CLIMATE ACTION PLAN

Road Map

2013-2035

Drafted by the Gonzaga University Advisory Council on Stewardship and Sustainability

Reviewed, Edited and Approved by the Office of the President

January 2013

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Executive Summary

Gonzaga University

True to its Jesuit, Catholic, humanist heritage, Gonzaga University educates students for lives of leadership and service for the common good by intentionally developing the whole person – intellectually, spiritually, physically, and emotionally. Consistent with its mission, Gonzaga University takes seriously its responsibility to safeguard the integrity of our natural world and is committed to a role of leadership in responsible environmental stewardship.

Advancing Stewardship

By becoming a signatory to the Presidents' Climate Commitment (see Appendix 1), Gonzaga was pledging to *deepen* and *strengthen* its commitment to ecological sustainability. Our Climate Action Plan embodies the University's comprehensive response to climate change and its efforts to advance ecological stewardship. This roadmap outlines current sustainability initiatives, strategies for achieving future targets, and potential funding sources and progress measures. This is a "living document" that can and must be revised as new circumstances and challenges present themselves.

This climate action plan establishes four goals:

Goal 1 – Deepen sustainability across the academic curriculum
Goal 2 – Increase sustainability related co-curricular programs
Goal 3 – Expand sustainable practices in University operations
Goal 4 – Coordinate and facilitate implementation of the Climate Action Plan

Gonzaga's Carbon "Footprint"

University operations produce greenhouse gas emissions that impact climate change and thereby provide a measure of the sustainability of University operations. Reducing greenhouse gas emissions will move Gonzaga closer to "climate neutrality." In December 2009, the University estimated that it annually emits 25,696 metric tons of emissions. Table 1 and Figure 1 outline the operational activities that contribute to these emissions.

Table 1. Emissions by scope and source, FY 2009 carbon footprint baseline.

Scope	Source	Emissions (metric tons of CO_2e)
1	Stationary combustion	6,267
1	Mobile combustion	210
1	Fugitive emissions	11
2	Purchased electricity	10,733
3	Commuting	3,989
3	Air travel	4,451
3	Solid waste	35

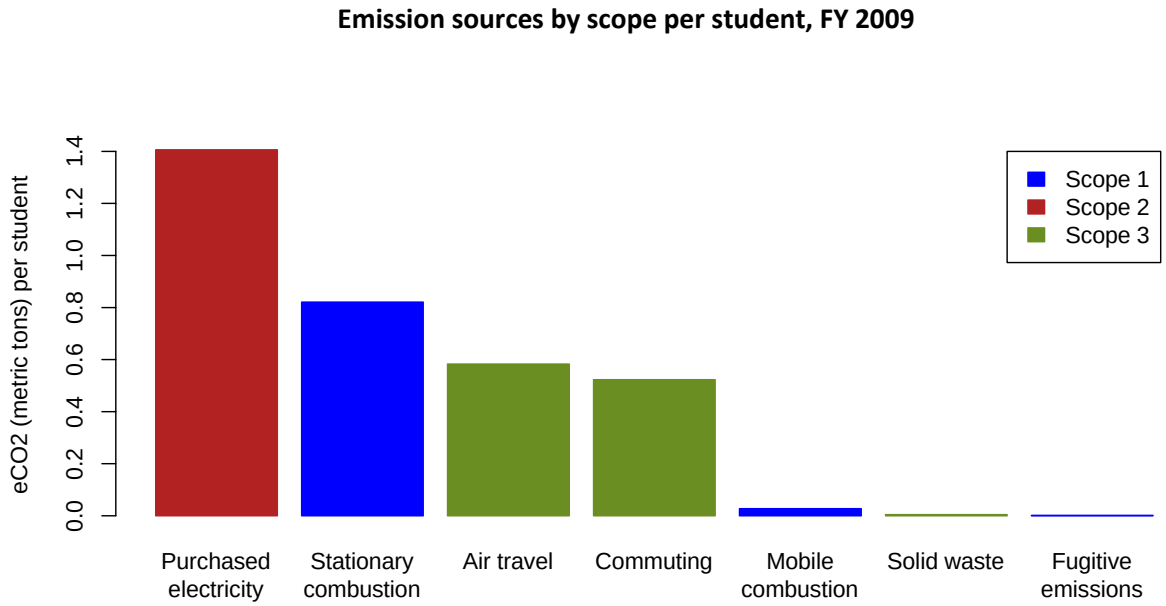

Figure 1. Greenhouse gas emissions per student and scope based on fiscal year 2009 carbon footprint baseline.

Commitment to Reduce Greenhouse Gas Emission

Signing the American College and University Presidents' Climate Commitment (ACUPCC), commits Gonzaga University to work toward climate neutrality or zero emissions, specifically a reduction of at least 20% by 2020 and at least 50% by 2035 (from 2009 levels) With the goal of climate neutrality by 2050. The University seeks to implement a series of sustainable purchasing and design practices; improve the efficiency of campus facilities; improve the efficiency of campus vehicles and equipment; increase reuse, recycling, reduction and composting activities; and decrease the percent of staff, faculty, and students who drive to work alone.

The University recognizes that it cannot remove 100% of its emissions through its own actions and will, therefore, l evaluate the effectiveness of high-quality offsets or renewable energy credits as a supplemental strategy for achieving climate neutrality.

Gonzaga University's Climate Action Plan Roadmap 2013-2035

I. About the University

Founded in 1887, Gonzaga University is a private Jesuit and Catholic institution located on the north bank of the Spokane River, in Spokane, Washington. Gonzaga University strives to inspire and transform its students so that they will have the capacities necessary to shape a better world.

a. Jesuit Catholic Heritage

Gonzaga University is one of twenty-eight Jesuit colleges and universities in the United States. Since 1548, when the Society of Jesus launched its first school, the Jesuits have been convinced that a high-quality education is the best path to meaningful lives of leadership and service. They have understood that the liberal arts, the natural and social sciences, and the performing arts, joined with all the other branches of knowledge, are powerful means to develop leaders with the potential for influencing and transforming society.

Part of the Jesuit mission, as emphasized by General Congregation 35 (GC 35) in 2008, is to respond to ecological or environmental challenges, "to appreciate more deeply our covenant with creation" (D 3, 36). In September 2011, the Social Justice and Ecology Secretariat at the General Curia of the Society of Jesus (Rome) published "Healing a Broken World," which considers the realities of environmental degradation and climate change in light of the Jesuit mission and charism. The document's recommendations particularly encourage Jesuit institutions of higher education to "[r]oot university teaching, research, and service activities in social and environmental justice issues."

b. Historical Commitment to Stewardship

In keeping with its mission, Gonzaga University takes seriously the responsibility to our natural world. While a practice of conservation has long been a part of Gonzaga's culture, including energy conservation and recycling, the University has expanded that commitment by improving its recycling and waste reduction programs, adopting expanded Sustainable Purchasing and Design Policies (see Appendix 2), and developing innovative courses of study focused on the environment and sustainability. Signing the American College and University Presidents' Climate Commitment (ACUPCC) was Gonzaga's public commitment to responsible stewardship and sustainability.

II. About the Presidents' Climate Commitment

a. The Challenge of Climate Change

The very real threat posed by global warming constitutes a crisis that threatens the viability of the planet. The scientific consensus is that we need to reduce the global emission of greenhouse gases by at least 80% by mid-century if we are to reestablish the more stable climatic conditions that have made human progress over the last 10,000 years possible. We cannot avoid or delay action – maintaining the

status quo and not moving aggressively toward climate neutrality is also a decision, and a tacit admission that we are willing to risk the potential collapse of our civilization (see Appendix 1).[1]

b. Higher Education's Role

Higher education holds a unique position in its ability to influence society, as it possesses, by virtue of its inherent responsibility, the capacity to effect lasting and meaningful change in systems, policies and cultural practices. Presidents' Climate Commitment signatories are rising to this challenge by creating comprehensive climate action plans for promoting education and research to raise public awareness about the actual state of the biosphere, and human practices which impact it both positively and negatively. Further, the Commitment seeks to demonstrate how the pursuit of climate neutrality in specific campus operations can make a meaningful difference on the environment, both immediately and for the longer term; and to hold the effort (and themselves) accountable by publicly reporting on their progress.[2]

III. About the Climate Action Plan

This Climate Action Plan (CAP) is intended to guide Gonzaga in furthering its commitment to sustainability and to addressing climate change. We envision an appropriate and thorough integration of ecological stewardship and sustainability at all levels of University life. This goal will be achieved when:

- All members of the Gonzaga community appreciate and can articulate the relevance of ecological stewardship and sustainability to their lives and to their society
- Sustainability is a guiding principle of campus decision-making processes
- University operations avoid or limit a negative impact on the environment

These goals will be advanced through (a) education, (b) research, (c) student development programs, (d) operational change, including changes in construction practices, and (e) knowledge-sharing. As circumstances, regulations, and technologies change, and progress is made towards achieving these goals, the University's priorities and approaches will undoubtedly be adjusted and this Climate Action Plan will be updated accordingly.

