



Climate Action Plan

January 15, 2011



INTRODUCTION:

"We, the undersigned presidents and chancellors of colleges and universities, are deeply concerned about the unprecedented scale and speed of global warming and its potential for large-scale, adverse health, social, economic and ecological effects. We recognize the scientific consensus that global warming is real and is largely being caused by humans. We further recognize the need to reduce the global emission of greenhouse gases by 80% by mid-century at the latest, in order to avert the worst impacts of global warming and to reestablish the more stable climatic conditions that have made human progress over the last 10,000 years possible." This text introduces the American College and University Presidents' Climate Commitment, which was signed by Dr. David Beyer on June 13, 2008. In signing this commitment, Everett Community College agreed to:

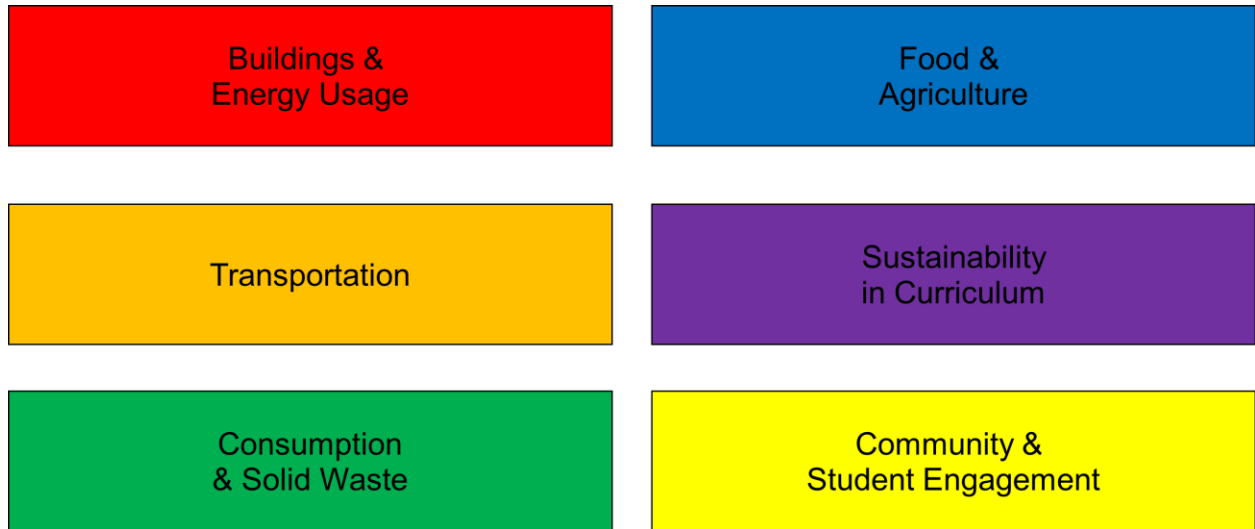
- Complete a green house gas (GHG) emissions inventory.
- Set a target date and interim milestones for becoming climate neutral, within the first two years.
- Take immediate steps to reduce GHG emissions by choosing from a list of short-term actions.
- Integrate sustainability into the curriculum, making it a component of the educational experience.
- Make the GHG inventory, climate action plan and progress reports publicly available.

CLIMATE ACTION PLAN OVERVIEW

Due to increasing enrollment and the opening of new facilities which has increased building square footage on campus, our Climate Action Plan (CAP) puts Everett Community College on a path to maintain our current emissions. We have enacted various strategies to prevent further increase in GHG emissions. Additional actions will need to be identified and implemented, subsequent to this initial plan in order to place the college on a path towards significant emissions reductions. The college will

- report on college emissions annually
- report on major actions outlined in the CAP
- combine long range financial, sustainability and capital projects planning
- identify additional actions in the next 12 months that will begin to reduce overall college emissions
- evaluate existing actions and identify new actions every three years, thereafter
- re-examine the established objectives every five years.

