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September 16, 2021

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ACADEMIC COUNCIL CHAIR HORWITZ  
LABORATORY DIRECTOR WITHERELL  
ANR VICE PRESIDENT HUMISTON

**Re: Systemwide Review of Proposed Presidential Policy on Sustainable Practices**

Dear Colleagues:

Enclosed for systemwide review are proposed revisions to Presidential Policy on Sustainable Practices.

The systemwide Sustainability Steering Committee is the governing body for the Sustainable Practices Policy and reviews the policy annually for required updates and revisions. This year, the Sustainability Steering Committee approved several policy updates to the Green Building Design, Climate Protection, Sustainable Transportation, Sustainable Water Systems, and Sustainability at UC Health sections. These changes included updating specific targets and adding additional requirements. In addition, a new Health and Well-Being section was added, and a number of minor revisions were made to clarify the intent and improve the readability of the policy.

The specific changes are summarized below by policy section:

- **Green Building Design:** Updated the section to reference a revised list of whole building performance targets that include 100% Lab Space and clarify the reporting process for the existing energy efficiency requirement for new buildings.
- **Climate Protection:** Included new provisions establishing criteria for any purchase of carbon offsets, added guidance to integrate environmental justice, adaptation, and resilience into each campus's Climate Action Plan, and clarified that greenhouse gas emissions reductions should be maintained after the 2020 target date.
- **Sustainable Transportation:** Replaced the fleet targets with ones that better reflect State policy and technological advances and incorporated telecommuting into the commute goals.
- **Sustainable Water Systems:** Updated the section to make it easier to read and removed expired dates and details that are already covered by regulatory requirements.
- **Sustainability at UC Health:** Revised the water and waste goals for health locations so that the same targets are now applicable to each health location.
- **Multiple changes** were made throughout to better reflect guidance in the UC Policy Stylebook, minimize footnotes, move definitions into the text, define acronyms, standardize formatting, etc.

The Sustainable Practices Policy has been reviewed annually since its issuance in 2004 by the Sustainability Steering Committee and the working groups it formed to develop and implement each section of the policy. The review process includes the following three main steps:

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1. Each section in the policy is governed by a separate systemwide working group. Those working groups evaluate their respective policy sections annually and propose revisions as needed. Each working group consists of one or more stakeholders from each campus and health system. These are the individuals responsible for implementing the associated policy requirements and reporting on implementation progress at their respective campus or health system. The working groups make decisions based on consensus. For example, campus fleet managers all agreed on the updated fleet targets in this year's proposed revisions.
2. The Sustainability Steering Committee reviews and discusses the proposed policy changes. The Sustainability Steering Committee includes senior management representation from every campus. This is usually the Vice Chancellor for Administration for campuses and the Chief Operating Officer from each health system. The committee also includes faculty appointed by the Academic Senate as well as appointed undergraduate and graduate student representatives and the Student Regent.
3. The Sustainability Steering Committee approves the recommended policy revisions.

This year's proposed changes have gone through all three steps above. The only change the Sustainability Steering Committee made to the draft revisions recommended by the working groups was to align the waste and water targets so each health system has the same goal. Previously, some health systems had policy targets that were less aggressive than others. All health systems agreed to adopt the same more aggressive waste and water targets.

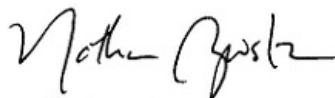
### **Systemwide Review**

Systemwide review is a public review distributed to the Chancellors, the Chair of the Academic Council, the Director of the Lawrence Berkeley National Laboratory, and the Vice President of Agriculture and Natural Resources requesting that they inform the general University community, especially affected employees, about policy proposals. Systemwide review also includes a mandatory, 90-day full Senate review.

Employees should be afforded the opportunity to review and comment on the draft policy. Attached is a Model Communication which may be used to inform non-exclusively represented employees about these proposals. The Labor Relations Office at the Office of the President is responsible for informing the bargaining units representing union membership about policy proposals.

We would appreciate receiving your comments no later than December 15, 2021. Please submit your comments to [Matthew.StClair@ucop.edu](mailto:Matthew.StClair@ucop.edu). If you have any questions, please contact Chief Sustainability Officer Matt St.Clair at [Matthew.StClair@ucop.edu](mailto:Matthew.StClair@ucop.edu).

Sincerely,



Nathan Brostrom  
Executive Vice President and Chief Financial Officer

Enclosures:

- 1) Draft Presidential Policy on Sustainable Practices (clean copy)

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- 2) Draft Presidential Policy on Sustainable Practices (redline copy)
- 3) Model Communication

cc: President Drake  
Provost and Executive Vice President Brown  
Executive Vice Chancellors/Provosts  
Executive Vice President and Chief Operating Officer Nava  
Senior Vice President Bustamante  
Vice President and Vice Provost Gullatt  
Vice President Lloyd  
Vice President Maldonado  
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Manager Smith  
Analyst Durrin  
Policy Advisory Committee



# Sustainable Practices

<b>Responsible Officer:</b>	EVP – Chief Financial Officer
<b>Responsible Office:</b>	ES – Energy & Sustainability
<b>Issuance Date:</b>	X/X/2021
<b>Effective Date:</b>	X/X/2021
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<b>Scope:</b>	All Campuses, Health Locations, and the Lawrence Berkeley National Laboratory

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## I. POLICY SUMMARY

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The Sustainable Practices Policy (“Policy”) establishes goals in 12 areas of sustainable practices: green building, clean energy, climate protection, transportation, sustainable operations, zero waste, procurement, foodservice, water, health care, performance assessment, and health and well-being.

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## II. DEFINITIONS

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**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.

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

**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 [LCFS Pathway Certified Carbon Intensities](#).

**Climate Neutrality:** Climate neutrality is a goal for the University to have net zero climate impacts from greenhouse gas (GHG) emissions attributed to scope 1 direct emission sources and scope 2 indirect emission sources as defined by The Climate Registry, and specific scope 3 emissions as defined by Second Nature's Carbon Commitment. This will be achieved by minimizing GHG emissions from these sources as much as possible and using carbon offsets or other measures to mitigate the remaining GHG emissions.

**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.

**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](#).

**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 fusing 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 in which 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 Facilities Inventory Guide (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.”

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

**Leadership in Energy and Environmental Design (LEED)<sup>TM</sup>:** 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;

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

LEED for Building Design and Construction (LEED-BD+C) 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.

**Location:** As used in this Policy, means all UC campuses, health locations, and the Lawrence Berkeley National Laboratory, as referred to in the “Scope” above.

**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. Non-health location waste targets refer to municipal solid waste only. Health Locations waste targets use the Practice Greenhealth definition of “Total Solid 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.

**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 [Sustainable Procurement Guidelines](#).

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

Direct Potable Reuse: Treated wastewater reused for human consumption.

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

Non-Potable Reuse: 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 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, and 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.

**Savings by Design:** An energy efficiency program offered by California's four investor-owned utility companies and the Sacramento Municipal Utility District. Savings By Design provides design assistance, energy analysis, life cycle costing, and financial incentives for new construction and major renovation projects. The Savings By Design program is also known as the Non-Residential New Construction Program.

**Single-Pass Cooling:** Single-Pass or once-through cooling systems flow water through a piece of equipment to absorb heat and dispose 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), US 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.

**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 campuses 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 campus-specific 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 University 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 a zero waste for locations other than health locations.

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### III. POLICY TEXT

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*The University of California (“University”) is committed to responsible stewardship of resources and to demonstrating leadership in sustainable business practices. 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 twelve areas of sustainable practices.*

## A. Green Building Design

### 1. New Buildings

- a. All new building projects, other than acute care facilities, 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 targets listed in Table 1 of Section V.A.1. The University will strive to design, construct, and commission buildings that outperform CBC energy efficiency standards by 30% or more, or meet the stretch whole-building energy performance targets listed in Table 1 of Section V.A.1, whenever possible within the constraints of program needs and standard budget parameters.
- b. Acute care/hospital facilities and medical office buildings will be designed, constructed, and commissioned to outperform ASHRAE 90.1 - 2010 by at least 30% or meet the whole-building energy performance targets listed in Table 2 in Section V.A.1.
- c. No new building or major renovation that is approved after June 30, 2019, will 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.
- d. All new buildings will achieve a USGBC LEED “Silver” certification at a minimum. All new buildings will strive to achieve certification at a USGBC LEED “Gold” rating or higher, whenever possible within the constraints of program needs and standard budget parameters.
- e. The University of California will design, construct, and commission new laboratory buildings to achieve a minimum of LEED “Silver” certification. Design, construction, and commissioning processes will strive to optimize the energy efficiency of systems not addressed by the CBC energy efficiency standards.
- f. All new building projects will achieve at least two points within the available credits in LEED-BD+C’s Water Efficiency category (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) will at a minimum comply with III.A.1.d. or III.A.1.e. Such projects will outperform CBC Title 24, Part 6, currently in effect, by 20%. This does not apply to acute care facilities.
- b. Acute care facilities and medical office buildings undertaking major renovations, as defined above, will outperform ASHRAE 90.1- 2010 by 30%.

- c. Renovation projects with a project cost of \$5 million or greater (CCCI 5000) that do not constitute a Major Renovation as defined in item III.A.2.a. will at a minimum achieve a LEED-ID+C Certified rating and register with the utilities' Savings by Design program, if eligible. This does not apply to acute care facilities.

## **B. Clean Energy**

In support of the climate neutrality goals outlined in Section C of this Policy, 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**

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

### **2. On-campus Renewable Electricity**

Campuses and health locations 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.

### **3. Off-campus Clean Electricity**

By 2025, each campus and health location will obtain 100% clean electricity. The UC Clean Power Program will provide 100% clean electricity to participating locations.

### **4. On-campus Combustion**

By 2025, at least 40% of the natural gas combusted on-site at each campus and health location will be biogas.

## **C. Climate Protection**

### **1. Greenhouse Gas Emissions**

Each campus and the UC Office of the President will develop strategies for meeting the following UC goals:

- a. Achieve climate neutrality from scope 1 and 2 sources by 2025
- b. Achieve climate neutrality from specific scope 3 sources (as defined by Second Nature's Carbon Commitment) by 2050 or sooner
- c. Maintain greenhouse gas (GHG) emissions at or below 1990, pursuant to the California Global Warming Solutions Act of 2006.

For purposes of this section, campuses will include their related health location for all goals. GHG emissions reduction goals pertain to emissions of the six Kyoto greenhouse gasses (carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons, and perfluorocarbons) originating from all scope 1 and scope 2 sources as specified by the Climate Registry, and from scope 3 emissions as specified by Second Nature's Carbon Commitment, which

includes air travel paid through the institution; and commuting to and from campus by students, faculty and other academic appointees, and staff. These goals will be pursued while maintaining the research, education, and public service missions of the University.

