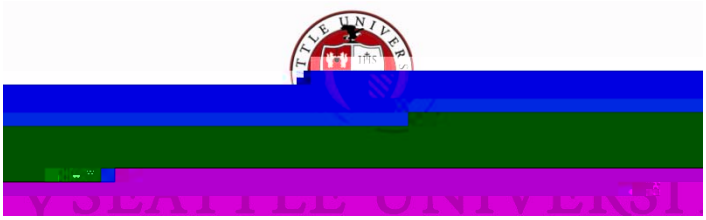

Deepening and Advancing
The Commitment to Sustainability

Seattle University's Climate Action Plan

2010 - 2035

Version 1.2

Version 1.2: October 2011
Version 1.1: April 2011
Version 1: June 2010

Table of Contents

Executive Summary

The University's Carbon Footprint

University operations produce the greenhouse gas emissions that impact climate change. Greenhouse gas emissions are a way to measure the sustainability of university operations. Reducing greenhouse gas emissions will move Seattle University closer to climate neutrality. In December 2009, the university estimated that it annually emits 24,607 metric tons of emissions. Table 1 outlines the operational activities that contribute to emissions.

Table 1. 2009 Sources of Emissions

Activity	Metric Tons	Percent
Air Travel (Staff & Students)	10,994	44%
Commuting (Staff & Students)	8,250	34%
Energy	4,996	20%
Landfilled Waste	215	1%
Vehicles and Equipment	129	.5%
Other	23	.09%

Seattle University

Mission

Seattle University is dedicated to educating the whole person, to professional formation, and to empowering leaders for a just and humane world.

Vision

We will be the premier independent university of the Northwest in academic quality, Jesuit Catholic inspiration, and service to society.

Values

Care
We put the good of students first.

Academic Excellence
We value excellence in learning with great teachers who are active scholars.

Diversity
We celebrate educational excellence achieved through diversity.

Faith
We treasure our Jesuit Catholic ethos and the enrichment from many faiths of our university community.

Justice
We foster a concern for justice and the competence to promote it.

Leadership
We seek to develop responsible leaders committed to the common good.

Waste Reduction Initiatives

In the early 1980's, the Environmental Safety Coordinator position began. The position was created to advance sustainable practices at the university. In 1988, a paper, glass, and metal recycling program began, followed by hiring the first Recycling Coordinator in 1992. In 1993, the Office of Environmental Services was created to oversee recycling and waste prevention, and later, the composting program.

In 1994, Father William Sullivan accepted an Environmental Excellence Award from the Rotary Club of Seattle, on behalf of the university. The award recognized the university's recycling program. The award also brought to Father Sullivan's attention the importance of the university's recycling program to the campus and its global environment. This recognition prompted Father Sullivan to pose the question "What else can we do?". With this acknowledgement and support, e1im8.4(ent. T

Sustainability Today

Today, the commitment to sustainability is expressed to students, neighbors, faculty, and staff in

Committees and Task Forces

Sustainability-related committees, task forces, and clubs have taken shape over the past few years. These groups represent campus as a whole, individual colleges and schools, and students. Examples of such committees include:

- Environmental Advisory Council (EAC): A student initiative led to the creation of the Environmental Advisory Council in 2004.

About the Climate Action Plan

This Climate Action Plan (CAP) is intended to guide Seattle University in furthering its commitment to sustainability and to addressing climate change. The university envisions a campus community in which the value and philosophy of sustainability is integrated in all university's activities. This goal will be achieved when:

- All students can articulate sustainability and its relevance to their field of study
- University operations avoid or limit a negative impact on the environment
- Sustainability is a component of all campus decision making processes
- The community recognizes sustainability as a primary university value

The pursuit of these goals will reflect transparency, collaboration, and inclusion. The goals will be advanced through education, research, student development programs, operations, and knowledge-sharing, with the following goals:

1. Expand sustainability in the curriculum
2. Expand sustainability-related student programs
3. Increase sustainable practices in university operations
4. Share knowledge with others

The CAP is intended to be an evolving document. As circumstances, regulations and technologies change, and progress is made towards achieving these goals, the university's priorities and approaches may be adjusted. The CAP will be updated accordingly.

The President's Committee for Sustainability (Appendix A) will provide oversight of the plan's goals and progress. The Committee will report at least annually to the President, and more frequently, as needed. The Committee will work with Marketing and Communications to report progress to the campus and community. The CAP progress reports will be made to the ACUPCC every two years, beginning January 2012.

Development Process

Work on the CAP began shortly after the university joined the President's Climate Commitment in 2007. Facilities Pnhortly afore d42(needed. Th[h2 Tw ACenhou the6),d lT03sion. The goals 26 val

Deepening Seattle University's Commitment to Sustainability

At the graduate level, there is not currently a specific degree program focusing on climate change or sustainability. Courses with sustainability themes do exist, however, and are offered in the School of Law, College of Education, and Albers School of Business and Economics, as described below.