Everett Community College's Climate Action Plan Objectives Map to 6 Core Action Areas:



BACKGROUND

The main campus of Everett Community College occupies 22 acres in north Everett, Washington and consists of 14 classroom and lab buildings plus 6 additional buildings occupying approximately 750,000 square feet. Branch campuses operate at the School of Cosmetology in Marysville, the Aviation Maintenance Technical School at Paine Field and the Applied Technology Training Center in south Everett. As of December 2009, full-time student equivalent enrollment was 11,697 with approximately 19,000 total students attending main and branch campuses, continuing education programs, and distance/e-learning courses.

SOURCES OF CARBON EMISSIONS

Overview

The Green House Gas Inventory baseline for Everett Community College was conducted in Fiscal Year 2009 (FY 2009) and total gross emissions consisted of 11,105.6 metric tons of CO₂. Emissions per full-time enrollment (FTE) were calculated at 0.92 metric tons of CO₂ and 14.85 metric tons of CO₂ per 1000 square feet. (See Figure 1 for emission by category.) Both of these metrics are below the average value of 3.1 metric tons of CO₂ /FTE and 27.38 metric tons of CO₂ / 1000 square feet for institutions designated as Associate's & Tribal Colleges via Carnegie Class. Data for comparison are available at <http://acupcc.aashe.org/stats/ghg-scope-stats/> and were accessed on 31 August 2010.

Transportation

Commuting by students, faculty and staff comprises the largest component of Everett Community College's GHG emissions, accounting for 60% of total emissions in the FY09 baseline inventory (See Fig. 1).

Energy

Energy use, including both the purchase of electricity (22%) and the use of natural gas (14%), is the second largest source of Everett Community College's GHG emissions (Fig. 1). Electricity is purchased from the Snohomish County PUD and approximately 80% of this electricity comes from hydropower, with another 5% coming from the Kimberly-Clark co-generation plant.

Natural gas is purchased from Puget Sound Energy. The natural gas that is used on campus powers several boilers, which provide heat to our buildings.

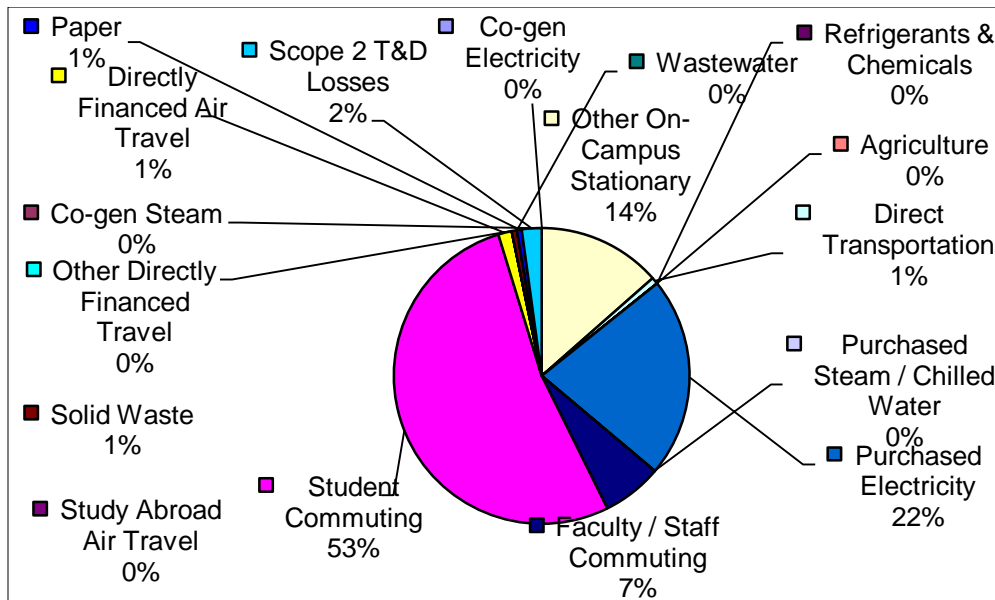


Figure 1. Total GHG Emissions for Everett Community College FY 2009 as calculated by Clean Air-Cool Planet, Campus Carbon Calculator, ©2001-2009 Clean Air-Cool Planet, Inc. All rights reserved.

