













A Vision for Systemic Change

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## Letter from the President

On behalf of the faculty, classified professionals, administrators, and students of Las Positas College, I am proud to present our Climate Action Plan 2024-2029. The updated Climate Action Plan (CAP) will advance systemic changes to addressing sustainability efforts at Las Positas College. The plan provides a clear vision and strategies that outlines how LPC will: cut emissions and achieve a net negative campus, build additional institutional capacity to implement sustainability actions, expand climate-focused education, provide opportunities for students, employees, and community partners to engage in sustainability efforts, and advance climate justice efforts over the next five years, while working towards becoming a net-zero energy campus by 2035.

The plan draws from our proud history, accentuates our distinctive regional strengths, and identifies the ongoing challenges and opportunities that climate change presents in shaping our lives and defining the global challenge for this century. The college is uniquely positioned with strong ties to local industry

leaders and local governments to prepare those at greater risk than others from these challenges. Las Positas College plays a critical role in the educational, economic, and environmental health of the region and sustainability and its social justice tenets directly align with our institutional mission, values, and goals. The college firmly believes that all climate change discussions are viewed through the lens of equity and fairness.

Our Climate Action Plan is a call to action for Las Positas College to continue to serve as a leader within the Tri-Valley area and among the 116 community colleges in our system; this requires all levels of our college to play a part in preparing ourselves and helping others in this global effort. The college also believes that it is important for us to continue to collaborate with educational, business, and government partners to enhance educational opportunities and provide programs, training, and support services that best meet the needs of our students and our communities. Through planning and action, Las Positas College is committed to addressing sustainability in our daily operations to provide stewardship of the environment, while providing students with the knowledge and skills to succeed in the green economy.



I am proud of the inclusive process that involved significant collaboration, outreach, active research, and a wide breadth of expertise from our climate fellows, student interns, faculty, classified professionals, administrators, with support from our District Office and colleagues from Chabot College. This plan is the work of countless hours of many individuals who brought passion and dedication to this planning effort. I would like to thank the following Las Positas College faculty and staff for their leadership in contributing to this document: Marsha Vernoga, Michael Ansell, Daniel Cearley, Laura Cornette, Amy Chovnick, David Montelongo, and Jean O'Neil-Opipari.

The Climate Action Plan should be considered a living document, which will serve as a guide for the future, yet be flexible enough to help the college navigate a rapidly evolving climate of social, economic, and environmental change. Las Positas College is proud to serve the communities within the Tri-Valley and beyond, and is committed to transforming lives, through our commitment to educational access, student equity, academic excellence, and student success. This Climate Action Plan will keep us on the path to continuing to lead our community in sustainability and climate justice action, locally and regionally, in the years to come.

Best regards,

Dyrell Foster, Ed.D. College President

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# **Executive Summary**

Climate change is the defining challenge for the 21st century and generations beyond. It is causing unprecedented stress on our communities, institutions, and environments with increasing dramatic health and economic risks. The destructive forces of climate change are not felt equally, and unfortunately our students and their families at lower income levels and communities of color are less able to navigate safely through extreme weather events. This report is a call to action by all levels of our college to play a part in preparing ourselves and help others in this global effort.

Our Climate Action Plan is part of a 116-community college wide effort to act in unison and make systemic changes to how we operate, how we prioritize, and how we communicate the challenges before us. Las Positas college is uniquely positioned with strong ties to local industry leaders and local governments to prepare those at greater risk than others from these challenges.

This report provides a vision for each area of the college to alter our campus culture, shift perspectives, and lead the way toward positive change.

#### 1 MAINTENANCE AND OPERATIONS - Cutting emissions and achieving a net negative campus.

- Increase energy from renewable sources such as solar and wind.
- Electrify campus heating and cooling systems.
- Develop and incentivize a robust carpooling system for students, faculty, and staff.

#### 2 ADMINISTRATION - Institutionalizing leadership around a resource hub.

- Hire a permanent sustainability director to oversee projects.
- Institute a Sustainability Office at Las Positas.
- Create a grant writer position for the campus.

#### 3 ACADEMICS - Encouraging a shift in academic practices.

- Expand Climate-Focused and Climate-Related Curriculum.
- Encourage Sustainable Teaching Practices.
- Increase Climate Literacy Amongst the Student Body.

#### 4 ENGAGEMENT - Engaging in the wider region will pay dividends.

- Foster Leadership Opportunities for Students in Campus Sustainability.
- Engage Community Partners in Campus Sustainability Efforts.

#### 5 FUTURE - Tracking our progress and being nimble in the process.

- Implement tracking mechanisms within our existing systems.
- Create a periodic checklist for facilities and operations.
- Share best practices with other institutions.

# 1 Introduction

Our students, staff, faculty, and the wider Las Positas College Community are experiencing the effects of climate change. Changes to our weather patterns are noticeable and alarming. Summers are becoming longer, winters are shorter, and the variability between weather events is increasingly dramatic and unpredictable. Significant weather events discussed by our elders as "once in a generation" are becoming more common for our current generation of students. Climate change is already shaping our lives and is the defining global challenge for this century.

Since writing the first 2010 Climate Action Plan (CAP) a decade ago, our region has navigated a series of life-altering and threatening climate-related events. We endured extreme and exceptional periods of drought, experienced mass wildfires and excessive heat waves, and witnessed a hyperactive winter season with flooding and record snowfall. The stress and direct physical harm of these events are unnerving and cannot be understated. California's Fourth Climate Change Assessment describes our region as one of the most variable in North America and "climate-challenged" compared to others. This fifth assessment provides a granular view of the impact of climate change on subregions of California; unlike other community colleges, the Chabot Las Positas Community College District is unique; it stretches across a wide range of ecotones from the edge of the San Francisco Bay to the San Joaquin Valley. The Las Positas College community needs to be prepared for a broader range of impacts than most other colleges.

Unfortunately, the impacts of extreme weather events are not experienced equally. The volatility in weather events poses a greater risk depending on age, economic status, race, and citizenship. Vulnerability is further exacerbated by a legacy of underinvestment in communities of color, institutionalized racism, and de jure and de facto neighborhood segregation. Depending upon who you are, and where you live matters. The ability to prepare for and navigate through changing climatic conditions is different for everyone. For these reasons, all climate change discussions are firmly viewed through the lens of equity and fairness.

Las Positas College recognizes that sustainability and its social justice tenets align with its institutional goals. These goals are directly driven by the California Community College Vision 2030¹ document, subtitled A Roadmap for California Community Colleges: Taking care of our students, our communities, and our planet. To provide students with an unhindered learning experience that is reflective of and through a deliberate ethos of equity, it is necessary to recognize that climate impacts will affect certain groups with greater impact. In November of 2022, Chabot-Las Positas Community College District amended their Board² and Administrative³ policy around Sustainability to reflect the Vision 2030 document.

"The sustainability plan will guide future sustainability efforts at the district and at colleges. The work will focus on providing a "just transition" from high-carbon activities into the green

<sup>&</sup>lt;sup>1</sup> Vision 2030: A Roadmap for California Community Colleges.

<sup>&</sup>lt;sup>2</sup> Chabot-Las Positas Community College District, BP 3580 Sustainability.

<sup>&</sup>lt;sup>3</sup> Chabot-Las Positas Community College District, AP 3580 Sustainability.

economy, seeking to ensure harm to workers, communities, and regions are avoided while maximizing the benefits of climate action."

Through planning and action, Las Positas College is committed to providing the conditions that propel all students forward in their career and academic trajectories. We recognize that our economies are shifting green. Unequivocally, our current generation of students must be resilient and responsive to meeting the challenges of a changing planet. Just as the Vision 2030 document is a call to action, this document is also reflective of this eagerness for Las Positas College to act as a leader within the Tri-Valley area and among the 116 community colleges.

