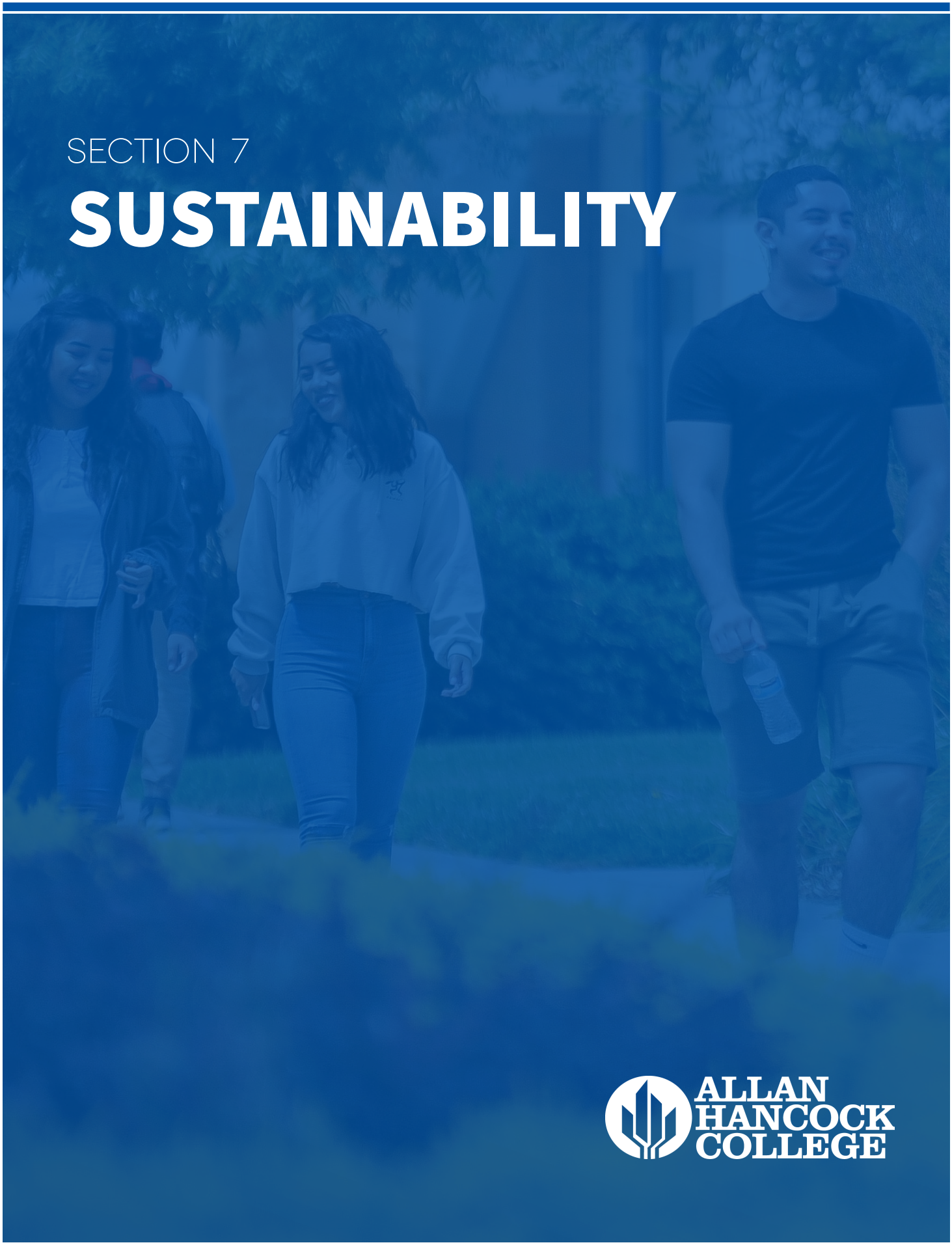
