



Paradise Valley Community College Climate Action Plan

The Power of Learning



WALKING THE WALK

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MOVING AROUND IN THE DOCUMENT

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- **Pages**-You can quickly go to any page listed in the Table of Contents simply by typing the page number into the box that displays the current page number in the Adobe Reader window, and pressing “Return/Enter.”

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EXECUTIVE SUMMARY OR PRESIDENT'S COMMENTS

With this document, Paradise Valley Community College starts to identify actions we can take to reduce our greenhouse gas (GHG) emissions and adapt to a more mindful way of living. When we know that our progress can and will be assessed every year and that this progress will be recorded on the ACUPCC website where not only our immediate community but the world may read it, we recognize the need to lead by example. Being educators is a privileged role in the greater community and when I signed the American College and University Presidents' Climate Commitment (ACUPCC) I set for PVCC a challenge to attain carbon neutrality and to develop a plan and the indicators showing progress in that plan. A review of our GHG inventory illustrates that this is no small task. But if we don't take on this challenge, who will? There are parts of this document which were included to tell people who we are and what we've achieved. There are also parts that show the benchmark we're up against, and what we have already done to mitigate our carbon footprint. It is my hope that these inspire you and motivate you to participate in this endeavor.

INTRODUCTION

Paradise Valley Community College (PVCC), one of the Maricopa Community Colleges, is a learning-centered two-year college located in Phoenix, Arizona. PVCC, and its satellite site at Black Mountain, is located furthest north in the Greater Phoenix Metropolitan Area of all the MCCCDC colleges. Founded in 1985, Paradise Valley Community College has grown from a per-semester enrollment in 1987 of 3,700 to over 9,951 today. The college's unduplicated headcount per year is over 14,633, with an additional 4,600 in non-credit and continuing education programs. Historically, PVCC has seen enrollment growth between 2-7% each semester. Coincident with enrollment growth has been the increase in number of faculty: from 27 full-time residential faculty in 1987 to 106 in 2012 (plus 479 adjunct faculty in 2012). The total number of employees has grown from 62 in 1987 to 277 in 2012.

Underrepresented student populations have increased as well: Hispanic from 3.6% to 14%, Asian from 1.5% to 3%, and Black from 0.6% to 4%. In our service area, the 2010 U.S. Census demographic data indicate 79.4% white, compared to 69.2% in the PVCC student population. Women represent the majority of student enrollments, about 55%. The college's Office of Disability Services currently has 454 ADA-registered students with disabilities and an annual budget about \$120,000. The percentage of students aged 19 and under has expanded to over 34%, reflecting increasing interest on the part of high school seniors; however, almost 16% of the student body is age 40 or over. Day enrollment is approximately 68% of the total, while night enrollment continues to be strong. Part of the ten-college Maricopa County Community College District (MCCCDC), one of the largest community college systems in the United States, College policy, legal, curriculum development, articulation with other educational institutions, and fiscal planning are centralized at the district level, yet each college in the system maintains separate accreditation with the Higher Learning Commission.

MISSION STATEMENT

The Mission of Paradise Valley Community College is to educate the whole person and to serve our students and our communities by providing learning opportunities that are designed to help them achieve their goals.

PVCC provides diverse learning opportunities including:

- University transfer education
- General education
- Developmental education
- Continuing education
- Community education
- Workforce development
- Student development
- Honors education
- Global engagement
- Civic responsibility

PVCC provides access to these opportunities in a welcoming, inclusive, and supportive environment. As a college committed to learning and continuous quality improvement, PVCC annually assesses and publishes reports concerning the effectiveness of our programs and services

GUIDING VALUES

Paradise Valley Community College's values guide our individual and collective actions and our decision-making. The college's values are public statements describing what we care about deeply. PVCC's values are what we "stand for" both as a college and as employees. When lived and used to guide our daily work, PVCC's values ultimately shape our college's unique identity and image.