The Advisory Council on Stewardship and Sustainability (ACSS) will help provide oversight of the plan's goals and progress. The ACSS will report progress at least annually to the President, will work with University Relations to report progress to the campus and the community, and will reach out to relevant stakeholders to facilitate sustainability efforts in the larger community of which Gonzaga is a part. Progress will be reported in an annual Campus Sustainability Report, and with the required public reporting to the ACUPCC every two years, beginning January 2015 (as stipulated in the President's Climate Commitment).

a. Development Process

[1] "The Crisis of Climate Disruption," Presidents' Climate Commitment http://www.presidentsclimatecommitment.org/about/climate-disruption.
[2] Ibid.

Work on the CAP began shortly after President McCulloh signed the Presidents' Climate Commitment in the fall of 2010. The Advisory Council on Stewardship and Sustainability was charged with making appropriate recommendations for implementing the Commitment (see Appendix 3). The ACSS Steering Committee invited faculty, staff, and students from across the University to participate in developing the Climate Action Plan, and the development process was guided by transparency, collaboration, and inclusion. Over the course of two years, more than 148 Gonzaga community members participated, including forty-two faculty, twenty-seven staff and administration, and seventy-nine students. In addition to student representation through GSBA, students from several courses dedicated their time and talent to advancing this work. For instance, in the spring semester of 2010, students in Dr. Bertotti-Metoyer's Environmental Sociology conducted a survey of current recycling practices. Also, in the spring of 2012, the students in Dr. Gordon's ENVS 399 capstone course constructed a draft climate action plan for Gonzaga as the culminating assignment of their major or minor in Environmental Studies. (Minutes of all meetings are publicly posted on the ACSS website at [http://www.gonzaga.edu/Campus-Resources/sustainability/acss/minutes.asp]).

IV. Advancing the Commitment to Sustainability

Goal 1 – Deepen sustainability across the curriculum

The most significant ecological impact universities can have on the world is in terms of how they educate the 1.6 million annual graduates who will become the next generation of leaders, parents, and community members -- presumptive of the fundamental change in understanding and practice that will proceed from this education.[3] Thus, relevant curricular focus and content is crucial to this effort.

Current Sustainability Curricular Offerings

Issues related to environmental stewardship and sustainability are addressed at many levels throughout Gonzaga's curricula.

College of Arts and Sciences - B.A. in Environmental Studies

In 2009, Gonzaga University initiated an Environmental Studies Major and Minor program in the College of Arts and Sciences. This thirty-six credit interdisciplinary program is built upon integrating science, the humanities and the social sciences, and integrating theory and practice in an effort to produce global citizens who have the capacity to solve the planet's most pressing environmental and social concerns. The required introductory interdisciplinary course and a senior symposium build cohesion and a sense of community. Students are encouraged to initiate and facilitate environmental stewardship and sustainability within the Gonzaga community and beyond. Based on eco-literacy, ethical awareness, reflective practice, and authentic application, the major encompasses Gonzaga's baccalaureate goals and the core principles of Jesuit education of experience, reflection, and action. Its essence is to address the question: "How do we build a just and sustainable future?"

School of Engineering and Applied Science - B.S. in Civil Engineering with Environmental Engineering Concentration

Within Gonzaga's School of Engineering and Applied Science, the Civil Engineering Department provides its students a choice of technical electives from four areas: environmental engineering, geotechnical engineering, structural engineering, and water resources engineering. Students may enroll in an environmental engineering concentration requiring additional course work, an experience that provides a strong background in the essential areas of environmental engineering. Through the Center for Engineering Design and Entrepreneurship, teams of students work on projects that incorporate sustainability. Current projects include evaluating the use of thermoelectric cells to provide energy for households in East Africa and developing software that will allow utilities companies to collect and present data on electric, gas, and water use at the level of residential customers.

[3] National Center for Education Statistics, http://nces.ed.gov/programs/digest/d10/tables/dt10_195.asp

School of Education – Teacher Certification Programs

The School of Education embeds sustainability into lesson plans for certain courses. For instance, the course, "Teaching in the Middle School" allows students to develop an integrated lesson on sustainability for a middle school classroom. Education students preparing to teach science learn how to address sustainability matters in primary and secondary level classes.

School of Business

The School of Business currently offers two courses related to sustainability: a) *Economics of Environmental Protection* (with approximately forty students per year, many of them business majors, and b) *Sustainable Business*, offered both at the undergraduate and graduate level.

The Environmental Law Clinic of University Legal Assistance at the Gonzaga School of Law

The Gonzaga Environmental Law Clinic provides legal representation to not-for-profit environmental programs in the Inland Northwest, with a focus on representing the Spokane Riverkeeper and other area Keeper programs. The Clinic gives students the opportunity to apply academics to legal practice, as they represent Spokane Riverkeeper, or other applicable organizations, on Clean Water Act citizen suit enforcement actions. Students may also appear on behalf of clients before regulatory agencies, or provide written comments to protect the River and forward the mission of that environmental group.

Future Curricular Goals and Strategies

Strategy 1.1 Assess and evaluate sustainability in the curriculum

Advancing sustainability across the curriculum will require a clear understanding of current course offerings and the viable possibilities of further programs or offerings focused on sustainability and the environment. Potential steps to further this goal include faculty surveys, assessment of student eco-literacy, and support by the Academic Vice President and deans in the context of realistic personnel and fiscal considerations.

Timeline:	2013-2015
Responsible party:	Academic Vice President, deans, department chairs
Outcome:	Appropriate benchmarks for sustainability in curriculum and for student eco-literacy

Strategy 1.2 Deepen sustainability across the curriculum

The University must approach environmental education broadly, including but not limited to rigorous courses of study in Engineering or Environmental Studies. Ideally, concepts related to the value, wonder, and complexity of the natural world will be incorporated across curricula. One way to achieve this goal would be through an institutionalized Sustainability across the Curriculum (SAC) program that would help create an informal learning community of faculty interested in incorporating moral stewardship and ecological sustainability concerns into their courses. (The Academic Vice President currently is supporting a three-year sustainability across the curriculum faculty learning community.)

With the approval of the Academic Vice President and deans, the appointment of a SAC faculty leader, as well as funding and incentivizing faculty participation in sustainability curricular development workshops, would be first steps toward achieving this goal.

Timeline: 2013-2015
Responsible party: Academic Vice President, deans, department chairs
Outcome: Integration of sustainability concepts and issues throughout the curriculum of the institution

Strategy 1.3 Support the creation of a Sustainable Business Concentration within the School of Business Administration

The School of Business is currently developing a concentration on sustainability as part of its Bachelors in Business Administration. The concentration will include two extant courses: *Economics of Environmental Protection* and *Sustainable Business*.

Timeline: 2012-2013
Responsible party: Dean, School of Business Administration
Outcome: A sustainability-focused concentration in the Business School

Strategy 1.4 Increase students' engagement with faculty research on sustainability

Faculty/student collaborative research provides opportunities for students to become part of the solution for climate change challenges. A clear sense of student interest in sustainability-related research projects, publication of such opportunities, and the promotion of such work can increase engagement by students and faculty in productive research activities that will have long-term impact. As is the case with all curricular efforts, they must be integrated into personnel and fiscal planning and realities at the administrative level of the University.

Timeline: 2013-2015
Responsible parties: Academic Vice President, deans, department chairs
Outcome: Increased faculty/student sustainability research; effective publication of relevant opportunities; institutional engagement with environmental concerns

Funding and Tracking Progress

Proposals such as these must reflect appropriate and timely planning and must progress in a timely manner through the regular administrative and budgetary procedures of the institution. Sustainability-related curricular goals must be established by those proposing specific initiatives and assessment of their achievement will be tracked by the relevant faculty members and administrators.