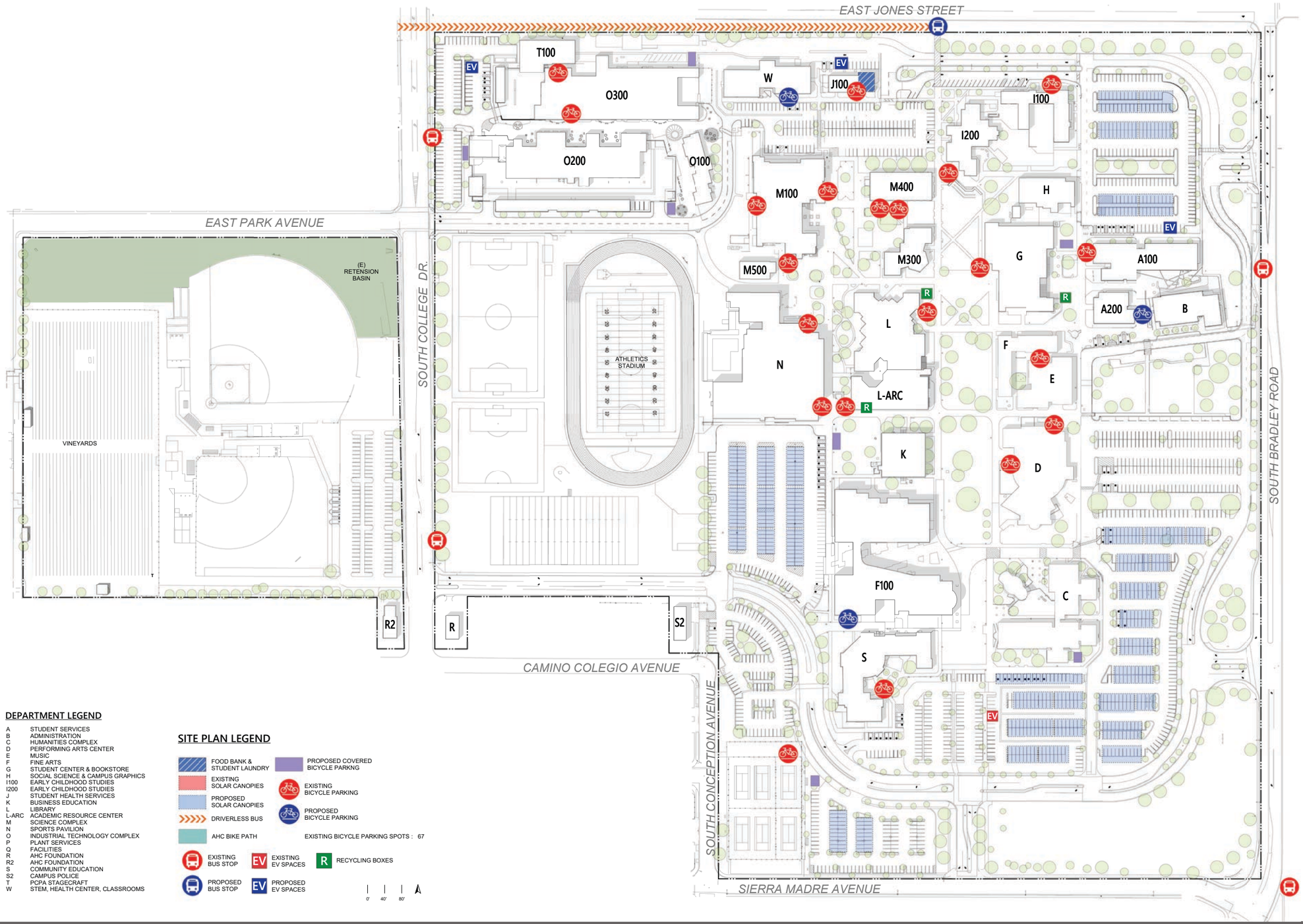
SECTION 7

