

## Sustainable Practices

Responsible Officer:	EVP – Chief Financial Officer
Responsible Office:	ES – Energy & Sustainability
Issuance Date:	X/X/XXX
Effective Date:	X/X/XXX
Scope:	All Campus Locations, Health Locations, the Lawrence Berkeley National Laboratory (LBNL), Division of Agriculture and Natural Resources (ANR), and the Office of the President (UCOP)

Contact: Matthew St. Clair

Title: Chief Sustainability Officer, UCOP

Email: Matthew.StClair@ucop.edu

**Phone:** (510) 287-3897

## **TABLE OF CONTENTS**

l.	Poli	cy Summary	2
II.		nitions	
III.		cy Text	
	A.	Green Building Design	
	B.	Clean Energy	
	C.	Climate Action	
	D.	Sustainable Transportation	13
	E.	Sustainable Building and Laboratory Operations	
	F.	Zero Waste	
	G.	Sustainable Procurement	
	H.	Sustainable Foodservices	18
	I.	Sustainable Water Systems	19
	J.	General Sustainability Performance Assessment	20
	K.	Health and Well-Being	20
	L.	Anti-Racism, Diversity, Equity and Inclusion	22
IV.	Con	npliance/Responsibilities	22
	A.	Implementation	
	B.	Revisions	

D. Reporting  V. Procedures	23
	23
	23
A. Green Building Design	∠ა
B. Clean Energy	
C. Climate Action	
D. Sustainable Transportation	31
E. Sustainable Building and Laboratory Operations	
F. Zero Waste	
G. Sustainable Procurement	
H. Sustainable Foodservices	
I. Sustainable Water Systems	39
J. General Sustainability Performance Assessment	
K. Health and Well-Being	
VI. Related Information	
VII. Frequently Asked Questions	
VIII.Revision History	

### I. POLICY SUMMARY

The Sustainable Practices Policy ("Policy") establishes goals in 12 areas of sustainable practices: green building, clean energy, climate action, transportation, sustainable operations, zero waste, procurement, foodservice, water, performance assessment, health and well-being, and diversity, equity, inclusion and justice.

### II. DEFINITIONS

Association for the Advancement of Sustainability in Higher Education (AASHE): The higher education association that sets sustainability standards for universities and colleges. Its mission is to support sustainability in higher education through empowering faculty, administrators, staff, and students to be effective change agents and drivers of sustainability innovation.

**Addressable Spend:** Spend that can be impacted through sourcing activities. For the purposes of this Policy, it relates to the spend within a specific product or service category.

**Adjusted Patient Day (APD):** Inpatient Days x (Gross Patient Revenue/Inpatient Revenue) where Gross Patient Revenue is Outpatient Revenue + Newborn Revenue + Inpatient Revenue.

**Anti-racism:** The policy and practice of actively opposing racism and promoting racial justice. Anti-racism is a proactive commitment to eradicating racism and to exploring and accepting responsibility for one's own part in it.

**California Building Code (CBC):** This refers to the California Building Code, Title 24 portion of the California Code of Regulations

**Campus Locations:** Includes all University of California institutions of higher education (academic campuses) and related facilities.

**Carbon Offset:** A reduction or removal of emissions of <u>carbon dioxide</u> or other <u>greenhouse</u> <u>gases</u> made in order to compensate for emissions made elsewhere. A carbon offset credit is a transferable instrument certified by governments or independent certification bodies to represent an emission reduction that can then be bought or sold.

Clean Transportation Fuel: A clean transportation fuel is a fuel derived from a net carbon-neutral fuel source with a carbon intensity of zero or less. These transportation fuels are typically produced from nonpetroleum renewable sources. Common examples include natural gas or hydrogen derived from the capture of gases from sewage waste, manure collection, or green waste decomposition. A fuel's carbon intensity can vary based on how it is produced. For a California Air Resources Board's maintained list of certified carbon intensities for alternative fuels, see the website <a href="LCFS Pathway Certified Carbon Intensities">LCFS Pathway Certified Carbon Intensities</a>.

**Climate Justice**: Climate justice recognizes the disproportionate impacts of climate change on low-income communities and communities of color around the world, the people, and places least responsible for the problem. The systems that create climate change are also responsible for economic inequalities and social and racial injustices. These issues cannot be separated, so, to be effective, solutions must simultaneously address climate change and inequity.

**Combustion:** As defined by CalRecycle, combustion is a rapid conversion of chemical energy into thermal energy. The reaction is exothermic. Organic matter is oxidized with sufficient air (or oxygen) for reactions to go to completion. The carbon and hydrogen are oxidized to carbon dioxide and water, respectively.

**Construction and Demolition Waste:** Waste generated by construction projects that do not occur every year or are not a result of regular operations and maintenance (e.g., building renovations or new construction).

**Diversion from Landfill:** Institutions divert materials from the landfill, combustion, or other non-allowable thermal conversion by recycling, composting, donating, reselling, or reusing.

**Diversity:** Differences in the lived experiences and perspectives of people that may include race, ethnicity, color, ancestry, caste, place of origin, political belief, religion, faith, marital status, family status, physical disability, mental disability, sex, gender identity or expression, sexual orientation, age, class, and/or socio-economic situations. Variation includes differences in power, privilege, and status.

**Economically and Socially Responsible (EaSR) Spend:** Spend on products or services supplied by a business holding one of the UC-recognized certifications listed in the UC Sustainable Procurement Guidelines.

**Environmental Justice:** Fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies (USEPA); All people and communities have the right to equal environmental protection under the law, and the right to live, work and play in communities that are safe, healthy and free of life-threatening conditions (*Principles of Environmental Justice*, 1991).

**Equity:** Creation and assurance of opportunities for equitable access and success for historically underrepresented populations, such as racial and ethnic minority and low- income communities, in three main areas: Representational equity- proportional participation at all levels of an institution; Resource equity- the distribution of resources in order to close equity gaps; and Equity-mindedness- the demonstration of an awareness of and willingness to address equity issues among institutional leaders, staff and all community members. A principle of fairness, with freedom from bias. Equity contends that people have different access to resources because of systems of oppression and privilege.

**Expanded Polystyrene (EPS):** As defined by the City of San Francisco, blown polystyrene and expanded and extruded foams which are thermoplastic petrochemical materials utilizing a styrene monomer and processed by various techniques including fusioning polymer spheres (expanded bead polystyrene), injection molding, foam molding, and extrusion-blown molding (extruded foam polystyrene).

**Fleet:** University-owned or operated vehicles and mobility equipment (e.g., passenger vehicles, trucks, vans, shuttles, agricultural vehicles, marine equipment, etc.), including vehicles operated under contract with the University and for which the University/Campus maintains operational control.

**Foodservice:** Dining establishments such as cafeterias, restaurants, cafes, retail stores, or similar places where food or drink is stored, prepared, packaged, served, or sold for consumption on premises or elsewhere. This includes locations that administer meal plans. Health location foodservice is defined as cafeterias.

**Foodware Accessory Items:** all types of items usually provided alongside food in containers and cups, including utensils, chopsticks, napkins, cup lids, cup sleeves, food or beverage trays, condiment containers and saucers, straws, stirrers, and toothpicks.

**Foodware:** products that are used to serve or transport food or beverages, including cups, bowls, plates, and hinged containers, as well as accessory items (see above definition). This does not include prepackaged, sealed food that is mass-produced by a third-party vendor off the premises for resale at University locations (e.g., grab-and-go items, such as prepackaged sandwiches and snacks resold in campus stores)

**Green Lab Assessment Programs:** A program that works with individual laboratories and researchers to inform, collect best practices, and assess areas for improvement in research efficiency, including engagement and targeted initiatives around efficiency in natural resources and other environmental issues. This assessment program could be based on the My Green Labs (MGL) Systemwide Checklist or another similar tool. The MGL checklist was developed based on best practices from several UC campuses as well as the expertise of My Green Lab

**Gross Square Foot:** Pursuant to the definition in the <u>Facilities Inventory Guide</u> (Appendix C, page C.19), gross square footage is the Outside Gross Area, or OGSF50, and equals the sum of Basic Gross Area (the sum of all areas, finished and unfinished, on all floors of an enclosed structure, for all stories or areas which have floor surfaces) + 50% Covered Unenclosed Gross Area (the sum of all covered or roofed areas of a building located outside of the enclosed structure). OGSF50 is also known as "California Gross."

**Health Locations:** Includes all University of California academic health centers, health systems, non-hospital clinics, and other related facilities owned by those entities. This policy also applies to leased facilities, where feasible to the extent of operational control and data accessibility.

**Inclusion:** Inclusion is the active, intentional, and continuous individual, institutional and systemic process to address inequities in power and privilege, to attribute appropriate value and merit to diversity work, and to build a respectful and strong community that ensures welcoming spaces and a sense of belonging for all.

**Industrial Water:** Water provided for specific industrial applications such as heating, cooling, or lubricating equipment.

Leadership in Energy and Environmental Design (LEED)™: Leadership in Energy and Environmental Design. LEED is a registered trademark of the U.S. Green Building Council (USGBC). This trademark applies to all occurrences of LEED in this document. LEED is a green building rating system developed and administered by the non-profit U.S. Green Building Council. The four levels of LEED certification, from lowest to highest, are Certified, Silver, Gold, and Platinum. LEED has several rating systems. This Policy refers to the following rating systems:

LEED for Interior Design and Construction (LEED-ID+C) for renovation projects;

<u>LEED for Building Operations and Maintenance (LEED-O+M)</u> for the ongoing operational and maintenance practices in buildings; and,

<u>LEED for Building Design and Construction (LEED-BD+C)</u> for new buildings and major renovations of existing buildings.

**Locally Compostable:** Products that can be composted in the local facilities that provide service to the campus. Acceptable products will vary by facility. Locally compostable may include but is not limited to products made of plastic, paper, wood, and bamboo. Compostable products must meet the criteria outlined in the Sustainable Procurement Guidelines.

**Locally Recyclable:** Products that can be recycled by the local facilities that provide service to the campus. Acceptable products will vary by facility.

**Locations:** University of California's Campus Locations, Health Locations, Division of Agriculture and Natural Resources (ANR), Lawrence Berkeley National Laboratory (LBNL), and the UC Office of the President (UCOP), as referred to in the "Scope" above. It is the responsibility of each location to appropriately determine how it will implement the Sustainable Practices Policy with respect to overlapping areas across ANR, Campus Locations, Health Locations, and LBNL

**Municipal Solid Waste:** Garbage, refuse, sludges, and other discarded solid materials resulting from residential activities and industrial and commercial operations, which are legally accepted in CalRecycle permitted landfills. Municipal Solid Waste does not include any regulated hazardous/universal waste, medical waste, or other material used as Alternative Daily Cover (ADC); however, it does include construction and demolition waste, diverted recyclables and organic waste. Campus Locations, LBNL, ANR, and UCOP waste targets

refer to municipal solid waste only. Health Locations waste targets use the Practice Greenhealth definition of "Total Waste," see section III.J.

**Organic:** As defined by CalRecycle, material containing carbon and hydrogen. Organic material in municipal solid waste includes the biomass components of the waste stream as well as hydrocarbons usually derived from fossil sources (e.g., most plastics, polymers, the majority of waste tire components, and petroleum residues).

**Packaging Foam:** Any open or closed cell, solidified, polymeric foam used for cushioning or packaging, including: Ethylene-vinyl acetate (EVA) foam, Low-density polyethylene (LDPE) foam, Polychloroprene foam (Neoprene), Polypropylene (PP) foam, Polystyrene (PS) foam (including EPS, extruded polystyrene foam (XPS) and polystyrene paper (PSP)), Polyurethane (PU) foams, Polyethylene foams, Polyvinyl chloride (PVC) foam, and Microcellular foam. Not included are easily biodegradable, plant-based foams such as those derived from corn or mushrooms.

**Parksmart:** Parksmart is a rating and certification program designed to advance sustainable mobility through smarter parking structure design and operation. The Parksmart framework guides projects toward innovative, solutions-oriented strategies that reduce operational costs, increase energy efficiency, improve lighting and ventilation, etc. Parksmart complements LEED and other certifications and is administered by Green Business Certification, Inc.

