



Villanova Annual Sustainability Report

April 22, 2014



VILLANOVA
UNIVERSITY

Commitment to Sustainability

Introduction

Villanova's sustainability efforts started long before 2007 when Father Peter signed the American Colleges and Universities Climate Commitment, agreeing to achieve carbon neutrality by 2050. Our efforts to build a sustainable future started even before the first recycling coordinator was hired in 1992, with the original creation of the University and our commitment to Augustinian values and Catholic social teachings. These values guide us as citizens; we should care for our neighbor, help those less fortunate than ourselves, and preserve the environment we all depend on. These same values are what guide our sustainability efforts.

Sustainability or the ability to meet the needs of the present without compromising the ability for future generations to meet their own needs, does not only relate to the environment, but also includes people and considers how our actions affect others, both present and in the future. Sustainability looks to preserve the environment for humanity's sake, so that future generations may be able to live in a world as comfortable as the one we enjoy today. Living in a stable environment is not the only measure of happiness. Sustainability also strives to build a socially just society for everyone, providing equal rights and opportunities to everyone.

Villanova strives to teach our students these values and to live them in our day-to-day operations.

Although this is the first annual sustainability report, it is not the start of our sustainability journey, it is a chapter along the way.

Letter from the President

Dear Friends:

Villanovans are creative and innovative; we are good stewards of our resources. We are aware of our world and mindful of our impact on it. With these factors as a backdrop, we have pursued a course of action, or more precisely, integrated into our community a way of living that prioritizes our efforts to “be green” and considers our actions in the larger context of sustainability.

During this past year we have built on that legacy and our efforts are chronicled here in the inaugural Villanova Annual Sustainability Report. I am delighted to share it with you, and I thank you for your part in the events and decisions that made it possible.

As I have said often this year about the University in general, we are doing very well but we are far from finished. As we strengthen Villanova by building on our strategic plan and campaign priorities, we will continue to work toward our goal of carbon neutrality. We can and must keep our stride steady and deliberate as we walk this journey together- for us, for future Villanovans, and indeed for our world.

Again, I want to thank those who have worked on Villanova's sustainability efforts over the years. We would not be where we are today without your support and commitment.