Our college has identified its core value, learning, along with nine supporting values. PVCC's core value resides at the center of our college vision and mission and serves as the ultimate measure of our actions and decisions. The nine supporting values guide us as we work individually and collectively to realize our vision and accomplish our mission

Core Value

Learning is the core value of Paradise Valley Community College. PVCC encourages and supports learning at three levels – student, employee and organizational – and the integrative relationship between the three levels. Learning at Paradise Valley Community College means increasing the capacity of our students, our employees and the college itself, to achieve their goals. PVCC acknowledges organizational learning as a means to continuously improve our college

Supporting Values

Inclusiveness/Diversity

We value inclusiveness and respect each other's viewpoints and ideas. We value individual diversity and the uniqueness of the individual. We acknowledge that diversity, in all its forms, enriches our learning environment. PVCC promotes the free exchange of ideas and opinions and the fair and equitable treatment of all.

Innovation

We value and support innovation. We encourage informed risk-taking that holds the promise of enhancing student, employee and organizational learning. We view a good faith unsuccessful attempt not as failure, but rather as a rich opportunity to learn.

Collaboration/Partnerships

We value the collective wisdom that emerges when individuals work together to solve problems and create opportunities. We believe that in most instances all of us working together is better than one of us working alone. We are committed to establishing and sustaining positive education, business and community partnerships.

Excellence

We value excellence in all that we do. We are committed to high academic standards. We support excellence in teaching and in the learning and support systems that advance student success. We expect professionalism in every aspect of our work. We are committed to the continuous improvement of our college.

Integrity

We value integrity, trustworthiness and ethical behavior in all that we do. We are committed to truthfulness, fairness and honesty in our internal and external relationships, communications and transactions. We continuously strive to provide objective and balanced assessments of the issues pertaining to our college. We value open, transparent and democratic decision-making.

Communication

We value communication in all forms, across all levels of the organization, and in all interactions with our constituents. We acknowledge that accurate, clear, concise, respectful and transparent communication is fundamental to enhancing relationships, developing shared understanding and assuring the long-term success of our college. We value empathic listening as a core element in all effective communications.

Leadership

We value leadership at all levels of the organization. We acknowledge that all employees are responsible for continuously providing effective leadership within the context of individual roles and responsibilities. We encourage every college leader to demonstrate vision, to think systemically and to act courageously when engaged in decision-making. We affirm that effective, collaborative and informed leadership of the college is essential to our long-term success.

Respect

We value civility in our oral and written word, as well as in our interactions with students, one another and with our constituents. We value each person's special contributions to our students, colleagues, constituents and to the college.

Stewardship

We value the full-range of resources - human, fiscal, capital and technology - that have been entrusted to us by the citizens of the state, county and cities we serve. We acknowledge our collective responsibility to serve as effective stewards of all resources at all times. We affirm our commitment to being accountable for the fulfillment of all duties and professional obligations associated with our positions.

ACUPCC COMMITMENT

PVCC is a signatory of the American College and University Presidents' Climate Commitment (ACUPCC) and is committed to reducing greenhouse gas emissions with the goal of becoming climate neutral.

PVCC's college-wide multi-disciplinary commitment which includes:

Academics - Our curriculum includes a focus on both global issues and sustainability.

Co-Curricular Activities and Events - There are a variety of college events and activities related to sustainability in which students, faculty and staff are engaged.

College Operations - PVCC is committed to modeling good behavior as it relates to issues of social, economic, and environmental sustainability.

ADOPTION OF THREE OF THE SEVEN ACUPCC TANGIBLE ACTIONS:

1. 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.
2. Adopt an energy-efficient appliance purchasing policy requiring purchase of ENERGY STAR certified products in all areas for which such ratings exist.
3. Establish a policy of offsetting all greenhouse gas emissions generated by air travel paid for by our institution.
4. Encourage use of and provide access to public transportation for all faculty, staff, students and visitors at our institution.
5. Within one year of signing this document, begin purchasing or producing at least 15% of our institution's electricity consumption from renewable sources.
6. Establish a policy or a committee that supports climate and sustainability shareholder proposals at companies where our institution's endowment is invested.
7. Participate in the Waste Minimization component of the national RecycleMania competition, and adopt 3 or more associated measures to reduce waste.