Method	Responsible Groups
1. Identify goals and benchmarks; annually assess available sustainability literacy opportunities	Faculty members, department chairs, relevant academic administrators

2. Report on sustainability curriculum progress in annual sustainability report 3. Pursue regular improvement within realistic restraints	Advisory Council on Stewardship and Sustainability Faculty and academic administrators

Goal 2 – Increase sustainability related co-curricular programs

About the Division of Student Life

In partnership with students, faculty, administrators, and other members of the Gonzaga University community, the division of Student Life supports students in their pursuit of a Jesuit education reflected in the Gonzaga University Mission and Ethos Statements. Student Life personnel strive to know and serve students individually, encourage them to grow and to mature, and enrich their educational experience by challenging them to be active participants in their own development. Recognizing growth as a continuous process, the division seeks to be sensitive and responsive to the spiritual, intellectual, social, physical, and emotional growth needs of all our students.

Gonzaga University encourages students to create and be involved in student organizations in order to fully participate in a diverse educational community that shares the interests and knowledge of others. In the context of environmental issues, various organizations or clubs on campus have begun and continue to educate and advocate for environmental issues, as summarized here.

Current Efforts

Gonzaga Outdoors

Gonzaga Outdoors allows students to explore the environment surrounding Spokane through rafting, backpacking, snowshoeing, etc. Students develop skills related to these activities, learn about the wildlife and ecology of the Inland Northwest, and gain appreciation for nature and an active lifestyle.

Gonzaga Environmental Organization

The student-led Gonzaga Environmental Organization (GEO) brings together students concerned with environmental issues; its members advocate for environmental awareness and promote environmentally-friendly initiatives on campus and in Spokane. GEO promotes recycling availability on campus, raises money for organizations such as the Friends of Scotchman Peaks, supports Earth Week activities, and coordinates and participates in various environmental efforts in Spokane.

Gonzaga Student Body Association

The Gonzaga Student Body Association (GSBA) actively promotes sustainability-related initiatives, including campus efforts to replace single-serving plastic water bottles with reusable plastic or metal water bottles.

The Center for Community Action and Service Learning

Service to others and engagement with our community are critical to Gonzaga values. Since 1997, the Center for Community Action and Service-Learning (CCASL) at Gonzaga University has fostered the integration of education, public service, and community involvement. CCASL organizes several activities that relate to sustainability. *The Recycled Notebook Project* collects and binds cereal-box cardboard and one-sided paper to form notebooks, the sales of which benefit programs such as Earthbound, a youth

mentoring school program. CCASL has also created the Ruellen-Day Community Garden and carries out an annual Spokane River Cleanup that removes litter from the river banks.

Residence Hall Association

The position of Student Director of Sustainability (SDOS) as a member of the Residence Hall Association (RHA) executive board was created in 2010 and filled in 2011. Since then, the SDOS has worked with other individuals and groups on campus to support sustainability efforts and, with the help of our local utility company, Avista, successfully competed against four other universities in the Power-Down, Add-Up initiative to reduce unnecessary electricity use. Currently, the SDOS is committed to planning at least one sustainability activity program and one sustainability awareness program per semester, while strengthening communication between faculty and students on effective means of sustainable living.

Dining Services - Sodexo, Inc.

Sodexo, Inc. (hereafter, "Sodexo"), Gonzaga's dining services contractor, is committed to working in partnership with Gonzaga to develop and implement new and more effective ways to reduce energy consumption and greenhouse gas emissions, conserve water, promote responsible waste management, reduce the use of toxic chemicals and create and advance new models of sustainable community development. Sodexo supports innovative sustainability at Gonzaga by introducing reusable cup discounts, the use of biodiesel, the elimination of trays, the sale of fair trade coffee, the purchasing of local seasonal produce whenever possible, and the reduction of inorganic and organic waste. (See http://www.zagdining.com/sustainability/ for more information.)

Future Sustainability Co-Curricular Goals and Strategies

Strategy 2.1 Create a "Green Fund" to support student-generated sustainability initiatives

The Gonzaga Student Body Association (GSBA) is exploring the creation of a "Green Fund" that would consist of an optional student fee of $5 per term. Students would be able to request funds to support sustainability-related projects.

Timeline:	2013-2014
Responsible party:	Gonzaga Student Body Association & VP for Student Life
Outcome:	Create a student-supported funding mechanism for student sustainability projects

Strategy 2.2 Expand sustainability related service-learning and place-based learning

CCASL intends to create generative partnerships with private and public entities to expand service-learning and place-based education related to sustainability efforts. Our Career Center's efforts to identify more sustainability-related internships (paid and unpaid) responds to increasing student interest in such work.

Timeline: On-going
Responsible party: CCASL and Career Center
Outcome: Sustained annual growth in sustainability partnerships

Strategy 2.3 Incorporating sustainability concepts and practices into new student orientation

New Student Orientation activities constitute a rich opportunity for incorporating sustainability concepts and practices into the lives of new students, both tapping into an interest for many of them and shaping their college experience through an awareness of sustainability problems and solutions.

Timeline: 2013-2014
Responsible party: Director of Student Activities
Outcome: Continuously increased awareness of and engagement with sustainability concepts and practices by all students

Funding and Tracking Progress

The "Green Fund" described here would be supported by a nominal student fee and managed by students. The Division of Student Life has and will continue to fund sustainability initiatives related to its programs; and CCASL will continue to seek partial funding through grants. Progress made toward these three goals will be tracked by Student Life.

Method	Responsible Groups
1. Report annually on number and type of sustainability related projects funded through Green Fund	GSBA; Student Life
2. Report on number of students participating in sustainability-related service-learning projects and internships	CCASL and Career Center

Goal 3 – Expand sustainable practices in University operations

American College & University Presidents' Climate Commitment (ACUPCC) signatories agree to complete a comprehensive inventory of all GHG emissions within one year after their implementation start date. Since signing the ACUPCC, Gonzaga has compiled and submitted complete emissions inventory results for FY 2009, 2010, and 2011. The first of these, the FY 2009 GHG inventory, serves as Gonzaga's institutional baseline for tracking progress in reducing climate footprint.

Summary of Greenhouse Gas (GHG) Emissions in FY 2009

In fiscal year 2009, University operations emitted 25,696 metric tons of greenhouse gasses.

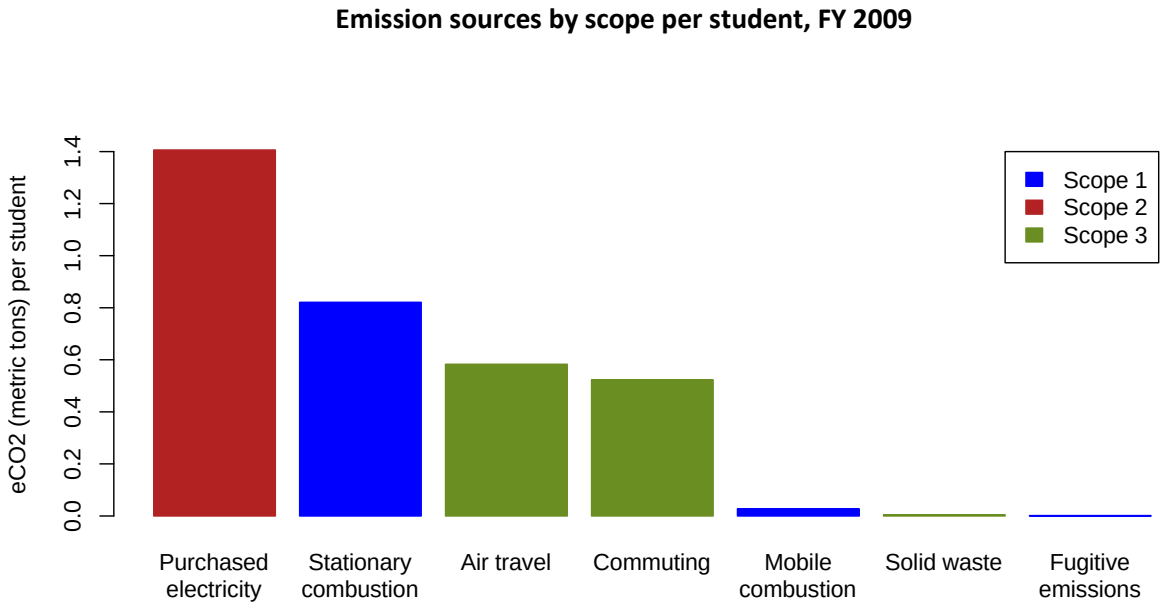

Figure 1. Greenhouse gas emissions per student and scope based on fiscal year 2009 carbon footprint baseline.