SUSTAINABILITY



ALLAN HANCOCK COLLEGE



DEPARTMENT LEGEND

A	STUDENT SERVICES
B	ADMINISTRATION
C	HUMANITIES COMPLEX
D	PERFORMING ARTS CENTER
E	MUSIC
F	FINE ARTS
G	STUDENT CENTER & BOOKSTORE
H	SOCIAL SCIENCE & CAMPUS GRAPHICS
I100	EARLY CHILDHOOD STUDIES
I200	EARLY CHILDHOOD STUDIES
J	STUDENT HEALTH SERVICES
K	BUSINESS EDUCATION
L	LIBRARY
L-ARC	ACADEMIC RESOURCE CENTER
M	SCIENCE COMPLEX
N	SPORTS PAVILION
O	INDUSTRIAL TECHNOLOGY COMPLEX
P	PLANT SERVICES
Q	FACILITIES
R	AHC FOUNDATION
R2	AHC FOUNDATION
S	COMMUNITY EDUCATION
S2	CAMPUS POLICE
T	PCPA STAGECRAFT
W	STEM, HEALTH CENTER, CLASSROOMS

SITE PLAN LEGEND

- FOOD BANK & STUDENT LAUNDRY
- EXISTING SOLAR CANOPIES
- PROPOSED SOLAR CANOPIES
- DRIVERLESS BUS
- AHC BIKE PATH
- PROPOSED COVERED BICYCLE PARKNG
- EXISTING BICYCLE PARKING
- PROPOSED BICYCLE PARKING
- EXISTING BICYCLE PARKING SPOTS : 67
- EXISTING BUS STOP
- EXISTING EV SPACES
- RECYCLING BOXES
- PROPOSED BUS STOP
- PROPOSED EV SPACES

0' 40' 80'

Santa Maria Campus **Sustainability**

Lompoc Valley Center **Sustainability**

A Vision of Sustainability at **AHJCCD**

AHJCCD aims to create a comprehensive framework for sustainability initiatives that:

- Align with the State and State Chancellor's office's ambitions
- Prepares AHJCCD to be competitive for future funding
- Illustrates AHJCCD sustainability stewardship

The sustainability committee meets monthly allowing them to identify additional opportunities and sustainability initiatives and to pilot sustainable innovations.

Sustainable development is defined as meeting the needs of the present without compromising the ability of future generations to meet their needs. There are three spheres of sustainability: environmental, social and economic. The environmental sphere, albeit the best known of the three spheres, will not lead to sustainable development alone. Maintaining its mission to transform lives through education, AHJCCD's vision of sustainability is one that betters its education system over a long-term horizon in all three spheres. Cost implications of sustainability initiatives cannot be so great that it impedes AHJCCD's commitment to affordable education for its diverse communities. Investments must have a sufficient return of investment to ensure economic responsibility over future operations at AHJCCD. AHJCCD evaluated each goal in this plan for its benefits and impacts to all stakeholders so as to maintain the course on AHJCCD's vision for sustainability.

Why **Sustainability**?

The Energy and Sustainability Policy of the Board of Governors of the California Community Colleges provides goals and guidance for districts to achieve energy conservation, sustainable building, and physical plant management best practices necessary to reduce energy consumption.

The development of an Energy and Sustainability plan is an institutional goal identified by the Facilities Council and the office of the Vice President. The plan is an approach to establish institutional sustainability in all areas of the College including instruction, operations, construction, facilities, energy production, landscape and maintenance.

The Allan Hancock College Sustainability Committee (AHCSC) continues through the valued participation of the current task force members. In fulfillment of their charge, the task force recommended this updated Sustainability plan to the Facilities Council, for review and recommendation to the College Council. As an integral part of the 2024-2034 AHJCCD Facilities Master Plan, the Sustainability Plan will guide efforts to integrate sustainability in every aspect of college life.

State Chancellor Office of **Sustainability Policies**

The Board of Governors of the California Community Colleges' Energy and Sustainability Policy recommends energy efficiency and sustainability goals for California Community Colleges. The Board of Governors in 2020 adopted a Climate Change and Sustainability Policy as part of their ongoing commitment to providing California community college students and their community's sustainable and safe learning environments.