EXECUTED ACTIONS TOWARDS GHG REDUCTIONS

The ACUPCC formalized PVCC's commitment to the social, environmental and economic issues facing our communities. Administrative support for this awareness included a commitment of operational funds and the incorporation of sustainability into College Strategic Goals. MCCCCD's Governing Board adopted a resolution that outlines the support for sustainability across the district to "help guide employees and students in framing decisions and district-wide discussions with due consideration for the economic, social, and environmental effects of MCCCCD's actions." PVCC has at present executed the following actions with this in mind.

OPERATIONAL ACTIONS

- Installed new cooling towers and high efficiency chiller system
- All rooms are fitted with motion sensors turning off lights when rooms are unoccupied
- Switched to unbleached paper towels
- Switched to green custodial products
- Contracted with City of Phoenix for comingled trash recycling and green waste recycling; converted trash compactor to manage recycling waste; provided additional recycling bins and receptacles in all buildings
- Hired part time staff dedicated to recycling pickup across campus
- Constructed/remodeled three new buildings that meet energy-efficient LEED silver standards
- Purchased the colleges' first Hybrid vehicle for the college vehicle fleet
- Ceased printing schedules and catalogs offering online versions, informing students with postcards printed with online locations (URLs)

EDUCATIONAL ACTIVITIES

- Maintain a sustainability webpage on the PVCC website
- Deliver monthly *Sustainability Tip* emails to faculty, staff, and students to keep the campus informed and updated regarding sustainability efforts.
- Incorporate sustainability topics and PVCC efforts into the required orientation sessions for all new incoming students
- Solicit faculty, staff, and student feedback and ideas via a sustainability tip hotline/website
- Create learning community courses around sustainability topics
- Continue on-going professional development for faculty, staff and administration that encourages and promotes environmental stewardship and integrating sustainability into the classroom learning.

OUTREACH ACTIVITIES

- Promote and lead community action in environmental stewardship
- Develop partnerships with local vendors to work towards greater environmental stewardship
- Encourage inclusion of sustainability topics in community education courses.

2012 GHG REPORT FOR PARADISE VALLEY COMMUNITY COLLEGE

Submitted on January 11, 2012; last updated on January 11, 2012

<http://rs.acupcc.org/>

SUMMARY STATISTICS

	Total	Per Full-Time Enrollment	Per 1000 Square Feet	% Offset
Gross emissions (Scopes 1 + 2)	7,294 metric tons of CO ₂ e	1.5 metric tons of CO ₂ e	20.6 metric tons of CO ₂ e	0%
Gross emissions (Scopes 1 + 2 + 3)	13,175 metric tons of CO ₂ e	2.7 metric tons of CO ₂ e	37.2 metric tons of CO ₂ e	0%
Net emissions	13,175 metric tons of CO ₂ e	2.7 metric tons of CO ₂ e	37.2 metric tons of CO ₂ e	N/A

EMISSIONS DATA

Emissions from the following sources (in metric tons of CO₂e)

Scope 1 Emissions	
Stationary Combustion	1,420.0 metric tons of CO ₂ e
Mobile Combustion	23.0 metric tons of CO ₂ e
Process Emissions	0.0 metric tons of CO ₂ e
Fugitive Emissions	31.0 metric tons of CO ₂ e
Total Scope 1 emissions	1,474.0 metric tons of CO₂e
Scope 2 Emissions	
Purchased Electricity	5,820.0 metric tons of CO ₂ e
Purchased Heating	0.0 metric tons of CO ₂ e
Purchased Cooling	0.0 metric tons of CO ₂ e
Purchased Steam	0.0 metric tons of CO ₂ e
Total Scope 2 emissions	5,820.0 metric tons of CO₂e
Scope 3 Emissions	
Commuting	4,943.0 metric tons of CO ₂ e
Air Travel	256.0 metric tons of CO ₂ e
Solid Waste	682.0 metric tons of CO ₂ e
Total Scope 3 emissions	5,881.0 metric tons of CO₂e
Biogenic Emissions	
Biogenic Emissions from Stationary Combustion	<i>No information provided</i>
Biogenic Emissions from Mobile Combustion	<i>No information provided</i>