### Purpose and Usage of the Climate Action Plan

The Las Positas College Climate Action Plan (CAP) is a guidance document that provides a clear series of steps that our institution can immediately implement as it grapples with climate change. This document helps add perspective to our role and responsibility to mitigate the impacts. It tracks our progress, highlights areas to celebrate, and provides recommendations for change. It is a document that will be reflected upon periodically to ensure its effectiveness. Currently, the review cycle is every 10 years. However, a 5-year period aligns more with Board of Governors policy and stated goals.

This report is a relatively new addition to the periodic reports that our college produces and will be utilized alongside other substantive guidance documents, such as the Facilities Master Plan and the Educational Master Plan (Table 1). Its content and intent reflect Chabot-Las Positas Community College Districts Board Policy and Administrative Policies: BP3580 and AP3580, each passed in late 2022.

Table 1 - Current and Previous Plans and Master Guidance Documents

CURRENT AND PREVIOUS PLANS				
Document Name	Date			
Five-Year Capital Outlay Plan	2020 – 2024 2017 – 2021			
Las Positas College Educational Master Plan	2021 – 2026 2015 – 2020			
Chabot-Las Positas Community College District-Wide Strategic Plan	2015 – 2020			
Facilities Master Plan	2019 2012			
Design Standards Manual	2018			
Information Technology Master Plan	2014			
Climate Action Plan Update Climate Action Plan	2019 2010			
Las Positas College Design Guidelines	2007			
District Design Guidelines	2006			

Like other guidance documents, this report focuses on how we can better serve our changing student population. It recognizes that our service area is becoming more diverse and home to large immigrant communities. More than half of our students are first-generation college students, with the highest number associated with Latinx students. A third of our students are from low-income households and represent communities most vulnerable to climate impacts. Most significantly, more than half of our students report mental health concerns related to anxiety, depression, and other related problems. Issues. These trends reaffirm the need to increase our efforts to integrate climate resiliency into our campus planning.

Underlying the goals and actions described in this report, each contributes to the Educational Master Plans five central goals:

- Educational Excellence
- Community Collaboration
- Supportive Organizational Resources
- Organizational Effectiveness
- Equity and Anti-Racism

These goals mirror guidance from the 2019 updated and revised California Community Colleges Board of Governors policy - Climate Action and Sustainability Framework.<sup>4</sup> This policy aligns California state institutions together in a cohesive footing to address climate change and its impacts. The 2019 policy recognizes the strength of the 116-community college system and, among a wider series of issues, directs each district to focus on three goals:

- Address climate and environmental justice in the communities they serve.
- Create carbon emissions baselines and carbon emissions inventories and reduce emissions by at least 75% by 2030.
- Follow sustainability plans that meet or exceed the 2019 Climate Action and Sustainability Framework objectives.

Reflective of these goals, the Las Positas College Climate Action Plan provides a series of recommendations that will shift the operating culture of our institution towards a sustainable footing and mindset. Fundamental shifts in our habits are challenging to embrace and require a broad, comprehensive approach that includes all college levels: academic, administrative, and operational. Most importantly, it requires leadership at all levels, from the District to classrooms and staff to students. The following report will cultivate and instill agency that confronts the challenges ahead.

#### This report provides:

- An integrated vision to embrace the challenges posed by climate change from an academic, administrative, and planning perspective.
- An achievable process to meet the California Community College Climate Action Sustainability goals set for 2025, 2030 and 2035.<sup>5</sup>

The following report emulates California's statewide efforts to assess and address climate change scientifically. It recognizes that our current climate has shifted away from natural patterns through

human-influenced anthropogenic cultural and societal processes, primarily using fossil fuels (coal, oil, and natural gas) as an energy source and related practices that hinder nature's ability to absorb CO2 (deforestation, urbanization, and loss of natural habitats). California recognizes that only through decisions made based upon science can deliberate actions be effective in contributing to positive change.

# 2 Directives & Sustainability Timeline 2000 to 2010

The first Las Positas College 2010 Climate Action Plan (CAP) reflects groundbreaking trends in the California government's energy policy in the early 2000s. It is directly tied to Governor Arnold Schwarzenegger's 2005 Executive Order S-3-05<sup>4</sup>, which pledged to reduce greenhouse gas (GHG) emissions across all California agencies. The bold plan put forth the following targets:

- by 2010, reduce GHG emissions to 2000 levels
- by 2020, reduce GHG emissions to 1990 levels
- by 2050, reduce GHG emissions to 80 percent below 1990 levels

The central argument for this effort was twofold: firstly, recognition that GHG is a cause for harmful and costly climate change events and, secondly, if California takes the lead in reducing levels, it ultimately will lead to job growth, technology investment, manufacturing expansion, and a broadly felt economic boost.

As part of this effort, all community colleges were asked to address their role and responsibility towards sustainability. In 2005, the Chabot-Las Positas Community College District Board of Trustees adopted a Sustainability Design Policy that addressed new construction and renovations:

- Leadership in Energy and Environmental Design (LEED) Silver Certified and that all new renovations
- In 2006 the District Purchasing Office developed an RFP process that includes a request for Energy Star certified products.

These policies coincided with a 2004 voter-supported \$495 million capital improvement bond (Measure B), which funded, and continues to support, the renovation and expansion of facilities at both campuses. The Chabot Las Positas College district was well positioned to increase its energy savings by replacing inefficient buildings.

In 2008, the CCC Board of Governors approved the first Energy and Sustainability Policy. This provided energy consumption goals and energy efficiency standards for renovated or new construction. The Board of Governors had yet to solidify guidance documents, which became available to the broader CCC community in 2013.<sup>4</sup>

With this as a backdrop, the Las Positas College 2010 Climate Action Plan (CAP) primarily focused on reducing the college's carbon footprint. This was a formative period when few examples existed, and little guidance was available. The team at LPC should be lauded for their efforts at a time when the concept of a Climate Action Plan was ill-defined, implementation strategies were developing, and for many, the idea of sustainability was still taking shape.

The LPC 2010 Climate Action Plan focused on the following areas:

- Establishing a baseline inventory
- Instigating early proactive measures

<sup>&</sup>lt;sup>4</sup> 2013 California Community Colleges Sustainability Plan Guidebook

Developing mitigation strategies

### Summary of 2010 Climate Action Plan (CAP)

Many aspects of the LPC 2010 CAP can be celebrated and clearly show the immediate effect of deliberate actions. Las Positas was relatively quickly able to implement measures that produced noticeable changes and continued to generate benefits. Many of these achievements directly result from the college's ongoing renovation and new construction efforts. However, others are innovative and reflective of shifting trends in education. For example, Las Positas College was an early adopter of Distance Education modalities and integrating technological solutions.

#### **Achievements**

#### Water, Waste and Materials

- Reclaimed water program
- Stormwater management
- Recycling and composting program (*Revise since this was a partial win*)

#### Integrative changes stemming from the 2010 report

- Free public transportation (Student Government Driven)
- Bike racks (4 noted 2010)
- Distance learning (75 online courses and 25 hybrid courses)
- Paper reduction initiative (double-sided default)
- Reduce Paper Volume through Improved Electronic Document Management
- "Las Positas Goes Green" website

#### **Buildings and Energy**

- LEED Silver or equivalent rating for all new construction and renovations
- On-site production of electricity with Solar Panel Array (20% of the total in 2009)

Similarly, the report collected, presented and visualized our energy consumption in ways that were helpful for planning. The report focused on areas we can control versus more challenging to alter. For example, the college invested in two large solar power arrays that moved us toward energy independence. We purchased more electric vehicles, chose higher gas mileage models, and shifted to more efficient lighting. All of these contributed to reducing our overall carbon footprint. However, our data shows that our primary source of GHG emissions stems from transportation from our homes to our campus. This is an area that may represent our most significant challenge.

#### **Findings**

- Transportation is the primary source of GHG emissions for the college, nearly 80% of total
- Student commuting is 68% of the 2008 total with 77% of the 9,000 + students driving alone.