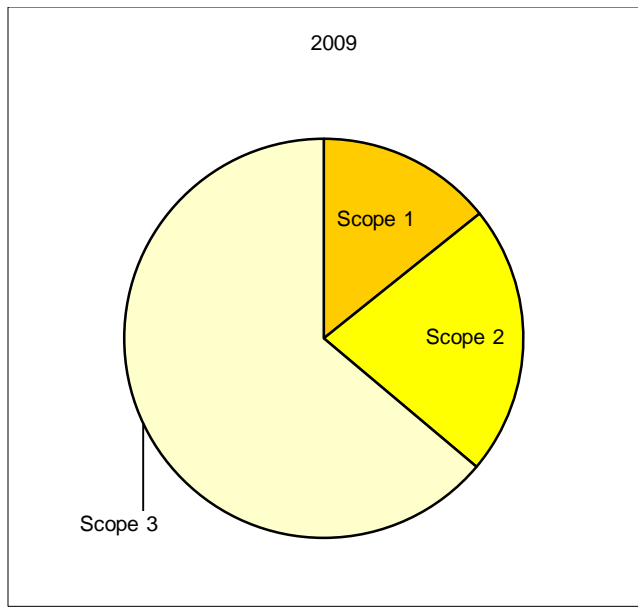


Figure 2. Total Everett Community College Emissions by “Scope” see below for definitions

Scope Definitions

The ACUPCC Implementation Guide classifies greenhouse gas emission sources by various “Scopes” in an effort “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 goals¹”. The various scopes are defined as follows:

- **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; 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 as well as the release of CH₄ from institution-owned farm animals.
- **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 the activities of the institution, but occur from sources not owned or controlled by the institution.

BUILDINGS AND ENERGY USAGE

Everett Community College currently has twenty main-campus buildings, five off-campus buildings and the new Fitness Center for which it tracks utility costs. To reduce energy consumption on campus, we need to assess our current usage in greater detail. Currently, campus electricity (Scope 2) is not sub-metered by building, which limits our ability to analyze the Energy Use Index (EUI) for a particular building. New state guidelines also mandate more detailed reporting of energy usage. To address both of these goals (reduction of GHG emissions & state reporting requirements) Everett Community College plans to install a system that will allow sub-metering of electrical usage by building. The proposed campus plan for sub-metering is in development via a Request for Proposal (RFP) with Tetra Tech

Engineering to develop and/or purchase a “dashboard” (PC available) software system which will allow users to access data regarding electrical use by individual buildings. Currently, this project is scheduled for completion in late 2011. Acquisition and analysis of data on building specific energy usage will enable us to identify areas where energy-use reduction strategies can be implemented. These strategies will be implemented as the EUI data for a particular building becomes available.

Natural gas (Scope 1) usage on campus is partially metered for some buildings, but other buildings are collectively metered. Since individualized gas metering of buildings is presently less urgent, a project to sub-meter the gas system is pending funding. Currently, the natural gas is used to power boilers which provide heat to the buildings. Everett Community College Physical Plant has 3 large boilers installed in 1952. Plans to replace our outdated infrastructure with more efficient boiler units will occur as funding from the Washington State Legislature becomes available.

Substantial reduction of GHG emissions and energy savings have already been achieved on campus through extensive re-lamping initiatives carried out over the last several years by the Facilities and Maintenance Personnel. EvCC also participates in PUD’s Energy Challenge. Current data gathered via temporary sub metering, reflects a 2.9% decrease in power usage across all facilities for the past quarter and a 2.6% decrease over the most recent 12 months.

Energy Policies

Campus buildings have set guidelines for minimum and maximum room temperatures (heating/cooling) which adhere to American Society of Heating, Refrigeration & Air-Conditioning Engineers (ASHRAE) standards. EvCC has adopted a four day a week schedule in the summer months to further reduce energy usage during the season that offices and classrooms require air conditioning. We are in the process of implementing new guidelines to restrict weekend use of facilities to only one building on campus. This will result in further energy savings.

