



Climate Action Plan

January 2011

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GateWay Community College
108 N 40th Street
Phoenix, AZ 85034



Letter from President Giovannini



Nearly three years ago, I, along with hundreds of my colleagues, signed the American College and University Presidents' Climate Commitment in a commitment to providing a safe, sustainable future for our planet, our communities and ourselves. Doing so marked my dedication to improving the environmental impact that GateWay Community College (GWCC) has on our future.

As president of GWCC, I am in a unique position that affords me the opportunity to have an exponentially greater impact on creating a carbon neutral and sustainable institution. Leading by example, we - the faculty, staff, and students of GateWay - can extend this movement beyond the college into our everyday life, to local businesses and surrounding communities; who in turn can lead their families, businesses and communities, creating a ripple effect for generations to come.

As a leading educator of students that will live, work and play in our community, it is our responsibility to provide them with the information and knowledge that will allow them to make sound decisions that may affect our environment and livelihoods. The decisions we make as a college and the choices we make as individuals should be made with regard to the overall impact and beyond the immediate product but with what it implications it may have for our surroundings.

I invite you to read GateWay's Climate Action Plan where you learn about the environmentally responsible initiatives we are implementing on our campus – a recycling program, LEED Certified construction, LED lighting, and more.

A handwritten signature in cursive script that reads "Eugene Giovannini".

Eugene Giovannini
President, GateWay Community College



American College & University Presidents' Climate Commitment

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.

While we understand that there might be short-term challenges associated with this effort, we believe that there will be great short-, medium-, and long-term economic, health, social and environmental benefits, including achieving energy independence for the U.S. as quickly as possible.

We believe colleges and universities must exercise leadership in their communities and throughout society by modeling ways to minimize global warming emissions, and by providing the knowledge and the educated graduates to achieve climate neutrality. Campuses that address the climate challenge by reducing global warming emissions and by integrating sustainability into their curriculum will better serve their students and meet their social mandate to help create a thriving, ethical and civil society. These colleges and universities will be providing students with the knowledge and skills needed to address the critical, systemic challenges faced by the world in this new century and enable them to benefit from the economic opportunities that will arise as a result of solutions they develop.

We further believe that colleges and universities that exert leadership in addressing climate change will stabilize and reduce their long-term energy costs, attract excellent students and faculty, attract new sources of funding, and increase the support of alumni and local communities.

Accordingly, we commit our institutions to taking the following steps in pursuit of climate neutrality:

1. Initiate the development of a comprehensive plan to achieve climate neutrality as soon as possible.
 - a. Within two months of signing this document, create institutional structures to guide the development and implementation of the plan.
 - b. Within one year of signing this document, complete a comprehensive inventory of all greenhouse gas emissions (including emissions from electricity, heating, commuting, and air travel) and update the inventory every other year thereafter.



c. Within two years of signing this document, develop an institutional action plan for becoming climate neutral, which will include:

- i. A target date for achieving climate neutrality as soon as possible.
- ii. Interim targets for goals and actions that will lead to climate neutrality.
- iii. Actions to make climate neutrality and sustainability a part of the curriculum and other educational experience for all students.
- iv. Actions to expand research or other efforts necessary to achieve climate neutrality.
- v. Mechanisms for tracking progress on goals and actions.

2. Initiate two or more of the following tangible actions to reduce greenhouse gases while the more comprehensive plan is being developed.

- a. Establish a policy that all new campus construction will be built to at least the U.S. Green Building Council's LEED Silver standard or equivalent.
- b. Adopt an energy-efficient appliance purchasing policy requiring purchase of ENERGY STAR certified products in all areas for which such ratings exist.
- c. Establish a policy of offsetting all greenhouse gas emissions generated by air travel paid for by our institution.
- d. Encourage use of and provide access to public transportation for all faculty, staff, students and visitors at our institution.
- e. Within one year of signing this document, begin purchasing or producing at least 15% of our institution's electricity consumption from renewable sources.
- f. Establish a policy or a committee that supports climate and sustainability shareholder proposals at companies where our institution's endowment is invested.
- g. Participate in the Waste Minimization component of the national RecycleMania competition, and adopt 3 or more associated measures to reduce waste.