 Purchased electricity is Las Positas College's second highest source of GHG emissions (18% 2008)

#### Recommendations

- To become "grid neutral" by 2030, two additional megawatts of renewable energy.
- Increased energy efficiency will involve enhanced building energy management controls and expanding the central utility plant.

#### **Unfinished Goals**

- Generate Renewable Energy from additional sources (Solar, wind, other)
- Composting of organic material, construction waste diversion, and single-stream recycling.
- Implementation of a composting program with active use of composting "Earth Tub"

Most notably, the chancellors positively endorsed the first CAP:

"This Campus Climate Action Plan provides a pathway to achieving the college's near term goal of meeting a 15% reduction in emissions below 2008 levels by 2020 with consideration of the longer term vision of reaching carbon neutrality by 2050."

It is with these aspirations that the second CAP is written. It builds upon our accomplishments, further strengthens our ability to collect data, and provides a broader range of measures to implement. This Climate Action plan further moves the college toward a sustainable mindset and deepens our commitment. It challenges all college levels to integrate a comprehensive series of measures to shift our operating culture toward a carbon-neutral campus, a student ready to embrace a changing economy, and a more resilient community.

Based upon the work of the 2020-2021 Chabot Las Positas College Climate Fellows, this report expands the parameters of the 2010 Report and will focus on the following areas:

- 1. Operations & Greenhouse Gasses Emissions
- 2. Academics
- 3. Planning and Administration
- 4. Community Engagement

# 3 Greenhouse Gas Emissions Baseline & Update 2018

Las Positas College is on target to meet the preliminary step of the Chancellor's Office Climate Action and Sustainability Goals by creating a baseline emissions inventory. We have promising data from 2008-2010 and 2018. Measuring our consumption patterns and tracking our energy budget is critical to reaching carbon neutrality.

Our energy budget includes all aspects of college life, from managing campus facilities to using teaching materials and the journey we all take from our homes to campus. As you can imagine, the former is

much easier to calculate, like our home energy bill, versus the latter, which is more complex to measure.

Most importantly, we must equate our energy budget with producing greenhouse gas (GHG) emissions. Inventories recognize that we produce GHG directly by burning fossil fuels, i.e., gas in our vehicles, natural gas for heating, and other active combustion sources. In contrast, we also track indirect forms of GHG emissions from purchased energy with GHG as a byproduct of production and other indirect sources, such as campus commuting and materials bought and consumed.

The emissions inventory covers the following GHG sources, categorized into three areas: Scopes 1, 2, and 3.

Table 2 - Definitions of Scope 1, 2, And 3 Emissions

	DEFINITIONS OF SCOPE 1, 2, AND 3 EMISSIONS				
Scope 1	Direct and produced on-site	Emissions we directly produce from sources that we own and control.			
		Example, vehicle fuel and natural gas for heating.			
Scope 2	Indirect and purchased/produced sustainably	stem indirectly from where the energy is produced			
		Example, purchased electricity and on-site solar generation.			
Scope 3	Indirect and variable	Activities that do not fall under scopes 1 and 2.			
		Examples include campus commuting, travel to conferences, purchasing, and using materials.			

We currently have a well-defined methodology for quantifying greenhouse gas (GHG) emissions that are produced "in-house" and continue to develop more accurate ways to measure energy spent through other Scope 2 and 3.

The data in two studies of our GHG emissions, 2010 and 2018, have been consistent. The main sources of campus emissions stem from two areas: transportation and buildings. Each of these areas poses challenges to significantly alter (Figure 1).

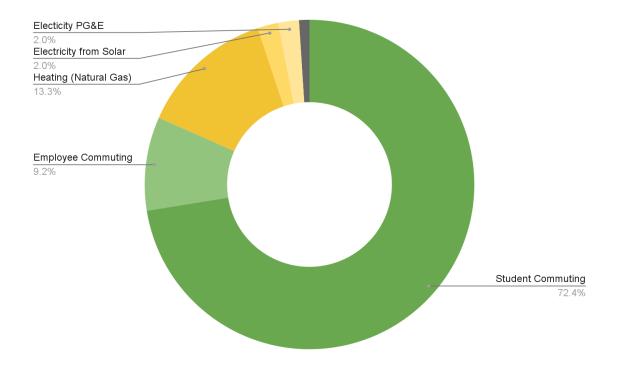


Figure 1 - GHG Emissions, 2018.

#### **Purchased Electricity**

Las Positas College has significantly reduced the amount of electricity purchased by becoming an energy producer. In 2009 and 2014, LPC invested in two solar arrays, generating over 50% of our electrical energy needs.

Table 3 - On-site Renewable Energy Generation

ON-SITE RENEWABLE ENERGY GENERATION	Year
Installed solar arrays over parking lots E and H with a total capacity of 1.1 MW	2009
Installed ground-mounted solar array with a total capacity of 1.2 MW	2014
Installed a 3-kW demonstration micro-solar grid at Building 1000	2018

Table 4 - Annual Electrical Energy Export and Usage (kWh)

ANNUAL ELECTRICAL ENERGY EXPORT AND USAGE (kWh)	FY2018
Annual solar energy produced on-site and exported	1,981,520
Annual purchased electricity used by the campus	3,879,997

#### **Buildings**

In the last two decades, Las Positas College has been transformed through two major voter-approved capital improvement bonds: a \$495 million bond passed in 2004 and a \$950 million bond in 2016. These monies have allowed the older, less sufficient buildings to be replaced by modern buildings designed to LEED silver status. LEED stands for Leadership in Energy and Environmental Design. It is a set of building standards and guidelines for sustainable buildings beyond current building codes. In parallel, the Central Plant has been expanded to accommodate this growth of new buildings and has been modernized to improve energy performance. The Central Plant efficiently provides hot and cold water used to heat all of the new buildings built since 2009 instead of inefficient traditional HVAC systems.

Table 5 - LEED Certification for New Buildings

LEED Certification for New Buildings	Year
Science Expansion Building achieved LEED Gold (1850)	2011
Barbara Francisco Mertes Center for the Arts achieved LEED NC Silver (4000)	2011
Student Services Center achieved LEED NC Silver (1600)	2012
Child Development Center achieved LEED NC Certified (2300)	2014
Academic Building achieved LEED NC Platinum (1000)	2018
Horticulture LEED NC Silver (3300)	2023
Public Safety, Advanced Manufacturing, and Transportation LEED NC Silver (3400/3500)	2023
Academic Support & Faculty Offices LEED NC Silver (2100)	2023
Viticulture and Winery Technology LEED NC Silver (3600/3700)	TBA (2024)
STEAM Building (TBA)	TBA (2028)

Table 6 - Energy Management & Efficiency

Energy Management & Efficiency	
Expanded the central utility plant to accommodate new buildings and improve energy performance	2009
All new buildings are connected to the campus building management system (BMS) to improve energy performance and occupant comfort	Ongoing
LED lighting retrofits are being implemented across campus	Ongoing
Retro -commissioning activities are performed to target efficiency opportunities in older buildings	Ongoing

#### **Transportation**

The most challenging area to make gains in reducing our carbon footprint is transportation. It represents the largest portion of our GHG emissions with few areas that are under direct control of college. Both students and staff use their vehicles to travel to campus. Since 2010, we have incentivized various ways to change commuter habits. Our student body offsets the cost of local public transport by making VTA free. We have invested in 24 electric vehicle charging stations at no cost up until 2023. To support bicycling, LPC has strategically installed bike racks across campus.

Other trends that offset transportation have been the diversification of teaching modalities, which allow students to take full or partial online courses. This has been an ongoing trend. However, it was dramatically developed and instituted during the COVID-19 pandemic. We currently offer more courses with virtual components, allowing added flexibility in how students interact with the campus directly. Similarly, many of our student services are available online; for example, academic counseling has increased its number of virtual appointment times. These trends have lessened the amount of GHG produced from transportation; however, they have not significantly altered commuter habits; we as a community prefer to drive alone to and from campus.