- The School of Law: Various aspects of Environmental Law are offered in the School of Law, such as "Environmental, Natural Resource, and Land Use." This course examines national, state, and international issues raised by increasing environmental pollution, problems of unchecked urban sprawl, and the utilization and degradation of natural resources.
-
- The College of Education: The Master in Teaching (MIT) program offers an opportunity to focus on environmental education. Students in the teacher certification program work with teachers in a partnership school to develop curriculum and provide instruction centered on an environmental issue. The program helps students to demonstrate planning, instruction and communication that prepares students for an environmentally responsible and globally interconnected society. Perspectives on sustainability and leadership are also offered in the Leadership and Sustainability class in the Executive Leadership Superintendent program, and the Educational Leadership program.

- The Albers School of Business and Economics: Sustainability-related business coursework is growing organically in response to increasing demands from business, student, and faculty interest. Albers School is building a collection of courses to augment existing sustainability curriculum, including "Sustainability Strategies for Business." Sustainability is also a major component of the Executive Leadership Program (ELP) in the Albers School, appearing in the Leading Organizations module. Student team projects have addressed sustainability issues, such as the facilitation of producing ceramic water filters for villages in Africa.

Research and Scholarship

Scholars from across the campus are engaged in research and scholarship addressing issues of sustainability. According to the survey, 40% of faculty respondents are actively researching sustainability issues. Since 2005, 20% of faculty respondents have published sustainability related peer-reviewed and non-peer-reviewed articles and papers, and 30% published peer-reviewed journal articles.

Faculty are investigating a broad array of sustainability challenges. In addition to research related to social and economic justice, researchers and scholars are investigating environmental and climate-related challenges and problems. Faculty are:

- Exploring how carbon particles in the atmosphere from vehicles, power plants, wood burning and wild fires influence climate, to inform climate change prediction models
- Using experimental optics and geophysics to study how atmospheric particles influence optical scattering and the effect of such scattering on global climate change models
- Understanding the impact of anthropogenic chemicals on atmospheric chemistry

academic offerings, research and scholarship, and service learning, the university has identified the following strategies:

Strategy 1.1 Assess and evaluate sustainability in the curriculum

Future programs or degrees focused on sustainability can be richly developed without understanding current curricular offerings. Understanding the type and depth of sustainability offered in each college and school helps drive collaboration on issues and identify where interest and expertise lie. The faculty survey on Sustainability in Curriculum provides initial insight, but a deeper understanding is needed. Measuring student sustainability literacy will also be considered in order to understand the success of learning and teaching.

Timeline: 2011
Responsible: President's Committee for Sustainability
Outcome: Benchmark for sustainability in curriculum and student literacy

Strategy 1.2 Support the Implementation of the 2009-2014 Academic Strategic Action Plan

The Academic Strategic Action Plan was developed to carry forward the strategic priority of academic excellence in 2009-2014. The plan calls for developing knowledge of and a commitment to environmental sustainability in both the undergraduate and graduate curriculum. The President's Committee for Sustainability will support the implementation of plan. Activities to consider include providing resources and support for faculty development; assessing demand for sustainability-related knowledge in the marketplace related to each college and school; and creating an action plan to support increasing sustainability in the curriculum.

Timeline: 2010 - 2014
Responsible: Provost's Office, Colleges and Schools
Outcome: Support Implementation of the Academic Strategic Action Plan

Strategy 1.3 Increase students' engagement with faculty research on sustainability

Connecting students to faculty research provides another opportunity to make students part of the solution to climate change challenges. Possible actions include: assessing the rate of student involvement 006 Tw ity-relricular of

Campus-Wide Speakers and Education

Within the past few years, various departments have partnered to invite speakers from a broad

Future Goals and Strategies

Departments that currently offer sustainability-related programs and events intend to continue these programs in the future. To deepen and expand sustainability commitment and opportunities within co-curricular programming, a more comprehensive approach with buy-in and partnerships spanning the entire campus community is needed.

Co-curricular departments are in the process of considering which goals and strategies to adopt and implement in order to expand sustainability within programs. The following are some of the strategies under discussion:

Strategy 2.1 Establish a Co-curricular Programming Subcommittee

A Subcommittee of the President's Committee for Sustainability will be charged with overseeing the development and implementation of co-curricular sustainability initiatives and programs. Steps in this process include appointing a staff member from each department to be the respective sustainability representative, and organizing and setting group goals.

Timeline:	2010
Responsible:	President's Committee for Sustainability
Outcome:	Co-curricular Programs Subcommittee

Strategy 2.2 Develop learning outcomes focused on sustainability

The Co-curricular Programs Subcommittee will identify outcomes and expertise needed to promote and advance sustainability within co-curricular programs. The Subcommittee will reach out to other areas on campus to leverage best practices to develop programs that complement other campus initiatives. Learning outcomes will be developed considering these possible approaches: assessing knowledge in and interest by students and staff, and expertise needed around key sustainability issues; conducting in-service workshops to educate staff on sustainability issues and invite input about how to incorporate sustainability into departments' strategic plan; and developing an action plan that identifies learning outcomes, goals and processes for deepening and expanding educational programming for students.