Campuses subject to the United States Environmental Protection Agency (USEPA) Greenhouse Gas Reporting Program, California Air Resources Board (CARB) Mandatory Greenhouse Gas Emissions Reporting or participation in the CARB Cap-and-Trade Program will perform to those regulatory requirements.

## 2. Offsets

- a. The University will prioritize direct reductions of its covered scope 1, 2, and 3 emissions. This Policy does not require the University, as a system and as individual campuses and units, to purchase carbon offsets to meet their carbon neutrality goals; instead, it sets priorities and minimum standards if they decide to purchase offsets. In meeting the UC Sustainable Practices Policy climate goals as outlined in section III.C., the University will use offsets as a transitional strategy, while implementing all feasible reductions in its scope 1, 2, and 3 emissions. The University will reevaluate and update section III.C and V.C of the Sustainable Practices Policy by 2025.
- b. The University will only use high-quality offset credits to meet its climate protection goals, beyond its requirements under California's cap-and-trade program, and will draw on the University's academic capacity to vet the quality of all voluntary offset credits it uses.
- c. To align its voluntary offset program with its research, education, and public service mission, the University will choose offset projects that demonstrate or advance scalable climate solutions aligned with a path towards deep decarbonization; prioritize projects that advance University research and support student education; prioritize projects with health and social justice benefits, and benefits to the UC community and communities surrounding the campuses; and prioritize projects with the potential for climate benefits well beyond the credited reductions, recognizing the urgency of near-term reductions. The University will analyze the ecological, health, social, and human rights impacts of its offset decisions to avoid negative outcomes for low-income communities, communities of color, and other marginalized populations, and to prioritize projects that benefit these communities.
- d. The University will develop and implement its voluntary offset procurement strategy in a way that advances understanding of, and models, how institutions of higher education and in other sectors can use offsets as an effective climate mitigation strategy aligned with their institutional mission.

## **D. Sustainable Transportation**

The University will implement transportation programs and greenhouse gas (GHG) emission reduction strategies that reduce the environmental impacts from

commuting, fleet and business air travel related to achieving the Climate Protection section of this Policy (see Section III.C.).

1. Each location will reduce GHG emissions from its fleet and report annually on its progress. Locations will implement strategies to reduce emissions from University-owned or operated fleet vehicles to align with UC's 2025 carbon neutrality goals (as defined in the Climate Protection sections of this Policy). Carbon neutral fleets can be achieved if vehicles produce no tailpipe emissions, use a clean transportation fuel, and/or if carbon offsets are purchased.

To support this goal, each location will ensure that:

- a. After July 1, 2023, zero-emission vehicles, plug-in hybrid, or dedicated clean transportation fueled 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 of 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 class, the use of clean transportation fuels and other low-emission fuels will be prioritized

Furthermore:

- d. Any carbon offsets purchased to meet the carbon neutrality goal will be coordinated with the location's Office of Sustainability, will support the location's overall carbon neutrality strategy, and will follow the guidelines laid out in the Climate Protection section of this Policy (see Section III.C.).
- e. Vehicle acquisitions plans should meet the State's goal (outlined in Executive Order N-79-20) that all new passenger cars and light-duty trucks (under 8,500 lbs.) acquired after January 1, 2035, and all medium-and heavy-duty vehicles acquired or operated after January 1, 2045, will be zero-emission.

Lawrence Berkeley National Laboratory will follow federal fleet requirements in the case where federal and UC fleet requirements conflict.

2. The University recognizes that single-occupant vehicle (SOV) commuting is a primary contributor to commute-related GHG emissions and localized transportation impacts.
  - a. By 2025, each location will strive to reduce its percentage of employees and students commuting by SOV by 10% relative to its 2015 SOV commute rates;
  - b. By 2050, each location will strive to have no more than 40% of its employees and no more than 30% of all employees and students commuting to the location by SOV.
3. Recognizing that flexible work arrangements, including telecommuting, are a low-cost, effective way to reduce emissions and carbon footprint, each location 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 goal of increasing alternative fuel – specifically electric – vehicle usage, the University will promote purchases and support investment in alternative fuel infrastructure at each location.
  - a. By 2025, each location will strive to have at least 4.5% of commuter vehicles be zero-emissions vehicles (ZEV).
  - b. By 2050, each location will strive to have at least 30% of commuter vehicles be ZEV.
5. Each location will develop a business-case analysis for any proposed parking structures serving University affiliates or visitors to campus to document how a capital investment in parking aligns with each campus' Climate Action Plans and/or sustainable transportation policies.

#### **E. Sustainable Building and Laboratory Operations for Campuses**

1. Each campus will seek to certify as many buildings as possible through the LEED-O+M rating system, within budgetary constraints and eligibility limitations.
2. All campuses will 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.
  - a. At least one staff or faculty member from the campus 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 campuses will maintain a UC Green Laboratories Action Plan.

#### **F. Zero Waste**

1. The University 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 all locations other than health locations, 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. The University supports the integration of waste, climate and other sustainability goals, including the reduction of embodied carbon in the supply chain through the promotion of a circular economy and the management of organic waste to



promote atmospheric carbon reduction. In support of this goal, waste reporting will include tracking estimated scope 3 greenhouse gas emissions.

3. The University prohibit 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. No packaging foam or expanded polystyrene (EPS) will be used in foodservice facilities for takeaway containers.

For implementation guidelines as they relate to the procurement of goods for University of California campuses, reference the [University of California Sustainable Procurement Guidelines](#).

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. Eliminate plastic bags in all retail and foodservice establishments in campus facilities or located on University owned land no later than January 1, 2021
  - 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, 2021
  - c. Provide reusable foodware items for food consumed onsite at dine-in facilities and to-go facilities no later than July 1, 2022.
  - d. Replace single-use plastic foodware items with reusable or locally compostable alternatives at to-go facilities no later than July 1, 2022
  - 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, 2023.
    - 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 University locations (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 of California 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 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 [UC Sustainable Procurement Guidelines](#)) are:
  - a. 100% 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. The University's sustainable purchasing reporting requirements are:
  - a. Reporting on percent Preferred Level Green Spend beginning at the close of the first full Fiscal Year after a category is added to the Guidelines.

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- b. Reporting on percent Economically and Socially Responsible Spend beginning at the close of Fiscal Year 2018/19.
5. Each University's Procurement department will integrate sustainability into its processes and practices, including competitive solicitations, to satisfy the sustainable purchasing goals outlined above for products, as well as for the procurement of services. The University will do so by:
  - a. Allocating a minimum of 15% of the points utilized in solicitation evaluations to sustainability criteria. Criteria may include, but is 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.
  - b. 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>1</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 its purchasing power and market presence to develop sustainable product and service options where not already available.
  - f. Requiring packaging for all products procured by the University 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 to the University, 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

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<sup>1</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."

the [Federal Trade Commission's \(FTC\) Green Guides](#) for the use of environmental marketing claims.

- i. Working with its 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).
6. All procurement staff will consult the UC [Sustainable Procurement Guidelines](#) 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 Location Foodservice Operations

#### a. Food Procurement

Each campus foodservice operation 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 defined by Practice Greenhealth, while maintaining accessibility and affordability for all students and health location's 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. Campuses and health centers will establish a baseline and goal in 2020.

Progress will be tracked annually by reporting the percentage of plant- based foods procured beginning in 2021.

### 2. Foodservice Operations in Leased Locations:

- a. Foodservice operations leased in campuses and health locations owned by the University of California and contractors providing foodservices in campus and health locations will strive to meet the policies in III.H.1.a-c.

- b. Campuses and health locations will include Section 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 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. Each campus 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 by removing turf.
2. Each location will develop and maintain a Water Action Plan that identifies long term strategies for achieving sustainable water systems.
3. Each campus will identify once-through cooling systems, constant flow sterilizers, constant-flow autoclaves and other water-to-waste cooling systems. Each campus 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.
  - a. 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 UC Sustainable Procurement Guidelines.

## **J. Sustainability at UC Health**

1. Health locations will achieve Practice Greenhealth's award "Greenhealth Partner for Change."
2. Health locations will achieve a target of 25lbs of total solid 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. In meeting these goals, Health locations will follow the provisions as outlined in section F of this Policy on Zero

Waste, including limiting combustion and reducing the use of foam and single use products.

- a. Practice Greenhealth defines total solid 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. In line with campus targets, health locations 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.
4. Acute care/hospital facilities and medical office buildings in health locations will be designed, constructed and commissioned, or renovated as outlined in Section A of this Policy on Green Building Design.
5. Health locations will strive to procure 30% sustainable food products by the year 2030 as defined by Practice Greenhealth and outlined in Section H of this Policy on Sustainable Foodservices.

#### **K. General Sustainability Performance Assessment**

1. All undergraduate campuses must maintain a certified AASHE STARS report.
2. All campuses must achieve a Silver STARS rating and strive for Gold by 2023.

#### **L. 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>2</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.

1. By the end of 2022, 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. By the end of 2021, the HCN will review and revise healthy vending goals with stakeholders to propose for inclusion in this Policy.

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<sup>2</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

3. By the end of 2021, the HCN will review the chemicals of concern criteria detailed in the Sustainable Procurement Guidelines and make recommendations for the inclusion of specific Policy targets.

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## **IV. COMPLIANCE/RESPONSIBILITIES**

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### **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 provisions 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 Lawrence Berkeley National Laboratory 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](#).

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## V. PROCEDURES

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### A. Green Building Design

1. New Buildings and Major Renovations
  - a. Projects will utilize the versions of the CBC energy efficiency standards and of LEED-BD+C that are in effect at the time of the first submittal of “Preliminary Plans” (design development drawings and outline specifications) as defined in the [State Administrative Manual](#).<sup>3</sup>
  - b. If eligible, all new buildings and major renovations (as defined in III.A) will register with the Savings By Design program to document compliance with the requirement to outperform CBC energy efficiency standards by at least 20%.
  - c. Projects other than acute care facilities 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 of the project’s budget approval.
    - 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 \(2020 update\)](#).<sup>4</sup>

**Table 1**

<b>Calendar Years</b>	<b>Compliance Target</b>	<b>Stretch Target</b>
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 their target energy use and how much they anticipate exceeding the CBC energy-efficiency standards (campuses), ASHRAE 90.1 - 2010 (Health Locations), or the UC Building Benchmarks at plan phase (P-Phase) approval. This information will be confirmed with modeled energy

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<sup>3</sup> The State Administrative Manual is a reference source for statewide policies, procedures, regulations and information developed and issued by authoring agencies such as the Governor’s Office, Department of General Services , Department of Finance , and Department of Personnel Administration.