Sincerely,

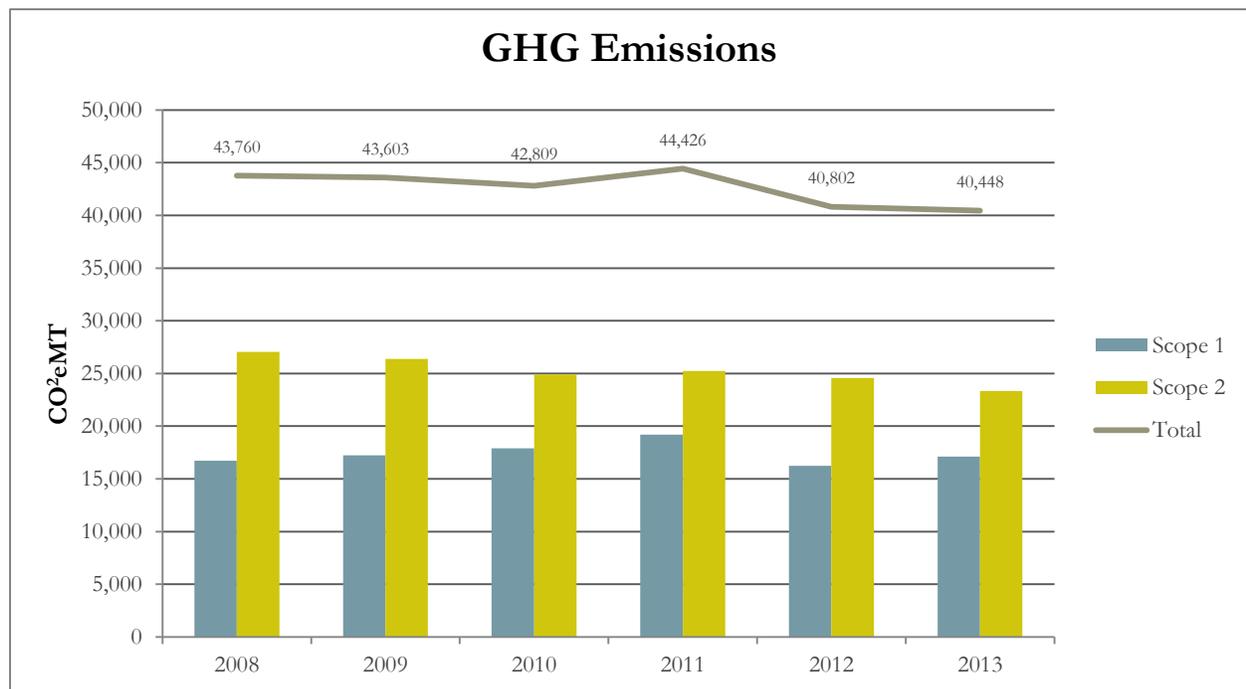


Rev. Peter M. Donohue, OSA, PhD
President

Presidents Climate Commitment Update

Father Peter signed the American College & University Presidents' Climate Commitment in 2007 to help strengthen Villanova's sustainability efforts, pledging to achieve carbon neutrality by 2050. Carbon neutrality means campus operations will not result in greenhouse gas emissions. This includes emissions from the steam plant, university-owned vehicles, purchased electricity and daily commuting. Reaching this goal will require participation from every member of the Villanova community.

Since the signing of the Presidents' Climate Commitment a committee was formed to address the challenges in achieving carbon neutrality. The President's Environmental Sustainability Committee (PESC), is made up of faculty, staff and students from across the University, representing every college. Additionally, a Carbon Action Plan was commissioned to help guide our efforts towards carbon neutrality. To learn more about the Presidents' Climate Commitment and what is being done please visit the [sustainability website](#).



Above is the most recent greenhouse gas report for Villanova. A greenhouse gas report provides a historical quantification of three scopes of emission. Scope 1 is energy that is burned on-site and used on-site: this includes the steam plant, university vehicles, and refrigerants. Scope 2 is energy generated off-campus and used on-campus: electricity makes up all of our scope 2 emissions. Scope 3 emissions, not shown on this graph, include indirect transportation emissions, such as commuting, conference travel, travel for athletic games, etc. We are currently conducting a campus wide transportation survey to better document our scope 3 emissions. Our overall scope 1 and 2 greenhouse gas emission has fallen over the past 6 years by almost 10,000 CO₂eMT, with a slight increase in 2011. This is due to energy efficiency projects across campus including lighting, heating, ventilation, and air conditioning (HVAC) and sustainable design, as well as a switch to natural gas-powered electricity from predominantly coal-powered electricity.

2013-2014 Academic Year Accomplishments

Communication

Sustainability Website

In an effort to build awareness and communication of campus sustainability issues, the Villanova Sustainability website was redesigned in 2013 to better represent our current initiatives. The new website is easier to navigate and has been updated with current information. Students, faculty and staff can use the website to learn more about campus sustainability initiatives and how to get involved, through events, committees and volunteer efforts. Please visit the Villanova Sustainability [website](#) to explore its resources.

Sustainability Newsletter

The Sustainability Newsletter was developed at the start of the 2013-2014 academic year to spotlight achievements in campus sustainability efforts and advertise sustainability events and opportunities both on and off campus. The Newsletter is released at the start of each month and is sent directly to those who have signed up for monthly delivery. Additionally, the Newsletter is posted on Campus Currents and the Newswire. The latest issue and all past issues are posted on the Villanova Sustainability [Website](#). To sign up for direct Newsletter deliveries email, [Liesel Schwarz](#).

Facebook Page

Social media plays a key role in communicating with the student, and to some extent faculty and staff, populations on campus. Recognizing that role, the "Sustainability at Villanova" Facebook page was launched in the spring of 2014. Managed by the Presidents' Environmental Sustainability Student Committee, new posts are added every week, ranging from news articles, to student and alumni spotlights, events, and more. The Facebook page is designed to not only attract the Villanova community, but also anyone else interested in sustainability.

3 New LEED Buildings

Villanova has a commitment to LEED design for all new construction projects through the Presidents' Climate Commitment, but we do not stop at new construction. For the past five years, any major renovation project has also pursued LEED certification. This past year Sheehan, Sullivan and Fedigan Hall achieved LEED certification. These were the first dormitories on campus to get LEED certification, giving students an opportunity to directly interact with sustainable design features such as like vacancy light sensors, low flow shower heads, dual flush toilets, and more highly insulated windows.

