

Climate Action and Sustainability Plan

Update - Extended to 2026





INTRODUCTION

Through the 2021-2025 Strategic Plan, PCC committed to the creation of a Climate Action and Sustainability Plan (CASP). It was created by a team of faculty, staff, students, and community members through a collaborative planning process. The resulting CASP was approved by the Chancellor in late spring 2022, and implementation began in July 2022. At the time it was approved, the CASP was scheduled to run from July 2022 to June 2025.

As a result of leadership changes at the College, PCC made the decision to extend the Strategic Plan by one year. Over the next two years, the institution will embark on a two-year comprehensive planning process that will include the Strategic Plan, Education Master Plan, Facilities Master Plan and more. The CASP will be part of that comprehensive planning process, and as a result, the decision was made to extend the current CASP by one year to align with the planning timeline. The current CASP will now conclude in June 2026.

UPDATE ON THE FOUR CASP TARGETS



This section provides a brief update on the College's progress toward the four targets within the CASP.



CASP Target 1:

REDUCE GREENHOUSE GAS EMISSIONS (GHG) FROM SCOPE 1 AND 2 SOURCES

- ▶ The College has met the commitment to create an inventory of PCC's greenhouse gas emissions and establish the College's GHG emissions baseline.
- ▶ PCC recently invested in significant upgrades to its energy infrastructure. By early 2025, sufficient data will be available to quantify the reductions resulting from these changes.
- ▶ The establishment of specific greenhouse gas reduction targets has not been completed and this is a priority moving forward.

CASP Target 2:

ENSURE ALL LEARNERS UNDERSTAND THE KEY PRINCIPLES OF CLIMATE ACTION AND SUSTAINABILITY AND CAN APPLY THEM IN THE FIELD IN WHICH THEY ARE TRAINED

- ▶ A new full time faculty member has been hired in the area of climate action and sustainability. Six new climate action courses have also been developed. The first of those classes, CAS 101IN "Sustainable Futures" and CAS 100 "Food People and the Planet", are being offered in fall 2024.

- ▶ Work is underway in Academics to integrate climate science into the curriculum across all programs.

CASP Target 3:

APPLY FOR GOLD CERTIFICATION THROUGH THE ASSOCIATION FOR THE ADVANCEMENT OF SUSTAINABILITY IN HIGHER EDUCATION (AASHE)

- ▶ Work is progressing well and the College is on track to apply for certification by June 2025
- ▶ The College has documented how it meets the majority of the AASHE requirements and is conducting a review of the findings
- ▶ Activities are underway in 2024-2025 to strengthen PCC's application

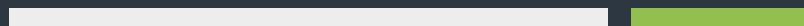
CASP Target 4:

DEVELOP A PLAN FOR THE PERIOD FROM JULY 2025 THROUGH JUNE 2030 THAT WILL RESULT IN, AT MINIMUM, A 50% REDUCTION IN GHG EMISSIONS

- ▶ Planning for greenhouse gas reductions will be a key component of PCC's 2024-2026 comprehensive planning process.
- ▶ In early 2025, data will be available to determine if the investments to improve the College's energy-efficient infrastructure have succeeded in reducing PCC's GHG emissions. These findings will be used to inform the planning process.

Climate Action and Sustainability Plan

ORIGINAL PLAN
July 2022 - June 2025





CONTENTS

Message from the Chancellor 3

Acknowledgments 5

Introduction 6

Planning Process 8

Plan Implementation 8

Climate Planning Team 9

Climate Planning Team: Curriculum Subcommittee Members 10

Climate Action and Sustainability Targets 11

 CASP Target 1: 11

 CASP Target 2: 12

 CASP Target 3: 13

 CASP Target 4: 13

Priority 1: Energy Reduction 14

Priority 2: Climate Change and Sustainability in the Curriculum 16

Priority 3: Engagement and Education 18

Priority 4: Inventory Greenhouse Gas Emissions 20

Priority 5: Infuse Climate Action and Sustainability College-wide 21

MESSAGE FROM THE CHANCELLOR



The operative word in Pima Community College’s 2022-2025 Climate Action and Sustainability Plan (CASP) is “action.” That we live at a time marked by human-caused climate change that presents an existential danger is beyond debate. At the time of this writing, the South Asian subcontinent – home to one-eighth of the world’s population¹ – suffers through a lethal heat wave. Closer to home, New Mexico is battling the largest wildfires in its history². For contrarians who discount these events as mere weather, as opposed to climate, consider that the World Meteorological Organization projects that the years 2022-26 will be the hottest half-decade on record³. The time for argument and counterargument is past. The College must link arms with myriad public and private institutions in our region and across the planet to take action right now to combat this scourge.