MITIGATION DATA

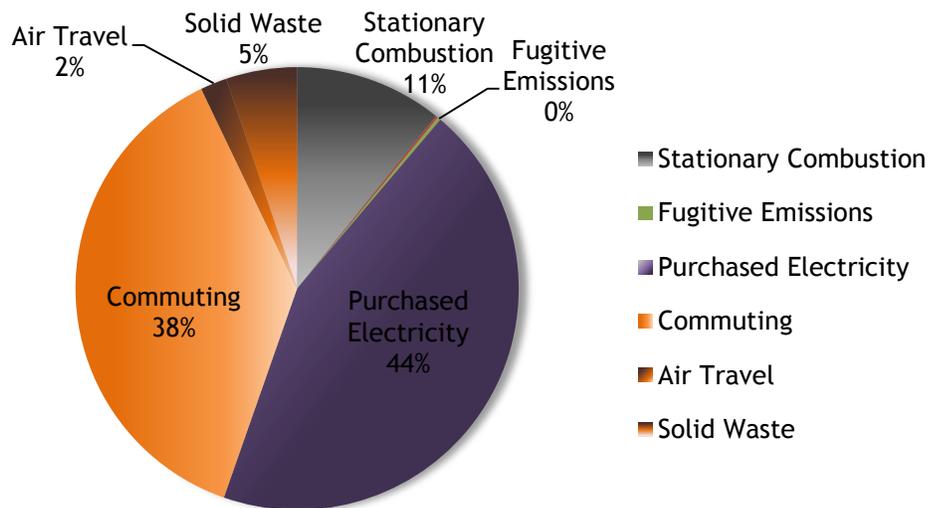
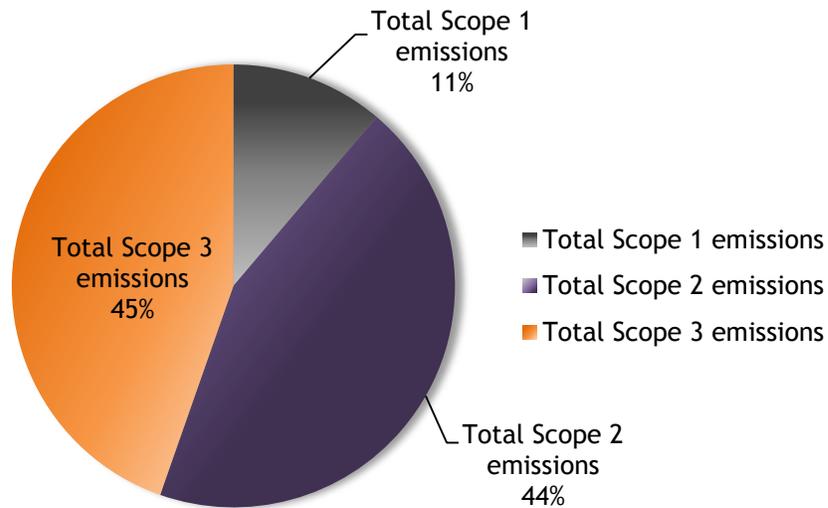
Carbon Offsets	
Carbon offsets purchased	<i>No information provided</i>
Offset verification program(s)	<i>No information provided</i>
Description of offsets purchased (including vendor, project source, etc.)	<i>No information provided</i>
Renewable Energy Certificates (RECs)	
Total RECs purchased	None kWh
Percent of total electricity consumption mitigated through the purchase of RECs	None %
Emissions reductions due to the purchase of RECs	<i>No information provided</i>
REC verification program(s)	<i>No information provided</i>
Description of RECs purchased (including vendor, project source, etc.)	No RECs purchased.
Sequestration and Carbon Storage	
Sequestration due to land owned by the institution	<i>No information provided</i>
Description of how sequestration was calculated	<i>No information provided</i>
Carbon storage due to composting	<i>No information provided</i>