To help delineate direct and indirect emission sources, improve transparency, facilitate fair comparisons, and provide utility for different types of organizations and different climate policies and goals, the ACUPCC GHG Protocol defines three "scopes" for GHG accounting and reporting purposes.

- Scope 1 - refers to direct GHG emissions occurring from sources that are owned or controlled by the institution, including: on-campus stationary combustion of fossil fuels (e.g., natural gas); mobile combustion of fossil fuels by institution owned/controlled vehicles; and "fugitive" emissions. Fugitive emissions result from intentional or unintentional releases of GHGs, including the leakage of HFCs from refrigeration and air conditioning equipment.
- Scope 2 - refers to indirect emissions generated in the production of electricity consumed by the institution.

- Scope 3 - refers to all other indirect emissions - those that are a consequence of institutional activities but occur from sources not owned or controlled by the institution, such as commuting, air travel, and waste management.

Total Greenhouse Gas Emissions by Scope, FY 2009

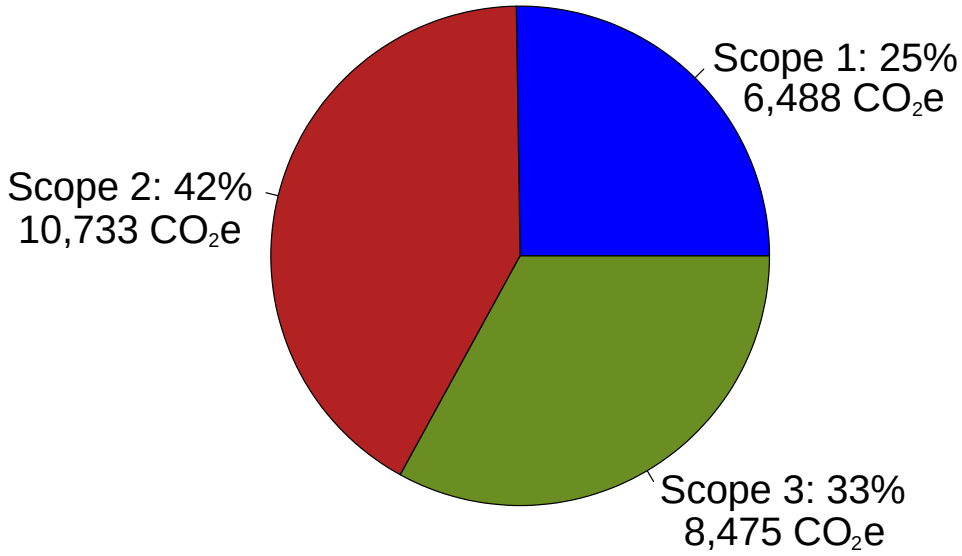

Figure 2. Tons of greenhouse gas emissions by scope based on fiscal year 2009 carbon footprint baseline.

Commitment to Reduce Greenhouse Gas Emissions

As stated above, Gonzaga University is committed reducing emissions by at least 20% by 2020 and by at least 50% by 2035 from 2009 levels. By 2050 the University intends to achieve climate neutrality.

Table 2. Greenhouse gas emission reduction benchmarks by percentage and year

Year	Metric Tons of CO_2e	% Reduction (from 2009 levels)
2009	25,696	-
2020	20,775	20%
2035	12,984	50%
2050	0	100%

Scope 1 Related Emissions and Mitigation Strategies

In FY 2009 Gonzaga generated 25,969 metric tons of GHG, of which 25 % were scope 1 emissions (6,488 metric tons). 96.6% of these scope 1 emissions were related to “stationary combustion” of natural gas (6,267 metric tons). 3% of scope 1 emissions were related to fleet vehicles (210 metric tons).

Natural Gas-related Emissions and Mitigation Strategies (Scope 1)

Current Natural Gas-related Emissions

In FY 2009, combustion of natural gas used for heating produced 24% (6,267 metric tons) of total campus emissions (25,969 metric tons).

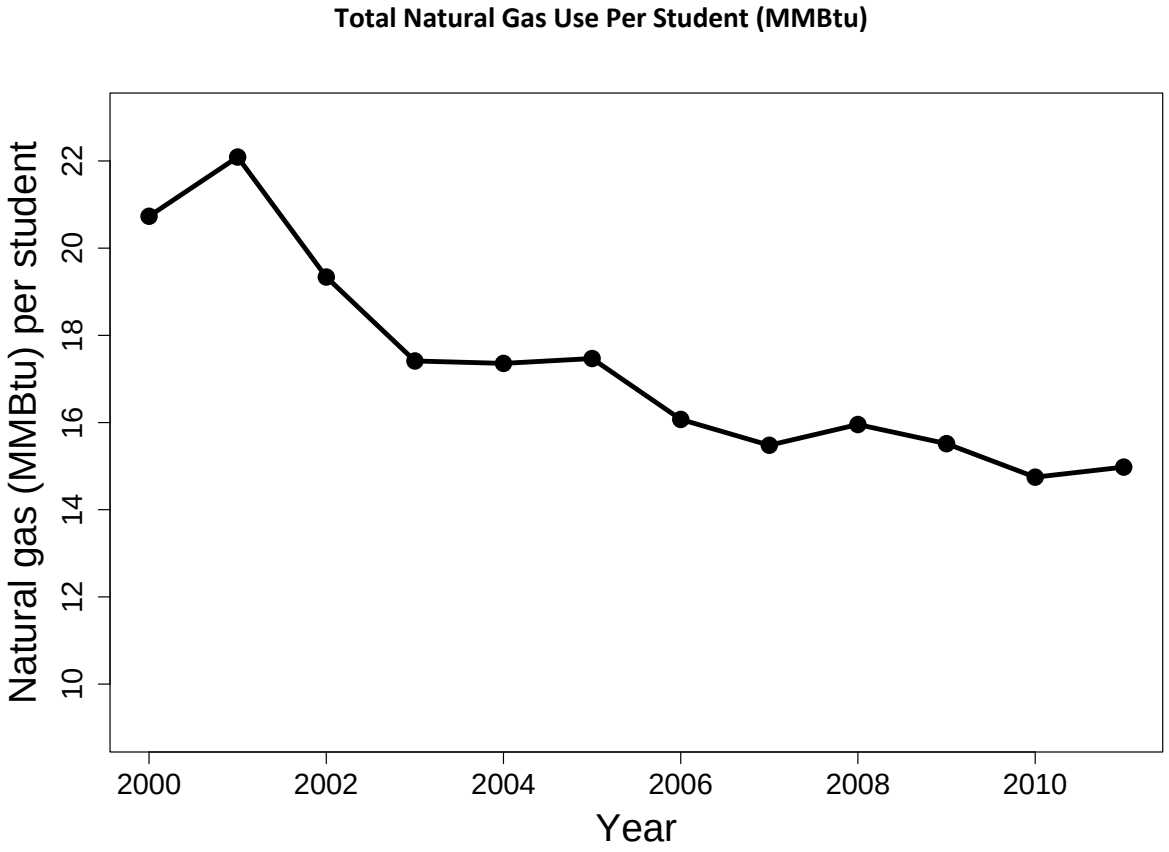

Figure 3. Total annual University natural gas use divided by student population from 2000-2011

Current Mitigation Strategies

Currently, the University manages emission reductions through key strategies of energy conservation and building efficiency; for example:

- Energy Management System (EMS) – A computer-based control system monitors and adjusts heating in buildings to conserve energy while maintaining comfort. Building systems in all new construction and major remodels are added to the EMS.
- Planned Maintenance – regularly scheduled maintenance of building systems ensures peak efficiency and allows problems to be fixed before they lead to significant declines in efficiency.
- Retro-commissioning – the lighting, mechanical equipment and controls systems in existing buildings are evaluated and tested to find opportunities for increased efficiency. This process

focuses on optimizing building performance by identifying and implementing efficiency and relativity low-cost operational and maintenance improvements.

- Building design – Since 2011, all new buildings as well as large renovation projects will target the U.S. Green Building Council's LEED Silver standard or equivalent. The 180,000 sq. ft. University Center that will be constructed over the next two and one half years is being designed to achieve LEED Gold (minimally, with LEED Platinum as a goal).
- Energy conservation projects – Installation of thermal pane windows has been completed in residence halls and apartment complexes that did not previously have them. New high efficiency furnaces have been installed in houses and rental properties.