**Partner for Change:** An award given through Practice Greenhealth's Environmental Excellence Awards program that recognizes health care organizations that have implemented a significant number of environmental programs and who can demonstrate continuous improvement and expansion of these programs on the path to sustainability.

**Plant-Based Foods:** As defined by the Culinary Institute of America's Menus of Change program, these include fruits and vegetables (produce); whole grains; beans; other legumes (pulses), and soy foods; nuts and seeds; plant oils; herbs and spices; simple combinations of these foods and their derivatives, and vegetarian/vegan alternatives to meat and dairy.

**Plant-Forward:** As defined by the Culinary Institute of America's Menus of Change program, this represents a style of cooking and eating that emphasizes and celebrates, but is not limited to, plant-based foods—including fruits and vegetables (produce); whole grains; beans, other legumes (pulses), and soy foods; nuts and seeds; plant oils; and herbs and spices—and that reflects evidence-based principles of health and sustainability. Often used synonymously with "vegetable-centric," "vegetable-forward," and "plant-centric."

**Plastic Bags:** a carryout bag, regardless of the thickness of the material, made of plastic that is provided by a store or foodservice facility to a customer at the point of sale to hold customer's purchases. This does not include bags that are locally compostable.

Potable Water: Water that meets state water quality standards for human consumption.

**Practice Greenhealth:** The leading membership and networking organization for sustainable health care, delivering environmental solutions to hospitals and health systems across the United States.

**Preferred Level Green Spend:** The amount spent on products meeting the UC Preferred Level of environmental sustainability criteria as laid out in the UC <u>Sustainable Procurement</u> Guidelines.

Reclaimed or Recycled Water: Wastewater treated with the intention of reuse, including:

<u>Direct Potable Reuse:</u> Treated wastewater reused for human consumption.

<u>Indirect Potable Reuse:</u> Treated wastewater blended with groundwater or other water sources reused as potable or non-potable water.

<u>Non-Potable Reuse:</u> Treated wastewater reused for purposes other than human consumption, such as irrigation, fire suppression, and industrial processes.

**Renewable Energy:** Energy generated from inexhaustible sources, such as the sun or wind, or from sources that can quickly be replenished, such as biomass. For the purposes of this Policy, an energy source is renewable if it has been designated as such by the California Energy Commission (Renewables Portfolio Standard Guidebook).

**Required Level Green Spend:** The minimum spend that meets sustainability criteria required for a product or service category. For Required Level Green Spend criteria, see the UC Sustainable Procurement Guidelines.

**Research Group:** When counting the laboratories assessed via a green lab assessment program, a laboratory will be counted as a research group rather than by physical rooms. As defined in the Laboratory Hazard Assessment Tool (LHAT), this group includes the workers that report to one Principal Investigator (PI) or Responsible Person. While some PI's may have multiple groups, one assessment for the purposes of this Policy will include all the people working under one PI or Responsible Person, all of the rooms they occupy or share, and field sites, if any. Total number of PI's and Responsible People will be tracked according to LHAT or a similar tracking method at campuses not using LHAT. LHAT includes research and teaching laboratories.

**Single-Pass Cooling:** Single-Pass or once-through cooling systems flow water through a piece of equipment to absorb heat and dispose of the water down the drain without recirculation. Replacing and managing these types of systems is a recommended best practice by the International Institute for Sustainable Laboratories (I<sup>2</sup>SL), the U.S. Office of Energy Efficiency & Renewable Energy, and the EPA. Equipment typically using this type of cooling includes hydraulic equipment, distillation condensers, refrigeration condensers, air compressors, vacuum pumps, electron microscopes, mass spectrometers, lasers, helium recovery, and electro-magnets.

**Single-Occupancy Vehicle (SOV):** A vehicle driven by a single driver with no passengers. SOV percentages may separate the percentage of vehicle trips occurring in zero- or low-emission vehicles from carbon-fuel vehicles (e.g., SOV-standard fuel and SOV-alternative fuel).

**Solicitation:** The process of seeking information, bid proposals, and quotations from suppliers.

**Sustainable Commutes:** may include walking, micro-mobility devices (e.g., bikes, scooters, skate devices), transit, telecommute, carpool, vanpool, compressed work week, and zero-emission vehicles.

**Sustainability Tracking, Assessment and Rating System (STARS):** A transparent, self-reporting framework for colleges and universities to measure their sustainability performance. STARS provides a framework for understanding sustainability in all sectors of higher education through using a common set of measurements that enables meaningful comparisons over time and across institutions.

**Sterilized Water:** Water that has been cleaned to remove, deactivate, or kill microorganisms present that may be harmful to humans, primarily used in medical facilities and research.

**Stormwater:** Water that originates during precipitation events.

**Strategic sourcing:** A process designed to maximize the purchasing power of large, decentralized organizations, such as the University of California, by consolidating and leveraging common purchases.

**Sustainable Food:** Food and beverage purchases that meet the AASHE STARS Technical Manual's requirements for sustainably and ethically produced food for Campus Locations and Practice Greenhealth's sustainable food for Health Locations.

**Sustainable Procurement:** Modified from the UK Government's Sustainable Procurement Task Force (2012) Purchasing that takes into account the economic, environmental, and socially responsible requirements of an entity's spending. Sustainable Procurement allows organizations to procure their goods and services in a way that achieves value for money on a whole-life basis in terms of generating benefits not only to the organization but also to society and the economy, while remaining within the carrying capacity of the environment.

**Sustainable Water Systems:** Water systems or processes that maximize water use conservation or efficiency, optimize water resource management, protect resources in the context of the local watershed, and enhance economic, social, and environmental sustainability while meeting operational objectives.

**Takeback program:** A program that allows customers to return used products or materials to either the producer or distributor for responsible re-use or recycling consistent with applicable state and federal laws. These programs encourage responsible design for disassembly and recyclability and protect the environment by keeping bulky or toxic products and packaging out of the waste stream.

**Transportation Demand Management (TDM):** The application of strategies and policies to reduce travel demand (specifically that of single-occupancy private vehicles). TDM programs may include car sharing (car share), carpools (rideshare), vanpools, bus pools, shuttles, transit, bicycle circulation systems, pedestrian circulation systems, emergency rides home, telecommuting, flexible schedules, parking management (amount, access, fees), etc.

**Total Cost of Ownership (TCO):** An analysis of cost that considers not only purchase price but also any costs associated with the acquisition, use, and disposal of the product. These costs may include some or all of the following: freight, taxes and fees, installation, operation/energy use, maintenance, warranty, collection, end-of-life disposal or recycling, as

well as social or environmental costs, such as the cost of purchasing pollution offsets or monitoring labor practices.

**UC Green Laboratories Action Plan:** A document created with the goal of setting campusspecific targets, documenting the strengths and areas for improvement within sustainable operations of research laboratories via gap analysis, and outlining actions that can be implemented to further targets.

**USGBC:** U.S. Green Building Council. The USGBC is a membership-based non-profit organization dedicated to sustainable building design and construction and is the developer of the LEED building rating system.

Wastewater: Water that is discharged from domestic, industrial, or other use.

**Watershed:** In the context of this Policy, a watershed is the area of land that drains to a common waterway, such as a stream, lake, estuary, wetland, aquifer, bay, or ocean.

**Water systems:** Natural and/or human-made systems that provide water to and support the functions of watersheds and/or human communities.

**Weighted Campus User (WCU):** As defined in the current AASHE STARS Technical Manual. This calculation applies only to campuses and not to health locations or LBNL.

**Zero-emissions vehicle (ZEV):** As defined by the California Air Resources Board (CARB) ZEV program standards, a vehicle that emits no tailpipe pollutants (e.g., criteria air pollutants, precursors, or greenhouse gases) from the onboard source of power under any possible operational modes or conditions. Common examples include battery electric and fuel cell vehicles.

**Zero waste:** The zero waste goal is made up of incremental waste reduction and waste diversion targets. The University recognizes the attainment of reduction goals stated in this Policy and a 90% diversion of municipal solid waste as minimum compliance standard to be defined as zero waste for Locations other than Health Locations.

### III. POLICY TEXT

The University of California ("University") is committed to responsible stewardship of resources and to demonstrating leadership in sustainable business practices, and to centering equity and climate and environmental justice in all sustainability efforts. The University's locations should be living laboratories for sustainability, contributing to the research and educational mission of the University. The goals outlined throughout these policy and procedures sections shall be applied within the constraints of research needs and budgetary requirements and in compliance with safe operating practices and all applicable rules, regulations and laws. Policy goals are presented below in thirteen areas of sustainable practices.

### A. Green Building Design

- 1. New Buildings
  - a. At a minimum, all new building projects, other than acute care facilities and medical office buildings, will be designed, constructed, and commissioned to outperform the

California Building Code (CBC) energy-efficiency standards by at least 20% or meet the whole-building energy performance compliance targets listed in Table 1 of Section V.A.1. Additionally, whenever possible within the constraints of program needs and standard budget parameters, Locations will strive to design, construct, and commission buildings that outperform CBC energy efficiency standards by at least 30% or meet the whole-building energy performance stretch targets listed in Table 1 of Section V.A.1.

- Acute care facilities and medical office buildings will be designed, constructed, and commissioned to meet the whole-building energy performance targets listed in Table 2 in Section V.A.1.
- c. In addition to and integrated with the building commissioning process, new buildings and major renovations will complete, at minimum, one year of monitoring-based commissioning following the building's certificate of occupancy date.
  - i. New buildings and major renovations will include permanent energy metering to collect, communicate, and archive energy usage data. This data will be used to track whole building Energy Use Intensity (EUI) against performance targets and monitor high-intensity enduse loads.
  - ii. These provisions apply to all building projects submitting Preliminary Drawings after January 1, 2027 (per section V.A.1.a.).
- d. New building or major renovation projects must not use onsite fossil fuel combustion (e.g., natural gas) for space and water heating (except those projects connected to an existing campus central thermal infrastructure). Projects unable to meet this requirement will document the rationale for this decision, as described in Section V.A.1.d.
- e. Any capital improvement project related to existing or planned gas-fired infrastructure projects with costs exceeding \$20M must be approved by the Board of Regents.
- f. All new buildings will, at a minimum, achieve a USGBC LEED "Gold." Additionally, whenever possible within the constraints of program needs and standard budget parameters, new buildings will strive to achieve certification at a USGBC LEED "Platinum" rating.
- g. Locations will design, construct, and commission new parking structures to achieve, at a minimum, Parksmart "Silver" certification and strive to achieve "Gold" whenever possible within the constraints of program needs and standard budget parameters.
- h. All new building projects will achieve at least five points within the available credits in LEED-BD+C's Water Efficiency and Sustainable Sites: Rainwater Management categories (in support of section III.I.) and prioritize earning waste reduction and recycling credits (per section V.F.)

### 2. Building Renovations

a. Major Renovations of buildings are defined as projects that require 100% replacement of mechanical, electrical, and plumbing systems and replacement of

over 50% of all non-shell areas (interior walls, doors, floor coverings, and ceiling systems). These projects will:

- i. At a minimum, comply with the applicable LEED and/or Parksmart certification requirements in III.A.1.d. or III.A.1.e.
- ii. Outperform CBC Title 24, Part 6, currently in effect, by 20%. This does not apply to acute care facilities or medical office buildings.
- Not use onsite fossil fuel combustion (e.g., natural gas) for space and water heating, per III.A.1.c.
- iv. Include permanent energy metering and complete monitoring-based commissioning as described in III.A.1.h.
- b. Acute care facilities and medical office buildings undertaking major renovations, as defined above, will meet the whole-building energy performance targets listed in Table-2 of Section V.A.1.
- c. Renovation projects that do not constitute a major renovation (as defined in item III.A.2.a.) with an estimated project cost at the time of budget approval that exceeds the threshold specified in "UC Cost Threshold for Minor Renovations" will, at a minimum, achieve a LEED-ID+C Certified rating.<sup>1</sup> These projects will also register with the utilities' energy efficiency program, if eligible. These requirements do not apply to acute care facilities or medical office buildings.
  - i. The cost threshold is based on the California Construction Cost Index (CCCI). The minimum project cost threshold will be adjusted annually (from \$10 million on July 1, 2024) and published at the beginning of each fiscal year.