New Construction

In April 2005, Washington Governor Christine Gregoire signed the high performance green buildings bill into law, which mandates that new public buildings meet "green building" standards of energy efficiency, water conservation and other environmental standards. Due to state law, all new buildings at Everett Community College must be built to Leadership in Energy and Environmental Design (LEED) standards. Gray Wolf Hall, completed in 2009, achieved the LEED Silver Rating. Additional information about this project can be found at: <http://www.ga.wa.gov/EAS/green/CaseStudy/GrayWolfHall.pdf>. White Horse Hall, which opened in January of 2007, was also built with high energy efficiency standards. The new Fitness Center which is opening January 2011 is also anticipated to achieve a LEED Silver rating.

TRANSPORTATION

Reductions in GHG emissions due to commuting (Scope 3) will be achieved via several new initiatives, including subsidizing ORCA (transit) passes for faculty, staff and students. Approximately 53 faculty/staff have purchased ORCA transit passes as of August 2010. Numbers of student purchases are pending, as Fall Quarter has not yet begun. Additionally, Everett Community College has approximately doubled the

number of carpool parking slots on campus from about 50 to 100 and has decreased the parking fee from \$30 (non-carpool full-time student, faculty or staff) to \$10.95 for carpool permits per quarter to incentivize students, faculty and staff to carpool to campus.

Current estimates of Single Occupancy Vehicle (SOV) trips to campus are based on a survey by the Washington State Department of Transportation. To gain more campus-specific SOV data, several students in instructor Eric Davishahl's Engineering Project Class of Spring 2010 conducted a five day, car counting survey. Their results are considered preliminary and some improvements need to be made to the methodology, but it is hoped that students in subsequent courses will improve upon this initial project, so that the campus community can gather and analyze its own SOV data.

Other commute reduction approaches include an inclusion of an Everett Community College Ride Connect site on our campus website for students, faculty and staff who wish to form campus carpools: <http://www.everettcc.edu/administration/operations/security/rideshare.cfm?id=3444>. Additionally, the college built bike lockers to encourage commuting by bike as part of the LEED certification process for Gray Wolf Hall.



CONSUMPTION & SOLID WASTE

Recycling

Currently, solid waste represents less than 1% of Everett Community Colleges total GHG inventory (Fig.1). The campus utilizes a co-mingled recycling program which currently diverts about 13 cubic yards per week and/or about 37% of waste that would otherwise go into the landfill.

Composting Food Waste

Prior to the closure of Dining Services at the end of Spring quarter 2010 due to a remodel, on-campus food waste was composted pre-consumer by the kitchen staff. This effort sent about 2.5 cubic yards of waste per week to Cedar Grove Composting. Also, used fryer oil from the kitchen was donated to a biodiesel company. If the campus is awarded the Washington Campus Compact Northwest Sustainability Initiative sub-grant (described below) we plan to implement post-consumer composting of food waste, and compostable utensils and dinnerware in the cafeteria.



Junk Mail Reduction

Since March of 2008, the campus has continued to participate in a “junk” mail reduction project. When measured in February of 2008, Everett Community College was receiving between 250-300 lbs of unwanted mail daily. As of May 2009, this had been reduced by 150 lbs per day.

Paper Use

At the beginning of Fall Quarter 2009, students were restricted to printing 350 pages per quarter. This was in response to a mandate by the Washington state governor, Christine Gregoire, to reduce paper

use at state agencies by 30%. Currently, the paper that we purchase for use on campus contains 30% recycled fiber (up from 0% recycled fiber) and we are mandated to purchase paper with 100% recycled fiber beginning in 2012.

Household Hazardous Waste

Staff from the Facilities and Maintenance Department also provides collection and disposal of used fluorescent bulbs and used batteries the campus and local community. These items are collected and then taken to a Household Hazardous Waste Materials site managed by Snohomish County.

Future Green Purchasing Policy

Currently, we are studying the logistics required to implement a campus-wide green purchasing system that would enable us to increase the purchase of consumer products produced in a sustainable manner.