Events

Green Apple Day of Service

The U.S. Green Building Council, the not-for-profit who developed the LEED rating system, organizes a nation-wide day of service to green the Country's schools. Villanova incorporated the Green Apple Day of Service activities into our annual St. Thomas Day of Service, serving 14 schools in sustainability related projects. Projects included gardening, clean-ups, and building a rain garden.

Campus Sustainability Day

The Association for the Advancement of Sustainability in Higher Education (AASHE) organizes Campus Sustainability Day, a cross national event held every fall to bring focus to sustainability issues around the world. Fall 2013 was the first year Villanova participated in the event, joining over 70 other colleges and universities across the country. The theme was general campus sustainability efforts with presentations on Villanova's commitment to sustainability, as well as a panel on academic sustainability opportunities. The day's events capped off with a panel of Villanova alumni who have incorporated sustainability into their career, all the undergraduate colleges were represented on the panel.

Commitments

St Francis Pledge

The Catholic Climate Covenant developed the St. Francis Pledge to bring awareness to the connection between Catholic social teaching and climate change. Those who take the pledge, whether an individual, group or organization, agree to protect "God's Creation and advocate on behalf of the people in poverty who face the harshest impacts of global climate change". Villanova University is now an official signatory of the St. Francis Pledge, joining other great institutions, including Chestnut Hill College, Cabrini College, Neumann University, Notre Dame, and Rosemont College. Individuals can also sign the pledge: if interested, use this [link](#).

Academics

Villanova Center for Energy and Environmental Education

The College of Liberal Arts and Sciences established the Villanova Center for Energy and Environmental Education (VCE³) with a grant in May 2013. VCE³'s mission is to "enhance learning opportunities of students in the broadly defined areas of environment, energy, sustainability and climate". Although housed in Liberal Arts and Sciences, VCE³ works with all of Villanova's Colleges to develop programing in research, teaching, and service. . The Center has sponsored a number of sustainability-themed events to date. In May 2014, VCE³ will host the first Faculty Sustainability Workshop to train faculty on incorporating sustainability into their academic curriculum.

Student Engagement

Athletic EcoReps

Although we do not always think of athletics when talking about sustainability, they do play a large role in Villanova's carbon footprint. Athletic facilities use a lot of energy, and teams require resources such as equipment, uniforms, travel, etc., and produce waste at games and on a daily basis. The Athletic EcoRep program was created to help engage athletes in sustainability issues that they directly impact. To date the group of ten athletes in the program has addressed locker room recycling and access to hydration stations. Next year the group hopes to achieve a zero waste game, as well as monitor recycling rates throughout the athletic facilities.

Subcommittee Updates

Communications

Committee Chairs: Francesca Reynolds and Shawn Proctor

Description: Work to communicate Villanova's sustainability efforts in promoting both on- and off-campus, and to reinforce the message that Villanova is committed to fulfilling the Presidents' Climate Commitment.

Past Year's Accomplishments:

- Created a video for Earth Day 2013, which can be repurposed to promote Earth 2014.
- Partnered with an independent Vermont tee-shirt company for additional gifts for the Earth Day raffle baskets.
- Communicated Earth Day and sustainability messages via the University's electronic and print communication vehicles, including Campus Currents newswire, the MyNova news channel and Villanova Magazine.
- Assisted with gathering data for STARS and Princeton Review undergraduate surveys.

Next Year Goals:

- Continue to support PESC events with marketing or promotional resources
- Add a "green tour" to the Villanova Virtual Visit

Earth Day

Committee Chair: Nat Weston

Description: The Earth Day Committee is focused on planning activities surrounding Earth Day on April 22 of each year. Events include a keynote address and sustainability fair. The committee works to involve students in the Earth Day activities and to develop other Earth Day events that highlight Villanova's commitment to sustainability.

Past Year's Accomplishments:

The committee organized a successful Earth Day in 2013, highlights of which included:

- Sustainability Fair and Farmers' Market
- Keynote address given by Katherine Gajewski from the Mayor's Office of Sustainability in Philadelphia
- Panel discussion on hydraulic fracturing for natural gas including Villanova professors and invited experts

Planning for Earth Day 2014 is well underway. The focus of Earth Day 2014 is on sustainable agriculture, and planned events include:

- Sustainability Fair and Farmers' Market
- Keynote address by Dean Carlson from Wyebrook Farms
- Panel discussion on sustainable agriculture
- Student led Earth Day of Service and BBQ

The day of service is a new component of Earth Day activities that we hope draws substantial interest from the Villanova community and further highlights Villanova's commitment to sustainability.