### **B.** Clean Energy

The University of California is committed to reducing its greenhouse gas emissions by reducing energy use and switching to clean energy supplies.

1. Energy Efficiency

Locations will implement energy efficiency actions in buildings and infrastructure systems to reduce the location's energy use intensity by an average of at least 2% annually.

2. On-campus Renewable Electricity

Campus Locations and HLocations will install additional on-site renewable electricity supplies and energy storage systems whenever cost-effective and/or supportive of the location's Climate Action Plan or other goals.

<sup>&</sup>lt;sup>1</sup> The document "UC Cost Threshold for Minor Renovations" can be found at, <a href="https://www.ucop.edu/sustainability/policy-areas/green-building/index.html">https://www.ucop.edu/sustainability/policy-areas/green-building/index.html</a>.

## 3. Off-campus Clean Electricity

By 2025, Locations, except LBNL, will obtain 100% clean electricity. The UC Clean Power Program first met this standard in 2019, and will continue to provide 100% clean electricity to participating locations.

#### C. Climate Action

The University of California recognizes the urgency of the climate crisis and the responsibility of public universities to lead in reducing emissions. This policy describes UC's commitments to reduce operational greenhouse gas (GHG) emissions supporting California's aggressive climate goals to address the climate crisis while mitigating impacts on vulnerable populations. For the purposes of this section, Campus Locations and their associated Health Locations will comply and report as combined entities.

#### 1. Total Emissions

- a. Locations will achieve at least a 90% reduction in total emissions (Scopes 1, 2, and 3) by no later than calendar year 2045 relative to a 2019 baseline year.
- b. After 2045, any residual emissions beyond the 90% reduction will be negated by carbon removal (per III.C.6.a.ii).

## 2. Scope 1 Emissions

UC will prioritize direct actions to reduce Scope 1 emissions:

- a. Location will achieve their Scope 1 GHG reduction targets for calendar years 2030, 2035 and 2040 emissions. Locations will assess progress toward meeting these targets and submit any changes to those targets to UCOP at least two years before the target date (i.e., by January 1, 2028, 2033, or 2038).
- Locations will incrementally reduce GHG emissions from the on-site combustion of fossil fuels relative to emissions in 2019. These reductions will be reported to the UC Office of the President annually.
- c. In lieu of purchasing voluntary offsets and to further accelerate on-site actions, beginning in 2025 through 2030 (fiscal year 2025-26 through 2030-31), Locations, except LBNL and ANR, will allocate funds equal to \$25/MTCO2e for all remaining Scope 1 and Scope 2 emissions. These funds will be used to achieve direct emissions reductions as described in the Procedures Section V.C.4. The price per ton will increase by 5% each year beginning in 2026.
- d. If any Location uses biomethane as a transition fuel to partially replace fossil gas, they will report annual Scope 1 emissions to UCOP and the impact that biomethane use has on those emissions.

#### 3. Scope 2 Emissions

Locations, except LBNL, will purchase 100% clean electricity beginning in 2025. LBNL will follow separate federal requirements to source electricity from carbon-free sources.

### 4. Scope 3 Emissions

Locations will set Scope 3 emission reduction targets with respect to a 2019 baseline year, to include emission sources from business travel, commuting, and disposal and treatment of solid waste. At a minimum, Scope 3 emissions reduction targets will align with the State of California's goals and policies to achieve climate neutrality by 2045 or sooner.

#### 5. Climate Action Plans

Each Location will prepare, implement, and update (as needed) a climate action plan (CAP) to establish and achieve the above GHG emission reduction goals.

#### 6. Carbon Offsets

- a. The University will prioritize direct reductions of its covered scope 1, 2, and 3 emissions. Counting carbon offsets toward a Location's GHG reduction targets will be limited to:
  - i. California Carbon Offsets purchased to meet regulatory requirements of the California Air Resource Board.
  - ii. Direct carbon removals used to negate residual emissions (not to exceed 10% per section III.C.1.).
- b. Voluntary offsets purchased to meet obligations under the California Environmental Quality Act, the LEED green building certifications, or other purposes will not count toward a location's GHG reduction targets.

#### D. Sustainable Transportation

The University will implement transportation programs and greenhouse gas (GHG) emission reduction strategies that improve public health and access, and reduce the environmental impacts from commuting, fleet, and business travel to achieve the Climate Action section of this Policy (Section III.C.).

#### 1 Fleet

Locations will reduce GHG emissions from their fleets and report annually on their progress. Locations will implement strategies to reduce emissions from University-owned or operated fleet vehicles to align with UC's climate action goals (as outlined in section III.C.). To support this goal, each Location will ensure that:

- a. Zero-emission vehicles, plug-in hybrids, or dedicated clean transportation fuel vehicles will account for at least 50% of all vehicle acquisitions (including both leased and purchased vehicles).
- b. All sedans and minivan acquisitions will be zero-emission or plug-in hybrid vehicles, except for public safety vehicles with special performance requirements.
- c. In applications where zero-emission vehicles are not available, regardless of vehicle size, clean transportation fuels and other low-emission fuels will be prioritized.

d. Vehicle acquisition plans should be maintained in a manner consistent with applicable state regulations adopted by the California Air Resources Board that require the purchase of zero-emissions vehicles and phase out the sale of ICE vehicles, including but not limited to those regulations addressing public fleets.

LBNL will follow federal fleet requirements in cases where federal and UC fleet requirements conflict.

#### 2. Commute

The University recognizes that single-occupant vehicle (SOV) commuting is a primary contributor to commute-related GHG emissions and localized transportation impacts. To achieve the GHG reduction targets outlined in section III.C., Locations will:

- a. Track progress by administering an annual survey to assess the commuter mode split among students and employees. Survey results will inform strategic adjustments to enhance sustainable transportation programs.
- b. Prioritize the reduction of vehicle trips. Locations should report on their trip reduction programs and initiatives (including costs and benefits) that support reductions in single-occupancy vehicle trips, such as micro-mobility, transit, and multi-occupancy vehicles (MOV).
- c. Foster accessible, equitable, and sustainable transportation options, with a commitment to safe access and a focus on meeting the needs of underrepresented and underserved communities.
- d. In partnership with regional transit/planning agencies, pursue programs and funding opportunities such as grants, subsidies, and other financial instruments to offset costs and support transit alternatives for residents and commuters.

LBNL will follow federal appropriation law in cases where federal and UC commute requirements conflict

- 3. Recognizing that flexible work arrangements, including telecommuting, are a low-cost, effective way to reduce emissions and carbon footprint, Locations should review and update local employee telecommute and flexible work policies, guidelines, procedures, and other applicable documents to normalize and promote telecommuting options and other flexible scheduling, as aligned appropriately based on business needs.
- 4. Consistent with the State of California's goal of increasing clean transportation fuel, specifically electric vehicle adoption, Locations will promote purchases and support investment in clean transportation fuel infrastructure, through
  - a. Promoting ZEV adoption and engaging with local air districts and other government and utility programs to reduce the costs of ZEV purchases for employees and students (especially those with lower incomes)

- b. Assessing ZEV infrastructure needs and developing an infrastructure plan to support ZEV commutes and the installation of local charging stations or other clean transportation fuel infrastructure.
- 5. Locations will document in the business-case analysis for any proposed parking structures how the capital investment in parking aligns with the Location's Climate Action Plans and/or sustainable transportation policies.

## E. Sustainable Building and Laboratory Operations

- 1. Campus Locations will seek to certify as many buildings as possible through the LEED-O+M rating system within budgetary constraints and eligibility limitations.
- 2. Campus Locations will develop and maintain an ongoing Green Lab Assessment Program supported by a department on campus to assess the operational sustainability of research groups and the laboratories and other research spaces.
  - At least one staff or faculty member from Campus Locations must have the role of managing the Green Lab Assessment Program.
  - b. Any Green Lab Assessment Programs and related efforts will adhere to all relevant UC, state and national policies and laws. Safety will never be compromised to accommodate sustainability goals.
  - c. All Campus Locations will maintain a UC Green Laboratories Action Plan.

### F. Zero Waste

- Campus Locations, LBNL, ANR and UCOP will achieve zero waste through prioritizing
  waste reduction in the following order: reduce, reuse, and then recycle and compost (or
  other forms of organic recycling) as described in section V.F.6. Minimum compliance for
  zero waste at Campus Locations, LBNL, ANR, and UCOP is as follows:
  - a. Reduce per capita municipal solid waste generation by:
    - i. 25% per capita from FY2015/16 levels by 2025
    - ii. 50% per capita from FY2015/16 levels by 2030.
  - b. Divert 90% of municipal solid waste from the landfill.
- 2. Health Locations will achieve a target of 25lbs of total waste as defined by Practice Greenhealth per Adjusted Patient Day by 2025 and strive for 20lbs of total waste per Adjusted Patient Day by 2030.
  - a. Practice Greenhealth defines total waste as municipal solid waste as well as all forms of regulated waste. This includes but is not limited to regulated medical waste, biohazardous waste, pharmaceutical waste, and universal waste. It does not include construction and demolition waste.
- 3. The University prohibits the sale, procurement, or distribution of packaging foam, such as food containers and packaging material, other than that utilized for laboratory supply

- or medical packaging and products. The University seeks to reduce, reuse, and find alternatives for packaging foam used for laboratory and medical packaging products.
- a. Location foodservice facilities will not use packaging foam or expanded polystyrene (EPS) for takeaway containers.
- For implementation guidelines related to the procurement of goods for University of California campuses, reference the <u>University of California Sustainable Procurement</u> <u>Guidelines.</u>
- 4. The University is committed to the reduction and elimination of single-use items in line with the University's and the State of California's Zero Waste goals and in recognition of the severe environmental impact single-use products have globally. In recognition of this commitment, Locations will reduce single-use products by taking the following actions:
  - a. The distribution of plastic bags is prohibited in all retail and foodservice establishments..
  - b. Replace disposable single-use plastic foodware accessory items in all foodservice facilities with reusables or locally compostable alternatives and provide only upon request no later than July 1, 2024.
  - c. Provide reusable foodware items for food consumed onsite at dine-in facilities and to-go facilities no later than July 1, 2024.
  - d. Replace single-use plastic foodware items with reusable or locally compostable alternatives at to-go facilities no later than July 1, 2024.
  - e. Phase out the procurement, sale and distribution of single-use plastic beverage bottles. Non-plastic alternatives will be locally recyclable or compostable.
    - i. Foodservice facilities will provide alternatives no later than January 1, 2024.
    - ii. Locations are encouraged to prioritize the installation of water refill stations to support the transition from single-use plastics to reusables.
    - iii. Locations will consider eliminating single-use plastic beverage bottles when contracting with suppliers, or upon contract renewal and/or extension if current contract terms prohibit (e.g., vending machines, departmental purchases, etc.).
  - f. When selecting prepackaged, sealed food that is mass produced off premises and resold at Locationss (e.g., grab-and-go items, such as chips, candy, prepackaged sandwiches, etc.), preference should be given in contract award and negotiations to suppliers that utilize locally compostable or locally recyclable packaging options.

This Policy section (III.F.4.) also applies to third-party foodservice facilities that lease space or provide contracted services at Locations. Locations will include these Policy provisions in lease language as new leases and contracts are negotiated or existing leases are renewed and work to incorporate these practices, as much as possible, within the timeframe of current leases. When procuring catering services, where possible, select providers that can provide alternatives to single-use plastics.

#### G. Sustainable Procurement

Recognizing the substantial impact that procurement decisions have on the environment, society, and the economy, the University will maximize its procurement of sustainable products and services. The goals outlined throughout these policy and procedures sections will be applied within the constraints of research needs, medical and patient care, and budgetary requirements and in compliance with all applicable rules, regulations, and laws.