Table 7 - Transportation

TRANSPORTATION	
Installed 24 Level 2 electric vehicle chargers	2015 – 2018
Student body approved a transportation fee that funds free rides on Livermore Amador Valley Transit Authority (LAVTA) Wheels and Rapid buses	2018
Student parking permit fees raised for the first time in 17 years to encourage use of alternative transportation	2019
Transitioning the campus vehicle fleet to electric models	Ongoing
Increased the availability of online student services to reduce unneeded trips to campus	Ongoing
Improved on-campus dining options to reduce extra trips to/from campus	Ongoing
Expanded hybrid education courses so that both online and face-to-face learning opportunities are available	Ongoing

# 4 Operations

The last decade of successful climate-related initiatives provides a strong foundation for continued progress. However, the path forward will require increased focus and commitment. The benchmarks developed by the Community Colleges Chancellor's Office require significant institutional and structural shifts in five-year increments (See appendix). Las Positas College is on track to meet the first 2025 benchmark that involves creating a baseline inventory process for energy, water, and waste. More important and challenging will be the creation of a series of strategies for meeting the next two benchmarks in 2030 and 2035. These benchmarks direct significant GHG emissions reductions in all areas. This will require increasing the usage of renewable energy sources and developing a campus electrification strategy for heating.

With the Chancellor's Climate Action and Sustainability guidelines in mind, the following goals are a consolidated list of types of actions needed in the next decade.

Goal 1: Become a Net-Zero Energy Campus by 2035

Goal 2: Work Towards a 75% Reduction in GHG Emissions from 2018 Levels by 2035

Goal 3: Become a Zero-Waste Campus by 2030

Goal 4: Implement sustainability measures outlined in the 2018 Facilities Master Plan

Goal 5: Becoming a Net-Negative Campus - Increasing Carbon Sequestration

### Goal 1 Become a Net-Zero Energy Campus by 2035

We are halfway to meeting our current electrical needs using solar energy. By adding 2 MW of oncampus-produced renewable energy, we would be grid-independent by 2030. Additional renewable energy sources would be needed to support the transition from natural gas to electrical HVAC. We will need to diversify our energy sources to include wind and a battery storage system. This would support evening workloads and allow for climate resiliency, mitigating power outages. Also, replacing the guts of the battery backup system with new technology would leverage existing hardware. Ultimately, the hope is to replace existing solar with a more efficient model when our current system reaches its life cycle end game and add solar panels to building 3400/3500.

- Action 1.0: Update District Policy for new buildings/renovations to Gold Leed Standard
- Action 1.1: Increase energy from renewable sources such as solar and wind.
- Action 1.2: Install/renovate energy storage battery system

#### Goal 2: Work Towards a 75% Reduction in GHG Emissions from 2018 Levels by 2035

This is the most challenging area that eludes simple solutions. It requires making infrastructure investments and creating incentives to change our commuting habits. A multi-prong approach includes working with public transport agencies, carpooling programs, developing bicycle transportation, and expanding EV charging stations. Since most of our emissions are related to our weekly commute, and most of us drive alone, increasing our ridesharing incrementally would make a significant impact.

• Action 2.0: Electrify campus heating and cooling systems

- o The use of natural gas in buildings has been reduced by 75%.
- Action 2.1: Continue to invest in free public transportation for students
- Action 2.2: Develop and incentivize a robust carpooling system for students
- Action 2.3: Offer public transportation or carpool reimbursements for employees
- Action 2.4: Increase EV charging on campus
  - o Provide EV charging for disability parking spots
- Action 2.5: Improve bicycle campus and feeder routes
  - o Promote biking workshops and bike maintenance workshops with Bike East Bay.

### Goal 3: Implement sustainability measures outlined in the 2018 Facilities Master Plan

Further, incorporate the Climate Action Plan recommendations into the Facilities Master Plan to "Ensure that the campus achieves ecological balance and promotes resource conservation where possible." <sup>5</sup>

- Action 3.0 Continue development of landscaping areas reflective of local native species.
- Action 3.1 Continue protecting mature vegetation.
- Action 3.2 Institutionalize the Eastern Alameda County Conservation Strategy for sensitive species.
- Action 3.3 Increase shade tree canopies to reduce the heat island effect
- Action 3.4 Align CAP goals and strategies with the Facilities Master Plan

#### Goal 4: Become a Zero-Waste Campus by 2030

In Spring, 2022, Las Positas College and Chabot College began working with the Post-Landfill Action Network (PLAN)<sup>6</sup> to conduct an Atlas Zero Waste Stage 1 Assessment of both campuses' capacities to achieve zero waste. This includes renovations, hiring of additional program staff to manage logistics, acquiring infrastructure, collection bins, and establishing contracts with hauling and materials management companies to process materials for composting and recycling.

- Action 4.0 Actualize findings from the 2022 Zero Waste Strategic Vision ATLAS report.
- Action 4.1 Develop a tracking system for consumables: paper, pens, office stuff, etc.

#### Goal 5: Achieve a Net-Negative Campus - Increasing Carbon Sequestration

As the college continues to invest at the same pace and scale as the past decade, we will be on track to be carbon neutral for our operations by 2035. Based on a preliminary 2022 Carbon Sequestration survey, there are significant opportunities for growing our ability to sequester carbon beyond our

<sup>&</sup>lt;sup>5</sup> <u>2018 Facilities Master Plan</u>, See page 16.

<sup>&</sup>lt;sup>6</sup> Post-Landfill Action Network (PLAN)

<sup>&</sup>lt;sup>7</sup> CLPCCD Zero Waste Strategic Vision 2022.

current baselines. Las Positas College can be an example for the Tri-Valley area and other community colleges.

- Action 5.0 Campus Tree Planting Program
- Action 5.1 Create a regional tree nursery repository
- Action 5.2 Study reestablishing oak woodlands on all district properties

# 5 Planning and Administration

In response to the growing need for key personnel and infrastructure to coordinate, implement, and direct sustainability efforts, Las Positas College envisions a Sustainability Center on Campus to provide a hub for the Sustainability Director and Project Coordinator, staff, and students. Without consistent key personnel on staff and a centralized campus location, there has been a lack of infrastructure to support and implement sustainability-related projects and action items related to the California Community College Climate Action and Sustainability Goals established in 2021 by the Community College Chancellor's Office. A Sustainability Program Director and Coordinator position is an integral step forward in implementing the strategies necessary to achieve the benchmarks in 2030 and 2035. With this said, the Sustainability Center would need to be integrated into administrative decision-making groups and have access to district funding streams to be effective.

The following goals and action items related to planning and administration have been issued to advance sustainable practices within and beyond the college community:

Goal 1: Institute a Sustainability Office at Las Positas

Goal 2: Increase Participation of Faculty, Admin, and Staff in Sustainability

Goal 3: Create a green fund to finance projects outlined in the Climate Action Plan

# Goal 1: Institute a Sustainability Office at Las Positas

The LPC Sustainability Hub will be the focal point for planning, coordination, and collaboration as a dedicated environment for sustainability projects, teaching resources, workshop space, upcycling facilities, storage for donated materials, etc. to emphasize student and faculty engagement.

The center will provide a safe space to discuss climate-related issues where doubts, concerns, and climate action solutions are expressed. Establishing a formal Sustainability Office provides a structured foundation for coordinated efforts and aims to increase student, faculty, administrators, and staff participation, fostering a campus-wide commitment to sustainability.

- Action 1.0: Hire a permanent sustainability director to oversee projects outlined in the CAP
- Action 1.1: Locate a permanent location on campus for a sustainability office or center.
- Action 1.2: Hire a college-wide grant writer to apply for a wide range of funding streams, including sustainability-related areas. These would include private foundations, federal programs, counties, and other local funding streams.