Next Year's Goals:

- Organizing and implementing a vibrant Earth Day 2015 celebration
- Growth of the student-led Earth Day of Service activities
- Higher profile and better advertising for Earth Day events

Law School

Committee Chair: Megan Jacobs

Description: Build the environmental profile of the Law School by encouraging better lines of communication to share ideas and best practices. The committee works to identify areas of success in the community that can be replicated in the Law School, share ideas for financial savings and improving environmental performance, and promote accomplishments and raise awareness of environmental improvements underway or already accomplished.

Past Year's Accomplishments:

- The Law School has partnered with Zip Car to get a substantial discount for our Law Students.
- Host the Environmental Law Journal Symposium-Green Tweets: The Promise and Peril of Advancing Corporate Social Responsibility Through Social Media- Friday, April 4, 2014 9am-4pm
- The Interim Director of Finance and Administration, Jennifer Henfey has joined the University wide committee to streamline our printing process and reduce printing waste on campus. This has already been completed in the Law School for the majority of our printers.
- We are coordinating a cell phone/e-waste drive following Earth Day 2014 to bring awareness to the proper disposal of electronics. We will be donating all the money raised to a charity.
- The Director of Events, Nicole Garafano is working to bring expert Christine Sheppard to the Law School to discuss the problem of Bird Collisions. The new Law School has a history of bird strikes and we are trying to raise awareness to find a solution.
- Double sided printing has been made the default on all copiers in the Law School.
- We petitioned the Faculty to reduce the amount of papers students print in the course of a semester.

Next Year Goals:

- Create a Law School specific monthly newsletter in which we try to increase our communities understanding of environmental issues and ways that they can be better stewards of their environment both at school and at home.
- Host at least two discussion regarding Sustainability at the Law School.
- Get more representation from Law School students, faculty, and staff involved in the committee.

Students

Committee Chairs: Chara Armon (Faculty), Allen Landis (Co-Chair), Kristen Shannon (Co-Chair)

Description: The Student Sub-Committee's primary goal is to develop individual and group student-led projects to help promote sustainability awareness and sustainability implementation on campus.

Past Year's Accomplishments:

- Implemented a new form of Committee organization, with two Co-Chairs, a Communications Chair, and a Secretary. The Committee has grown tremendously in productivity and effectiveness with this new system.
- Created RA Sustainability Boards that were raffled for two floors on West Campus.
- Extended our Social Media presence including a Villanova Sustainability Facebook Page.
- Working with the Chemistry Department to create program for students to reuse chemistry equipment instead of buying new every year.
- Initiated an Environmental Sustainability Service trip on the Saturday after Earth Day. The trip takes students to local community gardens, followed by an on-campus BBQ.
- Worked with Business Without Borders to bring a speaker from SAP to discuss sustainable business practices: "Careers in Sustainable Business: Perspectives from the Corporate World," Monday March 31, 2014, Bartley 1010. James Sullivan, Vice President for Sustainability at SAP Corporation, and JoAnn Garbin, Founder and Director at KnowE, Villanova alumna, and Member of the Sustainable Business Network of Greater Philadelphia.
- Working to develop a campus bike share program.

- Offered Campus Green Tours in the Fall on Sustainability Day as well as in the Spring for Earth Day.
- Working on a campus online trading network that allows students to buy, sell, and barter used goods.

Next Year Goals:

- Become a more well-known student group on campus.
- Spearhead projects working with the engineering school-including long term research projects and data collection.
- Finish work with the Chemistry Department to create program for students to reuse chemistry equipment instead of buying new every year.
- Work more with the community, including possibly a service trip in the fall for Campus Sustainability Day.
- Initiate a Sustainable Leadership Seminar that teaches our committee the skills needed to become an effective leader in environmentally sustainable programs.
- Contact environmental groups from other schools to work on a possible environmental sustainability in education workshop that focuses on how to implement programs and curriculums on campus.

Transportation

Committee Chair: Lisa Rodrigues

Description: Identify ways to promote a quality pedestrian campus environment by improving both bicycle and pedestrian transportation. Encourage use of public transportation for commuting by investigating possible subsidies/partnerships through SEPTA. Promote safe, efficient local transportation services for the University community. Research greater fuel efficiency vehicles for Villanova's fleet and encourage the use of World Travel to monitor travel by members of the campus community.