Of course, individuals have a role to play to help protect the Earth by acting mindfully in their everyday lives. But an institutional response is critical for substantially blunting global warming. That is why Priority 5.1a, “Establish a sustainability office charged with leading PCC’s climate action and sustainability work by December 23, 2022” is important. There are few purer expressions of support for an initiative than its inclusion in an institution’s budget. The CASP Planning Team deserves applause for laying the foundational resources for our endeavor and sends a message to both internal and external stakeholders.

The power of curriculum

It also is worth noting the value the CASP places on designing our credit and non-credit curriculum to prepare our learners for what lies ahead. We are, first and foremost, a school; through our programs, courses and co-curricular activities, we instruct and inspire. The CASP’s Curriculum Subcommittee has infused the plan with numerous initiatives to ensure our graduates will have the skills needed to bring about social and justice. Those skills likely will be called upon as our graduates go forth into the Real World’s economic, political and regulatory realms, where there are many long battles yet to be fought and won.

¹ <https://www.vox.com/23057267/india-pakistan-heat-wave-climate-change-coal-south-asia>

² <https://www.pbs.org/newshour/show/new-mexico-wildfires-leave-devastation-amid-historic-drought>

³ <https://www.npr.org/2022/05/10/1097821319/scientists-give-earth-a-50-50-chance-of-hitting-key-warming-mark-by-2026#:~:text=Scientists%20give%20Earth%20a%2050,warming%20mark%20by%202026%20%3A%20NPR&text=Press-,Scientists%20give%20Earth%20a%2050%2D50%20chance%20of%20hitting%20key,agreements%20are%20trying%20to%20prevent.>

Equity in perspective

Contemporaneous with the drafting of the CASP is the development of the College's next draft iterations of its Diversity, Equity and Inclusion (DEI) Plan and Strategic Enrollment Management Plan (SEMP). The past two years have demonstrated that those on the margins of society suffer the most in troubled times, and our plans are biased toward justice and rooting out inequity. These plans, and the College's overarching 2021-2025 Strategic Plan⁴, continue to close the gap in educational and economic attainment between whites and Communities of Color, and to ensure that all who come to Pima feel safe and valued. Likewise, the CASP seeks to protect the land, air and water. Environmental, societal and economic equity intersect at Pima.

The Acknowledgment following this message notes the history of atrocity that has been a centuries-long constant for the Indigenous peoples of the region.

It acknowledges that today's College facilities sit on the ancestral lands of the Pascua Yaqui Tribe and Tohono O'odham Nation. Never again must we forget the past and fail to recognize the present. And our shared future demands that the College seek out and collaborate with the land's original caretakers – keepers of millennia of environmental insight – so that together, through collective foresight, we can leave our home in a better way than we found it. The animating impulse in the Climate Action and Sustainability Plan is one of trusteeship. Let us consider the impact of our actions on those yet to be born.

⁴ https://www.pima.edu/about-pima/leadership-policies/integrated-planning/docs/pcc-2021-25-strategic-plan-report_2fnl.pdf

ACKNOWLEDGMENTS

All Pima Community College facilities sit on the ancestral lands of the Pascua Yaqui Tribe and Tohono O’odham Nation. These lands have been inhabited for millennia by the region’s Indigenous peoples, who have been subjected to centuries of systemic genocide, relocation and diminishment.

Pima Community College recognizes the necessity to right those horrific wrongs.

Moreover, this Climate Action and Sustainability Plan recognizes the importance of collaborating with all stakeholders to be responsible stewards of the diverse ecosystem we are privileged to live in.



INTRODUCTION

In the 2021-2025 Strategic Plan⁵, Pima Community College (PCC) committed to:

Develop a comprehensive Climate Action Plan addressing academics and operations, to position the College to halve its carbon footprint by 2030.

This 2022-2025 Climate Action and Sustainability Plan represents phase 1 in the College's work to meet this goal. Through this plan, PCC seeks to develop a strong foundation for climate and sustainability work at the College, with key milestones across five priority areas. Phase 2 will build upon the progress in this plan and see the College develop a five year plan running from 2025 to 2030, through which the institution will take the remaining steps needed to reduce greenhouse gas emissions by 50%.