#### Goal 2: Increase Participation of Faculty, Staff, and Admin in Sustainability

Faculty, administration, and staff are interested in implementing sustainability projects and practices on campus. An infrastructure must be established to support and increase cross-campus collaboration and participation to support this eagerness. Encouraging leadership and participation to support staff willing to climatize curriculum, encouraging faculty and administrators to help make climate-related decisions impacting our campus (i.e., hiring committee participation), and creating and maintaining relationships

with campus affinity groups are essential for a robust sustainability effort.

- Action 2.0: Encourage employees to join the Las Positas Climate Action Workgroup
  - O Administrative support for meetings and documentation
  - O Encourage cross-campus collaboration with Chabot
- Action 2.1: Institute a practice whereby faculty/staff specialties are present for climate-related decision-making moments, ex. hiring committees, LPC contractional decisions for cafeterias, suppliers, etc.
- Action 2.2: Align the schedule of the president speaker series and other departments with Earth Week activities.
- Action 2.3: Improve cohesion with the Student Equity and Achievement department and campus affinity groups.
  - O Work to eliminate gaps in student participation in sustainability for underrepresented students
  - O Connect sustainability topics to culturally relevant events

#### Goal 3: Create a LPC Green Fund to finance projects outlined in the Climate Action Plan

A LPC Green Fund is essential to support the sustainability efforts on our campus. Funding is necessary to enact Climate Action Plan goals and improve the proposed infrastructure changes to enhance our campus' carbon footprint related to facility upgrades, renovations, and sustainability-specific projects. In addition, funding would allow the Sustainability Center to support LPC as a Green Hub, which would increase our connections to the campus community and the community at large as LPC would be able to offer community partnerships, education, outreach, and resources (for example, community and campus gardens with an emphasis on sustainable and biodynamic techniques, drought resistant planting, community workshops around water saving measures, drip irrigation and fund a new tree seedling growth center). To support our faculty and staff, the Green Fund could offer stipends for faculty who desire to climatize curriculum and promote Earth Week activities and workshops.

- Action 3.0: Create a line item in the college budget to provide annual funding for sustainability projects
  - These include scholarships, host fellows, academic collaboration, forums, green industry groups, and local community agencies.
- Action 3.1: Create an LPC Foundation funding goal oriented toward LPC green projects
- Action 3.2: Apply for grants that provide funding for campus sustainability
- Action 3.3: Host a giving campaign among the greater Las Positas community to crowdfund goals.

Goal 4 Integrate Las Positas College into AASHE STARS

AASHE is the Association for the Advancement of Sustainability in Higher Education. They have numerous resources for colleges and universities including the online STARS system. STARS stands for their Sustainability Tracking, Assessment & Rating System. During the 2021-22 Academic Year, our CLPCCD Climate Fellows and their interns worked hard to gather a wide range of information at both colleges and the district and created a baseline to track our progress. It is critical that this is maintained and updated so that we can evaluate our progress, compare our performance with other colleges, and identify areas of improvement.

Sustainability Tracking, Assessment & Rating System

- Action 1.0: Re-enroll in the AASHE STARS (https://stars.aashe.org/) program
- Action 1.1: Create a more efficient system for reporting and updating information online.
- Action 1.2: Share the findings from this resource with college constituencies and use them to plan future actions.

# 6 Academic

Before 2010, our college catalog offered a limited number of courses and even fewer programs focused on humanity's relationship with the environment. At least five courses directly addressed the environment from a natural and social science perspective. At the Program level, Geography, Geology, and Economics each highlighted environmental concerns as a focal point in their program descriptions.

"Economics is central to many issues facing us today—job creation, wage determination, health-care reform, future of social security, economic prosperity, and **environmental sustainability** all require knowledge of economics. Economics, often called the "science of choice," analyzes how individuals, households, firms, and governments interact. Understanding those interactions is a distinctive feature of economics as a discipline and explains why so many everyday issues have an important economic dimension." (92, bold added)

The Economics program offered and continues to make a rallying call for environmental awareness, plainly associating the challenges we face with a "question of choice," and it seems that Las Positas College had chosen. The following year, the college created the Environmental Studies program and began a preliminary list of courses covering sustainable concepts: Biology/Chemistry: Algae to Fuels; Automotive: Hybrid Technology; History: Environmental Law; and Engineering/Architecture: Green Technology and Green Building Design.

Since 2010, Las Positas College has increased the number of courses incorporating climate-related topics and themes. More programs directly describe climate-related issues and sustainability as central to their learning outcomes. However, we currently do not track these trends. We need to learn more about how each discipline approaches the issues around climate change.

The following goals offer ways to document our progress and further increase climate literacy among our faculty, staff, and, ultimately, our students. These will encourage a broad campus-wide movement for awareness and action in a data-driven, deliberate, and systematic.

Goal 1: Expand Climate-Focused and Climate-Related Curriculum

Goal 2: Encourage Sustainable Teaching Practices

Goal 3: Increase Climate Literacy Amongst the Student Body

Goal 4: Utilize Las Positas College Campus as a Living Lab for Climate Education

#### Goal 1: Expand Climate-Focused and Climate-Related Curriculum

Our programs and courses are increasingly addressing climate change; however, we have few data points that describe where these changes are taking place. The first action creates a baseline report of how sustainability is represented in our curriculum. This would include a review of our course titles, descriptions, outlines of records, and student learning outcomes to better visualize how our college is teaching sustainability.

This baseline report would help us identify gaps in our current offerings and highlight areas of strength. Predictably, it will show the extent of expertise among our faculty and the range of how sustainability is being taught. Data points will also allow us to show a sustainably oriented pathway for students.

The following Actions support this effort to support and bolster our climate curriculum through various means:

- Action 1.0: Incorporate sustainability goals in future academic master planning documents
- Action 1.1: Create a baseline review of how sustainability is represented in the curriculum.
- Action 1.2: Encourage sustainability focuses in core required and ancillary courses
- Action 1.3: Incentivize climate-related content into curriculum
- Action 1.4: Highlight the interdisciplinary nature of climate change.
- Action 1.5: Encourage sustainability-focused SLO's

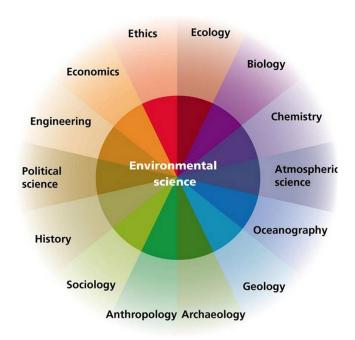


Figure 2 - Interdisciplinary Approach

# Goal 2: Increasing our Sustainable Practices in our Teaching

Our college is steadily embracing the digital/virtual shift in education. Our use of paper is decreasing as we leverage various digital materials. The Canvas online teaching software shifts much of our content away from paper. The number of courses allowing students to interact remotely is significant compared to past decades. Similarly to the previous goal, it is necessary to document our current green teaching practices to identify areas for improvement. This will allow us to create a better system of best practices, share successes, and track progress. It will also enable students to choose courses and pathways that are "Green" or have a low carbon footprint.

- Action 2.0: Implement a baseline review of green teaching practices.
- Action 2.1: Create a sustainability green leaf to identify courses with sustainability topics or are offered with a zero-carbon footprint (i.e., digital texts vs. hardcover)
- Action 2.2: Increase Open Educational Resources (OER) for sustainability content
- Action 2.3: Continued shift to digital course materials, fillable PDFs, and other green-friendly formats.

# Goal 3: Make Climate Literacy Part of Our Campus Culture

There are many opportunities to strengthen climate literacy campus-wide. Our campus culture is vibrant and active across all disciplines. Incorporating climate-related topics into existing monthly events and programming would raise awareness. Most importantly, continue support of Earth Month, Earth Week, and other events such as Bike to School/Work. More broadly, this would involve including climate themes in other annual programming such as our Theater, Music, Film festival, Literacy Festival, and speaker series. Internally, Flex Day would offer opportunities to share ideas, teaching methods, and cross-disciplinary perspectives. Similarly, other professional development events could highlight scholarly trends and best practices.