<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 in the [Green Building section of the UC Sustainability website](#).



estimates, at approval of the start of construction (completion of the W-Phase). Final efficiency will be reported at closeout (generally a year after the building has been occupied).

- 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:
  - i. 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, by 2025, 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.c. 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.

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/kgf) (if applicable)
- peak thermal (therms/hr/kgf)

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

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- 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:
- i. OR heating, ventilation and air conditioning (HVAC) is metered separately; and,
  - ii. 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. 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 University-owned 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 listing 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 goal of achieving carbon neutrality by 2025.
  - 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.

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- 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, I<sup>2</sup>SLthe 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 US Department of Energy's Better Building Challenge. Each location's 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. Each location 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. CO<sub>2</sub>/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 to reduce risk by developing a portfolio for systemwide clean energy procurement contracts from which locations may benefit.
5. On-campus Combustion
  - a. The University will develop and procure biogas supplies under the direction of the Energy Services Unit Governing Board (The Governing Board). The Governing Board will establish acceptable pricing for biogas projects and determine how the biogas will be allocated to each location. Locations may also implement local projects to directly transport biogas to the location.

### C. Climate Protection

1. Each campus will maintain individual membership with [The Climate Registry](#) (TCR).<sup>5</sup> Campuses will include their health locations in their membership.
2. Each campus will complete a Greenhouse Gas (GHG) emissions inventory annually. Campuses will include their health locations in their inventories.
3. To comply with TCR and the Second Nature Carbon Commitment requirements,<sup>6</sup> inventories should contain emissions of the six Kyoto greenhouse gasses from scope 1 and 2 emission sources outlined in the TCR General Reporting Protocol; and scope 3 emissions sources outlined by the Second Nature Carbon Commitment's Implementation Guide. All UC campuses will report their updated emissions inventories through the Second Nature Carbon Commitment online reporting tool at least biennially. Campuses must verify all emissions inventories through TCR. Campuses may either pursue verification annually (for the previous

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<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.

<sup>6</sup> The Second Nature Carbon Commitment requirements are outlined at [Second Nature: The Presidents' Climate Leadership Commitments](#).

year's emissions inventory) or biennially (for the emissions inventories from the previous two years).

4. Campuses subject to the United States Environmental Protection Agency (USEPA) Greenhouse Gas Reporting Program, California Air Resources Board (CARB) Mandatory Greenhouse Gas Emissions Reporting, or participation in the CARB Cap-and-Trade Program will complete the relevant emissions inventories outlined in the USEPA and CARB reporting protocols.
5. Each campus will regularly update its climate action plan for (a) maintaining GHG emissions at or below 1990 levels ; (b) achieving climate neutrality for scope 1 and 2 sources by calendar year 2025 (annual 2025 emissions reported in 2026); (c) achieving climate neutrality for the Second Nature Carbon Commitment-specified scope 3 sources (as defined by Second Nature's Carbon Commitment) for calendar year 2050 (annual 2050 emissions reported in 2051); and, (d) climate action planning will integrate environmental justice, adaptation, and resilience. This will include an annual review and update, if needed, of the GHG reduction strategies reported by the campus to the UC Office of the President (UCOP). Campuses will include their health locations in the action plan.
6. Each campus will complete an assessment of Scope 1 emissions from natural gas combustion by 2035 or at the date when that location's combined heat & power plant (or any other major fossil fuel-using campus infrastructure) is planned for capital renewal or major repair, whichever occurs first. The assessment should determine the best pathway, at that point, to decarbonize 80% of scope 1 emissions through means other than offsets. A de-carbonization assessment should evaluate, but is not limited to, (1) progress toward de-carbonization of piped gas, (2) the feasibility of installing on-site carbon capture, (3) electrification of carbon-emitting plant equipment, (4) hydrogen or synthetic methane injection, (5) emergent technologies, and (6) energy efficiency directed at Scope 1 footprint reductions. The assessment should be provided to campus leadership and inform each campus's Climate Action Plan.
7. The Climate Change Working Group (CCWG), under the UC Sustainability Steering Committee and represented on the President's Global Climate Leadership Council, will monitor progress toward reaching the stated goals for GHG reduction, and will evaluate suggestions for strategies and programs to reach these goals.
8. The CCWG will develop protocols for growth adjustment, data normalization, and accurate reporting procedures, as required.
9. The University will use only high-quality carbon offsets to meet its climate protection goals beyond its requirements under California's cap-and-trade program. High-quality offsets represent real, additional, quantifiable, durable, and

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enforceable emissions reduction or carbon removal, that have undergone third-party verification.<sup>7</sup>

- a. For the purposes of this section, offsets are considered:
  - i. Additional if the credited reductions would not have occurred were it not for the offset program or the University's climate protection policy. Additionality can be assessed for an individual project or for a project type
  - ii. Durable if there is a very high likelihood that they will remain out of the atmosphere for 40 years on-site or through commitments to replace credits.
  - iii. Enforceable if the University is able to reasonably ensure that its quality standards are met.
- b. The University recognizes that not all offset credits available for purchase from projects registered in the major offset registries represent high-quality emissions reductions.
- c. The University will evaluate the quality of each offset project it uses, involving a peer review process overseen by the Carbon Abatement Technical Committee (CATC). The CATC will be made up of at least one representative from each University of California campus, LBNL, Office of the President, and at least one student and one faculty member representative from the University. This review will include evaluating individual projects, or types of projects, against the University's offset quality criteria by appropriate experts. Peer review is in addition to third-party verification.
- d. Credits are considered to be real if the quantity of credits generated and used by a project, or a project type, does not exceed conservative estimates of the actual effect of the project, or the set of projects of the project type, on emissions. When there is uncertainty in emissions reduction/removal estimates, estimates are conservative when they are more likely to under-represent than to over-represent actual emissions reductions/removals achieved. Evaluations will take into account the following factors as detailed in the UC Offset Procurement Guidelines: project additionality, conservativeness of methods used to estimate emission reductions including the baseline, and effects outside of project boundaries such as through leakage.<sup>8</sup>
- e. The results of these evaluations, including quantitative assessments of credit quality and justifications for the assumptions and determinations made, will be

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<sup>7</sup> Third-Party Verification will involve an audit of offset project eligibility or claimed reductions or removals against an approved methodology by an independent party.

<sup>8</sup> An offset project results in leakage when it reduces an activity, in turn causing that activity, and the associated emissions, to shift location to somewhere outside of the offset project boundaries. For example, a project that increases forest carbon by reducing timber harvesting can result in increased harvesting on other forestlands to meet timber demand.

released publicly for all offset projects or project types the University uses to meet its climate targets.

- f. The CATC will develop and maintain additional criteria, guidelines, and procedures for evaluating offset projects against the University's quality and mission criteria in the UC Offset Procurement Guidelines to be published in 2022.
- g. The University recognizes the quality and mission benefits of implementing its own offset projects. UC-initiated offset projects give the University greater knowledge about the project with which it can ensure the projects' additionality and have confidence in the emission reduction estimates. UC-initiated offsets can also support the University's mission by researching, testing, and refining climate mitigation solutions and supporting student education which can have climate mitigation benefits far beyond the reduction from the credited offset project. The University system and its individual campuses and units will prioritize offset projects with active University involvement.
- h. 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 develop normalized data reporting protocols to track progress on the implementation of sustainable transportation programs. Annually, each location will collect and report:
  - a. Fleet efficiency metrics: fleet fuel consumption, total vehicle inventory, and total number and percent of new ZEV fleet acquisitions.
  - b. Commute data: employee and campus-wide mode split, including telecommute and compressed week, average vehicle ridership (AVR), and percent of commuter alternative fuel vehicles including ZEVs.
    - i. Average vehicle ridership is calculated by dividing all person trip arrivals by private vehicle trips, with adjustments for telecommuting, compressed work weeks, and zero-emission vehicles (based on the South Coast Air Quality Management District's methodology).
  - c. Number and type of alternative fuel infrastructure (e.g., electric vehicle charging stations, natural gas, etc.).
- 2. Due to the unique characteristics of each campus' fleet management protocols, each location will:
  - a. Develop a Fleet Sustainability Implementation Plan by January 1, 2022, to document the infrastructure and financial needs to implement a low-carbon fleet program and lower campus fleet carbon emissions through 2025.



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- 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 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 non-compliant acquisitions are operationally and financially justified, and that locations take advantage of opportunities to improve fleet utilization and efficiency.
  3. Explore partnerships with local agencies, including the Department of Energy's Clean Cities program, on opportunities to improve sustainable transportation access to and around University facilities in addition to developing its own transportation programs.
  4. Each location 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.
  5. The University will pursue strategic programs and data collection to offset greenhouse gas emissions related to commutes and business-related campus air travel. The Sustainable Transportation and Climate Change Working Groups will set an interim emissions reduction target for transportation-related scope 3 emissions.
  6. The Sustainable Transportation Working Group will support central and local Human Resource Offices, and other key stakeholders, in developing systemwide 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.
  7. 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 University.
  8. The Sustainable Transportation Working Group will regularly update the systemwide best practices guide for implementing this Policy and take steps to implement the best practices identified throughout the UC system. Mechanisms for reducing transportation emissions include, but are not limited to:
    - a. Constructing additional on-campus housing (e.g., student housing and temporary housing for new faculty)
    - b. Expanding transportation demand management (TDM) programs: car share, carpool/rideshare, vanpool, shuttles, transit, bicycle circulation system, pedestrian circulation system, emergency rides home, parking management and pricing, employee service, and retail amenities, etc.
    - c. Expanding intra-campus transportation programs such as shuttles, car share, bike share, bicycle, and pedestrian infrastructure, etc.

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- d. Encouraging flexible work schedules and/or telecommuting programs to provide alternative commute flexibility and options in accordance with local practices.
- e. Replacing fleet vehicles with newer, more fuel-efficient vehicles when ZEV are not available
- f. Rightsizing fleets (determining the appropriate fleet size, revising business practices to reduce the need for travel)
- g. Reducing overall fleet miles traveled
- h. Increasing use of fuels with lower GHG emissions
- i. Installation of telematics and GPS to measure and help reduce fuel consumption by monitoring and reducing excessive idling and speeding.

**E. Sustainable Building and Laboratory Operations for Campuses**

1. The University 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. Campuses 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. Campuses will assess at least three new research groups through their Green Lab Assessment Program .
5. Campuses will maintain a UC Green Laboratories Action Plan determine strengths and areas for improvement within the operations of research laboratories with respect to sustainability and carbon neutrality. 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 (2018, 2022, 2026 and so on).
6. Each campus 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.