While the priority in 2021-2022 has been the development of the plan, the College has already committed to action, through:

- ▶ Carrying out a review of energy management options to identify improvements and efficiencies
- ▶ Assessing PCC's readiness to pursue Sustainability Tracking, Assessment and Rating System⁶ certification from the Association for the Advancement of Sustainability in Higher Education⁷
- ▶ Hosting an event on March 30, 2022 as part of the Worldwide Teach-In for Climate and Justice⁸

5 https://www.pima.edu/about-pima/leadership-policies/integrated-planning/docs/pcc-2021-25-strategic-plan-report_2fnl.pdf

6 <https://stars.aashe.org/>

7 <https://www.aashe.org/>

8 <https://gps.bard.edu/world-wide-teach-in>

- ▶ Participating in the local 2022 Earth Day event at the Tucson Children's Museum
- ▶ Establishing an Earth Day Pledge for employees, with 130 participants
- ▶ Creating information posters about individual action people can take to support the environment

Implementation of these actions during the planning year hints at the sense of urgency around the climate crisis and highlights the College's commitment to engage in meaningful action.

The 2022-2025 plan introduces four overarching targets and is structured around five priority areas through which the College will make progress. The five priorities are:

- ▶ Energy reduction
- ▶ Climate change and sustainability in the curriculum
- ▶ Engagement and education
- ▶ Inventory greenhouse gas emissions
- ▶ Infuse sustainability college-wide

The order of the priorities is driven by their significance. Energy use is the largest contributor to greenhouse gas emissions and reducing our use of energy is a critical step to reduce the operational impact of PCC on the climate. As an educational institution, embedding climate change and sustainability is a vital component of the work we do. The remaining priorities address such topics as our role in the community, determining the current greenhouse gas emissions from the College and infusing sustainability throughout the College. All three are important and provide a foundation to support the first two goals.

The plan will address diversity, equity and inclusion throughout its implementation. It is well documented that climate change will not affect everyone equally and will instead have a more significant impact on those who are low income and people of color^{9, 10}. Climate justice matters and, as we work to implement the plan, we commit to addressing the social justice implications of climate change.

This is a new focus area for the College that positions the institution to do its part to address the climate crisis and what has been described as "a code red for humanity"¹¹. We invite students, employees and community members to review the targets, priorities and strategies, and engage with us in this vital work.

9 <https://news.climate.columbia.edu/2020/09/22/climate-change-environmental-justice/>

10 <https://www.un.org/sustainabledevelopment/blog/2019/05/climate-justice/>

11 <https://news.un.org/en/story/2021/08/1097362>

PLANNING PROCESS



A college-wide Climate Planning Team (CPT) was established in early fall 2021, with sub-groups looking at curriculum considerations, greenhouse gas emissions tracking, and organizing the Worldwide Teach-In for Climate and Justice event.

The team engaged in numerous conversations during fall and spring, identifying priorities in the area of climate action and sustainability, and iteratively refining draft priorities leading to the development of the final plan. A draft of the plan was shared with attendees at the 2022 Futures Conference and the CPT used the input from the event to further refine the plan.

The final draft was discussed by the team on May 13, 2022 and then shared with College leadership and the internal and external community for final input, prior to submission to the Chancellor for approval in May 2022. The plan was approved on May 31, 2022.

PLAN IMPLEMENTATION



Upon approval of the Climate Action and Sustainability Plan, an implementation roadmap will be developed that will include specific timelines for the strategies and actions, and identify the individuals responsible for each of the tasks. To ensure we hold ourselves accountable, within the first three months of plan implementation, the College will release a public-facing dashboard that presents the progress on the strategies and associated targets. The dashboard will be updated regularly, at least once every three months.

The plan is a living document. It will be reviewed annually and adjusted, as needed, to support goal attainment and to ensure relevancy as new technologies emerge. Further, it will be monitored for alignment with the Education and Facilities Master Plans, the Strategic Plan and other College priorities as part of the College's integrated planning process.

Plan implementation and the annual review is the responsibility of the Office of Strategy, Analytics and Research (STAR), with input and insights from the Climate Planning Team.