Future Natural Gas-related Emission Mitigation Goals and Strategies

The University's goal is to reduce natural gas-related emissions by 10% percent by 2020 and 25% percent by 2035, as outlined in Table 5

Table 3. Benchmark GHG emissions due to building-related emissions reduction strategies

Fiscal Year	Expected NG-related Emissions after Reduction (metric tons of CO_2e)	% Reduction in NG-related 2009 emissions
2009	6,267	--
2020	5640	10%
2035	4700	25%

To reduce emissions, the University must invest in projects that improve efficiency of building systems to conserve energy. The university will continue to make facility improvement projects such as upgrades to building exteriors, retro-commissioning, and HVAC improvements in order to reduce emissions. Optimal emissions reductions will of course also depend on behavior and choices made by campus community members. Strategies to reduce emissions include:

Strategy 3.1 Improve Energy Efficiency of Buildings

Plant Services regularly evaluates areas for energy conservation through audits of campus buildings. Educating the campus community on conservation-preferred behavior will help optimize building efficiency and conserve energy. Successful education relies on collaboration among Plant Services, Residence Life, office managers, and faculty.

Timeline: 2013-2020
Responsible party: Plant Services and ACSS
Outcome: Reduce natural gas related emissions by 10%

Strategy 3.2 Create green revolving fund

Green revolving funds invest in energy efficiency projects to reduce energy consumption on campus and reinvest the money saved in future projects. The reason they are called "revolving funds" is because the

funds loan money to specific projects, which then repay the loan through an internal account transfer from savings achieved in the institution's utilities budget. This creates a "virtuous cycle" of energy efficiency.

Timeline: 2013-2020
Responsible party: EVP; CFO
Outcome: Reduce natural gas related emissions by 10%

Funding and Tracking Progress

Building efficiency and conservation projects will be funded through regular funding mechanisms. Progress in energy conservation and building use savings will be tracked and compared to goals, and monitored by the Advisory Council on Stewardship and Sustainability. Energy conservation data will be tracked in the following ways:

Method	Responsible Groups
1. Explore creation of green revolving fund	EVP; CFO
2. Review utility bills	Plant Services
3. Evaluate energy management systems	Plant Services
4. Building design contracts	Plant Services
5. Annual Sustainability Report	Advisory Council on Stewardship and Sustainability

Fleet-related Emissions and Mitigation Strategies (Scope 1)

Current Fleet-related GHG Emissions

University vehicles and mobile equipment (fleet) contribute to Scope 1 emissions. In FY 2009, total emissions from operating vehicles and equipment are responsible for 210 metric tons or 0.8% of total emissions (25,969 metric tons).

Future Goals and Strategies for Fleet-related Emissions

The future goal for fleet-related emissions is a 3% per year reduction to 2020, or a total of 24%. If achieved, 50.4 metric tons will be reduced by 2020, leaving 159.6 metric tons produced.

Table 4. Benchmark GHG emission reductions for fleet vehicles

Fiscal Year	Expected Vehicle & Equipment Emissions after Reduction (metric tons of CO_2e)	% Reduction in Fleet-related 2009 emissions
2009	210	--
2020	159.6	24%

The reduction of 3% per year will largely depend on replacement and use strategies. Greater emissions reductions will depend on longer-term solutions. For example, as alternative fuel technology improves

and becomes more affordable and design improves vehicle and equipment efficiency, emissions will likely further decline. Until alternative fuels and design improves, the following strategies will be considered:

Strategy 3.3 Maintain or Increase Efficiency of Fleet Vehicles

Existing vehicles and equipment are owned and managed by individual departments. Multiple "owners" may lead to different levels of attention to vehicle maintenance. The University can promote efficient use and maintenance in the short term through campus-wide communications. Plant Services will work with the Executive Vice President, the Vice President of Finance, and individual departments and vehicle owners to understand current use patterns and maintenance practices, and promote efficient use.

Timeline: 2013-2020
Responsible party: Plant Services and Executive Vice President
Outcome: Optimize vehicle/equipment function and use

Strategy 3.4 Develop University-wide Fleet Vehicle Policy

Currently, there is no University-wide policy regarding fleet vehicle use, lifecycle, efficiency requirements, cost, or branding. These factors are managed on a departmental basis without consistency. A consistent and clear policy would include efficiency-related long-term planning decisions around replacement strategies, such as leasing versus purchasing and vehicle types (hybrid, electric, or alternative fuel). A University-wide fleet vehicle policy will require planning, collaboration and approval at multiple levels and across divisions.

Timeline: 2013-2014
Responsible party: Plant Services
Outcome: Efficient and optimized vehicle and equipment function and use

Funding and Tracking Progress

Individual departments will continue to fund their respective vehicles and equipment. As vehicles are upgraded, departments will investigate rebate and discount opportunities available for new high-efficiency vehicles and alternative fuel vehicles. For now, fleet usage and vehicle type will also continue to be the responsibility of individual departments.

Method	Responsible Groups
1. Log gallons of fuel used monthly	Individual departments
2. Track number of leased and owned vehicles annually	Individual departments
3. Annual Sustainability Report	Advisory Council on Stewardship and Sustainability

Scope 2 Related Emissions and Mitigation Strategies

In FY 2009 Gonzaga generated 25,969 metric tons of GHG, of which 41.3 % were scope 2 emissions (10,733 metric tons). 100% of these scope 2 emissions were related to purchased electricity.

Electricity-related Emissions and Mitigation Strategies (Scope 2)

Electricity used to operate buildings and equipment (heating, cooling, lighting, and electronic equipment) makeup Scope 2 emissions (10,733 metric tons in FY 2009).

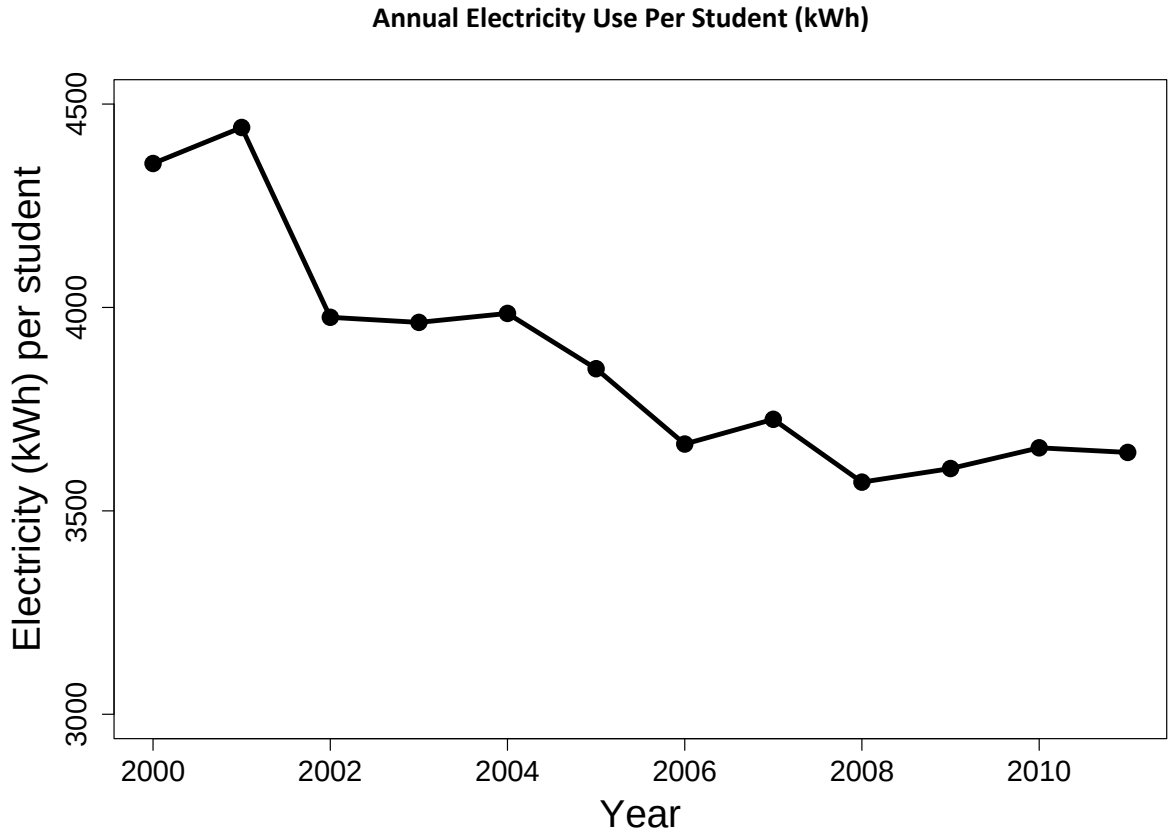

Figure 4. Total annual University electricity use divided by student population from 2000-2011

Current Electricity-related Mitigation Strategies

Today, the University manages emission reductions through key strategies of energy conservation, building efficiency, and renewable energy, for example:

- Lighting – Emissions-heavy bulbs and lamps continue to be replaced with energy efficient alternatives such as T-8 and T-5 tubes for T-12 fluorescent tube lighting, and energy efficient compact fluorescents in place of incandescent bulbs. Occupancy sensors and improved energy management also contribute to energy conservation.