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3. By the end of 2018, locations other than health locations will 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.
  - a. The 2023 updates to locations' waste management plans will identify the next steps to take (including costs, responsible parties, etc.) towards eliminating non-essential single-use plastics by 2030 and assess other opportunities for eliminating other single-use products. The findings of these assessments will be used to recommend changes and additions to section III.F.4. of this Policy, no later than July 1, 2024.
4. In line with the objective to minimize the use of single-use products (Section III.F.4), all 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 campus 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.

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- 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, greenwaste, and foodwaste 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 landfill 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. Campuses will use Weighted Campus User
  - b. LBNL will use Full Time Equivalent
- Other locations should use the per capita metric that best supports their business operations.
9. Locations, other than health locations, 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 outlining methods for quantifying waste generation and diversion at University 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. Campuses will be able to meet up to 10% of their diversion targets through combustion until the end of FY2021/22 after which the UC will no longer accept combustion as a form of diversion. No campus will increase the percentage of combustion reported as diversion from reported FY2015/16 levels. Up to 10% of total waste generated per campus may be disposed of through allowable thermal residual conversion after FY2021/22. To count, (non-combustion) waste converted through thermal processes must include an integrated materials recovery facility (MRF) or equivalent sorting system to recover recyclables and compostable material prior to conversion. The total value of converted materials counted as diversion from landfill is not to exceed 10%.
  - a. 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. To count as allowable residual conversion, the process must include an integrated materials recovery facility (MRF) or equivalent sorting system to recover recyclables and compostable material prior to conversion. Materials that are otherwise 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 as converted residual waste.

## **G. Sustainable Procurement**

1. This section V.G. will be applied within the constraints of research needs and budgetary requirements and in compliance with applicable rules, regulations and laws.
2. The University 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

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contaminants that can damage air quality, human health, productivity, and the environment.

3. The University will require suppliers to clearly identify products with UC-recognized certifications, as defined by the 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 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. The University 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:
  - Campus
  - 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
  - Third-party sustainability attribute or certification as recognized in the Guidelines
5. Locations, not including health locations or the Lawrence Berkeley National Lab, will report annually to the UC Office of the President (UCOP) their percent Preferred Level Green Spend and EaSR Spend for product and service categories defined in the Guidelines. For the first two years of reporting, reports on Preferred Level Green Spend will include, at minimum, a location's share of products purchased from systemwide strategically sourced suppliers, with reports to be provided by the suppliers to UCOP and locations. EaSR Spend reporting will be compiled at the campus level, with the support of UCOP. Reports will be reviewed by each location for accuracy and signed by the location's Chief

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Procurement Officer, with reporting due 60 days after fiscal close. Reporting procedures will be reviewed after two years of reporting under this Policy.

6. 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).
7. In accordance with section III.F.3., the University has disallowed the use of packaging foam after 2020. For implementation procedures, reference the University of California [Sustainable Procurement Guidelines](#).
8. 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:
  - a. 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.S. Environmental Protection Agency Comprehensive Procurement Guidelines](#);
  - e. Uses locally recyclable or certified compostable material.
9. 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.
10. All recyclers of the University's electronic equipment must be e-Steward certified by the [Basel Action Network \(BAN\)](#) . In cases where the University has established take-back programs with a manufacturer, the University will encourage the manufacturer to become a BAN-certified e-Steward Enterprise ([e-Stewards for Enterprises](#)).
11. The responsible 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.

## H. Sustainable Foodservices

1. 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 campuses 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 Menu 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 foodservice operations should track and report annually the percentage of total annual food budget spent on sustainable food and plant-based products.
5. Each campus and health location procurement department will integrate sustainability into competitive solicitations. Procurement departments 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 [UC Sustainable Procurement Guidelines](#).
6. The University prioritizes waste reduction in the following order: Reduce, reuse, and then recycle and compost. Campuses, health locations, and leased foodservice operations 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. Each campus and health location is encouraged to maintain accessibility and affordability for all students, staff, and patrons. Campuses 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.
- c. All locations will report water usage in a tabular format using the following methods:
  - i. Measure per capita water consumption by Weighted Campus User (WCU) for main campuses 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 year's 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 location 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,
      - WCU or APD for the most recent fiscal year,

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- 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.
  - b. 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:
    - i. 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.

**J. Sustainability at UC Health**

- 1. The UC Health Sustainability Working Group, with input from relevant working groups for each subject area, will develop normalized data reporting protocols to track the implementation of sustainability programs at health locations. Annually,

the UC Health Sustainability Working Group will report to the University of California Health Center Chief Operating Officer Group and the University of California Sustainability Steering Committee.

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 UC 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 complete 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. General Sustainability Performance Assessment**

1. The rating must be for a current certified STARS report, and under the current STARS point allocations.

#### **L. Health and Well-Being**

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

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## **VI. RELATED INFORMATION**

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[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](#)

[State Administrative Manual](#)

[The Climate Registry](#)

[Trademark Licensing Code of Conduct](#)

[UC Annual Report on Sustainable Practices](#)

[UC Flexible Work Arrangements and Telecommuting Website](#)

[UC Sustainability 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.S. Environmental Protection Agency Comprehensive Procurement Guidelines](#)

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## VII. FREQUENTLY ASKED QUESTIONS

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Not applicable.

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## VIII. REVISION HISTORY

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**XXX, 2021:** 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 should 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

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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 adding 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 Lawrence Berkeley National Laboratory.

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

**August 2018:** Policy expanded to include UC Health and change 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.

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**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](#))



# Sustainable Practices

<b>Responsible Officer:</b>	EVP – <del>Chief Financial Officer</del> <u>Chief Operating Officer</u>
<b>Responsible Office:</b>	ES – Energy & Sustainability
<b>Issuance Date:</b>	X/X/2021
<b>Effective Date:</b>	X/X/2021
<b>Last Review Date:</b>	1/28/2021
<b>Scope:</b>	All Campuses, Health Locations, and the Lawrence Berkeley National Laboratory

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## I. POLICY SUMMARY

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The Sustainable Practices Policy (“Policy”) establishes goals in ~~nine~~ 12 areas of sustainable practices: green building, clean energy, ~~transportation~~, climate protection, transportation, sustainable operations, zero waste ~~reduction and recycling~~, sustainable procurement, ~~sustainable~~ foodservice, ~~sustainable~~ water ~~systems~~, health care, performance assessment, and health and well-being.

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## II. DEFINITIONS

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**Association for the Advancement of Sustainability in Higher Education (AASHE):** ~~The Association for the Advancement of Sustainability in Higher Education is t~~he 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 ~~p~~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.

~~**Allowable Thermal Residual Conversion:** Consistent with CalRecycle and the Southern California Conversion Technology Project, 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. To count as allowable residual conversion, the process must include an integrated materials recovery facility (MRF) or equivalent sorting system to recover recyclables and compostable material prior to conversion. Materials that are otherwise 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 as converted residual waste.~~

~~**Average Vehicle Ridership (AVR):** The average vehicle ridership is calculated by dividing the number of all person trip arrivals by the number of private vehicle trips, with adjustments for telecommuting, compressed work weeks, and zero-emission vehicles (based on the South Coast Air Quality Management District method).~~

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

**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 LCFS Pathway Certified Carbon Intensities.

**Climate Neutrality:** Climate neutrality is a goal for the University to have net zero climate impacts from greenhouse gas (GHG) emissions attributed to scope 1 direct emission sources and scope 2 indirect emission sources as defined by The Climate Registry, and specific scope 3 emissions as defined by Second Nature's Carbon Commitment. This will be achieved by minimizing GHG emissions from these sources as much as possible and using carbon offsets or other measures to mitigate the remaining GHG emissions.

**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.

**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](#).

**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 ~~any number~~ various of techniques including ~~but not limited to~~, fusion ~~ing of~~ 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 Facilities:** Dining establishments such as cafeterias, r~~Restaurants, cafes,~~ retail stores, or similar places in which 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 ~~ready-to-consume~~ 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)

**Full Time Equivalent (FTE):** A full-time equivalent employee is the hours worked by one employee on a full-time basis and can be used to convert the hours worked by several part-time employees into the hours worked by full-time employees. A full-time employee is assumed to work 40 hours in a standard week.

**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

**Green Spend:** The amount spent on products meeting the UC “Preferred Level” of environmental sustainability criteria as laid out in the UC [Sustainable Procurement Guidelines](#).

**Gross Square Foot:** Pursuant to the definition in the Facilities Inventory Guide (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.”

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

**Leadership in Energy and Environmental Design (LEED)<sup>TM</sup>:** 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;

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

LEED for Building Design and Construction (LEED-BD+C) 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.

**Location:** As used in this Policy, means ~~any or~~ all UC campuses, health locations, and the Lawrence Berkeley National Laboratory, as referred to in the “Scope” above.

**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 Average-Alternative Daily Cover (ADC); however, it does include construction and demolition waste, diverted recyclables and organic waste. Non-health location waste targets refer to municipal solid waste only. Health Locations waste targets use the Practice Greenhealth definition of “Total Solid 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 ~~but not limited to:~~ 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.

**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.

~~**Policy Exception Authority:** The responsible authority for granting exceptions to item III.G.5.a. 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 and otherwise by the senior procurement officer of the campus.~~

**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 Sustainable Procurement Guidelines.

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

Direct Potable Reuse: Treated wastewater reused for human consumption.

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

Non-Potable Reuse: 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 Eligibility Guidebook](#)).

**Required Level Green Spend ~~criteria~~**: The minimum ~~certification standards~~ 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 ~~number of~~ 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, and 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.

**Savings by Design**: An energy efficiency program offered by California's four investor-owned utility companies and the Sacramento Municipal Utility District. Savings By Design provides design assistance, energy analysis, life cycle costing, and financial incentives for new construction and major renovation projects. The Savings By Design program is also known as the Non-Residential New Construction Program.

**Single-Pass Cooling**: Single-Pass or once-through cooling systems flow water through a piece of equipment to absorb heat and dispose 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)~~ ~~(formerly Labs 24)~~, US 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.

**Sustainability Tracking, Assessment and Rating System (STARS)**: ~~The Sustainability Tracking, Assessment and Rating System is a~~ 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 campuses 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 Spend:** The intersection of Green and EaSR Spend. UC Sustainable Spend is defined as spending that meets the criteria and requirements for Green Spend as well as EaSR Spend as laid out in the UC Sustainable Procurement Guidelines.~~

**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.

~~**TDM: Transportation Demand Management–(TDM):** TDM is t~~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.