SUSTAINABILITY + ENERGY EFFICIENCY

The Chancellor's Office has set the following sustainability goals for the Community Colleges:

- 50% of all new buildings and major renovations to be zero net energy (ZNE) by 2025
- 100% of all new buildings and major renovation to be ZNE by 2030.
- 50% of all new buildings and major renovations to achieve LEED Silver or equivalent rating by 2025
- 100% of all new buildings and major renovations to achieve LEED Silver or equivalent rating by 2030

LEED is a program that incorporates sustainable building practices in several categories, including site, water, energy, materials, indoor environmental quality, and project-specific innovation. Projects meet prerequisites in each category and earn additional points to meet one of four levels of certification: Certified, Silver, Gold, or Platinum. LEED is widely recognized in the building industry and is a commonly used way to benchmark sustainable performance and communicate that performance to the public.

The college can use the LEED program to increase the sustainability of its facilities in the following ways:

- Establishing a LEED certification standard for each new building or modernization
- Utilizing the LEED-EBOM (Existing Buildings Operations and Maintenance) program for existing buildings

Energy efficiency is a critical component of sustainable building and, when viewed at the campus level, the impact can be significant. A building management system that is campus-wide can help the college's facilities department track energy use and reduce response time for problems. Energy dashboards that are posted online can engage users in conservation efforts.

State Chancellor Office **Sustainability Goals**

In January of 2020, the Board of Governors of the California Community Colleges proposed 7 model goals that align with the vision of the California Climate Change Scoping Plan – the plan to achieve the State-wide carbon emission reduction goals outlined in Assembly Bill 32.

EMISSIONS
Reduce greenhouse gas emission levels below 1990 levels by 30% by 2025 and 40% by 2030.

ENERGY
Increase renewable energy consumption to 25% by 2025, and to 50% by 2030.

VEHICLES
Ensure 25% of fleet vehicles are zero-emission vehicles by 2025, and 50% by 2030.

CONSTRUCTION
50% of all new buildings and major renovations will be zero net energy (ZNE) by 2025, and 100% by 2030.

LEED SILVER
50% of all new building and major renovation will achieve LEED Silver or equivalent rating by 2025, and 100% by 2030.

PRODUCTS
Increase procurement of sustainable products and services compared to current levels by 20% by 2025, and 25% by 2030.

WASTE
Reduce municipal solid waste by 25% compared to current levels by 2025, and 50% by 2030.

AHJCCD Board Policy
3950 Sustainability

"Sustainability is defined as meeting our needs today while ensuring that future generations can continue to meet their needs. Sustainability means long-term cultural, ecological and economic health and vitality. Environmental Sustainability is a process that maintains and enhances economic opportunity and community well-being for every segment of society while protecting and restoring the natural and social environment upon which people and economies depend.

As a member of the greater Santa Barbara County community, the Allan Hancock Joint Community College District plays a critical role in the educational and economic health of the region. As part of this responsibility, the district recognizes the importance of addressing sustainability in its daily operations to provide stewardship of the environment, and to provide students, employees, and visitors with knowledge that is intended to promote environmentally responsible behavior.

In order to continue the legacy of leadership in sustainability in all areas of the college, including instruction, operations, construction, facilities, land use, energy conservation, and environmental integrity; the board delegates to the superintendent/president the authority to develop practices and an Energy and Sustainability plan as part of the district's educational and facilities master plan."

Adopted August 20, 2013
Revised July 9, 2019

Current + Future
Sustainable Practices

01 CAMPUS ENGAGEMENT

- The AHCSC engages the campus with events like the e-bike demo program
- Bins with logos and instructions for recycling on campus are being distributed
- Raised planter bed for organic farming at children's center in progress

02 OPERATIONS

Building Design and Construction:

- Replacing outdated fluorescent light fixtures with efficient LED fixtures (ongoing)
- Advanced lighting controls in buildings (ongoing)
- Replacing HVAC units with higher efficiency units (ongoing)
- Future Goals: All new buildings and renovations to meet CalGreen energy codes for 2023 including 50% of parking lots shaded and 20% of parking spaces EV designated and 5% EVSE ready
- 50% of all new buildings and renovations to achieve LEED Silver and be ZNE (zero net energy) by 2025 and 100% by 2030