Timeline:	2010 - 2011
Responsible:	PCS Co-curricular Programs Subcommittee
Outcome:	Learning goals for Co-curricular programs

Goal 3: Increase Sustainable Practices in University Operations

Summary of Sustainable Practices: Emissions in FY 2009

Table 2 also categorizes the emissions sources and activities by "scopes." Scopes define an organization's level of ownership and control of emissions sources. "Scopes" are defined as follows:

- Scope 1: sources that are owned or controlled by the institution; these emissions are generated on campus
- Scope 2: sources that are purchased in order to generate energy on campus; these emissions are generated off campus

Table 3. Target Effect on Emissions due to the Commitment to Increase Sustainability in University Operations

Year	Metric Tons of Carbon	Percent Reduction (based on 2009)
2009	24,478	-
2020	21,540	12%
2035	12,484	51%

Summary of Reduction Strategies

Reduce, Avoid and Replace

Strategies to reduce greenhouse gas emissions are often visible, demonstrating sustainability in practice. These initiatives are an opportunity nabiz-1.17 TD.0002io50S1 0nTD-.00054 0.0892 Tw[(Stra0egies to

Strategy 3.1 Reduce Emissions from Buildings

Current Emissions and Strategies

Energy used to operate the university's buildings (heating, cooling, lighting and operating office appliances and equipment) make up Scope 1 and 2 emissions. In FY 2009, natural gas, steam and electricity produced 21% (4,996 metric tons) of total campus emissions (24,478 metric tons), as shown in Table 4:

Table 4. Energy Used to Operate Buildings as a Share of Total Gross Emissions

Source	Metric Tons	% Of Total Campus Emissions
Energy – Natural Gas	3,398	14%
Energy – Steam	1,392	6%
Energy – Electricity	206	.8%
TOTALS	**4,996**	**21%**

Emissions levels have been relatively low as the result of various conservation projects. In 1986, the university developed an energy conservation program when Seattle Public Utilities began offering financial assistance. Between 1999 and 2009, conservation projects resulted in a reduction in heating and cooling related greenhouse gas emissions[iii]. This reduction occurred despite a 3% increase in building energy use, a 17% increase in square feet and 33% enrollment growth during the same period. The emissions reduction was achieved in part by shifting from steam to natural gas and electricity: steam carries a larger emissions factor than electricity and natural gas. The University also constructed multiple gas boiler plants and expanded hot water loops to improve heating and cooling efficiency. Emissions were further reduced by the efficiency gained from expanding the Energy Management System, a computer-aided tool that optimizes building energy efficiency.

Current Strategies

Today, the university manages emission reductions through key strategies of energy conservation, building efficiency and renewable energy. Examples of these strategies include:

- 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 efficient compact fluorescents in place of incandescent bulbs. Occupancy sensors and improved energy management also contribute to energy conservation. Through these efforts, the university has saved more than 2,600,000 kilowatt-hours of electricity.

- 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 relatively low-cost operational and maintenance improvements. To date, six buildings have been retro-commissioned.

- Building-ScAgne:

Strategy 3.1.1 Improve energy efficiency of buildings

Facilities will continue to retrocommission building systems and replace old equipment and fixtures with newer energy efficient ones.

Timeline: 2010 - 2020
Responsible: Facilities Services
Outcome: Reduced emissions by 2,650 or more metric tons

Strategy 3.1.2 Develop carbon neutral design strategies for major building project

Method	Responsible Group
1. Review utility bills	Facilities Services
2. Evaluate energy management system	Facilities Services
3. Building design contracts	Facilities Services
4. Annual Sustainability Report	President's Committee for Sustainability

Strategy 3.2 Improve Efficiency of Campus Vehicles and Equipment

Current Emissions and Strategies

University vehicles and mobile equipment contribute to Scope 1 emissions. In FY 2009, total emissions from operating vehicles and equipment equaled 125 metric tons of carbon, or 0.01% of total campus emissions. These emissions are due to the fuel type, vehicle type and use habits, which all affect efficiency.

Until 2001, all university vehicles and equipment had been powered by fossil fuels. Beginning in 2001, the university began purchasing electric and hybrid vehicles, which generally produce fewer emissions than fossil fuel alone. Today, 14 electric and 4 hybrid vehicles are in Seattle University's fleet. Bikes were also purchased to replace two vehicles used by Public Safety for patrolling campus. (The electric vehicles are included in the electricity total discussed in the section above, "Efficient Building Operations." The amount of emissions from electric vehicles is considered too small for direct discussion.) Diesel and gasoline power the remaining trucks, vans, flatbeds and dump trucks, executive and staff cars. Propane and diesel power equipment such as forklifts, generators and bobcats. (Biodiesel, although used in the past, is no longer used due to bad batches that damaged some equipment and vehicles.)

Currently, decisions about vehicle type and use are made by department. Strategies departments use to manage emissions include limiting the number of executive and staff vehicles; replacing vehicles with more efficient models when leases expire; optimizing trips and loads; and undertaking routine and planned maintenance. These strategies, if optimized, help ensure vehicles and equipment is running efficiently so emissions are minimized.