~~**Total Solid Waste:** Total solid waste includes 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, universal waste, and construction and demolition waste. Unlike campus targets, health location diversion rates and reduction targets use total solid waste rather than municipal solid waste as defined by Practice Greenhealth, which does not include construction and demolition waste.~~

~~**Vehicle Miles Traveled (VMT):** The number of miles driven by a given vehicle(s) over a given period of time.~~

**UC Green Laboratories Action Plan:** A document created with the goal of setting campus-specific 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 ~~current~~ 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, and may include subcategories as defined by CARB. Common examples include battery electric and fuel cell vehicles.

**Zero waste:** The University 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 a zero waste for locations other than health locations.

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### III. POLICY TEXT

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*The University of California (“University”) is committed to responsible stewardship of resources and to demonstrating leadership in sustainable business practices. 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., consistent with available funding and safe operational practices.* Policy goals are presented below in ninetwelve areas of sustainable practices.~~

## A. Green Building Design

### 1. New Buildings

- a. All new building projects, other than acute care facilities, ~~shall~~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 targets listed in Table 1 of Section V.A.1. The University will strive to design, construct, and commission buildings that outperform CBC energy efficiency standards by 30% or more, or meet the stretch whole-building energy performance targets listed in Table 1 of Section V.A.1, whenever possible within the constraints of program needs and standard budget parameters.
- b. Acute care/hospital facilities and medical office buildings ~~shall~~will be designed, constructed, and commissioned to outperform ASHRAE 90.1 - 2010 by at least 30% or meet the whole-building energy performance targets listed in Table 2 in Section V.A.1.
- c. No new building or major renovation that is approved after June 30, 2019, ~~shall~~will 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 ~~shall~~will document the rationale for this decision, as described in Section V.A. 14.d.
- d. All new buildings will achieve a USGBC LEED “Silver” certification at a minimum. All new buildings will strive to achieve certification at a USGBC LEED “Gold” rating or higher, whenever possible within the constraints of program needs and standard budget parameters.
- e. The University of California will design, construct, and commission new laboratory buildings to achieve a minimum of LEED “Silver” certification, ~~as well as meeting at least the prerequisites of the Laboratories for the 21st Century (Labs21) Environmental Performance Criteria (EPC)<sup>4</sup>. Laboratory spaces in new buildings also shall meet at least the prerequisites of Labs21 EPC.~~ Design, construction, and commissioning processes ~~shall~~will strive to optimize the energy efficiency of systems not addressed by the CBC energy efficiency standards.

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~~<sup>4</sup>Labs21 is a voluntary partnership program that offers training and resources to support the design and operation of high-performance laboratories. Labs21 is co-sponsored by the Department of Energy and the Environmental Protection Agency. The Labs21 Environmental Performance Criteria (EPC) is a rating system that consists of prerequisites and credits in several laboratory specific areas, including laboratory equipment water use, chemical management, and ventilation. Labs21 EPC is designed as a complement to LEED.~~



- f. All new building projects will achieve at least two points within the available credits in LEED-BD+C's Water Efficiency category (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) shall will at a minimum comply with III.A.1.d. or III.A.1.e., ~~above~~. Such projects shall will outperform CBC Title 24, Part 6, currently in effect, by 20%. This does not apply to acute care facilities.
- b. Acute care facilities and medical office buildings undertaking major renovations, as defined above, will outperform ASHRAE 90.1- 2010 by 30%.
- c. Renovation projects with a project cost of \$5 million or greater (CCCI 5000) that do not constitute a Major Renovation as defined in item III.A.2.a. shall will at a minimum achieve a LEED-ID+C Certified rating and register with the utilities' Savings by Design program, if eligible. This does not apply to acute care facilities.

## B. Clean Energy

In support of the climate neutrality goals outlined in Section C of this Policy, 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

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

### 2. On-campus Renewable Electricity

Campuses and health locations 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.

### 3. Off-campus Clean Electricity

By 2025, each campus and health location will obtain 100% clean electricity. ~~By 2018, the University's Wholesale-UC Clean~~ Power Program will provide 100% clean electricity to participating locations.

### 4. On-campus Combustion

By 2025, at least 40% of the natural gas combusted on-site at each campus and health location will be biogas.

## C. Climate Protection

### 1. Greenhouse Gas Emissions

Each campus and the UC Office of the President will develop strategies for meeting the following UC goals:

- a. Achieve ~~E~~Climate neutrality from scope 1 and 2 sources by 2025
- b. Achieve Climate neutrality from specific scope 3 sources (as defined by Second Nature’s Carbon Commitment) by 2050 or sooner

~~In addition, at a minimum, meet the following intermediate goal in pursuit of climate neutrality:~~

- c. ~~Reduce~~Maintain greenhouse gas (GHG) emissions ~~to at or below~~ 1990 ~~levels by 2020~~, pursuant to the California Global Warming Solutions Act of 2006.

For purposes of this section, campuses ~~shall~~will include their related health location for all goals. GHG emissions reduction goals pertain to emissions of the six Kyoto greenhouse gasses<sup>2</sup> (carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons, and perfluorocarbons) originating from all scope 1 and scope 2 sources as specified by the Climate Registry, and from scope 3 emissions as specified by Second Nature’s Carbon Commitment, which includes air travel paid through the institution; and commuting to and from campus by students, faculty and other academic appointees, and staff. These goals will be pursued while maintaining the research, education, and public service missions of the University.

Campuses subject to the United States Environmental Protection Agency (USEPA) Greenhouse Gas Reporting Program, California Air Resources Board (CARB) Mandatory Greenhouse Gas Emissions Reporting or participation in the CARB Cap-and-Trade Program ~~shall~~will perform to those regulatory requirements.

### 2. Offsets

- a. The University will prioritize direct reductions of its covered scope 1, 2, and 3 emissions. This Policy does not require the University, as a system and as individual campuses and units, to purchase carbon offsets to meet their carbon neutrality goals; instead, it sets priorities and minimum standards if they decide to purchase offsets. In meeting the UC Sustainable Practices Policy climate goals as outlined in section III.C., the University will use offsets as a transitional strategy, while implementing all feasible reductions in its scope 1, 2, and 3 emissions. The University will reevaluate and update section III.C and V.C of the Sustainable Practices Policy by 2025.
- b. The University will only use high-quality offset credits to meet its climate protection goals, beyond its requirements under California's cap-and-trade

<sup>2</sup>The six greenhouse gasses identified in the Kyoto Protocol are carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons, and perfluorocarbons.

program, and will draw on the University's academic capacity to vet the quality of all voluntary offset credits it uses.

- c. To align its voluntary offset program with its research, education, and public service mission, the University will choose offset projects that demonstrate or advance scalable climate solutions aligned with a path towards deep decarbonization; prioritize projects that advance University research and support student education; prioritize projects with health and social justice benefits, and benefits to the UC community and communities surrounding the campuses; and prioritize projects with the potential for climate benefits well beyond the credited reductions, recognizing the urgency of near-term reductions. The University will analyze the ecological, health, social, and human rights impacts of its offset decisions to avoid negative outcomes for low-income communities, communities of color, and other marginalized populations, and to prioritize projects that benefit these communities.
- d. The University will develop and implement its voluntary offset procurement strategy in a way that advances understanding of, and models, how institutions of higher education and in other sectors can use offsets as an effective climate mitigation strategy aligned with their institutional mission.

#### **D. Sustainable Transportation**

The University will implement transportation programs and greenhouse gas (GHG) emission reduction strategies that reduce the environmental impacts from commuting, fleet and business air travel related to achieving the Climate Protection section of this Policy (see Section III.C.).

1. Each location will reduce GHG emissions from its fleet and report annually on its progress. Locations ~~shall will~~ implement strategies to reduce ~~fleet~~-emissions ~~and improve the fuel efficiency of all from u~~University-owned or operated fleet vehicles to align with UC's 2025 carbon neutrality goals (as defined in the Climate Protection sections of this Policy), and equipment where practical options exist through acquisition and fleet operation protocols. Carbon neutral fleets can be achieved if vehicles produce no tailpipe emissions, use a clean transportation fuel, and/or if carbon offsets are purchased.

To support this goal, each location will ensure that:

- a. By 2025 After July 1, 2023, zero-emission vehicles ~~or hybrid vehicles,~~ plug-in hybrid, or dedicated clean transportation fueled vehicles will ~~shall~~ account for at least 50% of all ~~new light duty~~ vehicle acquisitions (including both leased and purchased vehicles).
- b. All sedans and minivan acquisitions will be of 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 class, the use of clean transportation fuels and other low-emission fuels will be prioritized

Furthermore:

- d. Any carbon offsets purchased to meet the carbon neutrality goal will be coordinated with the location's Office of Sustainability, will support the location's overall carbon neutrality strategy, and will follow the guidelines laid out in the Climate Protection section of this Policy (see Section III.C.).
- b.e. Vehicle acquisitions plans should meet the State's goal (outlined in Executive Order N-79-20) that all new passenger cars and light-duty trucks (under 8,500 lbs.) acquired after January 1, 2035, and all medium-and heavy-duty vehicles acquired or operated after January 1, 2045, will be zero-emission.

Lawrence Berkeley National Laboratory will follow federal fleet requirements in the case where federal and UC fleet requirements conflict.

- 2. The University recognizes that single-occupant vehicle (SOV) commuting is a primary contributor to commute-related GHG emissions and localized transportation impacts.
  - a. By 2025, each location shallwill strive to reduce its percentage of employees and students commuting by SOV by 10% relative to its 2015 SOV commute rates;
  - b. By 2050, each location shallwill strive to have no more than 40% of its employees and no more than 30% of all employees and students commuting to the location by SOV.
- 3. Recognizing that flexible work arrangements, including telecommuting, are a low-cost, effective way to reduce emissions and carbon footprint, each location 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.
- 3.4. \_\_\_\_\_ Consistent with the State of California goal of increasing alternative fuel – specifically electric – vehicle usage, the University shallwill promote purchases and support investment in alternative fuel infrastructure at each location.
  - a. By 2025, each location shallwill strive to have at least 4.5% of commuter vehicles be zero-emissions vehicles (ZEV).
  - b. By 2050, each location shallwill strive to have at least 30% of commuter vehicles be ZEV.
- 4.5. \_\_\_\_\_ Each location will develop a business-case analysis for any proposed parking structures serving University affiliates or visitors to campus to document how a capital investment in parking aligns with each campus' Climate Action Plans and/or sustainable transportation policies.