- Action 1.0: Integrate sustainability and climate-related themes into campus activities.
- Action 1.1: Promote collaboration between academic departments through Flex Day and other professional development events.

#### Goal 4: Utilize Las Positas College Campus as a Living Lab for Climate Education

We are well positioned to offer our students real-life examples of how to model sustainability practices. The decisions we make and practices we incorporate are valuable discussion points about how institutions grapple with climate change. All district levels respond to policy and create their own policies. Similarly, local industries are addressing their carbon footprint, creating Climate Action Plans, and hiring for sustainability-related positions. Each area is an excellent teaching example and can allow students to witness the decision-making processes.

Las Positas College is also uniquely positioned to act as a living lab. Our campus generates significant data points that help teach how the campus is adjusting to and experiencing climate change. The last ten years of renovations and new buildings uniquely compare past and present energy efficiency. Our horticulture and Viticulture and Winery programs offer state-of-the-art facilities to track the impact of climate change on crops and landscaping. Lastly, our position as an energy producer, consumer, and waste generator allows a first-hand look at energy and waste streams. These are only a few areas where our students can directly observe, ask questions, and draw conclusions about directly related subjects.

- Action 3.0: Incorporate climate-related campus based research into the curriculum
- Action 3.1: Partner with local industries and organizations to support off-campus research
- Action 3.2: Collaborate with LLNL and other industries to create on-campus opportunities

# 7 Engagement & Leadership

Las Positas College fosters leadership by promoting student and faculty engagement on campus and within the community. At the heart of our approach lies a deep commitment to amplifying student voices and perspectives while creating a space for conversations and discussions to tackle climate-related issues and sustainable solutions. As students engage, they build confidence in their abilities, empowering them to be part of a campus and community-wide effort during their academic journey. Fostering leadership opportunities on campus is essential as we continue to bolster the sustainability-focused internship programs and student club efforts (LPSEA) and connect students to employment opportunities in the environmental and sustainability sector. In addition, increasing opportunities for staff to increase their climate action literacy is an essential component of campus-wide engagement.

There are many ways to involve and align students, faculty, staff, and community entities to the climate action goals relating to engagement. For example, a "Hort to Table" initiative would increase healthy food accessibility on our campus with a community garden and a Master Gardener component, which could potentially stock the LPC Mini-Market and provide our food distribution program (The Market) with campus-grown fruits and vegetables. In addition, this would give LPC students and staff a chance to increase self-efficacy through gardening courses designed to align with a climatized curriculum that bolsters sustainability practices such as biodynamic farming methods.

As a hub for sustainability in the Tri-Valley region, LPC would collaborate with other groups and invite climate action leaders from local cities and businesses to share insights and collaborate. By working closely with organizations like the Quest Science Center and Innovation Tri-Valley we create pathways for internships and experiential learning, bridging academia with real-world impact through programming such as the Youth Climate Ambassador program. In addition, LPC would continue to build and maintain relationships with community colleges in the surrounding Bay Area to support initiatives such as the Bay Area Environmental Justice Assembly, which is a gathering of local industry partners that helps us to guide best practices in curriculum development and our CTE programs based on the skills needed in today's workforce. In addition, developing and maintaining a "Green Social Media Presence" would further our efforts on campus and community outreach and highlight current and potential collaborations.

Goal 1: Foster Leadership Opportunities for Students in Campus Sustainability

Goal 2: Offer Sustainability-Focused Professional Development Opportunities for Staff

Goal 3: Engage Community Partners in Campus Sustainability Efforts

Goal 4: Expand the Las Positas Green Social Media Presence

# Goal 1: Foster Leadership Opportunities for Students in Campus Sustainability

- Action 1.0: Institute a rotating campus-wide sustainability officer in the LPCSG
- Action 1.1: Continue the student internship program
- Action 1.2: Connect students with employment opportunities in the environmental sector
- Action 1.3: Support Student Clubs in continuation of leading campus environmental efforts

# Goal 2: Offer Sustainability-Focused Professional Development Opportunities for Staff

- Action 2.0: Lead climate-related FLEX training each year
- Action 2.1: Encourage supplemental professional development training for staff
- Action 2.2: Funding for staff, faculty to attend sustainability-focused events
- Action 2.3: Include sustainability element in new faculty orientation

### Goal 3: Engage Community Partners in Sustainability Efforts

- Action 3.0: Host annual campus events with community partners
- Action 3.1: Strengthen collaboration between Las Positas and Chabot Colleges
- Action 3.2: Increase partnerships with the Cities of Livermore, Dublin, and Pleasanton
- Action 3.3: Cultivate internship opportunities for students with local firms
- Action 3.4: Partner with cities for funding, co-funding, sharing of information
- Action 3.5: Work with high school environmental clubs and groups

### Goal 4: Expand the Las Positas Green Social Media Presence

- Action 4.0: Update the Las Positas Green website
- Action 4.1: Continue developing social media pages for Las Positas' sustainability efforts
- Action 4.2: Engage with campus and local news networks to reach a larger demographic

# 8 Future Reporting

This report will aid us in reaching the California Community Colleges Chancellors Office Climate Action and Sustainability Goals. These goals are spaced apart at 5-year intervals from 2025 to 2035. Like our other guidance documents, subsequent reports are expected to be at this cadence and in sync with our other central documents. It would be most impactful if it directly preceded the Facilities Master Plan since this plan is most directly tied to the Chancellor's Office Climate Action and Sustainability Goals. Climate Action Plans are an emergent reporting process. It is relatively new to us and other similar institutions; this means that it is expected that it will evolve and change.

Although future Climate Action Plans will differ, we intend to provide a framework to build upon that inspires leadership, action, and advocacy at all levels. It will require reallocating resources, discovering new funding streams, and altering campus culture. We expect that the latest Climate Action Coordinator, in conjunction with the Facilities and Sustainability Committee, the Vice Chancellor of Facilities, the Director of Maintenance and Operations, and the Vice President of Business Services, will use this report to create realistic timelines to implement the goals and action items.

- Action 1.0: Implement tracking mechanisms with our Office of Research, Planning and Institutional Effectiveness
- Action 1.1: Create a periodic checklist for facilities and operations.
- Action 1.2: Share best practices with other institutions.

# Appendix A - District and Administrative Policy

# Chabot-Las Positas Community College District Board Policy

**BP 3580** 

**General Institution** 

**BP 3580** SUSTAINABILITY

#### Reference:

Education Code Section 76360; Vehicle Code Section 21113

The Board of Trustees encourages the colleges to engage in environmental stewardship as a member of the greater Alameda County community. The district and the Colleges play a critical role in the educational, economic, and environmental health of the region. As a part of this responsibility, the district recognizes the importance of addressing sustainability in its daily operations to provide stewardship of the environment, as well as provide students with the knowledge and skills to succeed in the green economy.

- The district will provide a leadership role in sustainability through several means"
- Developing a district/College sustainability plan which concisely identifies the vision for sustainability, guiding principles and action necessary to implement the plan.
- Actively engaging faculty, students and staff in preparation and implementation of the sustainability program.
- Building greater awareness of sustainability and environmental justice within the colleges and within the greater Alameda County community.
- Working with the colleges and other agencies on internal and external funding opportunities.
- Aligning with the Board of Governors Climate Action and Sustainability Framework Resolution and Policy.
- · Supporting "just transitions" from high-carbon activities to the green economy.

Adopted: December 13, 2022

BP 3580 Chabot-Las Positas Community College District

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Figure 3 - Appendix A - Board Policy 3580 SUSTAINABILITY

# Chabot-Las Positas Community College District Administrative Procedure

AP 3580

**General Institution** 

#### AP 3580 SUSTAINABILITY

#### References:

Education Code Section 76360; Vehicle Code Section 21113

The district office and colleges will develop a sustainability plan with participation by the District IPBM Facilities Committee, Chabot College Facilities, Infrastructure and Technology Committee, and the Las Positas Facilities and Sustainability Committee members with input from the campus communities through public forums and other means.