- 1. The University values the health and wellbeing of its students, staff, faculty and other academic appointees, visitors, and suppliers. The University seeks to provide healthy and accessible conditions for the communities it serves, and this will be considered as a fundamental factor when making procurement decisions. Where functional alternatives to harmful products or impacts exist, they are to be strongly preferred.
- 2. Per III.F.1. the University prioritizes waste reduction in the following order: reduce, reuse, and then recycle. Accordingly, sustainable procurement will look to reduce unnecessary purchasing first, then prioritize the purchase of surplus or multiple-use products, before looking at recyclable or compostable products.
- 3. The University's sustainable purchasing requirements (detailed in the <u>UC Sustainable Procurement Guidelines</u>) are:
  - a. Compliance with Required Level Green Spend criteria within three fiscal years of the addition of those products and/or product categories to the Guidelines.
  - b. 25% Preferred Level Green Spend as a total percentage of spend per product category; target to be reached within three fiscal years after a category is added to the Guidelines.
  - c. 25% Economically and Socially Responsible Spend as a total percentage of addressable spend; target to be reached within five fiscal years of adoption of this section in the Guidelines.
- 4. Locations, except LBNL, will integrate sustainability into their processes and practices, including competitive solicitations, to satisfy the sustainable purchasing goals outlined above for products, as well as for the procurement of services, by:
  - a. Allocating a minimum of 15% of the points utilized in solicitation evaluations to sustainability criteria. Criteria may include, but are not limited to, sustainable product attributes, supplier diversity, supplier practices, contributions to health and wellbeing, and materials safety. Exceptions to this Policy may only be granted by the appropriate Policy Exception Authority. Decisions to grant an exception will be made in the context of a location's need to support teaching, research and public service when there is a demonstrable case that the inclusion of a minimum of 15% of the points utilized in solicitation evaluation for sustainability criteria will conflict with the project teams' ability to execute a competitive solicitation.
  - Supporting outreach, education, and providing equal access to small, diverse, and disadvantaged suppliers for all applicable University procurement opportunities in accordance with BUS-43 policy.

- c. Comparing the Total Cost of Ownership when evaluating costs for goods and services in the selection of suppliers, whenever feasible.<sup>2</sup>
- d. Targeting sustainable products and services for volume-discounted pricing to make less competitive or emerging sustainable products and services cost-competitive with conventional products and services.
- e. Leveraging purchasing power and market presence to develop sustainable product and service options where not already available.
- f. Requiring packaging for all products be designed, produced, and distributed to the end-user in a sustainable manner.
- g. Contracting with suppliers of products (e.g., electronics, furniture, lab consumables) that have established (preferably non-manufacturer specific) end-of-life reuse, recycling, and/or takeback programs at no extra cost, and in compliance with applicable federal, state, and University regulations regarding waste disposal.
- h. Requiring sustainability-related purchasing claims to be supported with UC-recognized certifications and/or detailed information on proven benefits, durability, recycled content, and recyclability properties, in accordance with the <a href="Federal Trade Commission's (FTC)">Federal Trade Commission's (FTC)</a> Green Guides for the use of environmental marketing claims.
- i. Working with suppliers to achieve greater transparency and sustainable outcomes throughout the supply chain. This may include maximizing the procurement of products that optimize the use of resources from extraction through manufacturing and distribution (e.g., EPA's SmartWay Program).

### 5. Medical Device Reprocessing

As applicable, Health Locations will consider product reprocessing as a sustainability criterion and a reprocessed item should be considered over a comparable product that cannot be reprocessed. Locations, except LBNL, will consult the UC <u>Sustainable</u> <u>Procurement Guidelines</u> document for minimum mandatory sustainability requirements to be included in solicitations for a given product or service category.

#### H. Sustainable Foodservices

1. Campus and Health Locations Foodservice Operations

#### a. Food Procurement

Each Campus Location will strive to procure 25% sustainable food products by the year 2030 as defined by AASHE STARS, and each Health Location foodservice operation will strive to procure 30% sustainable food products by the year 2030 as

<sup>&</sup>lt;sup>2</sup> Public Contract Code§ 10507.8 states: "As provided for in this article, when the University of California determines that it can expect long-term savings through the use of life cycle cost methodology, the use of more sustainable goods and materials, and reduced administrative costs, the lowest responsible bidder may be selected on the basis of the best value to the University. To implement this method of selection, the Regents of the University of California will adopt and publish policies and guidelines for evaluating bidders that ensure that best value selections by the University are conducted in a fair and impartial manner."

defined by Practice Greenhealth, while maintaining accessibility and affordability for all foodservice patrons.

#### b. Education

Each Campus and Health Location will provide patrons and foodservice staff with access to educational and training materials that will help support their food choices.

## c. Menu Development

Each Campus and Health Location will strive to reduce greenhouse gas emissions of their food purchases through globally-inspired, culturally-acceptable plant-forward menus.

- i. Each Campus and Health Location will procure 25% plant-based food by 2030 and strive to procure 30% by 2030.
- 2. Foodservice Operations in Third-Party leased locations:
  - a. Third-party Foodservice operations agreements and leases within Campus and Health Locations and contractors providing foodservices at Locations will strive to meet the policies in III.H.1.a-c.
  - b. Campus and Health Locations will include Section III.H of this Policy in lease language as new leases and contracts are negotiated or existing leases are renewed. However, Campus and Health Locations will also work with tenants to advance sustainable foodservice practices as much as possible within the timeframe of current leases.

### I. Sustainable Water Systems

With the overall intent of achieving sustainable water systems and demonstrating leadership in the area of sustainable water systems, the University has set the following goals applicable to all locations:

- 1. Locations, except ANR, will reduce growth-adjusted potable water consumption 20% by 2020, and 36% by 2025, when compared to a three-year average baseline of FY2005/06, FY2006/07, and FY2007/08. Locations that achieve this target early are encouraged to set more stringent goals to further reduce potable water consumption.
  - a. Locations, except ANR, will strive to reduce potable water used for irrigation by converting to recycled water, implementing efficient irrigation systems, planting drought-tolerant landscaping (including California native plants where feasible and appropriate), and/or removing turf.
  - b. Campus and Health Locations will complete Water Recycling and Stormwater Evaluations.
- 2. Locations, except ANR, will develop and maintain a Water Action Plan that identifies long-term strategies for achieving sustainable water systems.
- 3. Campus Locations and LBNL will identify once-through cooling systems, constant flow sterilizers, constant-flow autoclaves and other water-to-waste cooling systems. Campus

Locations and LBNL will develop and implement plans for eliminating or replacing these systems with recirculating systems or other means of cooling that do not drain water to waste after one use.

- 4. New equipment requiring liquid cooling will be connected to an existing recirculated building cooling water system, new local chiller vented to building exhaust or outdoors, or to the campus chilled water system through an intervening heat exchange system, if available.
  - Once-through or single-pass cooling systems will not be allowed for soft-plumbed systems using flexible tubing and quick-connect fittings for short-term research settings.
  - b. If no alternative to single-pass cooling exists, water flow must be metered, automated and controlled to reduce water waste.
- 5. Required water efficiency measures applicable to building projects are outlined in Section A of this Policy on Green Building Design, New Building.
- 6. Guidelines for the sustainable procurement of water fixtures, as applicable, are listed in the <u>UC Sustainable Procurement Guidelines</u>.
- 7. Locations must provide easy access to drinking water at no charge in accordance with California Water Code Section 106.3 (enacted through AB 685 in 2012)

## J. General Sustainability Performance Assessment

- 1. All undergraduate Campus Locations must maintain a certified AASHE STARS report.
- 2. All undergraduate Campus Locations must achieve a Gold STARS rating and strive for Platinum.
- 3. Health locations will achieve Practice Greenhealth's award "Greenhealth Partner for Change.

## K. Health and Well-Being

Health, equity, and the environment, including climate, are deeply interconnected, thus health, inequity, and environmental and climate change require intersectoral and collaborative solutions. Healthful food, healthy buildings, and active transportation are just some examples in which health, sustainability, and equity are synergistic. The Healthy Campus Network (HCN) leadership will use a Health in All Policies<sup>3</sup> framework and broad stakeholder engagement to better address health inequities; to support a culture of health for all faculty, staff, and students; to foster community collaborations across the UC system and California; and to meet the policy goals outlined below.

<sup>&</sup>lt;sup>3</sup> Rudolph, L., Caplan, J., Ben-Moshe, K., & Dillon, L. (2013). Health in All Policies: A Guide for State and Local Governments. Washington, DC and Oakland, CA: American Public Health Association and Public Health Institute

- 1. The HCN will review the strengths and gaps in the UC Sustainable Practices Policy and make recommendations for integration based on:
  - a. Environmental and human health co-benefits,
  - b. Social, physical, and emotional well-being, and
  - c. Health equity.

### 2. Healthy Vending

- a. Healthy Spend
  - i. By two years after the effective date of this policy, suppliers that operate or maintain vending machines at Campus and Health Locations will:
    - Ensure at least 50 percent of the beverages in a vending machine meet the UC Healthy Vending Guidelines for Healthy Spend.
    - Ensure that all Campus and Health Locations offer at least 35 percent of the food in a vending machine that meet the UC Healthy Vending Guidelines for Healthy Spend.
  - ii. By four years after the effective date of this policy, suppliers that operate or maintain vending machines at Campus and Health Locations will:
    - Ensure at least 60 percent of the beverages in a vending machine meet the UC Healthy Vending Guidelines for Healthy Spend.
    - Ensure at least 40 percent of the food in a vending machine meet the UC Healthy Vending Guidelines for Healthy Spend.
  - iii. New/revised lease agreements and contracts with vending machine companies will require that the UC Healthy Vending Guidelines are met.
  - iv. Off-campus Leased Facilities are encouraged, but not required, to meet this policy if feasible.

#### b. Marketing

- i. Campus and Health Locations will promote items that meet the UC Healthy Vending Guidelines in campus vending and report annually as to what strategies have been implemented. This report will include a campus' goals for and efforts to prioritize the products that meet the guidelines in the following areas:
  - Eye-level placement in vending machines,
  - Advertisements, wraps, and signage on vending machines,
  - Highlighting items that meet UC Healthy Vending Guidelines,
  - Number of facings and varieties of healthy options, and
  - Consumer price incentives such as competitive pricing of healthy items.

#### c. Resource Conservation

- i. In line with targets outlined in III.G.3 of this Policy on Sustainable Procurement, appliances and IT hardware, including vending machines, should meet the Required Level Green Spend. 25% of appliances and IT hardware should meet the Preferred Level Green Spend.
- ii. In meeting these Healthy Vending goals, locations will follow the provisions of the Zero Waste sections of this Policy, including eliminating the use of packaging foam and single use plastic products.
- 3. Chemicals of Concern: Locations, except LBNL, will provide appropriate staff with access to educational materials and/or training on the UC Sustainable Procurement Guidelines to help ensure greater adherence to the UC Policy on Sustainable Practices Procurement section.

## L. Anti-Racism, Diversity, Equity and Inclusion

The University is committed to applying anti-racism principles to all its sustainability policy areas, programs, and initiatives. The University is committed to ensuring that UC sustainability programs are diverse in their staff, and representative and inclusive of the communities who are engaged in these programs and equitable in their outcomes. The University will ensure collaborative and inclusive processes where sustainability work is driven by the contributions of diverse voices and perspectives centered in equity drive sustainability work. To achieve this, the University will:

- 1. Complete a DEIJ assessment of the existing sustainability policy that is responsive to local community needs and requests and identifies what is missing in the existing policy as well as what language or goals could be changed to be more community responsive.
- 2. Develop goals that incorporate principles of anti-racism, diversity, equity, and inclusion into specific areas of this Policy, as appropriate, by 2025.
- 3. Include a DEI/J impact analysis as part of any addition to or revision of this Policy.

### IV.COMPLIANCE/RESPONSIBILITIES

### A. Implementation

The Executive Vice President - Chief Financial Officer is the Responsible Officer for this Policy. The UC Sustainability Steering Committee, which is chaired by the Executive Vice President - Chief Financial Officer, provides oversight for all aspects of the Policy.

#### B. Revisions

The President is the approver of this Policy and has the authority to approve or delegate the approval of revisions to the Policy.

The systemwide Working Group corresponding to each section of the Policy recommends Policy revisions to the UC Sustainability Steering Committee and Executive Vice President - Chief Financial Officer. Proposed previsions accepted by the UC Sustainability Steering

Committee and the Executive Vice President - Chief Financial Officer will then be recommended to the President for approval or to the appropriate delegated authority, as stated above.