FOOD & AGRICULTURE

Everett Community College will be seeking a new food services provider to resume food service on campus for Spring quarter 2011 . Contract language will encourage the purchase of local and organic food products. Currently, some produce is being grown on campus and distributed to local families through the “Gardens to Groceries” program described below in the Community & Student Engagement Section.

SUSTAINABILITY IN CURRICULUM

A campus-wide approach to integration of sustainability topics into Everett Community College curriculum was begun in Winter quarter 2010. A retreat entitled *Sustainability: From Intention to Action – Self, Curriculum, Community* was held at Walla Walla Marine Station, January 29-31, 2010. Approximately 60 faculty, staff and students attended and participated in a variety of workshops directed at understanding sustainability from the perspective of their discipline. Jean MacGregor, Ph.D. of the Washington Center for Improving the Quality of Undergraduate Education at The Evergreen State College and director of the Curriculum for the Bioregion Initiative, was a featured speaker and gave two presentations. The first described the evolution of the term sustainability from its earliest usage and the second was a participatory workshop that engaged faculty with brainstorming on how to integrate sustainability concepts within their discipline specific curriculum.

Efforts to highlight sustainability courses for current and prospective students include “Learn Green” web-pages (<http://www.everettcc.edu/green/index.cfm?id=10836>) and advertisements in the printed student schedule with a list of all current courses that include a sustainability perspective. Presently, courses which address sustainability include a nutrition course entitled Sustainable Food Systems, Environmental Science courses, courses in geography and sociology and specific sections of English composition. Our cosmetology Salon Management course and the Principles of Marketing course also include a sustainability aspect. Additionally, faculty members have the ability to participate in a bi-weekly Teaching Lab that focuses on the integration of sustainability into their courses.

We currently offer curriculum guides for students planning to transfer as environmental studies, environmental science and global studies majors to four year institutions. These students are exposed to many aspects of sustainability in their coursework.

A faculty committee is currently in the process of developing the language and assessments needed to add a Student Core Learning Outcome (CLO) regarding sustainability to the curriculum of Everett Community College. Work on this project is anticipated to be completed by end of Winter quarter 2011. The earliest this new outcome would be implemented is Fall of 2011. Implementation of this new Student CLO will ensure that the majority of the student body is exposed to aspects of sustainability during their education at EvCC.

COMMUNITY & STUDENT ENGAGEMENT

Earthweek 2010

A week-long series of events were offered during the week of 19 April 2010 to commemorate the 40th Anniversary of the First Earth Day. Programs included a screening of the movie “Fresh” followed by a discussion moderated by a nutrition instructor and also a tour of the campus improvements regarding sustainability. Earth Day events have also occurred at Everett Community College in past years and are planned to continue on an annual basis.



Everett Farmers Market

Beginning in the Fall of 2009, the Everett Community College campus has hosted The Everett Farmers Market during the Fall and Spring quarters. The Market returned in 2010 from 9 a.m. to 2 p.m. on Wednesdays from March 31- June 2. The Everett Farmers Market consists of 12-15 farmers and

producers offering bread and baked goods, honey, fish, artisan cheeses and meats, hazelnuts, sauces, flowers, fruits and produce.

Sustainable Community Resource Guide

A pamphlet entitled “Sustainable Community Resource Guide” highlighting local food sources was developed by students in Laura Wild’s Spring 2010 Nutrition 180. This course, entitled “Sustainable Food Systems: What to Eat and Why It Matters”, was offered for the first time in Spring 2010. The guide was distributed at the Everett Community College Farmer’s Market and at the “Sorticulture” Festival that was held June 11,12, 13, 2010 in Everett, WA. A more detailed version of the pamphlet is available electronically at: <http://www.everettcc.edu/uploadedFiles/Green/SustainableResourceGuidePDF.pdf>.