CLIMATE PLANNING TEAM



Vanessa Arellano	Advanced Program Manager in Workforce Development
Gayle Bell	Executive Assistant in the Office of the Chief of Staff
Phil Berry	Community Member
Teresa Billick	Student
Ouatfa Chuffe-Moscoso	Director, Environmental Health & Safety
Brandye D'Lena	Assistant Vice Chancellor of Facilities
Tom Davis	Chief of Staff (co-chair)
Noah Fay	Full Time Faculty, Geology and Department Head, Geology and Geography (co-chair)
Ernesto Garcia	Student Affairs Supervisor
Don Gest	Part Time Faculty
Himat Khalsa	Full Time Faculty, Building and Construction Technologies
Sabrina Lovato	Program Assistant in Facilities Planning
Charlie MacCabe	Part Time Faculty
Donya Meggs	Instructor, Adult Education for College and Career
Josie Milliken	Academic Dean of Distance Education
Jennifer Moore	Senior Procurement Analyst
Maria Pereira	Full Time Faculty, Astronomy and Physics
Rene Reichardt	Transportation & Support Services Manager
Nic Richmond	Chief Strategy Officer (co-chair)
Maricruz Ruiz	Program Advisor
Michael Tulino	Director of Enrollment Services and Registrar
Cora Varas-Nelson	Part Time Faculty
Ross Waldrip	Science Program Manager
Christopher Wells	Student
Jon Wesley	Laboratory Specialist

CLIMATE PLANNING TEAM: CURRICULUM SUBCOMMITTEE MEMBERS



To support broad input into the plan, and recognizing the central priority of climate action and sustainability in the curriculum, a subcommittee was formed to focus on that specific topic.

Vanessa Arellano	Advanced Program Manager in Workforce Development
Phil Berry	Community Member
Anne Browning	Part Time Faculty
Elliot Churilla Mead	Full Time Faculty, Communications
Noah Fay	Full Time Faculty, Geology and Department Head, Geology and Geography
Francisca James Hernandez	Full Time Faculty, EGTSS/Social Sciences
Kathy Karlberg	Full Time Faculty, Nursing
Charlie MacCabe	Part Time Faculty
Rollin Medcalf	Instructor, Center for Training and Development
Donya Meggs	Instructor, Adult Education for College and Career
Josie Milliken	Academic Dean of Distance Education
Rosemary Ortega	Program Director, Biomedical Sciences, DAE
Maria Pereira	Full Time Faculty, Astronomy and Physics
Mary Prasciunas	Full Time Faculty, Anthropology/Archeology
Christopher Schipper	Educational Support Faculty Librarian
Cora Varas-Nelson	Part Time Faculty
Ross Waldrip	Science Program Manager

CLIMATE ACTION AND SUSTAINABILITY TARGETS



Through the Climate Action and Sustainability Plan (CASP), the College commits to four institutional targets, to be completed by June 2025. These targets represent the intended outcomes at the end of the Plan, while the priorities presented in the next section outline the specific steps the College will take to achieve these targets.



CASP Target 1:

REDUCE GREENHOUSE GAS EMISSIONS FROM SCOPE 1 AND 2 SOURCES

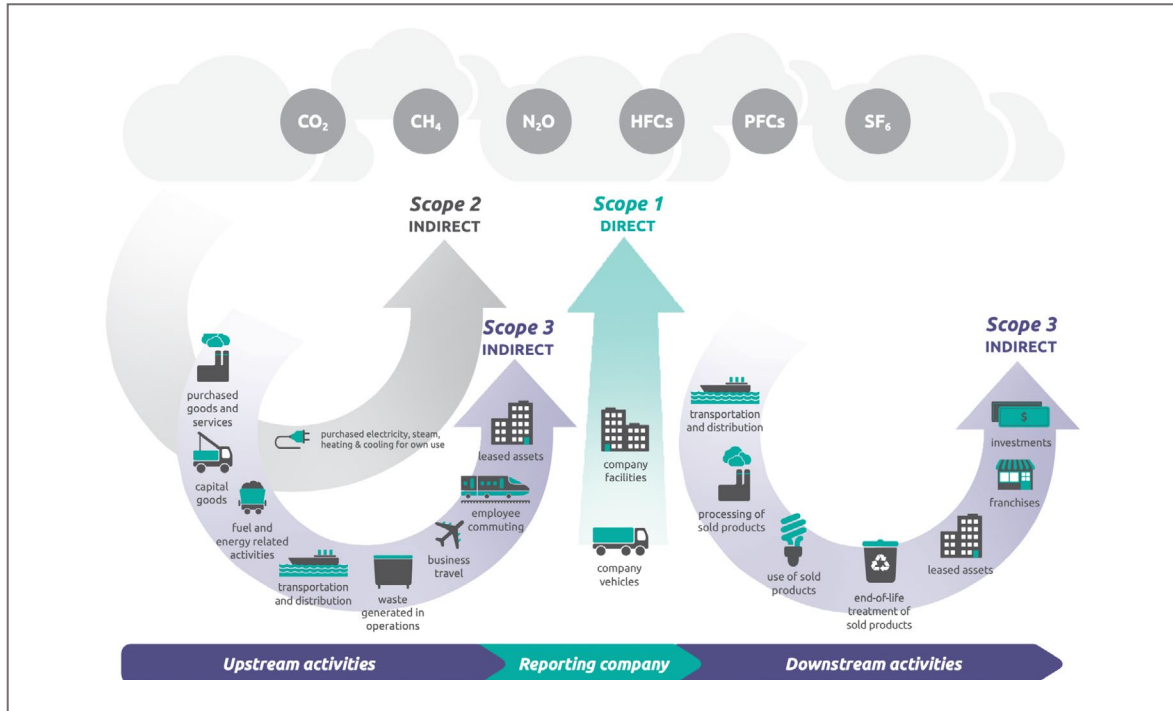
One major priority through the plan is to run a full inventory of greenhouse gas (GHG) emissions to establish a baseline. This will be completed in year one of the plan as part of Priority 4.