The Sustainable Practices Policy will be reviewed, at a minimum, once every three years with the intent of developing and strengthening implementation provisions and assessing the influence of the Policy on existing facilities and operations, new capital projects, plant operating costs, fleet and transportation services, and accessibility, mobility, and livability. The University will provide for ongoing active participation of students, faculty and other academic appointees, administrators, and external representatives in further development and implementation of this Policy.

### C. Compliance

Chancellors and the LBNL Director are responsible for implementation of the Policy in the context of individual building projects, facilities operations, etc. An assessment of location achievements with regard to the Policy is detailed in an annual report to the Regents. The internal audit department may conduct periodic audits to assess compliance with this Policy.

## D. Reporting

On an annual basis, the President will report to the Regents on the University's sustainability efforts in each area of the Policy. Unless otherwise specified, reporting on progress on each section of this Policy will be to UCOP as part of the development of the Annual Report on Sustainable Practices.

#### V. PROCEDURES

### A. Green Building Design

- 1. New Buildings and Major Renovations
  - a. Projects will utilize the versions of the UC Policy on Sustainable Practices, CBC energy efficiency standards (Code), and LEED-BD+C that are in effect at the time of the first submittal of Preliminary Drawings (at the end of the Design Development Phase) as defined in the <u>UC Facilities Manual</u>. In the event that Preliminary Drawings are not submitted to the University for compliance, the date of submittal of the completed Construction Documents to the University shall be the effective date for all items noted in this paragraph.
  - b. If eligible, all new buildings and major renovations (as defined in III.A) will register with the local utility's energy efficiency programs to get the financial resources needed to meet the University's aggressive efficiency targets and to document compliance with the requirement to outperform CBC energy efficiency standards by at least 20%.

- c. Projects, other than acute care facilities and medical office buildings, that opt to use energy performance targets for compliance with III.A.1.a. will, at a minimum, use the whole-building energy performance target listed below that corresponds to the year the project's Preliminary Drawings or Construction Documents are submitted, as described in section V.A.1.a.
  - i. The whole-building energy performance target is expressed as a percentage of the sum of the Annual Electricity and Annual Thermal targets (converted to kBtu/gsf-yr) as developed for UC Building 1999 Energy Benchmarks by Campus, in Sahai, et al. 2014 and updated with a new "100% Lab Space" use type in the spreadsheet 2016 Whole-Building Quantitative Energy Performance Targets (2020 update).4

#### Table 1

Calendar Years	Compliance Target	Stretch Target
2015-16	65%	50%
2017-18	60%	45%
2019-20	55%	40%
2021-22	50%	35%
2023-24	45%	30%
2025 or after	40%	25%

- d. Projects will report energy use intensity (EUI, kBtu per square foot per year) at minimum three times in their lifespan:
  - Target EUI based on UC Building Benchmarks at plan phase (P-Phase) funding approval
  - ii. As-designed EUI based on energy modeling at the approval of design or the start of construction (completion of the W-Phase)
  - iii. Post-occupancy EUI based on metered usage at least one year following certificate of occupancy date, submitted by the UC Project Manager as a requirement of project close-out.

Campus Locations using the CBC energy-efficiency standards to demonstrate compliance with III.A.1.a. will also report how much they anticipate exceeding those standards.

<sup>&</sup>lt;sup>4</sup> The "UC Building 1999 Energy Benchmarks by Campus" and "2016 Whole-Building Quantitative Energy Performance Targets (2020 update)" documents can be found at <a href="https://www.ucop.edu/sustainability/policy-areas/green-building/index.html">https://www.ucop.edu/sustainability/policy-areas/green-building/index.html</a>.

- e. Decisions affecting energy efficiency, fossil fuel use, and connection to existing central thermal services will be made in the context of the location's climate action plan. Where on-site fossil fuel combustion within the building is deemed necessary, the rationale for this decision will be documented as part of the existing project approval process. The submittal should include the following:
  - An estimate of annual electricity and gas use for the project as well as the project's target design energy use in thousand British thermal units (kBtu) per square foot.
  - ii. An explanation of why fossil fuel combustion is required for the project and what other alternatives were evaluated.
  - iii. An analysis explaining why fossil-fuel combustion is the most cost-effective energy source for the identified project-specific applications.
  - iv. A plan to mitigate the associated greenhouse gas emissions in accordance with the location's Climate Action Plan.

This documentation is part of the broader project approval process and does not require separate UCOP approval. Draft information should be submitted prior to budget approval as part of a Project Planning Guide, Delegated Authority Project Certification Checklist or related ancillary document. This information should be updated prior to design approval.

f. Acute care facilities and medical office buildings opting to use energy performance targets for compliance with III.A.1.b. will, at a minimum, use the whole-building energy performance target listed in Table 2 below. The whole-building energy performance target is expressed as a percentage of the sum of the Annual Electricity and Annual Thermal targets (converted to kBTU/gsf-yr) based on ASHRAE (2012) Advanced Energy Design Guidelines for Large Hospitals.

Table 2

	Acute Care			Medical Office Buildings		
	Benchmark Average	Target	Stretch Target	Benchmark Average	Target	Stretch Target
UC Davis Health	230	160	115	85	60	43
UC Irvine Health	230	160	115	80	56	40
UCLA Health	230	160	115	80	56	40
UC San Diego	230	160	115	80	56	40
UC San Francisco Health	230	160	115	80	56	40

- g. Locations will demonstrate compliance based on the results of energy modeling that represents a best estimate of as-operated, whole-building energy use, before accounting for on-site energy generation. Targets are intended to be verifiable in actual operation following building occupancy.
  - i. Projects are also required to model and report on the following metrics:
    - annual electricity consumption (kWh/gsf/yr)
    - annual thermal consumption (therms/gsf/yr)
    - peak electricity (W/gsf)
    - peak chilled water (tons/kgsf) (if applicable)
    - peak thermal (therms/hr/kgsf)
  - ii. The following very high-intensity process loads may be subtracted out of the total building energy use intensity if they can be metered separately:
    - Clean room
    - Data center
    - Micro-chip fabrication
    - Accelerator (e.g., laser, light source)
    - Bio-safety level III Laboratory
    - Magnetic Resonance Imaging (MRI)
    - Positron Emission Tomography (PET)

- Computer Tomography (CT)
- Pharmacies
- Proton Therapy
- Cyber Knife
- Gamma Knife
- iii. If a building has more than 6 Operating Rooms (ORs), additional ORs (defined as any ORs beyond the baseline of 6 ORs) may be subtracted out of total building energy use intensity if they meet the following two requirements:
  - OR heating, ventilation and air conditioning (HVAC) is metered separately; and,
  - A commitment is made by an appropriate official within the hospital's administration to implement an OR HVAC setback program in the subtracted ORs.
- h. Monitoring-Based Commissioning (MBCx) during the first year of occupancy shall follow a MBCx plan developed during construction and integrated with the building commissioning process, in coordination with and approved by the location Energy Manager and Facilities Director. Process loads, building operations and environmental functions shall be monitored continuously. Action plans will be developed and executed for correction of deficient operations compared to building design. Additional guidelines and requirements for the MBCx plan are outlined in the <a href="UC Green Building Guidelines">UC Green Building Guidelines</a>. Funding for implementing the one-year MBCx plan will be included in the building project budget.
  - i. Permanent installation and commissioning of energy metering sufficient to support the MBCx plan and track whole building EUI will be included in the scope and budget of the building project. Metering selection, placement location and installation shall be reviewed and approved by the location Energy Manager and Facilities Director. Sub-metering requirements of high-intensity end-use loads will be reviewed and approved by the location Energy Manager. Recommended submetered loads include HVAC, interior/exterior lighting, garage space and other loads based on a >10% of building consumption guideline. Additional recommendations and requirements are outlined in the UC Green Building Guidelines.
  - ii. This provision applies to all building projects submitting Preliminary Drawings after January 1, 2027 (per section V.A.1.a.).
- Locations are encouraged to coordinate with local water districts in efforts to conserve water and to meet reduced water use goals of the local districts.

### 2. Privatized Development

a. All privatized development of New Buildings or Major Renovations on Universityowned land that is constructed in whole or in substantial part for University-related purposes (i.e., in furtherance of the University's mission, both programmatic and

auxiliary uses), and build-to-suit projects not on University-owned land constructed for University-related purposes, will comply with section III.A. of this Policy. The provisions of this subsection apply regardless of the business relationship between the parties (i.e., whether a gift, acquisition, ground lease and/or lease).

## 3. Building Renovations

- a. At budget approval, all renovation projects should include a list of sustainable measures under consideration.
- b. For all improvement projects in spaces leased or licensed by the Regents to be used for University-related purposes for a term of greater than 12 months, locations will strive to comply with the appropriate Policy requirements in III.A.2.

## 4. Waiver Conditions Applicable to all Projects

- a. Waivers will only be granted in exceptional circumstances and will not be considered if the project negatively impacts the ability to comply with the goals of this Policy, in particular the climate action goals outlined in III.C..
- b. Any proposed waiver from section III.A. of the Policy may be requested administratively from the UCOP Executive Director of Capital Programs prior to first project approval.
- c. New Building and Major Renovation projects applying for an exception from section III.A.1.d. of this Policy should strive to achieve a USGBC LEED "Certified" rating. New building and renovation projects that are unable to achieve a USGBC LEED "Certified" rating will submit a request for an exception with a LEED scorecard and supporting documentation to the UCOP Executive Director of Capital Programs, showing the credits that the project would achieve.
- d. Such waiver requests will indicate the applicable section of the Policy and/or Procedures; the proposed solution; and demonstrate equivalency with Policy intent.

#### 5. General/Miscellaneous

- a. The University will develop a program for sharing best practices.
- b. The University will incorporate the requirements of sections III.A. and V.A. into existing training programs, with the aim of promoting and maintaining the goals of the Policy.
- c. The University planning and design process will include explicit consideration of life cycle cost along with other factors in the project planning and design process, recognizing the importance of long-term operations and maintenance in the performance of University facilities.
- d. The University will work closely with the USGBC, I2SL, the Department of Energy, the U.S. Environmental Protection Agency, state government, and other organizations to facilitate the improvement of evaluation methodologies to address University requirements.

### B. Clean Energy

1. Energy Efficiency: The energy efficiency goal follows the spirit of the U.S. Department of Energy's Better Building Challenge. Locations' percent reduction in energy use intensity (EUI) will be reported annually based on the sum of weather-adjusted energy use divided by the sum of the maintained gross square footage (OGSF50). The average annual reduction will be calculated using an established baseline as detailed in the UC EUI Tracking Methods and References. UCOP will use energy usage data from the systemwide purchased utility database for reporting campus energy use intensity, based on the campus-specified set of utility accounts and associated maintained gross square footage. Electric and gas site energy will be converted to kBTU and normalized for weather. Policy goals will be evaluated and adjusted as appropriate following the 2025 reporting year.

### 2. On-campus Renewable Energy

- a. Locations will determine the appropriate mix of measures to be adopted within its clean energy portfolio. The capacity to adopt these measures is driven by technological and economic factors, and each location will need to reevaluate its mix of energy measures regularly.
- b. Locations will periodically evaluate the feasibility of new on-site renewable electricity projects. The financial evaluation of these projects will fully account for the anticipated avoided costs associated with decreased on-site power production from combined heat and power plants and/or purchased electricity, as well as the avoided cost of carbon.

## 3. Off-campus Clean Electricity

- a. Clean electricity is defined as having a residual greenhouse gas emission factor that is less than 150 lbs. CO2/MWh.
- b. Clean electricity will be procured through the following methods and reported on annually:
  - i. A location may opt-in to a utility-provided green power program for its purchased electricity that meets the definition of clean electricity specified in V.B.3.a.
  - ii. The UC Clean Power Program, which will procure and supply to participating campuses 100% clean electricity.
  - iii. Those locations without access to a green power program may purchase Renewable Energy Credits (REC) to offset purchased electricity. To be counted, such RECs will be transferred to UC or retired on behalf of UC.
- 4. Where feasible, the University will seek to benefit from the economies of scale and reduce risk by developing a portfolio for systemwide clean energy procurement contracts from which locations may benefit.