3. Make the action plan, inventory, and periodic progress reports publicly available by providing them to the Association for the Advancement of Sustainability in Higher Education (AASHE) for posting and dissemination.

In recognition of the need to build support for this effort among college and university administrations across America, we will encourage other presidents to join this effort and become signatories to this commitment.

Signed,



President/ Chancellor Signature

Eugene Giovannini

President/ Chancellor Name

GateWay Community College

College or University

3/3/08

Date



Institutional Background

GateWay Community College, a Maricopa Community College, was established in 1968 and is in its 43rd year as a comprehensive public institution of higher education providing educational opportunities to over 16,500 students annually including the Maricopa Skill Center and GateWay Early College High School.

GateWay's offerings have grown to include more than 125 degree, certificate and university transfer programs in a wide variety of concentrations including Apprenticeships, Automotive, Business, Environment, Healthcare, Industrial Technology, Information Technology, Liberal Arts, Math and Science.

Striving to continuously provide a high quality of education with support from student service areas, and career training through innovation and state-of-the-art technology, has allowed GateWay to emerge as a leading institution in meeting the needs of students, businesses and industries throughout the community.

Mission/Goals Statements

GateWay's mission statement describes what the College is trying to do as an organization. In addition the college has five broad goals which begin to further define the mission. As part of institutional effectiveness, all program and department mission and goals statements should be tied to one or more of the College goals. The institutional effectiveness plan links each department's or program's mission statement and goals to the College's mission statement and goals. The mission statement and college goals and objectives are found at the Research and Planning website at <https://my.gatewaycc.edu/sites/ir/default.aspx> and are listed below.

Vision

GateWay Community College seeks to develop opportunities that are innovative and responsive to the diverse learning needs of our changing community.

Mission

GateWay Community College, an institution of higher education, provides effective, accessible, and responsive educational services in a multicultural environment resulting in student development and success.



Goals

GateWay Community College, including the Maricopa Skill Center and GateWay Early College High School, in achieving the mission of the College, is committed to the following strategic goals:

Learning

We foster learning and provide learning opportunities throughout the College.

Student Access and Success

We continue to maximize opportunities to increase enrollment and student success.

Collaboration and Innovation

We promote and celebrate collaboration and innovation.

Community and Civic Engagement

We strive to be advocates of community and civic engagement.

Workforce Development and Partnerships

We affirm our commitment to cultivating workforce development initiatives and partnerships.

Values

Students are the primary reason we exist. We value our diverse learning community and respect our students for their life experiences, their achievements, and we appreciate their contributions. For these reasons, GateWay is committed to the following values:

Learning as a lifelong endeavor of growth and self-discovery.

Diversity as a celebration of the unique richness that all individuals bring to our community and to the learning opportunity it provides.

Service to students, to each other, and to the community.

Teamwork as a commitment to working together toward student success.

Integrity as an essential element in our learning environment. We strive to be honest, authentic, consistent, and respectful in our words and actions.

Entrepreneurial Spirit as critical in accomplishing our mission and goals. Through calculated risk-taking, we see possibilities . . . not limitations.



Introduction

GateWay Community College is committed to reducing our carbon footprint and our impact on the environment. Our president, Dr. Eugene Giovannini signed the American College & University Presidents' Climate Commitment on March 3, 2008.

We submit this Climate Action Plan, a combination of ideas and actions, to guide GateWay Community College on its path to a sustainable future.

What is Sustainability?

Environmental sustainability is development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs.

– *World Commission on Environment and Development. Our Common Future. (1987)*

Why is Sustainability Important?

Our collective actions now affect not only ourselves, our families and our community. Our actions affect everything and everyone for generations to come. Humanity, through its development, growth, and resource use has transformed our atmosphere, hydrosphere, biosphere, and cultures on a global scale. Our collective decisions on everything from energy production, to materials consumption, to healthcare, to education, to the arts and sciences, resonate around our networked globe and has a profound impact on future generations and our environment on a dramatic scale. The need to embrace sustainability is of utmost importance to the future of humanity as well as all species and systems that share our planet earth with us and support our survival.

Why is Sustainability Important to Colleges and Universities?