The sustainability plan will guide future sustainability efforts at the district and at colleges. The work will focus on providing a "just transition" from high-carbon activities into the green economy, seeking to ensure harm to workers, communities, and regions are avoided while maximizing the benefits of climate action. The plan will be organized around the following categories:

- 1. Green buildings (leadership in energy and environmental design)
- 2. Energy conservation and renewable energy
- 3. Water conservation
- 4. Waste, recycling, and composting
- 5. Transportation
- 6. Business practices and policies
  - a. Green procurement practices
- 7. Academic instruction (sustainability curricula across the disciplines) and workforce training
- 8. Climate/greenhouse gas emissions (President's climate commitment)
  - a. Adopt the sustainability tracking, rating and assessment system (stars)
- 9. Communication and outreach
- 10. Funding (internal and external sources)
- 11. Environmental justice
- 12. Sustainable grounds management
  - a. Integrated pest management, carbon positive land management, campus as a living lab and ecosystem in line with the California 30x30 goals.
- 13. Food systems

AP 3580 Chabot-Las Positas Community College District

Page 1 of 2

Figure 4 - Appendix B - Administrative Policy 3580 SUSTAINABILITY

review and	ellor, or designee, will submit the Sustainability Plan provide regular reports on the progress of the sustai	to the Board for its nability effort.
Adopted:	November 15, 2022	
AP 3580 Ch	nabot-Las Positas Community College District	Page 2 of 2

# Appendix C - Las Positas College - Timeline of Scope Emissions

	LAS POSITAS COLLEGE	2005	2006	2007	2008	2018	2023
Scope 1	Direct Transportation	37.4	37.7	21.8	33.4		
30000	Agriculture	0.2	0.2	0.2	0.2		
Scope 2	Purchased Electricity	2,297.8	2,723.9	2,642.3	2,629.3		
	Faculty / Staff Commuting	1,020.2	1,171.6	1,259.2	1,344.8		
	Student Commuting	9,221.2	9,919.0	10,461.4	9,847.3		
	Directly Financed Air Travel	51.8	52.5	68.0	82.6		
	Other Directly Financed Travel	19.5	17.4	22.1	25.5		
	Study Abroad Air Travel	73.2	79.5	104.8	168.6		
Scope 3	Solid Waste	18.5	19.1	14.3	17.9		
	Wastewater	1.0	1.1	1.3	1.3		
	Paper	12.3	13.6	13.5	14.6		
	Scope 2 T&D Losses	227.3	269.4	261.3	260.0		
Offsets	Additional	-3.5	-4.6	-4.8	-4.8		
	Scope 1	37.6	37.9	22.0	33.6	1,687	
	Scope 2	2,297.8	2,723.9	2,642.3	2,629.3	1,003	
	Scope 3	10,645.0	11,543.2	12,205.9	11,762.6	10549	
Totals	All Scopes	12,980.4	14,305.0	14,870.2	14,425.5		
	All Offsets	-3.5	-4.6	-4.8	-4.8		
	Net Emissions	12,976.9	14,300.4	14,865.4	14,420.7		
	Students - ALL FTE	7,421	9,620	10,298	10,123		
Populati	Faculty and Staff	313	358	386	408		
on	TOTAL Campus Community	7,734	9,978	10,684	10,531		
Emissio	MTCO2e/Student	1.75	1.49	1.44	1.43		
ns Per Capita	MTCO2e/Campus Community	1.68	1.43	1.39	1.37		

Figure 5 - Appendix C - Las Positas College - Timeline of Scope Emissions

# Appendix D - California Community Colleges Chancellors Office - Climate Action and Sustainability Goals

STARS Category	Subcategory	2025 Benchmark	2030 Build and Institutionalize	2035 Improve and Reassess
Operations	Greenhouse Gas Emissions Reduction	Conduct emissions inventory baseline and create a climate action plan.	Reduce greenhouse gas emission to 75% below baseline.	Reduce greenhouse gas emission to 100% below baseline.
Operations	Green Buildings	Benchmark energy usage intensity for each building.  Develop Zero Net Energy (ZNE) and campus electrification strategy.  Conduct Leadership in Energy and Environmental Design (LEED) and/or WELL assessment of existing buildings.	All new buildings and major renovations constructed as ZNE ready.  All new buildings certified LEED or WELL Gold.  Use of natural gas in buildings reduced by 30%.	All new buildings and major renovations constructed as ZNE.  All new buildings certified Zero Carbon.  All existing buildings LEED O&M Gold or WELL Gold equivalent.  Use of natural gas in buildings reduced by 75%.
Operations	Energy	Establish a campus Energy Use Intensity (EUI) score.  Conduct Effective Useful Life (EUL) analysis of all gas using appliances and systems; plan for electrification of systems with EUL of <10 years.	Decrease EUI by 25% compared to the campus benchmark. Produce or procure 75% of site electrical consumption on an annual basis using renewable energy.	Decrease EUI by 40% compared to the campus benchmark. Accomplish Net Zero Energy Campus.
Operations	Water	Benchmark potable water usage and create a water balance.  Identify potential non-potable water resources.  Create a landscape zoning map and irrigation metering strategy.  Adopt the California Community College Model Stormwater management program.	Reduce potable water usage from baseline level by 25%.  Landscape irrigation systems of 2500 square feet or greater shall be separately metered (unless using local or municipal reclaimed water system).  Landscape planting materials shall be 90% native species to the climate and geographical area of the college.  Follow MS4 requirements.  Irrigated turf grass shall not exceed  50% of the landscaped areas on campus.	Reduce potable water usage from baseline level by 50%.  Stormwater runoff and discharge shall be limited to predevelopment levels for temperature, rate, volume and duration of flow through the use of green infrastructure and low impact development for the campus.  Stormwater runoff and discharge shall be limited to predevelopment levels for temperature, rate, volume and duration of flow through the use of green infrastructure and low impact development for new buildings and major modifications.
Operations	Waste	Conduct waste categorization assessment.  Benchmark and comply with Title 14, Division 2, Chapter 5 (Beverage Container Recycling and Litter Reduction Act).  Benchmark and comply with Title 14, CCR Division 7.  Conduct an AB 341 compliance assessment.  Centralize reporting for waste and resource recovery.  Conduct total material consumption benchmark.	Achieve zero waste to landfill.  Conduct circularity analysis.  Reduce total material consumption compared to the benchmark by 10%.	Maintain zero waste to landfill.  Increase material circularity by 25%.  Decrease consumption of materials by 25%.

Operations	Purchasing and Procurement	Benchmark sustainability characteristics of existing products and services.  Adopt a sustainable procurement policy and administrative procedure.  Purchase environmentally and socially preferable electronic products.	Increase procurement of sustainable products and services by 25% compared to benchmark levels.	Increase procurement of sustainable products and services by 50% compared to benchmark levels.
Operations	Transportation	Conduct accounting and conditions assessment of fleet vehicles.  Assess remainder rolling stock for potential electrification.  Develop Electric Vehicle (EV) charging infrastructure to encourage faculty, staff and students to use EVs.  Promote accessible shared transport methods.  Make pedestrian and bicycle access improvements.	50% of new fleet vehicles are zero emission vehicles. 50% of rolling stock are zero emissions.  Consider implementing green parking permits.	100% of new fleet vehicles are zero emission vehicles. 100% of rolling stock are zero emissions.
Operations	Food Systems	Consider signing the Real Food Campus Commitment.  Benchmark and track sustainable food purchases in alignment with the Real Food Challenge guidelines, or equivalent.	Strive to increase campus sustainable food purchases v. baseline by 20%.	80% of food served on campus meets the requirements of the Real Food Challenge or equivalent.