On the completion of the GHG inventory, specific targets will be established for GHG emission reduction across the different sources of emissions. An overall institutional target will be established no later than June 30, 2023. The target will commit the College to a reduction for scope 1 and 2 emissions. Scope 1 includes emissions from sources that are controlled or owned by the College (e.g. fuel use in vehicles), while scope 2 are indirect emissions associated with the purchase of electricity, heating and cooling¹². The scopes are defined by the GHG Protocol¹³ standards, which PCC commits to using. In developing the GHG inventory, PCC will also address scope 3 emissions associated with directly financed air travel and employee/student commuting and targets may be established for those areas as well.

¹² <https://www.epa.gov/climateleadership/scope-1-and-scope-2-inventory-guidance>

¹³ <https://ghgprotocol.org/>

Figure 1: Overview of GHG Protocol scopes and emissions¹⁴



CASP Target 2:

ENSURE ALL LEARNERS UNDERSTAND THE KEY PRINCIPLES OF CLIMATE ACTION AND SUSTAINABILITY, AND CAN APPLY THEM IN THE FIELD IN WHICH THEY ARE TRAINED

As an educational institution, we have an obligation to ensure our learners enter the workforce with an understanding about climate action and sustainability, and the ability to apply that knowledge in their work. This may be achieved through completion of a dedicated course within their program that incorporates these topics or it could be through the infusion of climate awareness into existing courses. The direction may vary, depending on the program. Regardless, through Target 2, PCC commits to ensuring that all learners understand climate action and sustainability as measured through course, program and/or general education learning outcomes.

14 Image source: https://ghgprotocol.org/sites/default/files/standards/Corporate-Value-Chain-Accounting-Reporting-Standard_041613_2.pdf

CASP Target 3:

APPLY FOR GOLD CERTIFICATION THROUGH THE ASSOCIATION FOR THE ADVANCEMENT OF SUSTAINABILITY IN HIGHER EDUCATION

PCC is committed to aligning with external systems to identify best practices and ensure the actions taken by the College are consistent with standards elsewhere in education. To this end, the College has selected the Sustainability Tracking, Assessment and Rating System¹⁵ (STARS) from the Association for the Advancement of Sustainability in Higher Education¹⁶ (AASHE). This system outlines institution-wide areas of focus that provide a structure through which the College can significantly enhance its sustainability work. Further, aligning to this external system provides important transparency and accountability to ensure the work stays on track.

During the 2021-2022 year, an assessment has been conducted of PCC's current alignment with the STARS standards, indicating the College may be approaching Bronze level. Through the Climate Action and Sustainability Plan, the College commits to taking the needed steps to apply for Gold Certification no later than June 30, 2025. However, it is noted that attaining Gold is an ambitious target. The College may apply for Silver Certification as an intermediate step.

CASP Target 4:

DEVELOP A PLAN FOR THE PERIOD FROM JULY 2025 THROUGH JUNE 2030 THAT WILL RESULT IN, AT MINIMUM, A 50% REDUCTION IN GHG EMISSIONS

The 2022-2025 plan is focused on building a strong foundation for sustainability and climate action at the College, but the long term goal is a 50% reduction in GHG emissions by 2030. Through the priorities in the plan, partnered with planning work scheduled for 2024-2025, PCC will establish a comprehensive roadmap that will lead to a minimum 50% decline in GHG emissions by 2030.