Colleges and universities today face unpredictable energy costs, budget cuts, student financial insecurity, rising employee insurance contributions, and other grave challenges to solvency and resiliency. These symptoms reflect global issues and require bold action to alleviate: continued social inequality and upheaval; increasing environmental degradation; higher economic uncertainty; and greater climate change as greenhouse gases are released to fuel conspicuous consumption and rising populations who conduct 'business as usual.'

GateWay Community College strives to be one of the leading academic institutions that are shifting the nation towards carbon neutrality, energy security, budget stability and ecologically-minded prosperity. Reversing the effects of anthropogenic global warming is the defining challenge of the 21st century. Sustainability is not only possible, it is imperative.



Go Green GateWay Committee

Christine Taccone – Science Lab Coordinator
Committee Chair
Implementation Liaison

Cheryl Berg – Biology Faculty

Martha Bergin – Communication Faculty

Mario Castaneda – Water Technology Faculty

Timothy Cejka – Biology Faculty

Michele Hamm – Coordinator Wellness Education

Nicolle Hightower – Medical Radiography Faculty

Brad Johnson - Medical Radiography Faculty

Theresa Johnson – High School Teacher

Charles Poure – Director of Facilities

Raymond Rocha – Student Services Specialist

Reece Weide – Biology Faculty



Initial Greenhouse Gas Report for period July 1, 2007 – June 30, 2008

GHG Report for GateWay Community College

[HOME](#) / GHG REPORT

Submitted on July 8, 2009; last updated on August 30, 2010

Summary Statistics

Making fair comparisons between higher education institutions is always challenging due to the rich diversity of higher education. The unverified nature of the information in this database and unavailability of unbiased normalization metrics means such comparisons are even more difficult. Users should therefore approach direct institution to institution comparisons with caution and recognize that all comparisons between institutions are inherently biased.

	Total	Per Full-Time Enrollment	Per 1000 Square Feet	% Offset
Gross emissions (Scopes 1 + 2)	6,982 metric tons of CO ₂ e	1.9 metric tons of CO ₂ e	23.2 metric tons of CO ₂ e	0%
Gross emissions (Scopes 1 + 2 + 3)	17,661 metric tons of CO ₂ e	4.8 metric tons of CO ₂ e	58.7 metric tons of CO ₂ e	0%
Net emissions	17,661 metric tons of CO ₂ e	4.8 metric tons of CO ₂ e	58.7 metric tons of CO ₂ e	N/A