Future Goals and Strategies

The future goal for vehicle and equipment emissions is a 3% per year reduction to 2020, or a total of 30%. If achieved, 35 metric tons will be reduced by 2020, leaving 71 metric tons produced, outlined in Table 7:

Timeline:	2011 - 2012
Responsible:	Facilities Services
Outcome:	Campus-wide policy for vehicle and equipment purchases, maintenance and disposal

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.

Fleet usage and vehicle type will also continue to be the responsibility of department owners, until the coordination and management of the fleet changes.

Method	Responsible Group
1. Log gallons of fuel used monthly	Departments
2. Track number of leased and owned vehicles annually	Departments
3. Annual Sustainability Report	President's Committee for Sustainability

Strategy 3.3 Provide alternatives to Air Travel

Current Emissions and Strategies

Air travel contributes to Scope 3 emissions and accounted for 10,986 metric tons, or 45%, of the university's total carbon footprint in FY 2009. In total, campus members traveled an estimated 14,149,475 air miles in FY 2009. The emissions are generated from business travel,[iv] transportation by athletic teams and students pa

Table 8. Type of Air Travel as a Share of Total Emissions

SOURCE	ROUND TRIP MILES TRAVELED	EMISSIONS (IN METRIC TONS)	% OF TOTAL CAMPUS EMISSIONS (24,478)
Study Abroad	6,999,146	5434	22%
Business Travel	5,129,882	3,983	16%
Athletics Travel	2,020,447	1,569	6%
TOTALS			

Strategy 3.4 Increase Alternative Transportation Mode Incentives and Programs for Commuters to Campus

Current Emissions and Strategies

Students and employees commuting to campus is the second largest source of emissions at the university. Commute trips account for 33% (8,129 metric tons) of the university's total carbon footprint. Clean Air-Cool Planet, the emissions calculator the university utilizes, tracks emissions from single-occupancy vehicles (SOV), car and van pools (HOV), bus, light rail and commuter rail. Campus members also travel in other ways, such as walking and biking. Share of miles by mode for all campus members are outlined in Table 10.

Table 10. Share of Miles by Commute Trip Mode

Commute Trip Mode	Miles Traveled	Percent Of Total Miles Traveled
Automobile (SOV + HOV)	15,459,762	53%
Bus	7,239,756	25%
Walking	3,751,555	13%
Commuter Rail	2,093,691	7%
Bicycling	881,627	3%
TOTALS	**29,426,391**	**100%***

Note: Light Rail and Ferry not tracked
*Total may not equal sum due to rounding.

The university is guided by two requirements: The Transportation Management Plan (TMP) and Commute Trip Reduction (CTR). Seattle University has had an effective Transportation Management Program (TMP) for almost twenty years as a result of Washington State law. This requirement focuses on reducing traffic and parking impacts on surrounding neighborhoods.
In 1991, the Washington State Legislature passed the Commute Trip Reduction Law. This law was designed to foster public and private partnerships that would encourage commuters to switch from driving alone to alternative commute modes. The Law requires employers with 100 or more full-time employees to provide a transportation program to encourage employees to use alternative commute modes. The university is also required to practice Transportation Management Programming.

The 1997 Institutional Master Plan adopted aggressive goals to reduce the number of employees and students choosing to drive alone to campus. Progress towards these goals was measured in 1995, 2001, and 2007 using electronic surveys of the campus population. Between 1995 and 2007, the percentage of employees and students driving alone to campus dropped from 53% to 39% even though campus population grew by 2,745, illustrated in Table 11:

Deepening Seattle University's Commitment to Sustainability

- Walking and Biking: Employees and students who are registered walkers and bicyclists receive a complimentary parking card for five days of parking each month when they need their car. Bicyclists have access to lockers, showers, covered parking and free bike lock checkout.

- Nighthawk Safety Escort/Patrol: Public Safety provides a safe evening shuttle for students and employees who live near campus or for employees to connect to transit stops that may be difficult to reach in the evening. The university utilizes two hybrid vehicles for this service.

Future Goals and Strategies

Reducing commute trip emissions requires a shift from SOV trips to lower or no-emissions alternatives. The university's goal is that no more than 29% of the daytime campus population (students and employees) should arrive to campus by driving alone by 2035. Interim goals are outlined in Table 12.

Table 12. Target Effect on SOV Rate due to Reduction Strategies targeting SOV Drivers

Fiscal Year	Percent of Population Utilizing SOVs
2009	43%
2015	35%
2020	35%
2025	32%
2030	30%
2035	29%

Reducing the percent of the campus community driving alone to class and work depends on access to and support for alternative modes of transportation, and personal decision to use the alternative modes. Access to alternative choices is dictated by the regional transit system. The regional transit system serving the university is complex; it involves multiple cities and counties, the state, and several transit agencies. The ability of the university to make a unique, direct, and immediate impact on the system itself is limited. The university must work with the transportation agencies and partner institutions to address transportation policy issues on a regional basis.

