaching students about meatless meal options.