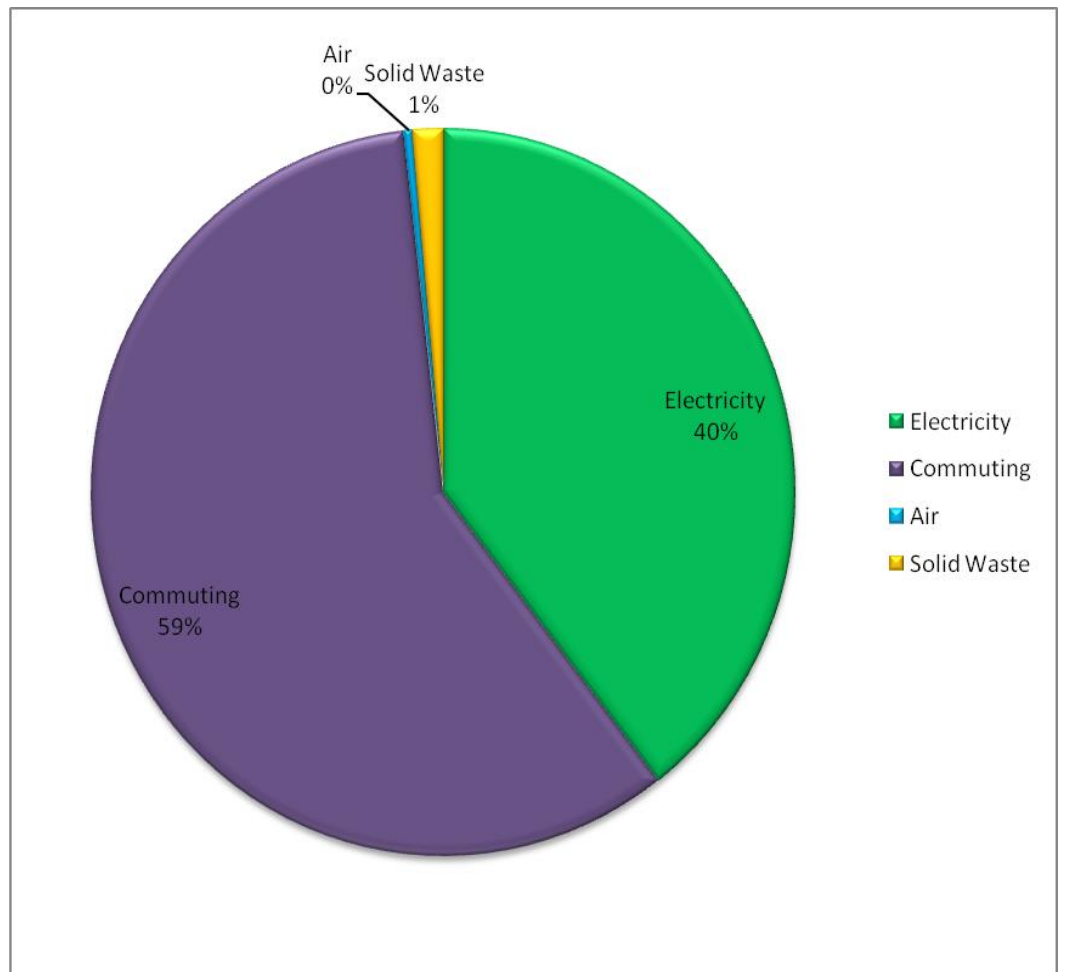


Definitions of Scopes applicable to GWCC:

**Scope 1: Natural gas for heating
Campus vehicle fuel use**

Scope 2: Purchased electricity

**Scope 3: Solid Waste
Commuting & Travel
Air Travel**



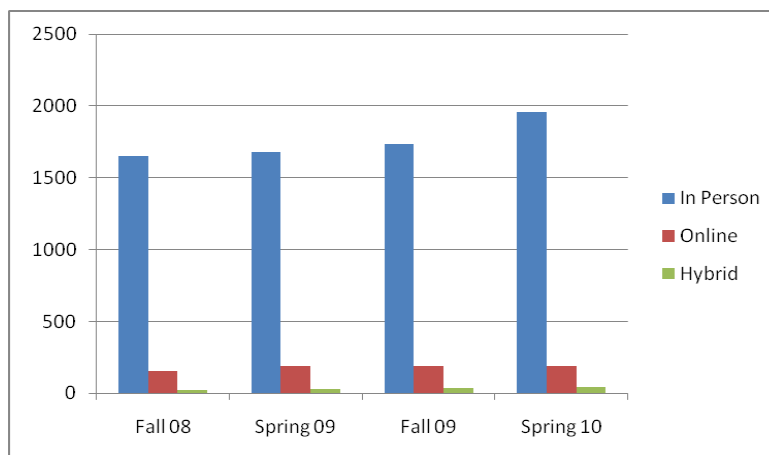
**Figure 1:
Percentage
GHG
Emissions
by Source**

Data collected for GHG report:

Operating Budget
Energy Budget
FT Students
PT Students
Faculty
Staff
Total Building Space
Refrigerant Quantity
Fertilizer Quantity
Air Travel miles
Solid waste amount
Paper purchased in pounds
Recycling amount in pounds
Electricity purchased
Commuter Info

Moving towards climate neutrality

GWCC's move toward climate neutrality is challenged by its need for commuting students and use of electricity. We have not been able to determine a date for climate neutrality as of yet. With only one greenhouse gas inventory report completed, it is difficult to project with any level of certainty. GWCC does not for see a time when students will not need to attend classes in person and commute. Currently we offer online and hybrid courses (see figure 3) and expect to increase the numbers of these classes.