- Energy Management System (EMS) – A computer-based control system monitors and adjusts heating and cooling in buildings to conserve energy while maintaining comfort. Building systems in all new construction and major remodels are added to the EMS.
- Planned Maintenance – regularly scheduled maintenance of building systems ensures peak efficiency and allows problems to be fixed before they lead to significant declines in efficiency.
- Retro-commissioning – the lighting, mechanical equipment and controls systems in existing buildings are evaluated and tested to find opportunities for increased efficiency. This process focuses on optimizing building performance by identifying and implementing efficiency and relativity low-cost operational and maintenance improvements.
- Building design – Since 2011, the University has been committed to designing new buildings as well as large renovation projects with a target of the U.S. Green Building Council's LEED Silver standard or equivalent.
- Renewable Energy Credits – Since 2010, 15% of Gonzaga's total annual electrical energy consumption is offset through Avista's Buck-A-Block program. Avista purchases Green-e certified REC's to supply the Buck-a-Block program. The REC's or Green Tags, have all renewable attributes intact including CO2 benefits. The Buck-a-Block program is primarily wind, but there are other green-e certified resources used to source the program. For example, in 2008, Buck-a-Block was sourced by 77% wind, 15% landfill gas, 7% biomass, and 1% Geo Thermal. In 2011, this amounted to the purchase of 2,940,000 kWh of REC's purchased, which reduced electricity-related emissions by 1,147 metric tons for a 10.7% reduction of scope 2 emissions.
- Made, and continue to make, a significant investment in server virtualization technology, which results in appreciable reductions in power consumption and waste.
- Track and quantify carbon footprint of on-campus printing in order to encourage faculty, staff, and students to consider ways to reduce unnecessary printing.
- Made, and continue to make, significant investment in blade server technology, which results in appreciable reductions in power consumption and waste.
- Made, and continue to make, bulk purchases of new computer systems, reducing packaging and resulting in fewer shipments, thereby reducing emissions.
- Committed to purchasing only Energy-Star gold-certified desktop and laptop computers, which have made and continue to make significant contributions to reducing power consumption and waste.
- Implemented local default power management settings on desktop and laptop computers as part of the default settings for all new computers.
- Beginning to evaluate virtual desktop technology where appropriate (much larger scale implementation of technology similar to thin clients).

Future Electricity-related Goals and Mitigation Strategies

Electricity used to operate buildings and equipment (heating, cooling, lighting, and electronic equipment) makeup Scope 2 emissions (10,733 metric tons in FY 2009).

Table 5. Benchmark GHG emissions due to electricity-related emissions reduction strategies

Fiscal Year	Expected Electricity-related Emissions after Reduction (metric tons of CO_2e)	% Reduction in Building-related 2009 emissions
2009	10,733	--
2020	9659	10%
2035	8049	25%

The University will continue facility improvement projects, such as upgrades to building exteriors, retro-commissioning, lighting upgrades, plumbing and HVAC improvements, in order to reduce emissions. More efficient information technology constitutes another important investment decision, and behavior changes by the community that improve sustainability are crucial to success in effective stewardship. Strategies to reduce emissions include:

Strategy 3.5 Improve Energy Efficiency of Buildings

Plant Services regularly audits campus buildings for energy conservation. Educating the campus community on conservation-preferred behavior will help optimize building efficiency and conserve energy. Successful education relies on collaboration among Plant Services, Residence Life, office managers, and faculty.

Timeline: 2013-2020
Responsible party: Plant Services and ACSS
Outcome: Reduce electricity related emissions by 10%

Strategy 3.6 Encourage Student Energy Conservation

Individual metering of buildings now makes it possible for student residence halls to have annual or semi-annual energy conservation competitions to help raise awareness and change energy use habits. One example of such a program is the partnership with AVISTA on: "Power Down, Add Up."

Timeline: 2013-2014
Responsible party: VP of Student Life; Student Director of Sustainability
Outcome: Reduce electricity related emissions

Strategy 3.7 Explore renewable energy sources

After consulting with several energy services firms (McKinstry, MW Engineers, and Honeywell), Gonzaga determined that renewable energy strategies were more appropriate for the mid-long term, when renewable technology is expected to improve and its associated costs decline. The University will continue to evaluate renewable energy strategies in partnership with community experts with the goal of producing 5% of its own electricity by 2035.

Timeline: 2013-2035
Responsible party: Plant Services and EVP
Outcome: Increased use of emission-free renewable energy

Funding and Tracking Progress

Renewable energy grant and rebate opportunities will be investigated annually as part of the budget planning process. Progress in energy conservation and building use savings will be tracked and compared to goals, and reported on by the Advisory Council on Stewardship and Sustainability. Renewable energy opportunities will be tracked in the following ways:

Method	Responsible Groups
1. Renewable energy grant and rebate opportunities investigated annually as part of budget planning process	Plant Services
2. Building design contracts	Plant Services
3. Annual Sustainability Report	Advisory Council on Stewardship and Sustainability

Strategy 3.8 Continue the process of moving to virtual servers

Virtual servers bring with them appreciable reductions in power consumption and waste, including physical hardware, space needs and power consumption. Gonzaga University estimates that it has reduced its physical power consumption in its data centers by more than 50% as of August 2012 by virtualizing approximately 62% of its total server inventory. The University anticipates virtualizing approximately 84% of its total server inventory by the end of 2013, resulting in an overall energy consumption reduction of more than 75%.

Timeline: 2013-2015
Responsible party: Information Technology Services
Outcome: Reduction in purchased electricity

Strategy 3.9 Replace some desktop computers with virtual desktop

In the same way that server virtualization reduces power consumption, desktop virtualization results in decreases in power consumption. Rapid changes in technology for desktop computers and thin client devices for desktop virtualization make estimation of power consumption savings at the desktop difficult, but Gonzaga will continue to attempt to reduce its carbon footprint through this possibility.

Timeline: 2013-2015
Responsible party: Information Technology Services
Outcome: Reduction in purchased electricity

Strategy 3.10 Implement power management functionality on desktop computers

Make use of existing or available power management systems so that users' computers, monitors, and peripherals automatically reduce power consumption after a certain period of time. New computers' automatic settings to lower power consumption during periods of inactivity have significantly reduced power consumption, with savings estimates ranging from 5 to 15%. The University is evaluating new tools to manage basic power settings for all newer devices through a centralized system, which will result in additional savings.

Timeline: 2013-2015
Responsible party: Information Technology Services
Outcome: Reduction in purchased electricity

Strategy 3.11 Modification of printing behavior

Incrementally implement expanded functionality of network applications such as "PaperCut" to provide users with information about the economic and environmental impact of their printing.

Timeline: 2012-2015
Responsible party: Information Technology Services
Outcome: Reduction in electricity usage and paper consumption

Strategy 3.12 Development of a university-wide printer purchasing policy

An institutional printer purchasing policy that accurately reflects the needs of all users could lead to the elimination of duplicative and energy-intensive printers.

Timeline: 2012-2015
Responsible party: Information Technology Services; all divisions of the institution
Outcome: Reduction in electricity usage and paper consumption

Funding and Tracking Progress

Building efficiency and conservation projects will be funded through regular funding mechanisms after appropriate vetting and discussion among all divisions affected by those projects. Progress in energy conservation and building use savings will be tracked and compared to goals, and reported on by the Advisory Council on Stewardship and Sustainability. Progress in energy conservation and technology use savings will be tracked and compared to goals, and monitored by the Chief Information Officer and the Vice Presidents. Energy conservation data will be tracked in the following ways:

Method	Responsible Groups
1. Review utility bills	Plant Services
2. Evaluate energy management systems	Plant Services
3. Building design contracts	Plant Services
4. Conduct annual or semi-annual conservation competition	VP of Student Life; Student Director of Sustainability

5. Advances in energy efficiency technologies investigated annually as part of budget planning and strategic planning processes.	Chief Information Officer; Vice Presidents
6. Annual Sustainability Report	Advisory Council on Stewardship and Sustainability

Scope 3 Related Emissions and Mitigation Strategies

Air Travel, Commuting, and Waste Management Emissions (Scope 3)

In FY 2009 Gonzaga generated 25,969 metric tons of GHG, of which 32.6% were scope 3 emissions (8,475 metric tons). 47% of these scope 3 emissions were related to commuting; 52.5% of scope 3 emissions were from air travel; and 0.4% were related to solid waste.