¹⁵ <https://stars.aashe.org/>

¹⁶ <https://www.aashe.org/>



PRIORITY 1: ENERGY REDUCTION

Within priority 1, the goal is to implement strategies to reduce the overall greenhouse gas generating energy usage at the College, to include both a reduction in energy use from electricity and an increase in the generation/use of renewable energy. The institution will also carefully monitor emerging technologies to identify other approaches that may help support success in this area. Through this priority, the College will meet CASP Target 1 “Reduce greenhouse gas emissions from scope 1 and 2 sources.”

1. Following the findings of the energy management review, upgrade systems to reduce energy consumption by 7,000 MWh/yr through:
 - a. HVAC upgrades¹⁷
 - b. HVAC control upgrades¹⁸
 - c. Lighting upgrades
2. Expand the use of renewable energy
 - a. Begin the migration of the PCC fleet to electric vehicles where possible (see also Priority 5)
 - b. Install electric vehicle charging stations at each campus
 - c. Assess, and pursue, opportunities to increase renewable energy generation/use at PCC sites.
3. Following completion of the GHG emissions inventory (Priority 4), establish the reduction targets to be achieved through Target 1 of the plan, no later than December 2023.
4. Commit to sustainable construction and renovation projects, through an alignment with an external sustainable building standard (LEED, ASHRAE¹⁹ 90.1-2019, the WELL Building Standard²⁰ or similar)
 - a. The Facilities Department to identify the most appropriate standard by June 30, 2023 and document the expectations for PCC’s building projects
 - b. All projects starting after July 1, 2024 will follow the new expectations.

17 HVAC upgrades are specific to the mechanical equipment providing heating, ventilation and air conditioning. These upgrades can include parts of existing systems that are at end of life or may involve full mechanical unit replacement. Upgrades can also include changes to a mechanical system specifically to improve efficiency.

18 HVAC controls are a subset of HVAC systems and are used to monitor and control heating, ventilation and air conditioning (HVAC) systems in buildings. These can range in simplicity from a thermostat in a home that responds only to temperature changes to a Building Management System (BMS) which is a complex computer-based system with various optional sensors allowing adjustment for the building’s mechanical and electrical equipment such as ventilation, lighting, power systems, fire systems and security systems. BMS systems also allow for remote system review and control providing alarms for systems that may require maintenance or have failed.

19 <https://www.ashrae.org/>

20 <https://www.usgbc.org/articles/what-well>

5. Identify opportunities to reduce energy use through day-to-day actions and implement change, for example:
 - a. Recognizing those units with hybrid work schedules, consolidate office spaces to reduce the footprint needing heating/cooling
 - b. Optimizing classroom use by time of day to consolidate classes into a subset of buildings/floors so not all spaces need heating/cooling
 - c. Leveraging computer shut-offs and outlet/power strip efficiency to reduce energy use
 - d. Revisiting default thermostat settings to identify opportunities for improvement
 - e. Changing existing lighting to LED lights and reducing outdoor lighting where possible while ensuring safety
 - f. Assessing the potential to increase natural lighting through energy efficient windows
 - g. Developing a policy to oversee the use of personal appliances in the workplace (microwaves, refrigerators) with the goal to reduce the use of those appliances.



PRIORITY 2: CLIMATE CHANGE AND SUSTAINABILITY IN THE CURRICULUM

The goal of priority 2 is to infuse climate action and sustainability throughout the curriculum at the course, program and institutional levels in all areas of the College (credit and non-credit), with the development of associated processes to support faculty and staff instructor participation. This priority directly supports CASP Target 2 “Ensure all learners understand the key principles of climate action and sustainability, and can apply them in the field in which they are trained.”

1. Develop and incorporate curriculum that addresses sustainability, climate solutions, social equity, and environmental justice. Empower students to take climate action through individual action and participation in student-led local, and national organizations.
2. Assess and expand academic programs
 - a. Evaluate the demand for a sustainability-focused two-year degree as well as shorter certificates, and, if supported, develop these programs.
 - b. Work with industry partners, local sustainability organizations and local government to evaluate the demand for sustainability-focused training opportunities in workforce development:
 - i. Microcredentials²¹, *PimaFastTrack*²², 21st Century Skills²³
 - ii. Continue investigating connections to Industry 4.0²⁴ career education: Electric vehicles, robotics, solar energy opportunities.
 - c. Adopt either institution-level learning outcome(s) or new general education learning outcome(s) related to sustainability, climate change and environmental justice.
 - d. Assess the potential to develop an internship and/or service learning program that connects PCC students to climate-relevant opportunities with local government agencies, sustainability organizations and industry.
 - e. Pursue external funding to support curriculum-related initiatives.