Current Mitigation Efforts

Efforts Specifically defined by Climate Commitment:

- Go Green GateWay Committee formed
- GHG report for 2007 finished
- Climate action plan developed
- Policy established for new construction to be certified LEED silver
- Encourage use and provide access and discounts for public transportation
- Climate action plan and GHG inventory made publicly available through AASHE

Endeavors Common to all Areas of the College:

- Recycle paper, plastic, and aluminum as well as used toner and ink cartridges and other products unique to college divisions
- Reuse file folders, boxes etc. and recycle supplies and products to other departments and/or areas
- Reduce paper use by utilizing more email and electronic communication (website etc), using 2-sided copies, etc.
- Purchase products that are recycled or made from recycled material whenever possible
- Purchase recyclable products from zero emissions companies (new carpet)
- Convert to LED lights (for ex. EXIT signs) wherever possible and appropriate
- Remove fluorescent bulbs if possible and feasible (for ex. from vending machines)

- Compressed work schedule during summer months (four 10 hour days per week)
- Utilize teleconferencing and online meetings instead of travel when possible
- Set thermostat to 78 degrees during summer months
- Use of foam soap and hands free paper towel dispensers
- Use of energy efficient equipment (copiers/fax/scanners etc.) whenever possible
- Use more efficient CFL light bulbs
- Turn off computers and small electronic devices at night and use 'sleep' mode during off-peak usage
- Use timers and motion detectors to turn off lights when not in use
- Follow guidelines for fair labor practices
- Promote diverse employee and student demographic
- Use cleaning supplies that are natural, biodegradable, and "green"
- Use telecommuting and flexible work schedules whenever possible and where appropriate
- Encourage employees and students to carpool and utilize public transportation
- Encourage the reduction of trash by using reusable containers for food and drink when possible
- Currently designing and planning a new instructional building which will be the first LEED certified instructional building on campus



Endeavors of Specific Divisions/Areas in the College:

Academic Areas and the Center for Teaching and Learning (CTL)

- Offer hybrid courses thereby promoting a compressed class schedule that decreases faculty and student travel to the campus
- Offer online courses which decrease the travel required to the college for traditional on campus classes
- Offer other classes with compressed schedules and at times when students can avoid rush hour traffic
- Incorporate community service hours in certain classes/programs
- The CTL provides support and expertise to all faculty with online and alternative learning approaches
- The CTL promotes the development of online and hybrid courses through frequent in-service and training opportunities and continues to encourage the design of online and hybrid learning
- Incorporation of sustainability issues and awareness in all curriculum where appropriate
- Environmental Biology class provides instruction in environmental awareness and sustainability and promotes student engagement in these areas
- The social sciences are an eco-friendly field of study and social science courses engage students in object lessons about sustainability in all parameters
- Service-learning students in the social sciences partner with the Water Technology program to address the polluted aquifers underneath our city streets. This issue is a campus issue, as one of the most polluted aquifers is physically underneath this campus. Working to clean up our natural water sources is an important aspect of water conservation
- Reduce paper and photocopying by using Blackboard for course materials
- Use of micro-scale chemistry reagents and experiments



- The Instructional Technology program is currently in negotiations with a partner to acquire new high efficiency air conditioners to replace the 1994 units

Bookstore

- Sell recycled products
- Sell e-books

Children's Learning Center

- Reduced paper and energy use by serving lunches instead of having the parents send lunches in for the children

Early College (High School)

- Provides bus cards to students who live outside a one mile radius and encourages those who live within a mile to walk or ride their bikes to school
- Faculty in all areas work to improve students understanding of sustainability and their role in creating a sustainable society
- New courses such as Environmental science have been added to expand the student's ability to engage and solve our most pressing sustainability issues here in Arizona such as water supply, pollution, and land use
- Courses such as Botany and Social Issues focus on students taking action to solve environmental justice issues such as fresh food for all and clean air
- Chemistry and Biology instructors have developed labs that do not use hazardous chemicals

Facilities

- Approximately 30,000 square feet of grass landscape has been converted to xeriscape with low water plants and drip irrigation
- All roofs are highly reflective (white)
- Currently in the process of changing the roof on the south building