Success also depends on employees' and students' decision to choose alternative modes of transportation. To achieve its goals, the university will work to influence this decision. The university will aggressively communicate, support, and promote alternatives; increase participation in current transportation programs; offer new choices or programs; and increase on-campus housing options.

Specifically, the university is committed to strategies below to reduce its SOV user rate to decrease emissions from commute transportation.

Timeline: 2010 through 2015
Responsible: Public Safety
Outcome: Increased awareness and involvement in programs

Strategy 3.4.4 Reduce the need for employees to commute to the campus

Offering adjusted schedules and telecommuting for employees reduces the amount of commuting to campus. The university will evaluate existing policy to determine if the use of alternative schedules can be expanded. The review will be led by Human Resources. The Office of Information Technology will assess technology options that support alternative schedules.

Timeline: 2012
Responsible: Human Resources
Outcome: Reduced commute miles traveled

Strategy 3.4.5 Increase percentage of students living on campus

Allowing a greater percentage of students to live on campus will reduce emissions created by commuting. The 2009 Campus Housing Master Plan and the 2010 Academic Strategic Action Plan call for increasing the percentage of students living on campus to 60% and 65%, respectively, reducing the commute trips made to campus each day. The 2006 Facilities Master Plan identifies the construction of residence halls over the next several years that would allow the university to achieve these rates.

Timeline: Ongoing
Responsible: Facilities Services
Outcome: Reduced number of students that commute by motorized vehicles

Strategy 3.4.6 Promote opportunities for students and employees to live near campus

The university's neighborhood offers many residential options including house rentals, apartment buildings, single family homes and condominiums, all within a comfortable walking, biking and public transit distance. To encourage campus members to live near campus, the university will investigate the rate of campus members who live in the university's neighborhood and will identify opportunities to partner with neighborhood property developers and develop a Local Area Housing Program. This program would provide support for employees who want to rent or own a home near the campus. Such a program may provide a link between campus members who seek to rent with public, private, and nonprofit housing providers, and programming for encouraging home ownership in the university's neighborhood.

Timeline: 2011 and ongoing
Responsible: To be determined

Strategy 3.5 Send Less Waste to the Landfill

Current Emissions and Strategies

In FY 2009, the university generated approximately 1375 tons of solid waste. Table 13 illustrates the quantity of each material and how it was disposed. Of the total waste generated, 51% was sent to the landfill and 49% was composted, recycled or reused.

Only waste sent to the landfill is counted toward our green house gas emissions. Landfilled waste created 215 metric tons of carbon dioxide, less than 1% of the university's total carbon footprint as part of Scope 3 emissions.

Table 13: Share of Total Waste Generated by Material and Disposal Method

WASTE DISPOSAL MODE	TOTAL (SHORT TONS)
Landfilled	705
Recycled – Commingled	413
Recycled – Paper	173
Compost – Pre And Post Consumer	48
Recycled – Electronics	20.5
Recycled – Scrap Metal	10
Reuse – Clothing	3.7
Reuse – Goodwill Donations	1.6
Reuse – Food Donation	.4
Total Solid Waste	**1375.5**
Total Compost + Recycle + Reuse	**670.8**
Recycle-Diversion Rate	**49%**
Landfilled Waste Rate	**51%**

Since 1988, the university has operated a dedicated waste reduction and recycling program which prevents and diverts waste from the landfill. In 1992, the university food service switched from an "all-you-can-eat" service to a "pay-per-item" system, resulting in decreased food waste. These programs and practices expanded over time to become today's waste management program. The program includes three key waste diversion categories: recycling and reuse, composting, and waste prevention. The program has received several awards including: six awards from the U.S. EPA Waste Wise program; three Recycler of the Year awards from the Washington State Recycling Association; and an Outstanding Achievement in Organics Recycling award from the Washington Organics Recycling Coalition.

Recycling and Reuse

Recyclable paper, cardboard, glass, metal, and plastic are collected inside and outside of all campus buildings. The university recently switched from separate collection to commingled collection. This switch has made recycling easier for the campus community and will increase participation. After collection, recyclable material is compacted, which reduces the number of trips required to transport the material from campus. Batteries, compact disks, electronics, toner cartridges, and packing material are also recycled. Computers are recycled through the Office of Information Technology, and cell phones, furniture, clothing, and many other items are donated to local nonprofit organizations.

Composting

The university began collecting pre-consumer kitchen scraps and coffee grounds for compost in 1995. In 2003, the university built an on-campus composting facility reducing the weight of material moved off campus. In 2008, the university began collecting post-consumer food waste for composting, which is now collected in several locations across campus, in addition to the main food service locations.

Waste Prevention

Various tactics to reduce waste are used on campus. Reusable mugs are provided to new employees. In 2008, the 'got mug?' campaign was created to increase reusable mug use. In 2009, students began sharing the cost of their printing with the university in order to reduce paper consumption. Facilities Services is currently installing water fountains with "bottle filler" faucets around campus that allow reusable water bottles to be easily refilled. This will cause a decrease in use of disposable water bottles. In cafes, the university's food service provider, Bon Appétit, provides durable, reusable service ware.