#### 5. On-campus Combustion

a. Locations may also implement local projects to directly transport biogas to the location.

#### C. Climate Action

For the purposes of this section, Campus Locations and their associated Health Locations will comply and report as combined entities.

- 1. All GHG emissions targets are measured on a calendar year basis and reported to the Office of the President in the following year's Annual Report. For example, a 2030 target refers to the emissions produced in the 2030 calendar year and reported in the 2031 Annual Report. All targets are measured as a percent reduction from calendar year 2019's baseline emissions.
- 2. The Climate Change Working Group (CCWG) will continue to evaluate the inclusion of additional Scope 3 categories beyond those included in the climate action section III.C.4. Any difference between the boundaries used for Scope 3 reporting and those used for Scope 1 and 2 reporting will be documented. Reporting for the listed Scope 3 emission categories will begin CY 2024.
- 3. Locations, except LBNL and ANR, will determine the best mechanism to spend or earmark additional funds required by III.C.2.d for direct emissions reduction, for example, infrastructure upgrades, and studies supporting those upgrades. These locations will report annual spending and progress to UCOP.
- 4. Locations, except LBNL, will use The Climate Registry (TCR)<sup>5</sup> General Reporting Protocol for GHG accounting. LBNL will continue to use a federally-required GHG accounting protocol. Locations will complete GHG emissions inventories annually. TCR inventories will be verified by a qualified third party. Campus Locations and UCOP will maintain individual membership with TCR on behalf of the Campus and Health Locations that report GHG emissions as one entity.
- 5. The CCWG, under the UC Sustainability Steering Committee and represented on the President's Global Climate Leadership Council, will monitor progress toward reaching the goals for GHG reduction and evaluate suggestions for strategies and programs to reach these goals.
- 6. Climate Action Plans
  - a. In order to integrate environmental justice, each Location will incorporate the "University of California's Framework for Incorporating Environmental & Climate Justice into Climate Action" and its evaluations into climate action planning and implementation. Climate action plans will also integrate adaptation and resilience considerations.
  - b. Climate action plans will be updated as needed to incorporate new scientific insights and technological advances; reflect applicable laws, policies, and established global commitments; consider State and regional electricity supply issues; and address social and cultural shifts around climate action.

<sup>&</sup>lt;sup>5</sup> The Climate Registry is a nonprofit collaboration among North American states, provinces, territories and Native Sovereign Nations that sets consistent and transparent standards to calculate, verify and publicly report greenhouse gas emissions into a single registry.

- c. Climate action plans will evaluate a broad range of climate solutions and will prioritize selected actions based on cost-effectiveness and climate justice considerations in addition to other location priorities.
- d. In developing and implementing climate action plans, each Campus and related Health Location should collaborate to delineate clear and actionable data with the appropriate depth and clarity to guide campus and health leadership in undertaking data-informed decision-making to guide GHG emissions reductions. This procedure is not intended to create separate emissions reporting under audit/certification processes but to ensure clear and actionable data for Health Locations.

#### 7. Offsets

- a. For the UC's limited use of voluntary offsets (outlined in section III.C.6.a.), only carbon offsets that represent real, additional, quantifiable, durable, and enforceable emissions reduction or carbon removal that have undergone third-party verification will be used.<sup>6</sup>
  - i. The University may develop and maintain additional criteria, guidelines, and procedures for evaluating offsets.
  - ii. Decisions affecting offset procurement will be made in the context of the location's climate action plan while following the offset requirements set forth in this Policy.

## D. Sustainable Transportation

- 1. The Sustainable Transportation Working Group, with input from the Climate Change Working Group, will use normalized data reporting protocols to track progress on sustainable transportation programs. Annually, Locations will collect and report on:
  - a. Fleet metrics: Fleet fuel consumption, total vehicle inventory by fuel type, and the total number and percent of new ZEV fleet acquisitions.
  - b. Commute data: employee, student, and campus-wide commuter mode split, average vehicle ridership (AVR), percent of clean-fueled commuter vehicles, and information needed to calculate scope 3 GHG emissions, as outlined in the <a href="sustainable">sustainable</a> transportation guidelines.
  - c. Number and type of clean transportation fuel infrastructure (e.g., electric vehicle charging stations, natural gas, etc.).
- 2. Due to the unique characteristics of each Location's fleet management protocols, Locations will:
  - a. Maintain a plan to meet the fleet goals (III.1) that considers the infrastructure and financial needs for a low-carbon fleet program.

<sup>&</sup>lt;sup>6</sup> Third-Party Verification involves an audit of offset projects by an independent party.

- b. Implement practical measures to improve fleet emissions, including, but not limited to, managing vehicle fleet size, eliminating non-essential vehicles, purchasing the cleanest and most efficient vehicles and fuels, and investing in zero-emission clean bus operations.
- c. Establish a local process for centralized review and approval of vehicle acquisitions to ensure that those acquisitions comply with this Policy, that noncompliant acquisitions are operationally and financially justified, and that locations take advantage of opportunities to improve fleet utilization and efficiency.
- 3. Locations will implement parking management and pricing strategies to support emissions reduction, trip reduction, and sustainable transportation goals, including variable pricing and unbundling parking and housing costs. LBNL will follow federal transportation requirements in cases where federal and UC fleet requirements conflict.
- 4. Locations and the Sustainable Transportation Working Group will provide GHG and commuter data to inform central and local Human Resource Offices and other key stakeholders in developing best practices guidance on telecommuting, flexible work schedules, and other alternative work arrangements. Any recommendations should take into consideration issues surrounding costs, savings, challenges, and equity.
- 5. This Policy will be consulted for all new campus development, including acquisitions and leases, to evaluate how the development or acquisition would meet the transportation policies and goals of the campus and the University.
  - a. The Sustainable Transportation Working Group will regularly update the systemwide best practices guide for implementing this Policy.

### E. Sustainable Building and Laboratory Operations

- 1. Campus Locations will incorporate the Sustainable Building and Laboratory Operations policy requirements into existing facilities-related training programs, with the aim of promoting and maintaining the goals of the Policy.
- 2. The University will work closely with the USGBC to address the needs and concerns of campuses in the further development of USGBC programs, including the LEED-O+M rating system and the USGBC's "Application Guide for Multiple Buildings and On-Campus Buildings."
- 3. Campus Locations will use the LEED-O+M certification process to advance the University's educational and research mission by using the buildings as living, learning laboratories.
- 4. Campus Locations will assess at least three new research groups through their Green Lab Assessment Program.
- 5. Campus Locations will maintain a UC Green Laboratories Action Plan to determine strengths and areas for improvement within the operations of research laboratories with respect to sustainability and climate action. A standard template for this with required sections will be maintained and updated by the Sustainable Building and Laboratory Operations Working Group, and this plan will be updated every four years.

6. Campus Locations will report annually on their Green Labs program progress, including the number of researchers directly and indirectly engaged by the program each year.

#### F. Zero Waste

- 1. The University will voluntarily comply with Chapter 18.5, the "State Agency Integrated Waste Management Plan," in California Public Resources Code Section 40196.3.
- 2. Waste reduction and recycling will be prioritized in seeking LEED credits for LEED-BD+C, LEED-ID+C, and LEED-O+M projects.
- 3. By the end of 2018, Campus Locations, LBNL, ANR, and UCOPwill submit new waste management plans, including planned waste reduction strategies. Plans will include campus and regional waste management practices and options, evaluate progress towards Policy goals, and determine the associated costs of achieving Policy goals. Waste management plans will be updated and submitted to the Office of the President's Associate Vice President of Capital Programs, Energy and Sustainability every five years.
- 4. In line with the objective to minimize the use of single-use products (Section III.F.4),Locations will,
  - a. Create a local implementation procedure that includes the delineation of an exception/exemption protocol (i.e., identifying campus authority, implementation authority, etc.) for cases where reasonable alternatives to plastic do not exist. Key stakeholders could include sustainability, dining, athletics, event services, and other departments that operate foodservice facilities. Local procedures may consider allowing plastic water bottles for emergency services, emergency water storage, and at events where alternatives are not practically available.
  - b. Work to identify and reduce single-use plastics that are not identified in section III.F.4.
  - c. Recognize that accessibility for and inclusion of the disability community is a priority and integrate best practices into their local implementation procedures to ensure this Policy and its implementation do not create barriers to access or an unwelcoming environment. This includes providing reasonable alternatives to single-use plastic products. If reasonable alternatives are not available, a small stock of single-use plastics (including, but not limited to, plastic straws) should be maintained and made readily available for individuals who need them either at the point of service/cashier; or upon request at dine-in facilities.
- 5. Exceptions will be considered for entities that represent less than 1% of the overall Location solid waste tonnage.
- 6. Reduction, reuse, recycling and composting are the primary methods to be counted toward the municipal solid waste diversion from landfill goals. The goal is to strive for the highest form of resource recovery methods and the best use of the materials. The hierarchy for resource recovery is as follows:

- a. Source reduction: The reduction of waste is the highest form of resource recovery as it eliminates the products from being manufactured or transported in the first place.
- b. Reuse: Reuse materials in their original form (e.g., use lumber for lumber, mugs instead of single-use cups, reuse course readers in subsequent classes. These methods maintain the embodied energy in each material.)
- c. Composting and recycling: Composting is the recycling of organics such as animal waste, bedding, green waste, and food waste into compost and mulch. Recycling refers to the conversion of waste into basic materials so they can be made back into new products.
- d. The methods of reusing and recycling waste vary and will evolve over time as technologies improve. The Zero Waste Working Group comprising waste and recycling professionals from each location will continue to evaluate recycling methods and recommend their appropriateness for counting toward diversion goals.
- 7. Waste Reduction: For the purposes of measuring waste reduction, reporting will be in waste generated per capita per day. Waste generated includes municipal solid waste that goes to landfills and all waste that is diverted through recycling, organics or conversion technologies. Not included in waste reduction calculations are:
  - a. Waste generated as part of major construction and demolition projects;
  - b. Organic waste generated due to landscape management;
  - c. Agricultural and animal-related waste.
- 8. Per capita metrics will be understood in the context of business operations and activities:
  - a. Campus Locations will use Weighted Campus User
  - b. LBNL will use Full-Time Equivalent
  - c. Health Locations will utilize Waste per Adjusted Patient Day.
  - d. Other locations should use the per capita metric that best supports their business operations.
- 9. Campus Locations, LBNL, ANR, and UCOP will strive to achieve 90% diversion of municipal solid waste as soon as feasible through steps that include but are not limited to partnering with local waste haulers to maximize diversion opportunities available and actively engaging with their local campus users to improve source separation. These locations will outline their strategy for maximizing diversion in their waste management plans and updates. Every year, locations will report to UCOP on their progress and next steps towards meeting this target and identify common barriers and opportunities.
- 10. The Zero Waste Working Group will coordinate the development of a systemwide best practices guide to outline methods for quantifying waste generation and diversion at Campus Locations. This guide will include recommendations on boundaries, calculation

- methodologies, contamination rates, tools, best practices for waste reduction and diversion, etc.
- 11. Where significant data methodology errors are found in benchmark years, an appropriate alternative methodology will be determined by agreement with UCOP and the Zero Waste Working Group.
- 12. Reporting of solid waste and recycling data will follow ULs Environmental Claim Validation Procedure for Zero Waste to Landfill (UL2799: 2017-03-22: 3rd Edition) and should be applied in principle to future standards/ editions. Where there are discrepancies between UC policy definitions and goals and UL2799 and subsequent editions, the Policy language will apply.
- 13. Combustion will not count as a form of diversion. Up to 10% of total waste generated per Campus Location may be disposed of through allowable thermal residual conversion.
  - a. To count, waste converted through (non-combustion) thermal processes must include an integrated materials recovery facility (MRF) or equivalent sorting system to recover recyclables and compostable material prior to conversion.
  - b. Consistent with CalRecycle and the Southern California Conversion Technology Project, Allowable Thermal Residual Conversion includes: thermal, chemical, mechanical, and/or biological processes capable of converting post-recycled residual solid waste into useful products and chemicals, green fuels like ethanol and biodiesel, and clean, renewable energy. It does not include combustion. Examples include the transformation of post-recycled residual materials into usable heat or electricity through gasification, pyrolysis, distillation, or biological conversion other than composting..
  - c. Materials that are landfilled or incinerated, including biomass conversion operations that exclusively incinerate organic materials, landfill-gas-to-energy (LFGTE) facilities, and other facilities that do not employ integrated materials recovery or equivalent sorting and recovery systems may not be considered converted residual waste.