Current Air Travel Emissions (Scope 3)

As of FY 2009, 17.1% of all University emissions were from air travel (4,451 metric tons) or 52.5% of scope 3 emissions. In total, campus members traveled an estimated 5,491,400 air miles in FY 2009. The emissions are generated from business travel, transportation by athletic teams, study abroad, and other University-related travel booked through central purchasing. The University has 16 athletic teams that travel mostly throughout the western United States and occasionally to other parts of the country. The School of Education's Department of Educational Leadership and Administration program services schools throughout western Canada and pays for faculty to travel to and from these sites.

Table 6. Type of air travel as a share of total emissions

Source	Round Trip Miles Traveled	Emissions (in metric tons)	% of total campus emissions (25,969)
Business Travel	2,201,636	966.49	3.72%
Athletics	3,289,746	1,444.21	5.56%
DELA			
Totals	5,491,382	2,410.7	9.28%

Future Air Travel Goals and Mitigation Strategies

Institutional priorities require travel by air (Division I athletics program, faculty travel to conferences, serving certain off-site student populations, study abroad programs, etc.). The University may consider the use of high-quality carbon offsets in the future, but has no plans to do so at present.

Strategy 3.13 Centralize and coordinate air travel purchasing

At present, air travel that is not booked through the University (e.g., faculty who book their own travel) is not being reported. It is likely that the University could more accurately reflect all University air travel emissions and control air travel costs through the development of centralized air travel purchasing.

Funding and Tracking Progress

Method	Responsible Groups
1. Calculate air miles traveled monthly	University Purchasing
2. Develop alternatives to business travel, where appropriate	University Purchasing; ITS; Vice Presidents
3. Evaluate use of offsets annually	Advisory Council on Stewardship and Sustainability

4. Annual Sustainability Report	Advisory Council on Stewardship and Sustainability

Current Commuting Emissions (Scope 3)

As of FY 2009, 15.4% of all University emissions were from commuting (3,989 metric tons) or 47% of scope 3 emissions. At present, commuting miles are based on estimates created by triangulating Commute Trip Reduction Data gathered by an annual survey of all faculty and staff, as well as a zip code analysis of employees and students.

Current Commute Emissions Mitigation Strategies

Commute Trip Reduction (CTR) Program

In keeping with Washington State law, Gonzaga is committed to a commute reduction program. The University's current commute trip reduction program is designed to encourage alternative transportation choices to help reduce the rate at which students, faculty, and staff drive alone to campus. The program includes the following elements to promote alternative transportation:

- Subsidized Bus Passes – The University makes Spokane Transit Authority bus passes available to employees at the rate of $33.00, $12.00 less than regular price. In addition, Gonzaga has actively participated in Spokane Transit Authority planning that might result in an electric trolley line directly connecting Gonzaga with downtown Spokane.
- Ride share matching – carpooling is facilitated through the use of Ride Share Online website.
- Carpool reduced-rate parking passes – to encourage carpooling, the University discounts annual parking permits by $15.00
- Spokane MyCommute CTR Program – Gonzaga participates in Spokane Country's MyCommute trip reduction program to encourage and track alternative and high-occupancy vehicle (HOV) commuting.
- Car sharing – as of Fall 2012, the University added a car sharing program through ZipCar. This program is intended to make it more realistic for some students not to bring their cars to campus.
- Guaranteed Ride Home Program –individuals using a commute alternative who have an emergency are provided a free cab ride home, along with essential stops on the way (i.e. stopping to get medication or visit a physician)
- Site amenities - provision of bicycle parking, lockers, changing areas and showers for employees and students who bicycle or walk to work.

Commuting Emissions Goals and Mitigation Strategies

Reducing commute trip emissions requires a shift from single occupancy vehicle (SOV) trips to lower or no-emissions alternatives. The University's goal is that no more than 50% of the daytime campus

population (students, faculty, and staff) should arrive to campus by driving alone by 2035. Interim goals are outlined in Table 7.

Table 7. Benchmark emission reductions due to decreases in SOV commuting

Fiscal Year	% of Population Utilizing SOVs
2009	89%
2020	65%
2035	50%

The ability of the University to make a unique, direct, and immediate impact on the system itself is affected by access to and support for alternative modes of transportation, personal decision, and public transit options. The University is working with the transportation agencies and partner institutions to address transportation policy issues on a regional basis. The University can influence individual decisions by communicating about, supporting, and promoting alternatives. Specifically, the University is committed to the strategies below to reduce its SOV user rate to decrease emissions from commute transportation.

Strategy 3.14 Create a University Transportation Master Plan

Conversations about developing a Transportation Master Plan (TMP) are occurring in parts of the University. A TMP would allow for a more complete assessment of current commute practices, a more accurate inventory of commute-related emissions, and the development of a comprehensive strategy for reducing SOV commuting.

Timeline: 2013-2014
Responsible party: President & President's Cabinet
Outcome: Reduced emissions, use, and miles related to SOV commute trips

Strategy 3.15 Increase awareness, outreach, and support of alternative transportation

With appropriate institutional guidance and support, individuals can be encouraged to change commute behavior from SOV to alternative commute modes such as transit, HOV, bicycle, and walking. Education campaigns may include traditional methods of education as well as more creative and effort-dependent methods such as office by office consultation focusing on transportation alternative strategies that work with individual needs. This strategy will require Plant Services, Public Safety, Human Resources, Academic Division and Student Life support, and must begin at the Vice-presidential level to ensure appropriate consideration of all ramifications.

Timeline: 2013-2015
Responsible party: President & President's Cabinet
Outcome: Increased awareness of and participation in CTR programs.

Strategy 3.16 Reduce the need for employees to commute to the campus

Since adjusted schedules and telecommuting will reduce commuting to campus, the University will evaluate existing policy to determine if the use of alternative schedules can be expanded. Such review must be led by the President & President's Cabinet to ensure that overlapping impacts are appropriately unearthed and considered.

Timeline: 2013-2014
Responsible party: President & President's Cabinet
Outcome: Reduced commute miles traveled

Strategy 3.17 Promote opportunities for faculty and staff to live near campus

The Logan Neighborhood and University District offer many residential options, including house rentals, apartment buildings, condominiums, and single family homes, all within a comfortable walking and biking distance. Efforts to encourage campus members to live near campus must begin with an assessment of how many Gonzaga employees currently live near campus and a thorough exploration of opportunities to partner with neighborhood property developers with a view toward developing a Local Area Housing Program. Such efforts would lead to tangible support for employees who want to rent or own a home near the campus by providing links between them and local real estate developers and providers.

Timeline: 2013-ongoing
Responsible party: President & President's Cabinet
Outcome: Reduced commute miles traveled and promote a walkable community

Strategy 3.18 Increase use of bicycles as an alternative to vehicles

The university is committed to bicycle use as a preferred alternative to vehicle transportation and as a means of filling the gaps in public transportation. The University Transportation Master Plan must include a bike and pedestrian section that investigates the most effective ways of supporting and growing of bicycle transportation at Gonzaga.

Timeline: 2013-2015
Responsible party: President & President's Cabinet
Outcome: Reduce emissions related to motorized commute modes

Funding and Tracking Progress

Funding for commute trip reduction will come from annual budget requests through existing avenues and after appropriate planning at the vice-presidential level. The success of reducing commute trip emissions will be tracked utilizing several methods, including the following:

Method	Responsible Groups
1. Conduct annual CTR Survey of employee commuting survey	Human Resources
2. Accurate Parking Stall Inventory, maintained and shared	Public Safety/Plant Services

3. Number and types of transit passes issued annually	Public Safety/Plant Services
4. Quarterly Bicycle Count	Public Safety; Student Life
5. Annual Commute Trip Reduction Survey	Human Resources
6. Annual Sustainability Report	Advisory Council on Stewardship and Sustainability
7. Regular evaluation of Parking Fee Structure	President & President's Cabinet Public Safety/Plant Services
8. New policy discouraging employees from utilizing free street parking in Logan	Public Safety
9. Annual Sustainability Report	Advisory Council on Stewardship and Sustainability

Current Waste Management Emissions (Scope 3)

In FY 2009 Gonzaga generated an estimated 943 tons of solid waste. Solid waste sent to the Regional Solid Waste System's Waste to Energy Plant accounts for about 0.4% of the scope three emissions.