NORMALIZATION AND CONTEXTUAL DATA

Building Space	
Gross square feet of building space	354,375.0 sq ft
Net assignable square feet of laboratory space	<i>No information provided</i>
Net assignable square feet of health care space	<i>No information provided</i>
Net assignable square feet of residential space	<i>No information provided</i>
Population	
Total Student Enrollment (FTE)	4826.0
Residential Students	<i>No information provided</i>
Full-time Commuter Students	1477
Part-time Commuter Students	3349
Non-Credit Students	<i>No information provided</i>
Full-time Faculty	94
Part-time Faculty	444

Full-time Staff	138
Part-time Staff	<i>No information provided</i>
Other Contextual Data	
Endowment Size	<i>No information provided</i>
Heating Degree Days	1890
Cooling Degree Days	2779
<p>Please describe any circumstances specific to your institution that provide context for understanding your greenhouse gas emissions this year.</p> <p>PVCC is a community college with no residential students; a considerable number of our students travel from school to jobs and/or other MCCCDC campuses in the Greater Phoenix Area via SOV.</p>	

PARADISE VALLEY COMMUNITY COLLEGE BASELINE GHG INVENTORY



SCOPE 1 EMISSIONS are direct GHG emissions from sources that are owned or controlled by the entity. Scope 1 can include emissions from fossil fuels burned on site, emissions from entity-owned or entity-leased vehicles, and other direct sources.

PVCC's sources: Natural gas, vehicle fleet fuel; refrigerants & chemicals, fertilizer

SCOPE 2 EMISSIONS are indirect GHG emissions resulting from the generation of electricity, heating and cooling, or steam generated off site but purchased by the entity, and the transmission and distribution losses associated with some purchased utilities (e.g., chilled water, steam, and high temperature hot water).

PVCC's source: Purchased electricity

SCOPE 3 EMISSIONS include indirect GHG emissions from sources not owned or directly controlled by the entity but related to the entity's activities. Scope 3 GHG emission sources currently required for federal GHG reporting include T&D losses associated with purchased electricity, employee travel and commuting, contracted solid waste disposal, and contracted wastewater treatment. Additional sources that are currently optional under federal reporting requirements, but are significant, include GHG emissions from leased space, vendor supply chains, outsourced activities, and site remediation activities

PVCC's sources: Faculty, Staff and Student commuting, campus-financed air travel, landfilled waste, paper usage (0% recycled content)

CLIMATE ACTION PLANNING

Within two years of their implementation start date, all signatories agreed to develop a climate action plan that included a target date and interim milestones for achieving climate neutrality. Climate neutrality is defined as having no net greenhouse gas (GHG) emissions, achieved through conservation, energy from renewable sources, carbon offsets, or other measures which mitigate remaining emissions.

Before even completing the GHG emissions inventory, PVCC Administrative Services Division began to implement operational strategies that would lead to reductions in emissions. Uncertainty exists about what actions can be taken to offset emissions resulting from being a commuter-centric campus due to both budget challenges and changes at PVCC's leadership level. The college has been without a permanent Vice President of Administrative Services for over two years. This position serves as the primary advocate and designated implementation liaison for the ACUPCC. The economic downturn has both contributed to steps we might take to mitigate GHG emissions and a natural decrease of those emissions due to the economic constraints of our commuter population. While purchasing energy credits seems to be the most expeditious offset to commuter emissions, an analysis by our District Facilities Planning Department has recommended that the greatest return on investment in reductions is finding more efficiencies in our daily operations. In addition, the purchase of energy credits is not possible at this time due to budget reductions and redirected budget priorities. As we find and execute efficiencies and measure the impact on overall emissions, our Climate Neutral Plan will be reviewed and revised to incorporate new trends and to apportion some percentage of savings from those efficiencies toward projects we currently are not able to fund through current allocations.

Paradise Valley Community College sees the Climate Action Plan evolving and developing through four avenues: Operations, Education, Outreach, and Assessment reporting.

OPERATIONS

PVCC is reviewing all aspects of facilities maintenance and operations for opportunities to adopt environmental and economically viable ways to continue moving in the direction of having a net zero impact on the climate and environment. We will continue to take advantage of advancements in technology, sustainable construction practices, and recognized best practices to reduce greenhouse gases and reach our goal of climate neutrality.