**E. Sustainable Building and Laboratory Operations for Campuses**

- ~~1. Each campus will submit for certification one pilot building at a LEED-O+M "Certified" level or higher.~~

- ~~2. Each campus shall will register a master site to certify campus-wide LEED-O+M credits and prerequisites to streamline the certification of multiple buildings through the LEED-O+M rating system by July 1, 2015. Each campus shall will certify their campus-wide credits as soon as possible after the master site has been registered.~~
1. Each campus shall will seek to certify as many buildings as possible through the LEED-O+M rating system, within budgetary constraints and eligibility limitations.
  2. All campuses shall will implement 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 they use by Summer 2018.
    - a. At least one staff or faculty member from the campus 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 campuses shall will submit maintain a UC Green Laboratories Action Plan by Summer 2018.

#### F. Zero Waste

1. The University 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 all locations other than health locations, is as follows:
  - a. Reduce per capita ~~total~~ 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. The University supports the integration of waste, climate and other sustainability goals, including the reduction of embodied carbon in the supply chain through the promotion of a circular economy and the management of organic waste to promote atmospheric carbon reduction. In support of this goal, waste reporting will include tracking estimated scope 3 greenhouse gas emissions.
3. ~~By 2020, t~~The University will prohibit 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. No packaging foam or expanded polystyrene (EPS) shall will be used in foodservice facilities for takeaway containers.

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For implementation guidelines as they relate to the procurement of goods for University of California campuses, reference the [University of California Sustainable Procurement Guidelines](#).

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. Eliminate plastic bags in all retail and foodservice establishments in campus facilities or located on ~~U~~university owned land no later than January 1, 2021
  - 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, 2021
  - c. Provide reusable foodware items for food consumed onsite at dine-in facilities and to-go facilities no later than July 1, 2022.
  - d. Replace single-use plastic foodware items with reusable or locally compostable alternatives at to-go facilities no later than July 1, 2022
  - e. Phase out the procurement, sale and distribution of single-use plastic beverage bottles. Non-plastic alternatives ~~shall~~will be locally recyclable or compostable.
    - i. Foodservice facilities will provide alternatives no later than January 1, 2023.
    - 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 University locations (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 ~~P~~policy section (III.F.4.) also applies to third-party foodservice facilities that lease space or provide contracted services at ~~UC~~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 of California will maximize its procurement of sustainable products and services. The goals outlined throughout these policy and procedures sections ~~shall~~will be applied within the constraints of research needs 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 UC Sustainable Procurement Guidelines) are<sup>3</sup>:
  - a. 100% 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. The University’s sustainable purchasing reporting requirements are:
  - a. Reporting on percent Preferred Level Green Spend beginning at the close of the first full Fiscal Year after a category is added to the Guidelines.
  - b. Reporting on percent Economically and Socially Responsible Spend beginning at the close of Fiscal Year 2018/19.

~~Reporting on percent Sustainable Spend will be piloted by UCOP beginning at the close of Fiscal Year 2018/19.~~

5. Each University’s Procurement department will integrate sustainability into its processes and practices, including competitive solicitations, ~~in order~~ to satisfy the

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<sup>3</sup>~~Detailed criteria for Preferred Level Green Spend, and Economically and Socially Responsible (EaSR) Spend, and their combined intersection, Sustainable Spend....., can be found in the UC Sustainable Procurement Guidelines.~~

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sustainable purchasing goals outlined above for products, as well as for the procurement of services. The University will do so by:

- a. Allocating a minimum of 15% of the points utilized in solicitation evaluations to sustainability criteria. Criteria may include, but is not limited to, sustainable product attributes, supplier diversity, supplier practices, contributions to health and wellbeing, and materials safety. ~~This requirement will go into effect on July 1st, 2019.~~ Exceptions to this ~~p~~Policy may only be granted by the appropriate Policy Exception Authority. Decisions to grant an exception ~~shall~~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.
- b. 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>4</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 its purchasing power and market presence to develop sustainable product and service options where not already available.
- f. Requiring packaging for all products procured by the University 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 to the University, 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 [Federal Trade Commission's \(FTC\) Green Guides](#) for the use of environmental marketing claims.

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<sup>4</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 ~~U~~university. ~~In order to~~ To implement this method of selection, the Regents of the University of California ~~shall~~will adopt and publish policies and guidelines for evaluating bidders that ensure that best value selections by the ~~u~~University are conducted in a fair and impartial manner."



- i. Working with its 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).
6. All procurement staff will consult the UC [Sustainable Procurement Guidelines](#) 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 Location Foodservice Operations

#### a. Food Procurement

Each campus foodservice operation 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 defined by Practice Greenhealth, while maintaining accessibility and affordability for all students and health location’s foodservice patrons.<sup>5</sup>

#### 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. Campuses and health centers will establish a baseline and goal in 2020.

Progress will be tracked annually by reporting the percentage of plant- based foods procured beginning in 2021.

### 2. Foodservice Operations in Leased Locations:

- a. Foodservice operations leased in campuses and health locations owned by the University of California and contractors providing foodservices in campus and health locations will strive to meet the policies in III.H.1.a-c. ~~above.~~

- b. Campuses and health locations will include Section 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.

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<sup>5</sup>~~For the purposes of this policy, campus foodservice operations is defined as locations that are managed by entities that administer meal plans. Health location foodservice is defined as cafeterias.~~

## I. Sustainable Water Systems<sup>6</sup>

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 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. Each ~~Campus~~ campus shall 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) ~~drought-tolerant planting selections,~~ and/or by removing turf.
- ~~3.2.~~ Each location will develop and maintain a Water Action Plan that identifies long term strategies for achieving sustainable water systems. ~~The next update of the plan shall be completed in December 2016.~~
  - ~~a. Campuses will include in this update quantification of total square feet of used turf and under-used turf areas on campus as well as a plan for phasing out un-used turf irrigated with potable water.~~
3. Each campus shall will identify once-through cooling systems, constant flow sterilizers, constant-flow autoclaves and other water-to-waste cooling systems. Each campus shall 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. Each location shall identify existing single-pass cooling systems and constant flow sterilizers and autoclaves in laboratories and develop a plan for replacement.~~
- ~~5.4.~~ New equipment requiring liquid cooling shall 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.
  - a. Once-through or single-pass cooling systems shall 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 avoid-reduce water waste.

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<sup>6</sup> Related sections: Green Building Design policy III.A. 5, Green Building Design procedure V.A.4, and Sustainable Purchasing procedures V.G.10.e, V.G.15, V.G.16, and V.G.17.

- ~~5. Required water efficiency measures applicable to building projects are As outlined in Section A of this Policy on this Policy Text: A. Green Building Design, New Buildings, Section 6) All new building projects will achieve at least two points within the available credits in LEED-BD+C's Water Efficiency category~~
- ~~6. Guidelines for the sustainable procurement of water fixtures, as applicable, are listed in the UC Sustainable Procurement Guidelines.~~

## J. Sustainability at UC Health

- ~~1. Health locations will achieve Practice Greenhealth's award "Greenhealth Partner for Change."~~
- ~~2. Health locations will achieve a target of 25lbs of total solid 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. In meeting these goals, Health locations will follow the provisions as outlined in section F of this Policy on Zero Waste, including limiting combustion and reducing the use of foam and single use products.~~
  - ~~a. Practice Greenhealth defines total solid 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.~~
- ~~4-3. In line with campus targets, health locations 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.~~
- ~~2. Locations will use the definitions in Practice Greenhealth to set medical-center-specific goals for waste diversion and reduction as well as water reduction.~~
  - ~~• UC San Francisco Health and UCLA Health have the following waste and water targets:
    - ~~○ Waste
      - ~~▪ By 2020, 50% of total solid waste diverted from landfill and incineration.~~
      - ~~▪ By 2020, 40lbs of total solid waste per Adjusted Patient Day.~~~~
    - ~~○ Water
      - ~~▪ In line with campus targets, UC San Francisco Health and UCLA Health 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.~~~~~~
  - ~~• UC Irvine Health has the following waste and water targets:
    - ~~○ Waste~~~~

- ~~By 2020, 50% of total solid waste diverted from landfill and incineration.~~

- ~~Water~~

- ~~In line with campus targets, UC Irvine Health 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.~~
- ~~UC San Diego Health and UC Davis Health will have target commitments by December 31, 2020.~~

~~3.4.~~ Acute care/hospital facilities and medical office buildings in health locations ~~shall~~will be designed, constructed and commissioned, or renovated as outlined in Section A of this ~~p~~Policy on Green Building Design.

~~5.~~ Health locations will strive to procure 30% sustainable food products by the year 2030 as defined by Practice Greenhealth and outlined in Section H of this ~~p~~Policy on Sustainable Foodservices.

## **K. General Sustainability Performance Assessment**

1. All undergraduate campuses must maintain a certified AASHE STARS report.
2. All campuses must achieve a Silver STARS rating and strive for Gold by 2023.

## **L. 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>7</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.

1. By the end of 2022, 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. By the end of 2021, the HCN will review and revise healthy vending goals with stakeholders to propose for inclusion in this ~~p~~Policy.

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<sup>7</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

3. By the end of 2021, the HCN will review the chemicals of concern criteria detailed in the Sustainable Procurement Guidelines and make recommendations for the inclusion of specific Policy targets.

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## IV. COMPLIANCE/RESPONSIBILITIES

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### A. Implementation ~~of the Policy~~

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

### B. Revisions ~~to the Policy~~

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~~ ~~Chief Operating Officer~~. Proposed provisions accepted by the UC Sustainability Steering Committee and the Executive Vice President- ~~Chief Financial Officer~~ ~~Chief Operating Officer~~ ~~shall~~ 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 ~~with the Policy~~

Chancellors and the Lawrence Berkeley National Laboratory 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.

~~(Annual Report on Sustainable Practices).~~

### 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 CBC energy efficiency standards and of LEED-BD+C that are in effect at the time of the first submittal of “Preliminary Plans” (design development drawings and outline specifications) as defined in the [State Administrative Manual](#).<sup>8</sup>
- b. If eligible, all new buildings and major renovations (as defined in III.A) will register with the Savings By Design program ~~in order~~ to document compliance with the requirement to outperform CBC energy efficiency standards by at least 20%.
- c. Projects other than acute care facilities 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 of the project’s budget approval.
  - 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 kBtuTU/gsf-yr) ~~published as Table 1, as developed for UC Building 1999 Energy Benchmarks by Campus, in Sahai, et al. 2014.~~<sup>9</sup> and updated with a new “100% Lab Space” use type in the spreadsheet 2016 Whole-Building Quantitative Energy Performance Targets (2020 update).<sup>10</sup>

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%

<sup>8</sup> The State Administrative Manual (~~SAM~~) is a reference source for statewide policies, procedures, regulations and information developed and issued by authoring agencies such as the Governor’s Office, Department of General Services (~~DGS~~), Department of Finance (~~DOF~~), and Department of Personnel Administration.