Clean and Renewable Energy:

- 2 MW (Megawatt) solar tracking system utilizes and transforms campus parking lots into solar carports, which produces 200 kW of clean renewable energy. An added benefit is the reduction of 'heat island effect' from solar gain on the asphalt parking lot. Shading the asphalt parking lots will reduce overall campus temperatures. The shaded parking lot will also benefit the public by providing shaded parking spaces which will protect vehicles from direct sun exposure.
- Installed a water bottle fill station at bldg. K, with future installations planned at SM and LVC campuses
- Installed solar panels in the Children's Center and IT buildings on the roofs that supply electricity for those locations, and a solar field is in the works at the LVC
- Received a LEED Gold certification for the Student Services Center, Early Childhood Studies Child Care Center, and a Silver certification for the Public Safety Training Complex

03 PURCHASING

Cleaning and Janitorial Purchasing:

- Biobased, nontoxic cleaning and janitorial products are used by the campus
- In Spring 2020, the SSCCC Delegates passed Resolutions 03.06 – Sustainable Products from Auxiliary Organizations and 04.03 – Marine Degradable Food Service Ware for College Activities. These Resolutions called for the SSCCC to work with student body associations at all California Community Colleges (CCC) to advance the use of reusable and/or sustainable utensils, drinkware, packaging products, and other items from sustainable manufacturers during contract negotiations with current and future auxiliary organizations.

04 PLANNING & ADMINISTRATION

Coordination & Planning:

- Sustainable coordination takes place in the planning, preconstruction, and construction processes of every project on campus. It is the goal of the college to attain LEED Silver Certification on all new and future buildings.
- Established architectural, viticulture, and gardening classes offering new technology education for sustainability
- Future goals to achieve LEED silver and Zero Net Energy on all new and future construction by 2030.

05 INNOVATION & LEADERSHIP

Underrepresented Students:

- A Food Bank and Student Laundry are student services currently being added to the Student Health Center building J100
- Serving Underrepresented Students AHC supports students in every academic way possible to achieve their educational goals
- Established a community garden
- Installed 4 raised panter beds in the Children's Center so children can cultivate their own produce

Current + Future
Sustainable Practices

06 TRANSPORTATION

Campus Fleet:

» The fleet is gradually being converted to electric

Support for Sustainable Transportation:

» Bicycles: AHCSC organized an EZ Bike Project event, a new electric bicycle (e-bike) demo program operated by SBCAG Traffic Solutions division. It offered free e-bike demos of various models including cargo bikes, cruisers, city bikes, and folding bikes to local residents and commuters as a measure to reduce traffic and air pollution in Santa Barbara County.

» AHCSC is also finalizing selection of a covered bike rack with built-in charging for e-bikes that can be installed on the campuses.

» Dedicated bike paths are being considered.

Electric/Hybrid Vehicles:

» AHCSC advocated for the first EV charging station on campus with grants supplying most of the costs. More EV charging locations are planned on the Main campus. An EV charging is currently being installed on the LVC campus.

» Any new construction will require roughly 20 of all parking spaces to be EV ready and 5% of all parking spaces to be EVSE operating (electric vehicle service equipment provided)

» Proposed driverless bus system being developed in conjection with City of Santa Maria.

07 GROUNDS

Landscape Management:

» Replacement of landscaping and turf to native species for water conservation.

» Initiated a new software system ArborPro which identifies all trees on campus and their health for maximum carbon offset

» Majority of irrgiation controllers on campu are weather based

Biodiversity:

» The landscaping on campus aims for a variety of plant species. Landscapes with high biodiversity are more stable towards annual fluctuations in environmental conditions.

Future

» 100% Green waste diversion as mandated by Assembly bill SB1383

08 WATER

Water Use:

» Switched from domestic water to untreated well water in Oct. 2015 for the college's sports fields, which netted a savings of $93,000. In 2016, the north half of the campus was switched to untreated well water, with a forecasted savings of $55,00.