Future Goals and Strategies

Table 14: Target Percent of Total Waste Stream Sent to the Landfill due to Reduction Strategies

Fiscal Year	Maximum Percent to Landfill	Tons of Waste	Metric Tons of CO2
2009	51%	705	215
2015	45%	317	76
2020	35%	247	59
2025	30%	211.5	51
2030	25%	176	42
2035	20%	141	34

To achieve these waste diversion goals, the university plans to enact the following waste management strategies and actions.

Strategy 3.5.1 Increase outreach & education about recycling and composting

The university will increase outreach and education about recycling and composting. Potential methods include increasing the availability and visibility of recycling and composting information, developing a recycling and composting newsletter, training student Residence Hall Advisors (RAs) on recycling and composting procedures, and increasing orientation for new employees.

Timeline: 2011 and ongoing
Responsible: Facilities Services
Outcome: Increased knowledge and awareness of recycling and composting

Strategy 3.5.2 Prevent Waste

Preventing waste will require a significant collaboration among many campus stakeholders. Possible actions the university will consider implementing include reducing bottled water consumption, evaluating replacement of paper towel dispensers with energy efficient hand dryers, promoting in-café dining and durable service ware in cafes, and establishing paperless workflow standards.

Timeline: 2010 and ongoing
Responsible: Facilities Services
Outcome: Reduction in generation of solid waste by preventing waste

Strategy 3.5.3 Increase Waste Diversion Rate

The university will expand its waste diversion successes to increase the amount of recycling, composting, and donations collected. Existing recycling containers will be replaced and additional containers will be installed. The compost collection program will be expanded to all facilities, and additional donation and reuse collection will be evaluated.

Strategy 3.6 Evaluate High Quality Carbon Offsets

In order to achieve climate neutrality, the university must reduce its emissions to zero. The university is committed to first reducing its greenhouse gas emissions through energy conservation and other reduction and avoidance initiatives. These strategies are described in goals 4.1 – 4.5 above. However, these initiatives alone will not eliminate emissions. Offsets provide a mechanism to eliminate remaining emissions after all other means have been pursued; they complement and do not replace emissions reduction strategies.

Current Strategies

Although Seattle University purchases Renewable Energy Credits through its utility provider, Seattle City Light, it does not yet purchase offsets. The university will begin investigating offsets through Strategy 4.6 below.

Future Goal and Strategies

Strategy 3.6 Evaluate high-quality certified carbon offsets

The university will thoroughly evaluate and assess the merits of offsets with other strategies in the future. Carbon offsets are available from a number of sources. Some providers specialize in offsetting emissions for specific sources of emissions, such as Terrapass for air travel. Others providers offer offsets that can be applied to multiple emissions sources. Carbon offset standards and oversight is not yet well-established; offsets must be considered carefully. The university will study the issue, gather input from the campus community, and exercise due diligence before committing to offsets purchases. The use of Terrapass offsets is likely to be considered much sooner than general offsets.

Timeline:	Future
Responsible:	Presidents Committee for Sustainability
Outcome:	Recommendation of alternatives for use of offsets

Funding and Tracking Progress

No funding is necessary to complete the evaluation, but funds will be needed to acquire offsets. Funding sources will be determined during the evaluation phase. The strategies and actions described above will be tracked as follows. Should offsets purchases be adopted, tracking mechanisms will need to be developed.

Method	Responsible Group
1. Evaluate use of offsets	President's Committee for Sustainability
2. Report in Annual Sustainability Report	Facilities Services

Goal 4: Share Knowledge with Others

Current Strategies

Sharing the university's commitments, actions, and progress is an essential component of the university's effort to achieve climate neutrality. Today, the university provides information to campus members and the public through the university website and occasional newsletters and articles. A variety of one-time, sustainability-related conferences and workshops are also held on campus, including tours of campus facilities and features. Seattle University staff and employees are also frequently asked to speak at off-campus workshops and conferences.

Future Goals and Strategies

The university needs to develop robust and interactive methods to engage others and share information about sustainability and climate change issues. Sharing information holds the university accountable for its commitments and can support sustainable behavior changes in individuals. The university will bolster and formalize its approach to communicating about climate change with the strategies described below. Encouraging campus and community members to become involved with sustainability is also a focus. The university must also expand existing and new partnerships, and collaborate with local agencies and private entities, to support the implementation of the strategies outlined in this plan.

Strategy 4.2 Increase opportunities for individuals to engage sustainability

Encouraging campus and community members to become involved with the university's efforts can increase interest in participating in the university's effort, and creates dialogue, which in turn can increase passion for sustainability. The first step is to inventory and evaluate existing opportunities and develop plans for greater participation. This effort could include creating sustainability committees in each department or facility, or working with students on sustainability projects. This effort will be led by the Campus Sustainability Manager in collaboration with the President's Commission on Sustainability.