#### G. Sustainable Procurement

- 1. This section V.G. will be applied within the constraints of research needs, medical and patient care, and budgetary requirements and in compliance with applicable rules, regulations and laws.
- 2. Locations will work to remove harmful chemicals from products brought onto campus by increasing the purchase of products and materials that disclose known hazards (e.g., in compliance with the requirements of LEED BD+C v4 "Building product disclosure and optimization material ingredients" or updated equivalent) and choosing products with reduced concentrations of chemical contaminants that can damage air quality, human health, productivity, and the environment.

- 3. Locations, except LBNL, will require suppliers to clearly identify products with UC-recognized certifications, as defined by the Sustainable Procurement Guidelines, in both hosted and punch out catalog e-procurement environments.
  - a. Commodity/Contract Managers will work with all contracted suppliers to ensure that contract items that meet the UC criteria for Green and Economically and Socially Responsible (EaSR) Spend as outlined in the Guidelines will be prioritized in all product searches.
  - b. Unless Locations (except LBNL) request otherwise, products that do not meet the University's minimum criteria requirements will be blocked in all hosted catalogs and punch out catalogs upon contract award.
- 4. Locations, except LBNL, will require all strategically sourced suppliers to report annually on their sustainable business operations and quarterly on the University's sustainable purchasing activity. Quarterly spend reports will be collected by the appropriate University of California Procurement Services department. Quarterly spend reports must be filterable, include all products and services purchased, use an Excel-compatible software, include information on a single sheet, and include the following fields:
  - a. Location Name
    - Department and/or delivery location
    - SKU and/or manufacturer number
    - Item description
    - 8-digit UNSPSC code
    - Product category/Title of UNSPSC code
    - Quantity
    - Unit of measure
    - Price
  - b. Third-party sustainability attribute or certification as recognized in the Guidelines
- 5. The University Standards for all packaging materials will be outlined in all solicitations. Suppliers will be required to demonstrate how their standards and practices for packaging materials meet the UC Standards.
  - a. Additional consideration in bid evaluations will be given to suppliers who meet more than one criteria listed in 8 (a) (e) for packaging, and with preference given to bids meeting 8 (b).
- 6. In accordance with section III.F.3., the University has disallowed the use of packaging foam. For implementation procedures, reference the University of California <a href="Sustainable Procurement Guidelines">Sustainable Procurement Guidelines</a>.
- 7. The University requires that all packaging be compliant with the Toxics in Packaging Prevention Act (AB 455) as to be free of any intentionally introduced lead, cadmium, mercury or hexavalent chromium, and containing no incidental concentrations of these

regulated metals greater than 100 parts per million (ppm) by weight. In addition, the University requires that all packaging meet at least one of the criteria listed below:

- Uses bulk packaging;
- b. Uses reusable packaging (e.g., totes reused by delivery service for next delivery);
- c. Uses innovative packaging that reduces the weight of packaging, reduces packaging waste, or utilizes packaging that is a component of the product;
- d. Maximizes recycled content and/or meets or exceeds the minimum post-consumer content level for packaging in the <u>U.S. Environmental Protection Agency</u> <u>Comprehensive Procurement Guidelines</u> for Paper and Paper Products;
- e. Uses locally recyclable or certified compostable material.
- 8. Suppliers, when interacting with the University, will be prohibited from providing hard copies of presentations or other materials. Suppliers will be required to present all information in an electronic format that is easily transferable to University staff, who may choose to print their own copies in accordance with UC Policy if necessary. Materials may be provided if specifically required or requested by a UC representative.
- 9. All recyclers of a Location's electronic equipment must be e-Steward certified by the <u>Basel Action Network (BAN)</u>. In cases where a Location has established take-back programs with a manufacturer, the Location will encourage the manufacturer to become a BAN-certified e-Steward Enterprise (e-Stewards for Enterprises).
- 10. The responsible Policy Exception Authority for granting exceptions to items III.G.5.a. and V.G.7. in the Sustainable Procurement section of this Policy will be the Chief Procurement Officer for a non-UC Health systemwide or Office of the President contract; the AVP, UC Health Procurement for a UC Health Systemwide contract; and otherwise by the Procurement/Supply Chain Director of the campus, medical center, or Laboratory.

### 11. Medical Device Reprocessing

#### Health Locations will:

- a. Strive for new contracts to specify that at least 20% of disposables should be purchased reprocessed as approved by the FDA when available and operationally feasible.
- b. Implement a medical device reprocessing program with an FDA-approved third party reprocessor by 2025.
- c. Evaluate at least 3 products/devices and associated contracts for reprocessing collection by 2025.
- d. Evaluate at least 3 products/devices and associated contracts for reprocessing buyback by 2025.
- e. Health locations will provide an assessment of progress around medical device reprocessing to UCOP by 2025.
- 12. Campus and Health Locations sustainable purchasing reporting requirements are:

- a. Campus Locations will report on percent Preferred Level Green Spend annually beginning at the close of the first full Fiscal Year after a category is added to the Sustainable Procurement Guidelines.
- b. Campus Locations will report annually on percent Economically and Socially Responsible Spend.
- c. Health Locations will report annually on percent Preferred Level Green Spend on office supplies and IT hardware and appliances.
- d. Health Locations will report annually on Medical Device reprocessing program progress.

#### H. Sustainable Foodservices

- Campus and health Location foodservice operations subject to this Policy will include self-operated and contract-operated foodservices, as well as foodservices in leased locations.
- 2. Sustainable food is defined as food and beverage purchases that meet AASHE STARS' "sustainably and ethically produced" food for Campus Locations and Practice Greenhealth's "sustainable food" for Health Locations, as outlined below:
  - a. AASHE STARS 2.2 Sustainably and Ethically Produced for campuses;
  - b. Practice Greenhealth Healthier Food Purchasing Standards for Health Locations.
- 3. Plant-based foods as defined by the Culinary Institute of America's Menus of Change program includes fruits and vegetables (produce); whole grains; beans; other legumes (pulses), and soy foods; nuts and seeds; plant oils; herbs and spices; simple combinations of these foods and their derivatives, and vegetarian/ vegan alternatives to meat and dairy.
  - a. AASHE STARS provides additional guidance on processed food items.
  - b. Animal products (i.e., meat, poultry, fish, seafood, eggs, and dairy) and their derivatives, drinking water, and most ultra-processed foods do NOT qualify as plant-based foods. Examples of ultra-processed foods include sweet or savory packaged snacks; chocolate and candies (confectionary); mass-produced packaged breads and buns; cookies (biscuits), pastries, cakes, and cake mixes; instant sauces; many ready to heat products, including pre-prepared pies and pasta and pizza dishes; powdered and packaged 'instant' soups, noodles and desserts; carbonated drinks; 'energy' drinks; 'fruit' drinks; and distilled alcoholic beverages such as whiskey, gin, rum, and vodka.
- 4. All Campus and Health Location foodservice operations should track and report annually the percentage of total annual food budget spent on sustainable food and plant-based products.
- 5. Locations will integrate sustainability into competitive solicitations. Locations, except LBNL, will allocate a minimum of 15% of the points utilized in solicitation evaluations to sustainability criteria. Additional guidelines for procurement are listed in III G and the <u>UC Sustainable Procurement Guidelines</u>.

- 6. The University prioritizes waste reduction in the following order: Reduce, reuse, and then recycle and compost. Locations are encouraged to utilize compostable foodservice containers and packages that have recycled and/or sustainably harvested content wherever possible. Guidelines for compostable foodware are listed in the UC Sustainable Procurement Guidelines.
- 7. Locations are encouraged to maintain accessibility and affordability for all students, staff, and patrons. Campus Locations are encouraged to explore food recovery programs that can support campus basic needs programs.

## I. Sustainable Water Systems

- 1. Reporting Methods
  - a. Explicitly identify the geographic and operational areas comprising the scope of location water usage (e.g., the campus as defined by its Long Range Development Plan boundary, excluding third-party operated facilities).
  - b. Locations with Health Locations may choose to report Health Locations data and progress toward the target separately from the main campus. Where overlaps in operations and data exist, Campus and Health Locations should identify any gaps or potential for redundancy and explain via reporting.
  - c. All Locations will report water usage in a tabular format using the following methods:
    - Measure per capita water consumption by Weighted Campus User (WCU) for Campus Locations and Adjusted Patient Day (APD) for Health Locations. If necessary, WCU and APD may be combined using the following calculation: [(APD/360) \* 1.5] + WCU;
    - ii. Potable water usage for a baseline period that is three consecutive fiscal years, including FY 2005/06, 2006/07, and FY 2007/08:
      - Total location potable water usage, in gallons, for each of the three years comprising the baseline period,
      - WCU, or APD, for each of the three years comprising the baseline period.
      - Baseline Potable Water Usage: calculate the baseline metric as follows: Step
         1: Divide each year's total water use in gallons by that years' WCU or APD population. Step 2: Average the three gallons/population calculations to derive the Baseline Potable Water Usage for the Location,
      - Multiply the Baseline Potable Water Usage figure by 0.64 to derive the location's 2025 Potable Water Usage Target, and
      - Unless impracticable, provide average gallons of potable water usage per baseline year per gross square foot of a Location's built space for which potable water consumption is being reported
    - iii. Potable water usage for the most recent fiscal year.

- If using only the most recent fiscal year, and not an average, list in the table the following:
  - Total Location potable water usage, in gallons, for the most recent fiscal year,
  - o WCU or APD for the most recent fiscal year,
  - Divide the gallons by the WCU or APD to derive the Current Potable Water Usage, and
- If feasible, provide average gallons of potable water usage per gross square feet for either the three most current fiscal years, if that is the method adopted, or for the single most current fiscal year, using the methodology described above.
- iv. If data is available, total Location non-potable water usage, in gallons, for the most recent fiscal year.
- v. If data is available, report or estimate water usage in the following use categories at a minimum: buildings, landscape, and central plant including cooling towers, identifying the quantities of potable and non-potable used for these purposes.

### 2. Reporting Schedule

- a. Each Location prepared a Water Action Plan as specified below and submitted it to the Office of the President by December 2013.
- Beginning the following year, each Location will provide an annual progress report on implementing its Water Action Plan to include progress on its water usage reduction.

#### 3. Water Action Plans

- a. Each Water Action Plan will include:
  - Water usage and reduction strategies addressing major categories of usage such as irrigation and landscaping, potable water, non-potable water, industrial water, sterilized water, reclaimed water, wastewater, and any other water systems;
  - ii. Stormwater management, including stormwater capture and reuse (or reference to the campus' separate stormwater management plan, if one exists);
  - iii. Suggestions for implementation of innovative water-efficient technologies as part of capital projects and renovations (e.g., installation of WaterSense certified fixtures and appliances, greywater reuse, rainwater harvesting, and watershed restoration); and
  - iv. Education and outreach on water conservation.
- b. Each Water Action Plan, and the water conservation and water efficiency strategies they contain, will also take into account relevant regional conditions

and regulatory requirements, will recognize historical progress, and will acknowledge current location best practices implemented.

### 4. Water Recycling and Stormwater Evaluations

#### a. New Construction:

- i. New construction and major renovation projects shall include water recycling or stormwater reuse evaluations. As an alternative, identify other major water savings opportunities with increased water savings.
- ii. Projects must specify criteria to include water recycling or stormwater collection and reuse in project scope and provide a justification to the UCOP Director of Design and Construction if not including such criteria.

## b. Existing Campus:

- i. By 2025, Campus and Health Locations, as defined in the Long-Range Development Plan, will initiate new water reuse and conservation feasibility evaluations, or have an existing on-going program to develop water conservation, water recycling, and stormwater reuse projects. Evaluations must result in an actionable project concept and show water savings related to campus total consumption in the Water Action Plan.
- ii. The minimum requirement is to perform an evaluation of water conservation, water recycling, or stormwater reuse at any scale, such as: building, district, campus, watershed, or sewer system. Criteria for evaluations are determined by each campus, recognizing the diversity of land use, building types, and infrastructure. Evaluations may be performed by staff, consultants, faculty, or students.