- Contract for Campus Sustainability Master Plan
- All new construction will continue to meet a minimum of LEED - Silver standards
- Energy Star or higher standard for replacement of appliances as required
- Implementation of Room Use Analysis and consequent consolidation of scheduled classrooms during Summer to decrease need to cool multiple buildings
- Renovation of campus irrigation system with moisture sensors to detect watering need and provide direct application of fertilizers to decrease overall water and fertilizer use
- Incorporate reclaimed water into irrigation operations
- Increase duplex printing at all copiers and printers
- Switch from 0% to 30% recycled content paper
- Increase webinar based meetings to reduce campus travel
- Purchase CNG and/or Hybrid vehicles for the scheduled college fleet replacement
- Explore opportunities to partner or add solar photovoltaic to campus rooftops
- Use biodegradable flatware and paper products
- Food Services will investigate purchasing from local farmers and producers
- A percentage of budget savings from sustainable practices will be directed to new practices which currently cannot be funded

EDUCATION

Paradise Valley Community College realizes that incorporating sustainability into our campus culture and the educational experience for all students will require continued effort. The following strategies have been identified to explore or implement in the coming years.

- Maintain a sustainability link on the PVCC website
- Deliver monthly *Sustainability Tip* emails to faculty, staff, and students to keep the campus informed and updated regarding sustainability efforts.
- Solicit faculty, staff, and student feedback and ideas via a sustainability tip hotline/website
- Expand ongoing Professional Development for faculty, staff and administration to encourage and promote integrating sustainability into the curriculum.
- Increase the number of existing environmental science course offerings
- Offer at least two of the four Sustainability certificate program tracks
- Recognize and celebrate best practices in instructional and co-curricular activities
- Promote service learning opportunities in areas of environmental stewardship and sustainability

- Incorporate sustainability topics and PVCC efforts into the required orientation sessions for all new incoming students and employees
- Create learning community courses around sustainability topics
- Explore options for certificate and/or degrees to meet needs of the emerging “Green” job market

OUTREACH

PVCC will continue to expand its record of community service and civic engagement by both setting an example and extending into the community best practices as relates to sustainability.

- Develop partnerships with local vendors to work towards greater environmental stewardship
- Establish community gardens for instruction and for community use in the vicinity
- Develop partnerships with community businesses to conduct demonstrations and information presentations about sustainable practices

ASSESSMENT REPORTING

We recognize that nothing succeeds like success, that is, people respond to reporting which shows their efforts are producing results. This connects with the Education component, but we believe it also strengthens the community’s resolve to achieve our goals and has the potential to turn passive observers into creative advocates.

- Conduct a greenhouse gas inventory every year to monitor progress; report results
- Investigate areas where inventory data is inadequate and develop systems to better capture data
- Report activities to reduce GHG and the consequential data as it is gathered on the PVCC Sustainability webpage

CONCLUSIONS

Planning for a climate neutral campus during economic uncertainty would seem to impede achievement, but the PVCC greenhouse gas inventory reveals that there is much that can be done within the scope of the current budget. It takes creativity and determination to look at the way we do things and what we can change. This document is more a call for action than a map to attainment. We need more involvement from our campus community to be able to set hard goals and timeframes within which to reach those goals. This plan reveals what we are trying to achieve, and what has already been done...the plan is to inspire others to join in and get serious about climate neutrality.

The Paradise Valley Community College motto is “The Power of Learning”. It is something to live up to. It is synergic and can fuel creativity. The power of learning is also the power of leading, of teaching others what succeeds and why it is better. The power of learning is the power to change. With such a clear goal in front of us, that is, to lower our carbon footprint, the power of learning should provide enough guidance to see things in a new way, to collectively generate ideas and the will to see them launched toward a brighter future.

PVCC SUSTAINABILITY COMMITTEE - 2012

- Sharlene Celeskey
- Jaimee Corbet
- Karen Fehr
- Brett Garwood
- Connie Kyes
- Reyes Medrano
- Robert Metivier
- Lynda Santiago
- Jeanette Saxon
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