Timeline:	2010 – 2012
Responsible:	Facility Services and President's Commission on Sustainability
Outcome:	Increased passion, collaboration, and communication

Strategy 4.3 Increase the university's network of partners

In order for the university to reach its potential in addressing climate change, it must increase its partnerships and networks. The university currently collaborates with local agencies on environmental issues, such as transportation planning and energy conservation, and with private entities, such as McKinstry. Robust networks not only increase opportunities for Seattle University to provide sustainability leadership, but also for leveraging resources for project assistance, service learning and research. The university will assess its existing network of sustainability partners to identify new partners or opportunities to strengthen its effort.

Timeline:	2011 and ongoing
Responsible:	Facility Services and President's Commission on Sustainability
Outcome:	Increased collaboration and partnerships

Funding and Tracking Progress

Any needed funding will be included in department's budget request. These strategies will be tracked primarily by the President's Committee for Sustainability.

LIST OF TABLES AND GRAPHS

Tables

APPENDICES

Appendix A: President's Committee for Sustainability

Membership

A. One (1) Administrator from Provost's Office
B. One (1) Administrator from Student Development
C. One (1) Administrator from the Business and Finance Office
D. One (1) Member of the Jesuit Community
E. One (1) Staff from Office of Mission and Ministry
F.

Appendix B: Sustainability in Curriculum Fall 2009 Survey

What is Sustainability

Sustainability can be defined as ''a framework for making decisions that integrates human, environmental, and economic needs as a whole system.''

Curriculum

1. What type of classes do you primarily teach?
   Undergraduate
   Graduate
   Undergraduate and graduate equally

Considering the core/required

included last academic year (2008/2009)?
Yes
No

9. Do you plan to incorporate more sustainability content into your **elective** coursework in the next academic year (2010/2011)?
Yes
No
Not sure

Research and Scholarship

10. Are you actively researching sustainability issues?
Yes
No

11. Do you plan to research sustainability issues in the future?
Yes
No
Not sure

12. How many sustainability-related scholarly items have you published since 2005?
a. Peer-reviewed journal articles
0, 1-2, 3-4, 5 or more
b. Peer-reviewed proceedings
0, 1-2, 3-4, 5 or more
c. Non-peer-reviewed items
0, 1-2, 3-4, 5 or more

Other Questions

All respondents answer the following series of questions.

13. In what school or college do you primarily teach?
Arts & Sciences
Albers School of Business and Economics
Education
Law
Matteo Ricci
Nursing
Science and Engineering
Theology and Ministry

14. Is your position tenure-track or adjunct?
Tenure-track
Full-time adjunct/lecturer
Adjunct

15.

Appendix C: Inventory of Sustainability-related Courses, 2008-2009

Undergraduate Courses

Graduate Courses

Albers School of Business& Economics

MBA 512 Business Ethics and Social Responsibility
MGMT 586 Entrepreneurship: New Venture Plan
MGMT 574 Entrepreneurial Leadership: Social Entrepreneurship
MKTG 591 Sustainability Strategies for Business
OPER 564 Supply Chain Management

College of Arts & Sciences

PUBM 569 Community and Economic Development

College of Education: Master in Teaching Program

TEED 521 Elementary Curriculum, Instruction, and Assessment

School of Theology and Ministry

STMM 506 Earth Community, Earth Ethics

Law School

The Law School offers the following courses that are related to sustainability issues:

- Environmental Law Fundamentals
- Land Use Regulation
- Climate Change
- Natural Resources Law
- Growth Management
- Environmental Justice Seminar
- Environmental Enforcement
- Environmental/Land Use Externship

APPENDIX D: Co-curricular Departments

Some of the departments that comprise Co-curricular programming include:

The Office of the Vice President for Student Development provides institutional leadership by guiding the offices that advance diversity, promote and ensure health and safety, support career and academic services, develop student leadership, coordinate campus activities, explore student ethical development, enforce community standards, and create community both on and off campus.

The Athletics Department exists to champion the holistic development of student-athletes, inspiring a vital and engaged campus community through the development and maintenance of a premier, nationally prominent NCAA Division I athletic program, in the spirit of the Jesuit tradition

The Career Services Office helps students and alumni discover their career passion by integrating the Jesuit core values and introducing a process of personal discovery and discernment. This process assists students with discovering their unique talents and gifts and their life's direction in relationship to their individual needs and their connections with others in a community. This is an on-going, lifetime activity.

Commuter and Transfer Student Services supports educational success and fosters a sense of belonging, involvement and connection between commuter students and campus.

Counseling and Psychological Services seeks to promote and maintain the psychological health of students and the campus community The Counseling Center's mission rests upon the Jesuit and humanistic values of self-reflection, life-long learning and the development of the whole person.

Housing and Residence Life provides safe and secure residence halls with diverse living options, student centered service, and programs and systems that foster student learning, development, and community living.

The International Student and Scholar Center exists to provide assistance to our international students in all matters pertaining to cultural adjustment, academic assistance, community building, immigration, visa status, document certification, employment authorization and more. Every year, the ISC sponsors several workshops on immigration-related issues.