### 5. Drinking Water Access

- a. UC Water Working Group, in collaboration with the UC Healthy Campus Network, will use the UC Healthy Beverage Initiative mapping to identify an evidence-based baseline by 2025, and propose a goal to increase the number of bottle filling stations as a percentage of drinking fountains. The proposal will include guidelines for drinking water access and identifying deficiencies in drinking water access, including consideration of increased drinking water demand during heat wave events.
- b. Drinking water access cannot be met with single use bottled water, or non-plumbed water dispensers, such as bottled water delivery, which have adverse environmental impacts, such as plastic waste and greenhouse gas emissions.
- c. Every Major Capital Project involving a conditioned interior space, with a project budget greater than \$5 million, shall include bottle fillers at each drinking fountain required by the building code in compliance with ADA requirements.General

## J. Sustainability Performance Assessment

- 1. The Campus Location ratings reported must be for a current certified STARS report and under the current STARS point allocations.
- 2. Health Locations will participate in Practice Greenhealth's reporting program and report at a minimum metrics for energy, carbon, water, and waste. To meet the reporting requirements, reporting to Practice Greenhealth will reflect Health Location boundaries and will use either adjusted patient encounters or adjusted patient days as appropriate to reflect non-licensed patient encounters. Reporting to Practice Greenhealth will be based on the most recently completed fiscal year.
- 3. Health Locations may discretionarily submit additional facility-specific applications to Practice Greenhealth for award consideration in addition to a total site/campus application. The stated goal of achieving Practice Greenhealth Partner for Change Awards may be at the campus or facility level.

## K. Health and Well-Being

1. The Healthy Campus Network will build a systemwide working group that will work closely with Campus Locations, Health Locations and community stakeholders to build out and coordinate implementation of this section of the Policy.

### 2. Healthy Vending

- a. Healthy spend is defined as spend on food and beverage products that adhere to the guidelines described in the UC Healthy Vending Guidelines.
- b. Campus and Health Locations will include these Policy provisions in lease language as new leases and contracts are negotiated or existing leases are renewed and work to incorporate these practices, as much as possible, within the timeframe of current leases.
- c. Data reporting for this section will be inclusive of all vending machines sited at Campus and Health Locations, including those that are both owned and operated and not owned and operated by the University.
- d. Campus and Health Locations will report on the following metrics annually for UC's Annual Sustainability Report:
- i. Healthy Spend in dollars in Vending Machines
- e. Progress reporting on the marketing section will be qualitative.

### VI.RELATED INFORMATION

AASHE STARS 2.2 Sustainably and Ethically Produced (Food and Beverage Purchasing)

AASHE STARS guidance on processed food items

BFB-BUS-43 Purchases of Goods and Services; Supply Chain Management

BFB-BUS-38: Disposition of Excess Property and Transfer of University-Owned Property

California Air Resources Board LCFS Pathway Certified Carbon Intensities

California Building Code, Title 24

California Energy Commission's Renewables Portfolio Standard Guidebook

e-Stewards for Enterprise

**Facilities Inventory Guide** 

Federal Trade Commission's (FTC) Green Guides

Practice Greenhealth Healthier Food Purchasing Standards for health locations

Public Contract Code: Materials, Goods, and Services, Section 10507.8

Public Contract Code: Construction

The Climate Registry

**Trademark Licensing Code of Conduct** 

**UC Annual Report on Sustainable Practices** 

UC Cost Threshold for Minor Renovations

UC Facilities Manual (State Codes, Regulations and Agencies)

UC Flexible Work Arrangements and Telecommuting Website

**UC Sustainable Procurement Guidelines** 

**UC Sustainable Procurement Website** 

UC 2016 Whole-Building Quantitative Energy Performance Targets (2020 update)

UL 2799 Environmental Claim Validation Procedure for Zero Waste to Landfill

<u>U.S. Environmental Protection Agency Comprehensive Procurement Guidelines for Paper Products</u>

## VII. FREQUENTLY ASKED QUESTIONS

Not applicable.

## VIII. REVISION HISTORY

**XXXX** Added new provisions to the Green Building section to require Regents' approval for investments in natural gas infrastructure that exceed \$20M and require that new buildings and major renovation projects complete one year of monitoring-based commissioning.

Updated the Clean Energy and Climate Action sections to remove references to centrally procured biogas and added a provision allowing locations to update their greenhouse gas reduction targets at regular intervals.

Replaced outdated single-occupancy vehicle reduction targets in the Sustainable Transportation section with general requirements to continue promoting commute trip

reduction programs. Updated this section to clarify which State electric vehicle regulations apply to UC and add a requirement that each location conducts an annual commuter survey.

Removed the Sustainability at UC Health section and embedded its policy elements within related policy sections. Standardized the terms for campuses and health locations throughout the policy.

Made minor revisions throughout the policy to remove outdated provisions, clarify intent, and improve organization.

**April, 10, 2024:** Policy revised to replace the cost threshold over which minor renovations need to be LEED certified, which was based on the State CCCI, with an equivalent cost threshold that UCOP will set annually that is calculated the same way.

Removed references to carbon offset purchases that are no longer used for policy compliance.

**May 16, 2023:** Policy revised to replace the Climate Protection section with a Climate Action section, and to update the following sections with new goals, procedures, and clarifications: Green Building Design, Clean Energy, Zero Waste, Sustainable Food Services, Sustainable Water Systems, Sustainability at UC Health, General Sustainability Performance Assessment and Health and Well-Being. Policy expanded to add a new section for Anti-Racism, Diversity, Equity and Inclusion.

Raised the minimum green building certification level for new buildings from LEED Silver to LEED Gold. Adopted requirement of Parksmart Silver certification for new parking structures. Additionally, the policy text was updated to remove reference to the defunct Savings By Design Program and make other minor revisions to improve clarity.

Revised the Clean Energy section to indicate that the UC Clean Power Program is already achieving the Clean Electricity goals and to update the goals and timelines around centrally purchased biomethane to reflect current plans.

Replaced the former Climate Protection section with a new Climate Action section. This change replaced the former goal of achieving carbon neutrality by 2025 with a new set of targets and requirements. All campuses, along with their associated health systems will reduce GHG emissions from all scopes 90% by 2045 (from a 2019 baseline) and neutralize any remaining emissions through carbon removal. They will also set interim reduction targets for 2030, 2035 and 2040, update their climate action plans and allocate funds for direct emissions reductions. Offsets will not be counted towards these targets except for those required by the California Air Resources Board or to neutralize the remaining emissions in 2045. Other policy sections that reference the former Climate Protection section were updated to align with the new Policy provisions.

Updated the Zero Waste section to postpone implementation of the single-use plastic requirements that apply to the foodservice until July 2024 and reflect the fact that campuses can no longer count incinerated waste toward their waste diversion rates.

Set a new Sustainable Foodservice target for UC locations to procure 25% plant-based food by 2030 and strive to procure 30%.

Updated the Sustainable Water Systems section to increase LEED water credit requirements to reflect what most UC projects are already achieving, as well as require water conservation,

water recycling or stormwater reuse feasibility evaluations in new construction projects and on existing campus sites. Additionally, included provisions to assess access to drinking water and develop guidelines for increasing such access.

Added new requirements to the Sustainability at UC Health section covering sustainable procurement, specifically medical device reprocessing and the procurement of appliances, hardware, and office supplies.

Revised the General Sustainability Performance Assessment section to remove the target year and change the target rating to maintain Gold and strive for Platinum.

Included new Health and Well-Being policy provisions to specify targets for the percentage of beverages and food in vending machines that meet the UC Health Vending Guidelines. Additional provisions cover the marketing of healthy vending items and energy efficiency, and zero waste goals for vending machines.

Added a new Anti-Racism, Diversity, Equity and Inclusion section that establishes working definitions for relevant terms and requires a complete DEIJ assessment of the Policy, development of DEIJ goals by 2025 as well as creation and utilization of a DEIJ impact analysis for future revisions to the Policy.

Made other small formatting and wording changes to improve the clarity and readability of the Policy.

**March 10, 2022:** Policy revised to update the following sections with new goals, procedures, and clarifications: Green Building Design, Climate Protection, Sustainable Transportation, Sustainable Water Systems, and Sustainability at UC Health. Added a Health and Well-Being Policy section. Made minor clarifications to water and procurement sections.

Updated the Green Building Design section to reference an updated list of whole building performance targets that include 100% Lab Space and include reporting on the energy efficiency policy requirement for new buildings.

Included new provisions establishing criteria for the purchase of carbon offsets to the Climate Protection sections, added a reference to climate justice in campus's Climate Action Plans, and clarified that GHG reductions will be maintained after the 2020 target date.

Replaced the fleet targets in the Sustainable Transportation section with ones that better reflect State policy and technological advances. Incorporated telecommuting into the Sustainable Transportation goals.

Updated the Sustainable Water Systems section to make it easier to read and removed expired dates and details that are already regulatory requirements.

Revised the water and waste goals for health locations so that the same targets are now applicable to each health location.

**July 2020:** Policy revised to update the following sections with new goals, procedures, and clarifications: clean energy, climate protection, sustainable building and laboratory operations for campuses, sustainable foodservice, zero waste, and UC Health. Policy expanded to add a section for general sustainability performance assessment. The following provides more details on the updates:

Added a new provision to the Climate Protection section to require that campuses formally assess options for reducing emissions from combined heat and power plants before capital renewal or major repairs.

Updated the Zero Waste section to integrate the waste diversion and minimization targets into a new zero waste goal and add a new Policy provision to begin phasing out single-use plastic bags and foodware items.

Replaced the 2020 goal in the Sustainable Food Services section, which has already been met, with a new 2030 goal that aligns with the Association for the Advancement of Sustainability in Higher Education's (AASHE) Sustainability Tracking, Assessment and Rating System (STARS) and Practice Greenhealth's requirements.

Added a General Sustainability Performance Assessment section that codifies participation by all undergraduate campuses in the AASHE STARS rating system and achieving a gold rating by 2023.

Updated the UC Health Policy Section to include new waste and water targets for UCI Health and to reference existing green building and sustainable food requirements.

Made other small formatting and wording changes to improve the clarity and readability of the Policy and to clarify which Policy sections apply to the LBNL.

**January 2019:** Policy revised to clarify the following sections: climate protection, zero waste, and sustainable procurement.

**August 2018:** Policy expanded to include UC Health. Changed the name of the Environmental Preferable Purchasing section to Sustainable Procurement. Policy revised to update the following sections with new goals and clarifying language: definitions, green building design, clean energy, zero waste, and sustainable procurement.

**June 2017:** Policy remediated for accessibility according to Web Content Accessibility Guidelines (WCAG) 2.0

Policy revised to reflect the University Carbon Neutrality Initiative, adding definitions of green lab assessment programs, "research group" as defined by the Laboratory Hazard Assessment Tool (LHAT), and the inclusion of the UC Green Laboratories Action Plan. Changes were also made to the sections for Sustainable Building Operations for Campuses.

**June 2016:** Policy revised to update the following sections with new goals and clarifying language: definitions, green building design, sustainable transportation, and sustainable water systems.

**June 2015:** Policy revised to update the following sections: sustainable building operations, sustainable foodservices practices, green building design, and clean energy.

**July 2011:** Policy revised to update the following sections: green building design, climate protection practices, sustainable operations, environmentally preferable purchasing, and sustainable foodservice practices.

**September 2009:** Policy expanded to include sustainable foodservice

**March 2007:** Policy expanded to include sustainable operations, waste reduction, and environmentally preferable purchasing; renovations guidelines added to green building section, climate protection section refined

January 2006: Policy expanded to include transportation and climate protection

**June 2004:** President formally issued the "Presidential Policy on Green Building Design and Clean Energy Standards." This Policy was subsequently renamed the Policy on Sustainable Practices

July 2003: The Regents approved sustainability policy principles (UCOP Sustainability)