Figure 6 - Appendix D - CCCC Office Climate Action and Sustainability Goals

# Appendix E - OPERATIONS - Representation of Goals as a Timeline and Planning Table

OPERATIONS									
Goal 1 Become a Net-Zero Er	nergy Campus by 20	035							
Action	Oversight	Inventory	Tracking	Assess	Plan	Fund	2025	2030	2035
Update District Policy for new buildings/renovations	Board Policy						х		
Increase energy from renewable sources.	District/M&O	х	х	х				х	
Install/renovate energy storage battery system	District/M&O	х		х					
Goal 2: Work Towards a 75%	Reduction in GHG	Emissions fro	m 2018 Leve	ls by 2035					
Electrify campus heating and cooling systems	District/M&O	х	х	х					x
Invest in free public transportation for students	District/LPC	Survey							
Develop robust carpooling system for students	District/LPC	Survey							
Create carpool program for employees	District/LPC	Survey							
Increase EV charging	District/LPC		Х	Х					
Improve bicycle campus and feeder routes	District/LPC	Survey		х					
Goal 3: Implement sustainab Plan	ility measures outli	ned in the 20	18 Facilities	Master					
Development of landscaping of local native species	LPC/M&O/Hort	х	х	х					
Protect mature vegetation.	LPC/M&O/Hort	х	Х	Х					
Eastern Alameda County Conservation Strategy	LPC/M&O/Hort	х		х	х				
Increase shade tree canopies	LPC/M&O/Hort	х	х	х	х				
Align CAP goals and strategies with the Facilities Master Plan	District/LPC/M &O								

Figure 7 - Appendix E - OPERATIONS - Timeline & Planning 1 of 2

#### **OPERATIONS** Goal 3: Implement sustainability measures outlined in the 2018 Facilities Master Plan Action Oversight Plan Fund 2025 2030 2035 Inventory Tracking Assess Development of landscaping of local native LPC/M&O/Hort Х Х Х Х species LPC/M&O/Hort Protect mature vegetation. Х Х Х Eastern Alameda County LPC/M&O/Hort Х х Х **Conservation Strategy** Increase shade tree LPC/M&O/Hort Х Х Х Х canopies Align CAP goals and District/LPC/M strategies with the &O Facilities Master Plan Goal 4: Become a Zero-Waste Campus by 2030 Actualize ATLAS report District/LPC Goal 5: Achieve a Net-Negative Campus - Increasing Carbon Sequestration Tree planting program LPC/M&O/Hort Х Х Regional tree nursery LPC/M&O/Hort Х Х Х repository Study reestablishing LPC/M&O/Hort woodlands on district Х Х Х properties

OPERATIONS									
Goal 1 Become a Net-Zero Er	nergy Campus by 20	)35							
Action	Oversight	Inventory	Tracking	Assess	Plan	Fund	2025	2030	2035
Update District Policy for new buildings/renovations	Board Policy						х		
Increase energy from renewable sources.	District/M&O	х	х	х				х	
Install/renovate energy storage battery system	District/M&O	х		х					
Goal 2: Work Towards a 75%	Reduction in GHG	Emissions fro	m 2018 Leve	ls by 2035					
Electrify campus heating and cooling systems	District/M&O	х	х	х					Х
Invest in free public transportation for students	District/LPC	Survey							
Develop robust carpooling system for students	District/LPC	Survey							
Create carpool program for employees	District/LPC	Survey							
Increase EV charging	District/LPC		Х	х					
Improve bicycle campus and feeder routes	District/LPC	Survey		Х					
Goal 3: Implement sustainab Plan	ility measures outli	ned in the 20	18 Facilities I	Master					
Development of landscaping of local native species	LPC/M&O/Hort	х	x	Х					
Protect mature vegetation.	LPC/M&O/Hort	х	Х	х					
Eastern Alameda County Conservation Strategy	LPC/M&O/Hort	х		Х	х				
Increase shade tree canopies	LPC/M&O/Hort	х	х	х	х				
Align CAP goals and strategies with the Facilities Master Plan	District/LPC/M &O								

# Appendix F - ADMINISTRATION - Representation of Goals as a Timeline and Planning Table

Planning and Administration									
Goal 1: Institute a Sustainability Office at Las Positas									
Action	Oversight	Timeline	Resources	Notes / Status					
Hire a permanent sustainability director									
Create campus for a sustainability office or center									
Hire a College wide grant writer									
Goal 2: Increase Participation of Faculty, Staff, and	d Administration on	Sustainability	1						
Las Positas Climate Action Workgroup									
Leverage faculty/staff specialties in decision making									
Align speaker series with earth week									
Align Student Equity and Achievement goals									
Goal 3: Create a LPC Green Fund to finance project	cts in the Climate Ac	tion Plan							
provide annual funding for sustainability projects									
LPC Foundation funding goal for green projects									
Apply for grants for campus sustainability									
LPC community Giving campaign									
Goal 4 Integrate Las Positas College into AASHE S	TARS								
Re-enroll in the AASHE STARS									
Report and update STARS information online									
Share STARS with Other Colleges									

Figure 8 - Appendix F - ADMINISTRATION Timeline and Planning Table

# Appendix G - ACADEMIC - Representation of Goals as a Timeline and Planning Table

Academic				
Goal 1: Expand Climate-Focused and Climate-	Related Cu	ırriculum		
Action	Oversight	Timeline	Resources	Notes / Status
baseline review of curriculum.				
Sustainability focus in core courses				
sustainability related courses				
Incentivize climate-related content				
Encourage interdisciplinary sharing				
Sustainability focused SLO				
Goal 2: Increasing our Sustainable Practices in	our Teach	ning		_1
baseline review of green teaching practices.				
Identify courses with sustainability topics				
(OER) for sustainability content				
digital course material				
Goal 3: Make Climate Literacy Part of Our Car	npus Cultu	re	<u> </u>	
sustainability themes into campus activities				
Flex Day and professional development events				
Goal 4: Utilize Las Positas College Campus as	a Living Lak	for Clim	ate Education	on
project-based learning in the curriculum				
LLNL partnership to create on-campus opportunities				
Partner with local industries/organizations				
	1	l	i	<del>-</del>

Figure 9 - Appendix G - ACADEMIC - Timeline and Planning Table

# Appendix H - ENGAGEMENT - Representation of Goals as a Timeline and Planning Table

Engagement								
Goal 1: Foster Leadership Opportunities for Students in Campus Sustainability								
Action	Oversight	Timeline	Resources	Notes / Status				
sustainability officer in the LPCSG								
student internship program								
employment opportunities in the environmental sector								
Support Student Clubs								
Goal 2: Offer Sustainability-Focused Profession	al Develop	ment Opp	ortunities	or Staff				
FLEX training								
professional development								
Funding for staff, faculty to attend events								
new faculty orientation								
Goal 3: Engage Community Partners in Campus	s Sustainak	ility Effort	:S					
Host annual campus events								
Collaborate with local sustainability groups								
collaboration LPC and Chabot Colleges								
collaboration with local Cities								
collaboration with high school								
Internship opportunities								
Partnerships with cities for funding								
Youth Climate Ambassador program								
Goal 4: Expand the Las Positas Green Social Media Presence								
Las Positas Green website								

social media pages		
Engage with local news networks		

Figure 10 - Appendix H - ENGAGEMENT - Timeline and Planning Table

# Appendix I - Next Report - Representation of Goals as a Timeline and Planning Table

Next Report									
Goal 1: Foster Leadership Opportunities for Students in Campus Sustainability									
	Oversight	Timeline	Resources	Notes / Status					
Goal 2: Offer Sustainability-Focused Professional	Development Op	portunities for	Staff						
Goal 3: Engage Community Partners in Campus S	ustainability Effo	rts							
Goal 4: Expand the Las Positas Green Social Medi	a Presence								

Figure 11 - Appendix I - NEXT REPORT - Timeline and Planning Table