21 Modified from the National Education Association, microcredentials are short, competency-based recognitions that allow a learner to demonstrate mastery in a particular area <https://www.nea.org/professional-excellence/professional-learning/micro-credentials>

22 <https://ce.pima.edu/fast-career-credentials/>

23 These skills include critical thinking, problem solving and more. For details, see <https://www.edglossary.org/21st-century-skills/>

24 The digital revolution that is shaping the world today, see <https://www.weforum.org/agenda/2016/01/the-fourth-industrial-revolution-what-it-means-and-how-to-respond/>

3. Assess and expand course offerings
 - a. Inventory and advertise current offerings:
 - i. At the course level, identify those courses that incorporate climate change/sustainability/environmental justice.
 - ii. Identify programs with a sustainability focus or content.
 - b. Develop new course(s) focused on climate change, sustainability, and social justice, to be launched in fall 2023:
 - i. Develop new single-discipline class(es) focused on climate science, actions, and solutions, aligned with state university offerings.
 - ii. Explore opportunities for credit and non-credit interdisciplinary courses (in particular those that articulate to UA's new General Education program).
 - c. When appropriate, encourage the use of Open Educational Resources, e-book, and textbook rentals to reduce material usage.
 - d. Assess the potential for increased use of virtual or augmented reality to complement course activities such as field trips.
4. Establish a Virtual Living Learning Lab (VL3) to enable PCC facilities to become instructional spaces that provide real-world experiences for our students.
5. Create systems to engage faculty, staff instructors and students in climate action and sustainability
 - a. Develop college structures and staffing policies that support collaborative interdisciplinary approaches to climate education, and more collaboration between transfer and Career and Technical Education areas of the College and Diversity, Equity and Inclusion initiatives.
 - b. Establish a college-wide, faculty-led, learning community/standing committee to develop processes to effectively support interdisciplinary pedagogy, and to identify actionable priorities.
 - c. Create a repository for climate change related curricular materials.
 - d. Create one or more long-term Faculty fellow positions through the Teaching and Learning Center (TLC) to plan and coordinate curriculum and pedagogy efforts related to climate action, sustainability and environmental justice.
 - e. Provide faculty professional development through the TLC to support wide adoption of climate/sustainability-themed General Education Learning Outcomes or Institutional Learning Outcomes into existing courses.
 - f. Create awards for faculty, staff instructors and departments engaging in climate/sustainability related curricular development.



PRIORITY 3: ENGAGEMENT AND EDUCATION

As part of building a strong foundation for climate action and sustainability, it is vital that the college connects with the wider community, as well as students within all PCC programs (both credit and non-credit), and employees, with the goal to ensure that everyone engages meaningfully with the issue, not only on campus but also in their daily lives. Progress within this priority will support all of the climate action and sustainability targets.

1. Develop partnerships and increase engagement with the community
 - a. Partner with the city or county for Earth Day events.
 - b. Establish strategic partnerships with local sustainability and climate justice organizations, to connect faculty, staff and students with community organizations and entities with sustainability goals and to facilitate joint action.
 - c. Pursue federal, state and local funding opportunities.
 - d. Host and promote periodic events focused on climate action, sustainability and environmental justice involving students, PCC employees, and community organizations.
 - e. Leverage relationships with local K-12 institutions to ensure prospective students see PCC as a leading destination to study and engage in climate action and sustainability.
2. Increase student engagement by convening students to develop programs that may include:
 - a. Create a “Student Climate Ambassador” program to participate in the planning and implementation of climate/sustainability/social justice related events, initiatives and curricular changes (e.g., service learning and internship programs).
 - b. Establish a student contest to reduce their climate footprint.
 - c. Gather student feedback to identify achievable goals for student engagement. For example, composting or water management projects.
 - d. Ensure all students have the opportunity to engage in sustainability/climate justice-focused co-curricular programming. Organize a student/community mixer in Fall 2022 to discuss student-led organization around climate action. Include local organizations and potential community and faculty mentors.
 - e. Establish an annual student art event to mark Earth Day.

3. Engage employees in meaningful action:
 - a. Create a climate action and sustainability educational program for PCC employees focusing on actions they can take professionally and personally.
 - b. During May of each year, hold a climate action or sustainability challenge to engage employees in taking meaningful action.
 - c. Encourage employees to (1) Eliminate as much raw material consumption as possible, to include paper and plastic, and (2) Use recycled materials and materials that can be recycled when necessary.