Growing Groceries Project

The Early Learning Center “Growing Groceries with Families Project” is an ongoing partnership between Snohomish County Human Services Community Action Program, the Washington State Early Childhood Education & Assistance Program (ECEAP), Washington State University Extension Programs, WSU Snohomish County Master Gardeners, and Everett Community College Early Learning Center. The “Growing Groceries with Families Project” is a local response to help address childhood obesity and health issues. Parents and children are mentored by WSU Master Gardeners in the growth, use and preservation of fresh produce as a means to supplement their household food budget. Families work collaboratively to prepare the garden, plant, maintain and harvest produce. Each month families meet for a work party and cooking demonstration using produce grown in the garden.

The original budget granted this site was \$500.00 for supplies. There are two other ECEAP sites participating in the project also. Snohomish County ECEAP appropriated money for cooking demonstrations, Cedar Grove Compost donated the soil, Everett Community College Facilities department (John Syson) provided many plant starts as well as a hose and spray nozzle, hose reel and a new planter. A donation of date expired (but still good) seeds was also made by an ELC parent.

As of August 2010, the ELC has 6 large container gardens as well as a few planted pots. We have harvested green beans, snap peas, carrots, parsley, chives, and leeks. Soon we will harvest onions, tomatoes, zucchini, cilantro, peppers and many more carrots. There are 6 actively participating families and we expect more families to join this coming Fall 2010. Produce is distributed at work/harvest sessions as well as daily when things need to be picked. ELC teachers and children have been visiting the garden to check up on watering and as part of their emergent science curriculum. The project has plans to continue year round with "cold season crops" like kale and lettuce as well as soil enriching plants such as soy beans.



Service Learning Projects

Everett Community College has received a sub-grant of the Northwest Sustainability Initiative (NWSI) sponsored by Washington Campus Compact (WACC). This project is an effort to increase the use of service-learning in the STEM disciplines (science, math, engineering, technology). With the grant funding, EvCC plans to implement sustainability focused service learning projects in several courses, including training students to help peer teach other students the appropriate manner in which to recycle and compost food waste on campus. This will allow us to expand the practice of composting food waste to the cafeteria for a post-consumer process. Additionally, the students of the Sustainable Food Systems: What To Eat and Why It Matters class of Spring 2011 will be creating and maintaining a long-term campus community garden.

Everett Community College Reads

“By reading one book in common, Everett Community College students, faculty and staff engage in a year long, cross-disciplinary collaboration that encourages imaginative and critical thought.”²⁹ For the academic year 2010-2011, the books *Plenty* and *Hannah Coulter*, have been chosen. *Plenty* is a memoir by Alisa Smith and J.B. Mackinnon of their year-long adventure in eating locally, during which they limited themselves to food produced within 100 miles of their Vancouver, B.C. home. *Hannah Coulter* by Wendell Berry is suggested as a companion literary piece due to its related focus on the rural experience and the deterioration of farm communities. Berry has been called "one of the great American voices" and is an author everyone should get to know.

In addition to book discussions, the Everett Community College Reads Committee will plan a schedule of speakers, and other events, perhaps even a local farm fair and a locavore meal. A year-long focus on these two books will further emphasize and extend our focus on sustainability as a campus community.

LONG-TERM FINANCING PLANS FOR SUSTAINABILITY ON CAMPUS

In current discussion amongst the stakeholders of EvCC sustainability is the idea of establishing a “Sustainability” Fee for students. Such a fee, if implemented, would fund sustainability projects, trainings, and other sustainable measures on campus. Current sustainability projects are generally funded by grants and rebates from energy efficiency projects. Projects funded usually require a 2 year or less return on investment, and only the base investment is returned to the sustainability fund, with the cost savings returning to the campus general fund. Another idea for funding is a percentage of cost savings resulting from sustainability or efficiency projects being used for new ideas and/or ROI capital.

REFERENCES

- 1) Implementation Guide: Information and Resources for Participating Institutions, Version 1.1, 2009. Available at http://www2.presidentsclimatecommitment.org/pdf/ACUPCC_IG_Final.pdf. Accessed on 30 August 2010.
- 2) “EvCC Reads” Webpage <http://www.everettcc.edu/library/index.cfm?id=10026&link>. Accessed 1 September 2010.