Judicial & Integrity Programs provides students with the tools needed for success in a pluralistic society by providing feedback about behaviors that both enhance and harm the academic community, as well as assistance and opportunities in modifying such behaviors.

The Leadership Development program promotes the development of value-driven leaders in a diverse and changing world. It promotes the belief that everyone has the potential to be a leader. The program sponsors a variety of programs to encourage students to find the leader within, experience leadership in different capacities, and celebrate the accomplishments of campus leaders.

The Office of Multicultural Affairs is committed to supporting the academic, personal, social, and cultural success of students of color.

New Student and Family Programs Office,

The Department of Public Safety and Transportation Is committed to ensuring a safe and secure environment for the university community, and providing campus members resources to assist in moving to and from campus.

Recreational Sports provides university community members with an opportunity to enhance their overall physical and mental wellness through various supervised and/or self-directed programs and activities.

Student Activities, in collaboration with many student organizations, provides a variety of entertainment for the students on and off campus, and develops an activities program that meets the social and cultural needs of the undergraduate students.

The Student Health Center is focused on enhancing levels of wellness and empowering students to be self-directed in their own care. In addition, these college years are seen as a unique window of opportunity where health care providers can influence health promoting life-style behaviors.

The Office for Wellness and Health Promotion exists to enhance the health and well-being of the campus community and empower students to make positive health choices through education, prevention, collaboration and peer support.

Appendix F: Updates to Climate Action Plan Version 1

Page	Section	Update
4-6	Executive Summary and About Seattle U	Moved the Executive Summary to be before About Seattle U
5	Table 1	Changed "Landfilled Garbage" to "Landfilled Waste"
14	Deepening and Advancing Sustainability	Added to section title "The Goals"
15	Current Offerings	Added to the last sentence "…some of…" to read "However, findings do illustrate that sustainability is incorporated into some of the academic offerings throughout the university.
18	Future Goals and Strategies	The following paragraph was added: The Academics sub-committee of the President's Committee for Sustainability wants to be clear that Seattle U addresses sustainability in a broad sense, rather than one limited to environmental issues. Therefore, the Academic Strategic Action Plan goals stated above will be implemented with students learning about the environmental, social, and economic dimensions of sustainability and climate change.
20	Title	Changed "Student Development" to "Co-Curricular"
20	About	Where "Student Development" is referenced, changed to "Co-Curricular" and reworded sentences accordingly, such as: 1. Changed the first sentence from "The Division of Student Development works…" to "These areas work…" 2. Added sentence as first sentence: "The goal of co-curricular programming is to provide students opportunities for learning outside the classroom." 3. Added sentence as second sentence: "Co-curricular programs include those overseen by the Director of Student Development, Athletics, Mission and Ministry and Athletics. 4. Changed "Student development provides programs, services and activities…" to "Co-curricular programming provides resources, services and activities…"
20	Current Efforts	Changed first sentence from "The majority of departments within the Division of Student Development…" to "Many co-curricular departments…"

Page	Section	Update
31	Future Goals and Strategies	Changed in second sentence from "…30 metric tons will be reduced by 2020…" to "…35 metric tons…" to correct math error
32	Strategy 3.2.2	Changed outcome to "Campus-wide policy for vehicle and equipment purchases, maintenance and disposal"
35-36	Goal 3.3 Provide alternatives to Air Travel	2008 instead of 2009 emissions were used for Study Abroad in table 8 and the mileage was incorrect. Added reducing Athletic's air miles to the Future Goals and Strategies.
38	Table 12	1. Changed Table Title to "Target Effect on SOV Rate due to Reduction Strategies targeting SOV Drivers" to correct table description. 2. Changed 2009 Percent of Population Utilizing SOVs from 39% to 43% to correct an error that did not reflect both students and employees. The percents for the following years correctly reflect both students and employees.
44	Future Goals and Strategies	1. Changed "Over the next 25 years the university is committed to reducing its net solid waste emissions…" to "Over the next 25 years the university is committed to reducing its waste diversion rate…." 2. Changed "Target emissions reductions are shown…" to "Target waste reduction rates are shown…"
45	Table 14	Changed Table Title to "Target

ENDNOTES

[i] (1987). Brundtland Commission. Report of the World Commission on Environment and Development: Our Common Future**.** Chapter 2: Towards Sustainable Development. Retrieved from http://www.un-documents.net/wced-ocf.htm 04/12/10.

[ii] (2006). Society of Jesus, Oregon Province. Regional Sustainable Development: A Plan of Action. Retrieved from http://www.seattleu.edu/uploadedFiles/Sustainability/Regional%20Sustainable%20Development--Plan%20of%20Action.pdf 04/12/10.

[iii] Source: Emissions data in the university's Utility Manager Pro software.

[iv] Business air miles are round trip and are approximated according to the ACUPCC Implementation Guide. The guide states that "…signatories may use statistics on the average price per passenger air mile from the Air Transport Association of America to convert their total air travel expenditures into a rough estimate of passenger air miles." (pg.17-18). Seattle University used a factor of $0.25 per passenger air mile.

[v]