<sup>9</sup> ~~Sahai, R., Kniazowycz, C., Brown, K, 2014. Benchmark-based, Whole-Building Energy Performance Targets for UC Buildings. University of California Office of the President and California Institute of Energy and Environment.~~

<sup>10</sup> The “UC Building 1999 Energy Benchmarks by Campus” and “2016 Whole-Building Quantitative Energy Performance Targets (2020 update)” documents can be found in the Green Building section of the UC Sustainability website.

d. Projects will report their target energy use and how much they anticipate exceeding the CBC energy-efficiency standards (campuses), ASHRAE 90.1 - 2010 (Health Locations), or the UC Building Benchmarks at plan phase (P-Phase) approval. This information will be confirmed with modeled energy estimates, at approval of the start of construction (completion of the W-Phase). Final efficiency will be reported at closeout (generally a year after the building has been occupied).

d.e. Decisions affecting energy efficiency, fossil fuel use, and connection to existing central thermal services shall-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 shall-will be documented as part of the existing project approval process. The submittal should include the following:

- i. 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, by 2025, 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.

e.f. Acute care facilities and medical office buildings opting to use energy performance targets for compliance with III.A.21.c. 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.<sup>44</sup>

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<sup>44</sup>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

**f.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.

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/kgf) (if applicable)
- peak thermal (therms/hr/kgf)

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



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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:

- i. OR heating, ventilation and air conditioning (HVAC) is metered separately; and,
- ii. A commitment is made by an appropriate official within the hospital's administration to implement an OR HVAC setback program in the subtracted ORs.

~~g.h.~~ 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 University-owned 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, ~~shall~~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 listing 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 ~~shall~~will strive to comply with the appropriate Policy requirements in III.A.2. ~~, as appropriate.~~

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 ~~p~~Policy, in particular the goal of achieving carbon neutrality by 2025.
- 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 ~~shall~~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 ~~shall~~will indicate the applicable section of the Policy and/or Procedures; the proposed solution; and demonstrate equivalency with ~~p~~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, ~~I<sup>2</sup>SL Labs21~~, 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 US Department of Energy's Better Building Challenge. Each location's 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. Each location 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 ~~on a regular~~ly-basis.
  - 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. CO<sub>2</sub>/MWh.
- b. Clean electricity ~~shall~~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 ~~Wholesale Clean~~ Power Program, which will procure and supply to participating campuses 100% clean electricity ~~by 2018~~.
  - iii. Those locations without access to a green power program may purchase Renewable Energy Credits (REC) to offset purchased electricity. ~~In order~~ ~~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 to reduce risk by developing a portfolio for systemwide clean energy procurement contracts from which locations may benefit.

5. On-campus Combustion

- a. The University will develop and procure biogas supplies under the direction of the Energy Services Unit Governing Board (The Governing Board). The Governing Board will establish acceptable pricing for biogas projects and determine how the biogas will be allocated to each location. Locations may also implement local projects to directly transport biogas to the location.

**C. Climate Protection**

1. Each campus will maintain individual membership with [The Climate Registry](#) (TCR).<sup>12</sup> Campuses ~~shall~~will include their health locations in their membership.
2. Each campus will complete a Greenhouse Gas (GHG) emissions inventory annually. Campuses ~~shall~~will include their health locations in their inventories.
3. To comply with TCR and the Second Nature Carbon Commitment requirements,<sup>13</sup> inventories should contain emissions of the six Kyoto greenhouse gasses from scope 1 and 2 emission sources outlined in the TCR General Reporting Protocol; and scope 3 emissions sources outlined by the Second Nature Carbon Commitment's Implementation Guide. All UC campuses will report their updated emissions inventories through the Second Nature Carbon Commitment online reporting tool at least biennially. Campuses must

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<sup>12</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.

<sup>13</sup> The Second Nature Carbon Commitment requirements are outlined at [Second Nature: The Presidents' Climate Leadership Commitments](#).

verify all emissions inventories through TCR. Campuses may either pursue verification annually (for the previous year's emissions inventory) or biennially (for the emissions inventories from the previous two years).

4. Campuses subject to the United States Environmental Protection Agency (USEPA) Greenhouse Gas Reporting Program, California Air Resources Board (CARB) Mandatory Greenhouse Gas Emissions Reporting, or participation in the CARB Cap-and-Trade Program ~~shall~~will complete the relevant emissions inventories outlined in the USEPA and CARB reporting protocols.
5. Each campus will regularly update its climate action plan for (a) maintaining reducing GHG emissions ~~to at or below~~ 1990 levels ~~by calendar year 2020 (annual 2020 emissions to be reported in 2021)~~; (b) achieving climate neutrality for scope 1 and 2 sources by calendar year 2025 (annual 2025 emissions reported in 2026); ~~and~~ (c) achieving climate neutrality for the Second Nature Carbon Commitment-specified scope 3 sources (as defined by Second Nature's Carbon Commitment) for calendar year 2050 (annual 2050 emissions reported in 2051); ~~and~~, (d) climate action planning will integrate environmental justice, adaptation, and resilience. This will include an annual review and update, if needed, of the GHG reduction strategies reported by the campus to the UC Office of the President (UCOP). Campuses ~~shall~~will include their health locations in the action plan.
6. Each campus will complete an assessment of Scope 1 emissions from natural gas combustion by 2035 or at the date when that location's combined heat & power plant (or any other major fossil fuel-using campus infrastructure) is planned for capital renewal or major repair, whichever occurs first. The assessment should determine the best pathway, at that point, to decarbonize 80% of scope 1 emissions through means other than offsets. A de-carbonization assessment should evaluate, but is not limited to, (1) progress toward de-carbonization of piped gas, (2) the feasibility of installing on-site carbon capture, (3) electrification of carbon-emitting plant equipment, (4) hydrogen or synthetic methane injection, (5) emergent technologies, and (6) energy efficiency directed at Scope 1 footprint reductions. The assessment should be provided to campus leadership and inform each campus's Climate Action Plan.
7. The Climate Change Working Group (CCWG), under the UC Sustainability Steering Committee and represented on the President's Global Climate Leadership Council, will monitor progress toward reaching the stated goals for GHG reduction, and will evaluate suggestions for strategies and programs to reach these goals.
8. The CCWG will develop protocols for growth adjustment, data normalization, and accurate reporting procedures, as required.
9. The University will use only high-quality carbon offsets to meet its climate protection goals beyond its requirements under California's cap-and-trade program. High-quality offsets represent real, additional, quantifiable, durable, and

enforceable emissions reduction or carbon removal, that have undergone third-party verification.<sup>14</sup>

- a. For the purposes of this section, offsets are considered:
  - i. Additional if the credited reductions would not have occurred were it not for the offset program or the University's climate protection policy. Additionality can be assessed for an individual project or for a project type
  - ii. Durable if there is a very high likelihood that they will remain out of the atmosphere for 40 years on-site or through commitments to replace credits.
  - iii. Enforceable if the University is able to reasonably ensure that its quality standards are met.
- b. The University recognizes that not all offset credits available for purchase from projects registered in the major offset registries represent high-quality emissions reductions.
- c. The University will evaluate the quality of each offset project it uses, involving a peer review process overseen by the Carbon Abatement Technical Committee (CATC). The CATC will be made up of at least one representative from each University of California campus, LBNL, Office of the President, and at least one student and one faculty member representative from the University. This review will include evaluating individual projects, or types of projects, against the University's offset quality criteria by appropriate experts. Peer review is in addition to third-party verification.
- d. Credits are considered to be real if the quantity of credits generated and used by a project, or a project type, does not exceed conservative estimates of the actual effect of the project, or the set of projects of the project type, on emissions. When there is uncertainty in emissions reduction/removal estimates, estimates are conservative when they are more likely to under-represent than to over-represent actual emissions reductions/removals achieved. Evaluations will take into account the following factors as detailed in the UC Offset Procurement Guidelines: project additionality, conservativeness of methods used to estimate emission reductions including the baseline, and effects outside of project boundaries such as through leakage.<sup>15</sup>
- e. The results of these evaluations, including quantitative assessments of credit quality and justifications for the assumptions and determinations made, will be

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<sup>14</sup> Third-Party Verification will involve an audit of offset project eligibility or claimed reductions or removals against an approved methodology by an independent party.

<sup>15</sup> An offset project results in leakage when it reduces an activity, in turn causing that activity, and the associated emissions, to shift location to somewhere outside of the offset project boundaries. For example, a project that increases forest carbon by reducing timber harvesting can result in increased harvesting on other forestlands to meet timber demand.

released publicly for all offset projects or project types the University uses to meet its climate targets.

- f. The CATC will develop and maintain additional criteria, guidelines, and procedures for evaluating offset projects against the University's quality and mission criteria in the UC Offset Procurement Guidelines to be published in 2022.
- g. The University recognizes the quality and mission benefits of implementing its own offset projects. UC-initiated offset projects give the University greater knowledge about the project with which it can ensure the projects' additionality and have confidence in the emission reduction estimates. UC-initiated offsets can also support the University's mission by researching, testing, and refining climate mitigation solutions and supporting student education which can have climate mitigation benefits far beyond the reduction from the credited offset project. The University system and its individual campuses and units will prioritize offset projects with active University involvement.
- h. 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 develop normalized data reporting protocols to track progress on the implementation of sustainable transportation programs. Annually, each location will collect and report:
  - a. Fleet efficiency metrics: fleet fuel consumption, total vehicle inventory, and total number and percent of new ZEV fleet acquisitions.
  - b. Commute data: employee and campus-wide mode split, including telecommute and compressed week, average vehicle ridership (AVR), and percent of commuter alternative fuel vehicles including ZEVs.
    - i. Average vehicle ridership is calculated by dividing all person trip arrivals by private vehicle trips, with adjustments for telecommuting, compressed work weeks, and zero-emission vehicles (based on the South Coast Air Quality Management District's methodology).
  - c. Number and type of alternative fuel infrastructure (e.g., electric vehicle charging stations, natural gas, etc.).
2. Due to the unique characteristics of each campus' fleet management protocols, each location ~~shall~~ will:
  - a. ~~d~~Develop a Fleet Sustainability Implementation Plan by January 1, 20~~22~~18, to document the infrastructure and financial needs to implement a low-carbon fleet program and lower campus fleet carbon emissions through 2025.