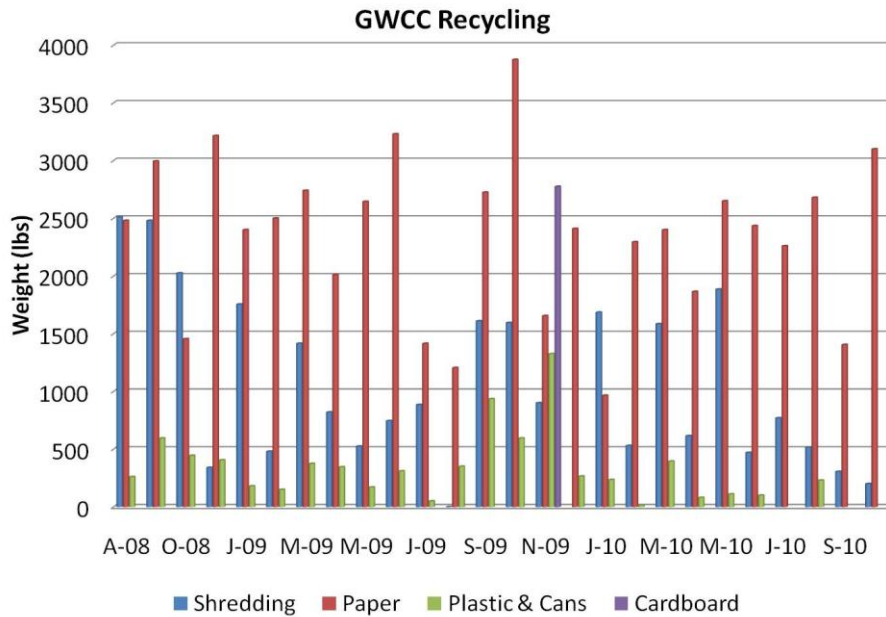
- Installation of two new high efficiency chillers and three new high efficiency cooling towers which has resulted in a significant decrease in pump electrical use
- Implement new outside air makeup unit to use fresh air. Waste air used to pre-cool entering air (removes 20 tons on a/c load)
- Purchased cardboard baler and recycle all cardboard
- Continued operation of the recycling program and the Go Green Initiative.
Go Green GateWay is a partnership across departments and disciplines to bring environmental awareness and sustainability efforts to the GateWay Community College Campus through a recycling program and other sustainability efforts. It relies on the volunteer efforts of Staff, Students, and Faculty. The Go Green blog (<http://blend.gatewaycc.edu/blogs/gogreen/>) provides detailed information and a video to assist volunteers in helping pick up recyclable materials.

GateWay Community College and the Go Green Initiative diverted over 47,365 lbs of recyclable materials from landfill in 2009. This included 28,810 lbs of mixed paper, 10,730 lbs of shredded paper, 5,050 lbs of plastic and aluminum cans, and 2,775 lbs of cardboard.

The Go Green Initiative has established relationships with the Arizona Center for the Blind and Visually Impaired Document and Recycling Services, CMS Morell, L.L.C. (Metal Recycling), Nike reuse a shoe, and Nabisco's Upcycle recycling of vending machine wrappers. Currently the Arizona Center for the Blind offsets our cost of document shredding and destruction with paper and plastic recycling revenues.

GateWay Community College's Environmental Biology 105 classes have participated in two recycling drives. The students and faculty sort garbage from the Center for Health Sciences building. The sorting efforts have identified that at least 30% of our garbage could still be recycled. About 50% of the recyclable material is paper and 50% is plastic and aluminum cans.





Information Technology

- Our college is preparing to launch a virtual desktop project which would allow employees to access campus resources without having their computers left on at all times

Public Safety

- On campus travel is accomplished with electrically powered carts



FUTURE INITIATIVES

In 2009, Dr. Glasper, the Chancellor of Maricopa Community College District, signed the American College and Universities Presidents Climate Commitment (ACUPCC) on behalf of the entire Maricopa Community College District. As a part of this commitment, a formal Sustainability Council has been formed to coordinate the progress and implementation of the initiative. The purpose of the Council is to lead a charge of developing a district-wide Climate Action Plan (CAP), providing guidance to colleges for their development of CAPs, and assuring two-way alignment of colleges to district goals and plans. Created with broad-based membership, the Council also will be charged to monitor progress and reporting against the goals and framework of the Triple Bottom Line. Additionally, the purpose of the Council is not just to assure implementation of and compliance with the President's Climate Commitment but to encourage broader commitment to sustainability. This council will also be hiring a consultant to achieve District-wide sustainable energy/energy conservation measures.