For many years Gonzaga has operated a dedicated waste reduction and recycling program which prevents and diverts waste from the landfill. The program includes three key waste diversion categories: recycling and reuse, composting, and waste prevention. The program received the 2012 Higher Education Recycler of the Year Award from the Washington State Recycling Association.

Recycling & Reuse

Recyclable paper, cardboard, glass, metal, and plastic are collected in all campus buildings (over 560 bins). Prior to Spring 2012, Gonzaga University recycled paper, aluminum, plastic and glass in separate bins; since then, collection is commingled. The historic problems of contaminated recyclables (35% of recycle bins suffered from contamination)and of recyclables ending up in waste bins (nearly 56% of waste bins examined contained visible recyclables) have been eliminated, dramatically increasing the recycling diversion rate. Gonzaga supports recycling batteries, electronics, toner cartridges, packing material, and computers (the latter through ITS).

Gonzaga redeploys, sells, donates, trades or recycles almost all of its surplus items. Plant Services collects excess furniture and other surplus items and makes them available to other campus departments through the surplus website. Outdated or damaged items are donated to second hand stores, homeless shelters or offered to Gonzaga employees for sale or for free. The funds earned from the sale of outdated or unusable items on eBay are used to purchase new and second-hand furniture. Electronics that cannot be redeployed, traded or donated are recycled. Gonzaga annually participates in the Soles4Souls shoe drive, which collects new or used shoes during basketball games for subsequent world-wide distribution.

Composting & Food

In 2011, Gonzaga's provider of dining services, Sodexo, purchased a 12 cubic yard receptacle for storing compostable waste. The compostable material is picked up approximately five times a month by a local company Barr-tech (http://www.barr-tech.net). This effort has reduced Sodexo's trash pick-ups from the

COG area by over half, resulting in a cost savings to Gonzaga of over $2000 per month. Compostable waste that has historically gone into garbage cans in the dining facility has instead been separated from trash by Sodexo. In addition, the COG dining facility also went "tray-less" in 2011. Based on comparisons of "Weigh the Waste" nights from before and after the availability of trays, 30% less waste is generated since the implementation of tray-less dining. This program has helped raise student awareness of how much food they throw away. In addition to reducing food waste, going tray-less has resulted in a water savings of approximately 300,000 gallons of water annually and reduced soap purchases by approximately 5%. Since 2012, Sodexo has further supported sustainability efforts by purchasing at least 10% of its food from local farmers.

Sodexo provides ongoing sustainability training and incentives for its employees. In the fall of 2011 Sodexo also began to utilize "Lean Path," a tool that tracks and records waste from each food production employee and rewards those who improve by reducing waste generation This has helped Sodexo reduce waste by an additional 4% in the 2011-2012 academic year. Their hiring of a Student Manager of Sustainability in 2011 has further increased education and awareness of sustainability throughout our campus food services.

Gonzaga University Plant Services participates in Spokane's "clean green" program, composting over thirty-five tons of leaves and needles annually. The industrial composting facility, Barr-Tech, can take food waste, clean green, and food contaminated paper and cardboard products, including pizza boxes.

Containers for compostable materials are currently available at the Martin Centre, Madonna, Coughlin, Cataldo, Dooley, Corkery, Chardin, Crimont, and Roncalli buildings. Plant Services has provided Gonzaga students with the opportunity to compost outside of the dining experiences in containers placed behind Cataldo, in Kennedy, in the Sharp-Boone alleyway and near Goller. Plant services also uses these containers to dispose of the yard waste they collect from maintaining campus grounds.

Gonzaga University currently has twelve 96-gallon compost bins, up from one 96-gallon bin in June of 2011. In the 2011-2012 school year 7,200 gallons have been composted and 138 total yards of yield compost generated.

Waste Prevention

Various tactics reduce waste on campus. Reusable mugs are encouraged by offering refill discounts. The Gonzaga Student Body Association (GSBA) proposed a bottled water ban to Sodexo in May of 2008, and that policy was implemented four months later. Since then, first year students are given re-usable water bottles during orientation, and they can fill these bottles in various dining facilities and other sites on campus. In the Spring of 2012 Sodexo added two new water filling stations outside of the COG and Crosby Hall providing water that is double filtered and is sourced from spigots within the buildings through a food-grade hose.

The approximately 3,000 students living on campus generate significant quantities of solid waste at their annual move-out. Since May 2011, a process for collecting reusable items in portable storage containers placed throughout the campus has resulted in significant donations through the Zagiving program

created by Residence Life and Catholic Charities of Spokane (in 2011: 12,000 pounds of material that benefited 435 families).

Strategy 3.19 Improve uniformity of recycling

The University has made great strides at improving its recycling program, especially through the introduction of single-stream recycling. Recycling can be further improved through the following strategies:

- Improved recycling signage.
- Replacing or improving cumbersome classroom recycling bins with low bins that have a hinged lid.
- Ensuring that a waste bin is located next to every recycling bin.
- Regular study of the effectiveness of recycling system design.
- Increased use of outdoor recycling bins.

Timeline: 2013-2014
Responsible party: Plant Services; Student Life
Outcome: Reduce emissions related to solid waste

Strategy 3.20 Improve prevalence and uniformity of composting

Food waste composting is still relatively new to the campus, but it has expanded quickly. Further expanding the composting program will increase the solid waste diversion rate, decreasing related emissions. The composting program can also be improved by strategies such as the following:

- Develop a plan / provide resources to collect compostable materials campus-wide and funnel to centrally-located composters. This will require new well-labeled receptacles throughout campus, emptied regularly to avoid the odors associated with the compostables going septic. A collaborative effort on the part of Student Life, Plant Services, and Sodexo, as well as an effective education program will be required.
- Purchase an additional large composter to be placed behind Cataldo.

Timeline: 2013-2015
Responsible party: Plant Services; Student Life; Sodexo
Outcome: Reduce emissions related to solid waste

Funding and Tracking Progress

Funding for recycling, composting, and waste reduction will come from annual budget requests through existing avenues and with appropriate consideration of overlapping ramifications. The success of these efforts will be tracked utilizing several methods, including the following:

Method	Responsible Groups

1. Annual waste audit	Plant Services
2. Calculate waste diversion rate	Plant Services
3. Move out waste reduction program	Residential Life
4. Annual Sustainability Report	Advisory Council on Stewardship and Sustainability

Goal 4 – Coordinate and facilitate implementation of the Climate Action Plan

The success of Gonzaga University's Climate Action Plan would be greatly enhanced by the creation of an Office of Sustainability with a Director who has expertise in sustainability and in working with multiple constituencies in a complex organization to advance sustainability goals.

Current Coordination and Management of Sustainability at Gonzaga

The Advisory Council on Stewardship and Sustainability (ACSS) is currently the body designated to coordinate and oversee sustainability efforts on campus. (For a detailed description of the ACSS duties see the Appendix 3.) The ACSS is comprised of faculty, staff and students who volunteer their time and expertise. The Council was charged by the President in 2010 with developing Gonzaga University's Climate Action Plan for consideration by the President.

Strategy 4.1 Create an Office of Sustainability and Hire a Director of the Office of Sustainability

The Director of the Office of Sustainability will develop and administer programs, provide advice on policies within the area of sustainability at Gonzaga University, and consult and collaborate widely with stakeholders across Gonzaga, with the ultimate goal of fully implementing the University Climate Action Plan, creating a Comprehensive Sustainability Plan, and developing a culture of sustainability at the University. If and when an Office of Sustainability is created and a Director is hired, a significant number of responsibilities identified in this report will fall to that office and administrator, requiring a major redrafting of this plan.

Timeline:	2013-2014
Responsible party:	Executive VP; Cabinet; President
Outcome:	Ensure adequate profile, status, and resources for ongoing sustainability work

Funding and Tracking Progress

Funding for a Director of the Office of Sustainability would come partly from the cost savings generated by reducing energy consumption on campus. However, the position is not expected to pay for itself.

Method	Responsible Groups
1. Hire a full time Director of the Office of Sustainability	Executive Vice President, in consultation with the President & President's Cabinet and the ACSS