» Water use in landscaping has been significantly reduced by gradually replacing landscaping with drought tolerant and native species.

Rainwater Management:

» Weather based irrigation control system are now in place on campus which provides significant resource conservation

» Traditional spray head irrigation systems have all been replaced with drip systems to save water

» Stormwater management to minimize stormwater runoff with bioswales and ground retention. Reduce storm runoff by implementing bioswales into new construction.

» Water use in landscaping has been significantly reduced by gradually replacing landscaping with drought tolerant and native species.

Current + Future **Recycling Goals**

09 WASTE

Waste Minimization and Diversion:

- Diverted 5 tons of green waste from the landfill each month. Reducing Short-Lived Climate Super Pollutants like organic waste will have the fastest impact on the climate crisis. 100% green waste diversion as mandated in Assembly Bill SB1383 is taking place on both campuses with all organic water preassembly food waste and green waste
- SC is supplying blue bins with a logo in every building for paper waste to encourage indoor waste recycling.
- Indoor Recycling: 100% green waste diversion as mandated by SB 1383. Goal to recycle all paper and cardboard on campus
- Enlisted to recycle used oil, Hazmat, and universal waste

Recycling Goals

Indoor Recycling: 100% green waste diversion as mandated by SB 1383. Goal to recycle all paper and cardboard on campus

- Beverage containers
- Metals
- Cardboard
- Pallets
- Packaging materials
- Furniture recycling and reuse
- Shredded paper
- VTC white paper pickup
- Construction materials
- White goods

LANDSCAPE WASTE DIVERSION GOALS

- Grass mulching
- Tree waste chipped and used for landscape mulch
- Low-water use vegetation and native plants
- Drip irrigation
- Weather-based irrigation controls – based on evaporation rates and temp
- Low-flow irrigation spray heads
- Low-maintenance landscapes
- Irrigation water separate from potable water goal to swith all irrigation to well water
- High nitrate well water reduces need for fertilizer
- Storm water to bioswales and ground table

HAZARDOUS MATERIAL RECYCLING GOALS

- Recycling chemicals and paints
- Recycling universal waste – light tubes, batteries, incandescent bulbs, light ballasts
- Recycling electronic waste – computers, printers, monitors, radios, televisions, copiers
- Recycling automotive oils, greases, and antifreeze
- Utilizing non-hazardous parts cleaners
- Recycling vehicle batteries and tires
- Recycling used vehicles either through auction or scrap metal

PAPER REDUCTION GOALS

- Electronic communications – Email – my Hancock Website
- Two-sided copying
- Recycled content copy paper
- Book Rentals
- Book buy-back program
- Electronic textbooks
- Books available to the library on loan

Current + Future **Recycling Goals**

FACILITIES GOALS

- Automated energy management systems for HVAC and lighting
- Timers and photo-sensors on parking lot and perimeter building lighting
- lighting dual-function occupancy sensors
- Updating HVAC system using less energy
- Updating lighting systems using less energy – moving to LED technology
- Replacing old boilers with high-efficiency units
- Utilizing multi-stage tankless water heaters
- Use of carpet squares for less waste
- Low VOC paints and stains
- Electric hand dryers
- Green chemicals for cleaning
- Waterless urinals
- Automatic controls on water faucets and toilets
- Recycling/trash bins
- Installation of water bottle filling stations
- Skylights for natural lighting
- Parking lots – grinding asphalt – reusing as base materials
- More sources for healthy locally purchased food on campus encourages ‘stay all day’ and reduces the number of trips off-campus
- Sustainable Dining/ Food + Beverage Purchasing

TRANSPORTATION GOALS

- Updating from older vehicles to more efficient electric vehicles
- Covered bike parking
- Additional walkways
- Bus stops – adding more in the future

RECYCLED PRODUCTS PURCHASE GOALS

- Entry mats and fatigue mats
- Plastic piping for storm sewers
- Copy paper
- Recycled content paper towels and toilet paper