Some measures we plan to accomplish at the campus level within the next 5 years include the following:

Efforts Specifically defined by Climate Commitment:

- Determine date for climate neutrality
- Define actions to make neutrality and sustainability a part of the curriculum
- Develop a purchasing policy at campus level as well as district level to ensure purchase of Energy Star certified appliances. If contract vendor is used, ensure they have a comparable policy in place.
- Establish a policy of offsetting all greenhouse gas emissions generated by college paid air travel.
- Purchase or produce at least 15% of electricity consumption from renewable sources.
- Participate in Recycle Mania and adopt 3 measures to reduce waste.



Other Efforts:

- Athletics department moving practices and games to locations closer to campus or adding athletic housing to campus
- Researching more efficient scheduling to allow less days travel to campus
- Develop a flexible work schedule to reduce commuting
- Increase use of automatic lighting (motion sensor) use
- Ensure all paper used on campus for copying and printing is made with recycled content
- Enable lab flow hoods to turn off reducing need for constant air flow
- Lighting improvements
 - ⇒ Convert all T8, 32 watt, 4 foot florescent lamps to 25 watt lamps. Preliminary figures indicate we will change out 9,000 lamps. This will remove 63 kw (or nearly 13,800 kwh annually) of nearly constant load from the system.
 - ⇒ Convert outdoor parking and street lighting to LED systems.
 - ⇒ Convert landscape and architectural lighting to LED systems.
 - ⇒ Reduce illumination levels inside buildings to levels appropriate to the tasks being performed in an area by area basis.
 - ⇒ Reduce outdoor lighting where possible during normally closed hours – especially architectural accent lighting.
- Reduce or eliminate vampire loads in all buildings
- Participate in the local utility company's load shedding program to help manage summer peak loads
- Replace playground grass with artificial turf
- Remove constant volume terminal air units and replace with VAV units



- Replace single and multi-zone air handling units with Variable Air Volume Systems
- Convert electric water heaters with capacities greater than 100 gallons to gas fired heaters
- Upgrade roof insulation values for any facility with a roof R Value of 19 or less
- New Facilities will be constructed and maintained at LEED Silver
- Remove trash and recycling containers from over 100 classrooms and consolidate into fewer and larger containers in hallways
- 20,600 square feet of grass area is to be converted to gravel
- Monitor and benchmark energy usage (electricity and gas) per building
- Purchasing Policies need to be adjusted to show an interest in sustainability, including ordering supplies that are made with recycled products



IV. Summary



The time has come for GateWay Community College to help reposition our state and region to the forefront of the green economy and support the holistic well-being of all Arizonans. The college has made it a strategic objective to reduce campus carbon emissions and establish the needed framework to make GateWay carbon neutral in the near future.

The future initiatives will be monitored by the Go Green GateWay Sustainability Committee. This committee is a collection of faculty, managers and staff in various areas of campus. Initiatives will be assigned each academic year and a follow up summary will be posted at the end of each academic year.

V. Appendix 1: Sustainability Survey

This survey was distributed to identify sustainable initiatives on campus that may have not been recognized by the campus as a whole.

For your division / area, please answer the following questions and forward your responses to (gogreen@gatewaycc.edu). If a question does not apply to you, answer “N/A” and why you feel it does not apply to your area. Comments and questions are welcomed!

What is our area doing to reduce energy consumption?

What can our area do to reduce energy consumption? (Time frame?)

Is there a purchasing plan in place to purchase energy efficient appliances and recycled/ recyclable products?

What could our area do to change the purchasing plan to include energy efficient appliances and recycled /recyclable products? (Time frame?)

What is our area doing to promote less commuting and/or travel?

What can our area do to promote less commuting and/or travel? (Time frame?)

Does our area support distance learning and in what way?

How can our area increase support for distance learning? Any future plans/ classes?

What is our area doing to add sustainability to the curriculum?

What can our area do to add sustainability to the curriculum? (Time frame?)

What is our area doing to support recycling and Go Green GateWay?

What can our area do to support recycling and Go Green GateWay? (Time frame?)

What is our area doing to conserve water?

What can our area do to conserve water? (Time frame?)

What is our area doing to reduce the use of hazardous chemicals?

What can our area do to reduce the use of hazardous chemicals? (Time frame?)



What is our area doing to ensure fair labor practices?

What can our area doing to ensure fair labor practices? (Time frame?)

Does your area do anything not contained in the responses above that are particularly “green”/ sustainable/ environmental?