Past Year's Accomplishments:

- Evaluated incentives offered for using public transportation at the following peer institutions: University of Pennsylvania, University of Georgia, University of Rochester, Emory University, Dartmouth University, Drexel University, and Temple University. This compilation was presented to and discussed with Mr. Joseph Ahern, Office of Public Safety.
- Following consultation with the Parking Office, regular users of public transportation are allowed to receive a temporary parking pass for day use when required.
- Drafted and tested a student survey of transportation uses, opinions, and needs for CEE 8207, Design of Sustainable Transportation Systems, taught by Dr. Seri Park. Student comments were used to improve the survey for students and create a separate, but similar survey for faculty and staff.
- Final student survey was distributed 3/26/2014.
- Discussions with Student Government Association to determine student interest in and opinion of a bike share program on campus. Several companies are being considered to implement a program.

Next Year's Goals:

- Analyze and evaluate the data collected from the student survey.
- Distribute the faculty and staff survey in Fall 2014.
- Analyze and evaluate the data collected from the faculty and staff survey.
- Use survey outcomes to refine and development future goals from transportation-related initiatives at Villanova University.

Waste Minimization

Committee Chairs: Richard Laudenslager and Michelle Moss

Description: Conduct annual waste inventories by identifying all areas on campus that generate solid waste, categorize the various types of waste, and track the volume of this waste year to year. Benchmark this data and set targets on minimizing waste and recycling. Use the data to make recommendations to PESC regarding programs and practices that will reduce, divert, or eliminate solid waste on campus, and implement any approved programs. Educate the campus on ways to minimize waste and encourage recycling.

Past Year's Accomplishments:

- **Construction Waste Recycling:** Members of the subcommittee helped to set up a new construction waste recycling program which includes the recycling of over 85% of construction waste and access to all construction waste records. Members also helped identify and select the new construction waste hauler for the program.
- **Waste Minimization and Recycling Challenges and Successes:** Members of the subcommittee created a list of waste minimization and recycling challenges and successes in each of their respective departments. This list will eventually be part of our marketing campaign to the university community to help encourage waste minimization and recycling in all Villanova departments.

Next Year's Goals:

- **University Printing:** This project will study, identify and report all the policies, processes, issues, statistics and facts about printing at Villanova. When the study is complete a report will be issued to PESC and the University at large about the best practices from a fiscal and sustainable standpoint for printing at Villanova.
- **Used Office Furniture:** This project will study, identify and report all the policies, processes, issues, statistics and facts about used office furniture at Villanova. When the study is complete a report will be issued to PESC and the University at large about the best practices from a fiscal and sustainable standpoint for the lifecycle of used furniture at Villanova.
- **Recycling Centers/Recycling Marketing:** This project will identify and improve all existing and new indoor recycling centers on campus. A map will be created so that Villanova community members will know where to find all recycling centers. There will also be a marketing campaign where signs with recycling facts will be placed on all the centers as well as other areas on campus.

Looking Ahead: Goals for Next Year

Apart from the President's Environmental Sustainability Subcommittee goals, we are working on the following additional goals for the upcoming coming academic year.

Sustainability Plan

Over the next 6 months we plan to develop an all-encompassing Villanova Sustainability Plan to address all elements of campus sustainability. This plan will go beyond the Climate Action Plan to include items such as transportation, indoor environmental quality, waste minimization, water use, purchasing, and academics, as well as energy. A team of students, faculty and staff will work together to develop the plan with two, three and four year goals. The plan is scheduled to be updated every two years to reflect accomplishments and new areas of interest.

Sustainability Training

On-campus training will be provided for the following sustainability groups next year: President's Environmental Sustainability Student Subcommittee, Recycling Advocates, and Athletic EcoReps. The training will provide committee members with valuable information and team building opportunities. Through these training opportunities we will better plan for the future and get insight into what is important to the campus community.

Bike Share

Development of a bike share program for students that allows for easier access to bikes both on and off campus is an ongoing effort that we hope to see realized in the coming year.

TradePal

In an effort to discourage waste and save money we are looking to offer a new service to students called TradePal. Through TradePal students can barter, trade, or sell items they no longer want safely within the Villanova community. Not only do students save money and waste less, but TradePal will also track our waste reduction and give Villanova a report on carbon emission diversion through use of the site.

If you have comments or questions on anything in this report please, email [Liesel Schwarz](mailto:Liesel.Schwarz).

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