PRIORITY 4: INVENTORY GREENHOUSE GAS EMISSIONS

Through this priority, PCC will use the Sustainability Indicator Management and Analysis Platform (SIMAP)²⁵ to conduct a full inventory of greenhouse gas (GHG) emissions according to the three scopes from the GHG protocol²⁶. SIMAP is a leading GHG platform used by over 1,500 schools, colleges, universities and other organizations. The inventory will be completed no later than June 2023, subject to available data. The results will directly inform the establishment of reduction goals as part of Target 1.

1. Calculate the direct GHG emissions associated with PCC operations (scope 1²⁷ from the GHG Protocol).
2. Use SIMAP to calculate the indirect emissions from sources that are directly linked to on-campus energy consumption, including electricity (scope 2²⁸ from the GHG Protocol).
3. Determine a way to gather employee and student travel modes and distance to estimate the GHG emissions associated with those activities (a component of scope 3²⁹ from the GHG Protocol).
4. Calculate the GHG emissions associated with directly financed air travel to the extent data are available (a component of scope 3 from the GHG Protocol).
5. Submit PCC's full GHG emissions data to the SIMAP reporting tool to support transparency and accountability, and post the information clearly on the PCC website, no later than June of each year starting in 2023.
6. Identify and develop a way to test GHG scenarios to determine the impact of different changes (for example, assessing the GHG impact of college-wide assignments for faculty or in-person meetings) no later than June 2024.

²⁵ SIMAP homepage at the University of New Hampshire: <https://unhsimap.org/home>

²⁶ The Greenhouse Gas Protocol is the world's most widely used greenhouse gas accounting standard. Find out more: <https://ghgprotocol.org/>

²⁷ Direct emissions from sources owned by PCC, for example emissions from fuel in the PCC fleet

²⁸ Indirect emissions from purchased electricity

²⁹ Indirect emissions from sources not owned or controlled by PCC, such as employee commutes and air travel to conference



PRIORITY 5: INFUSE CLIMATE ACTION AND SUSTAINABILITY COLLEGE-WIDE

While energy reduction at the institutional level, as described in Priority 1, is a major way in which the College will reduce greenhouse gas emissions, there are many other relevant channels that need to be addressed. By infusing climate action and sustainability college-wide, strategies such as waste reduction, water harvesting and composting can be assessed. Further, by pursuing Association for the Advancement of Sustainability in Higher Education (AASHE) STARS³⁰ certification, the College can align itself with an external higher education sustainability standard and embed meaningful action throughout College operations. Priority 5 directly supports CASP Targets 3 and 4.

1. Institutionalize climate action and sustainability
 - a. Establish a sustainability office charged with leading PCC's climate action and sustainability work by December 23, 2022
 - b. Create a standing committee for climate action and sustainability to make recommendations, prioritize initiatives, monitor grant opportunities and develop the roadmap that will see the College reduce greenhouse gas emissions by 50% by 2030.
 - c. Incorporate issues of climate action, sustainability and climate justice in college events, such as All College Day
 - d. Carry out a detailed review and embed climate action and sustainability throughout PCC's decision-making processes and any applicable policies
 - e. Assess the feasibility of setting up a sustainability fund for small grants to College faculty and staff who want to pursue sustainability initiatives. If feasible, establish an application process and implement.
2. Use the AASHE STARS framework to identify sustainability focus areas and embed the priority actions into unit plans, through the Institutional Quality process. Target the most important improvements for PCC that lay a foundation to apply for Gold certification no later than June 30, 2025.
3. Assess the alignment of the CASP and other College plans with the United Nations Sustainable Development Goals³¹ to identify areas in which the College can support progress and improvement for the community we serve.

³⁰ <https://stars.aashe.org/>

³¹ <https://sdgs.un.org/goals>

4. Assess the options for active and passive carbon sequestration³² and implement those options, where possible.
5. Carry out a comprehensive review of water and landscaping practices and evaluate options to reduce water use and engage in water harvesting. Establish baseline metrics and develop a plan for improvement. Recognizing that water usage is particularly important in Pima County, a CASP Target related to water use may be developed in year two of the plan.
6. Develop a comprehensive transportation plan for students and employees that provides increased alternative modes of transportation options, to include transitioning the PCC fleet to electric vehicles where possible (see also Priority 1).
7. Reduce energy consumption related to local travel by adopting hybrid work schedules where possible and providing virtual options for PCC meetings post-pandemic.
8. Establish an internal “freecycle” online presence for employees to exchange office items.
9. Encourage each area of the College to develop their own commitments for Earth Day that are tracked centrally and publicly recognized.

³² <https://www.usgs.gov/faqs/what-carbon-sequestration>