- ~~b. Location fleets shall~~ implement practical measures to improve fleet emissions, including, but not ~~necessarily~~ limited to, managing vehicle fleet size, eliminating non-essential vehicles, purchasing the cleanest and most efficient vehicles and fuels, and investing in clean ~~bus shuttle~~ operations.
- ~~c. Establish a local process for centralized review and approval of vehicle acquisitions to ensure that those acquisitions comply with this Policy, that non-compliant acquisitions are operationally and financially justified, and that locations take advantage of opportunities to improve fleet utilization and efficiency.~~
3. ~~To amplify the impact of campus programs, each location is encouraged to partner~~ Explore partnerships with local agencies, including the Department of Energy's Clean Cities program, on opportunities to improve sustainable transportation access to and around ~~U~~university facilities in addition to developing its own transportation programs.
4. Each location ~~shall~~ 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.
5. The University will pursue strategic programs and data collection to offset greenhouse gas emissions related to commutes and business-related campus air travel. The Sustainable Transportation and Climate Change Working Groups will set an interim emissions reduction target for transportation-related scope 3 emissions.
- ~~6.~~ The Sustainable Transportation Working Group will support central and local Human Resource Offices, and other key stakeholders, in developing systemwide 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.
- ~~6-7.~~ \_\_\_\_\_ This Policy ~~shall~~ 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 University.
- ~~7-8.~~ The Sustainable Transportation Working Group will ~~coordinate the development of a~~ regularly update the systemwide best practices guide for ~~campus units~~ implementing this Policy and take steps to implement the best practices identified throughout the UC system. Mechanisms for reducing transportation emissions include, but are not limited to:
- Constructing additional on-campus housing (e.g., student housing and temporary housing for new faculty)
  - Expanding transportation demand management (TDM) programs: car share, carpool/rideshare, vanpool, shuttles, transit, bicycle circulation system, pedestrian circulation system, emergency rides home, parking management and pricing, employee service, and retail amenities, etc.

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- c. Expanding intra-campus transportation programs such as shuttles, car share, bike share, bicycle, and pedestrian infrastructure, etc.
- d. Encouraging ~~opportunities for employees to participate in~~ flexible work schedules and/or telecommuting programs to provide alternative commute flexibility and options in accordance with local practices.
- e. Replacing fleet vehicles with newer, more fuel-efficient vehicles when ZEV are not available
- f. Rightsizing fleets (determining the appropriate fleet size, revising business practices to reduce the need for travel)
- g. Reducing overall fleet ~~vehicle~~-miles traveled
- h. Increasing use of fuels with lower GHG emissions
- i. Installation of telematics and GPS to measure and help reduce fuel consumption by monitoring and reducing excessive idling and speeding.

**E. Sustainable Building and Laboratory Operations for Campuses**

1. The University 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. Campuses 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. Campuses will assess at least three new research groups through their Green Lab Assessment Program ~~by Summer 2018~~.
5. Campuses ~~shall~~will complete/maintain a UC Green Laboratories Action Plan ~~by summer 2018 to~~ determine strengths and areas for improvement within the operations of research laboratories with respect to sustainability and carbon neutrality. 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 ~~on a every~~ four-years cycle (2018, 2022, 2026 and so on).
6. Each campus 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 ~~shall~~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, locations other than health locations will submit new waste management plans, including planned waste reduction strategies. Plans will include campus and regional waste management practices and options, evaluate progress towards ~~P~~policy goals, and determine the associated costs of achieving ~~p~~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, ~~Office of the President, on a every five-years cycle~~.
  - a. The 2023 updates to locations’ waste management plans ~~shall~~will identify the next steps to take (including costs, responsible parties, etc.) towards eliminating non-essential single-use plastics by 2030 and assess other opportunities for eliminating other single-use products. The findings of these assessments will be used to recommend changes and additions to section III.F.4. of this ~~p~~policy, no later than July 1, 2024.
4. In line with the objective to minimize the use of single-use products (Section III.F.4), all locations will,
  - a. Create a local implementation procedure, ~~by December 2020~~ 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 ~~p~~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 campus 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, greenwaste, and foodwaste 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 landfill 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. Campuses will use Weighted Campus User
  - b. LBNL will use Full Time EquivalentOther locations should use the per capita metric that best supports their business operations.
9. Locations, other than health locations, 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 ~~shall~~will outline their strategy for maximizing diversion in their waste management plans and updates. Every year, ~~after 2020,~~ ~~these~~ 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 outlining methods for quantifying waste generation and diversion at University 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 pPolicy language will apply.
13. Campuses will be able to meet up to 10% of their diversion targets through combustion until the end of FY2021/22 after which the UC will no longer accept combustion as a form of diversion. No campus will increase the percentage of combustion reported as diversion from reported FY2015/16 levels. Up to 10% of total waste generated per campus may be disposed of through allowable thermal residual conversion after FY2021/22. To count, (non-combustion) waste converted through thermal processes must include an integrated materials recovery facility (MRF) or equivalent sorting system to recover recyclables and compostable material prior to conversion. The total value of converted materials counted as diversion from landfill is not to exceed 10%.
  - a. 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. To count as allowable residual conversion, the process must include an integrated materials recovery facility (MRF) or equivalent sorting system to recover recyclables and compostable material prior to conversion. Materials that are otherwise 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 as converted residual waste.

## G. Sustainable Procurement

1. This section V.G. ~~shall~~will be applied within the constraints of research needs and budgetary requirements and in compliance with applicable rules, regulations and laws.

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2. The University 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. The University will require suppliers to clearly identify products with UC-recognized certifications, as defined by the 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 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. The University will require all strategically sourced suppliers to report annually on their sustainable business operations, and quarterly on the University’s sustainable purchasing activity. Quarterly ~~sustainable~~ 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:
  - Campus
  - 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
  - Third-party sustainability attribute or certification as recognized in the Guidelines
5. ~~UC-I~~ locations, not including health locations or the Lawrence Berkeley National Lab, will report annually to the UC Office of the President (UCOP) their percent [Preferred Level](#) Green Spend and EaSR Spend for product and service categories defined in the Guidelines. For the first two years of reporting, reports

on Preferred Level Green Spend will include, at minimum, a location's share of products purchased from systemwide strategically sourced suppliers, with reports to be provided by the suppliers to UCOP and locations. EaSR Spend reporting will be compiled at the campus level, with the support of UCOP. Reports will be reviewed by each location for accuracy and signed by the location's Chief Procurement Officer, with reporting due 60 days after fiscal close. Reporting procedures will be reviewed after two years of reporting under this Policy.

6. 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).
7. In accordance with section III.F.3., the University has disallowed the use of packaging foam by-after 2020. For implementation procedures, reference the University of California [Sustainable Procurement Guidelines](#).
8. 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:
  - a. 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.S. Environmental Protection Agency Comprehensive Procurement Guidelines](#);
  - e. Uses locally recyclable or certified compostable material.
9. Suppliers, when interacting with the University, ~~shall~~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.
10. All recyclers of the University's electronic equipment must be e-Steward certified by the [Basel Action Network \(BAN\) \(www.ban.org\)](#). In cases where the University has established take-back programs with a manufacturer, the University will encourage the manufacturer to become a BAN-certified e-Steward Enterprise ([e-Stewards for Enterprises](#)).

~~40-11.~~ The responsible 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.

## H. Sustainable Foodservices

1. Campus and health location foodservice operations subject to this Policy ~~shall~~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 campuses 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 Menu 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 foodservice operations should track and report annually the percentage of total annual food budget spent on sustainable food and plant-based products.
5. Each campus and health location procurement department will integrate sustainability into competitive solicitations. Procurement departments 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 [UC Sustainable Procurement Guidelines](#).
6. The University prioritizes waste reduction in the following order: Reduce, reuse, and then recycle and compost. Campuses, health locations, and leased foodservice operations are encouraged to utilize compostable foodservice containers and packages that have recycled and/or sustainably harvested

content wherever possible. Guidelines for compostable food ~~service~~ ware are listed in the [UC Sustainable Procurement Guidelines](#).

7. Each campus and health location is encouraged to maintain accessibility and affordability for all students, staff, and patrons. Campuses 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.
- c. All locations ~~shall~~**will** report water usage in a tabular format using the following methods:
  - i. Measure per capita water consumption by Weighted Campus User (WCU) for main campuses 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 year's 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 location built space for which potable water consumption is being reported, ~~mirroring (e) above;~~
  - iii. Potable water usage for the most recent fiscal year<sup>16</sup>.

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<sup>16</sup>~~An average of the three most current fiscal years is allowed but not required.~~

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- 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,
    - 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, ~~again~~ using the methodology described above;
- iv. ~~Total~~ If data is available, total location non-potable water usage, in gallons, for the most recent fiscal year.
- v. ~~Report~~ If data is available, report, or estimate ~~if metered data is not available~~, 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.
- b. 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:
- i. 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.
- a.b. Each Water Action Plan, and the water conservation and water efficiency strategies ~~they~~ contain, ~~s~~ will also take into account relevant regional



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

- ~~4. Each Water Action Plan will include a section on Water Usage and Reduction Strategies that:~~
  - ~~a. Describes the applicable types of water comprising water systems, including but not limited to potable water, non-potable water, industrial water, sterilized water, reclaimed water, stormwater, and wastewater;~~
  - ~~b. Reports water usage in accordance with the methods set forth in these procedures;~~
  - ~~c. Considers setting more stringent potable water reduction goals if the location has already achieved a 36% below baseline reduction in per capita potable water consumption;~~
  - ~~d. Outlines location-specific strategies for achieving the target for reduced potable water consumption;~~
  - ~~e. Encourages implementation of innovative water efficient technologies as part of capital projects and renovations (e.g., installation of WaterSense certified fixtures and appliances, graywater reuse, rainwater harvesting, and watershed restoration);~~
  - ~~f. Addresses use of non-potable water sources, and how those sources factor into overall sustainable water systems strategy;~~
  - ~~g. Analyzes the identified water use reduction strategies using a full cost approach by considering:~~
    - ~~o Projected costs and savings of the identified water use strategies;~~
    - ~~o Indirect costs and savings associated with reduced energy consumption due to the energy use embodied in water use;~~
    - ~~o Savings associated with reduced or avoided infrastructure costs, and~~
    - ~~o Other avoided costs; and~~
  - ~~h. Sets a timeline for the strategies being implemented to reach the water usage reduction target.~~
- ~~5. Each Water Action Plan will include a section on Stormwater Management developed in conjunction with the location stormwater regulatory specialist that:~~
  - ~~a. Addresses stormwater management from a watershed perspective in a location-wide, comprehensive way that recognizes stormwater as a resource and aims to protect and restore the integrity of the local watershed(s);~~
  - ~~b. References the location's best management practices for preventing stormwater pollution from activities that have the potential to pollute the watershed (e.g., construction; trenching; storage of outdoor equipment;~~

- ~~materials, and waste; landscaping maintenance; outdoor cleaning practices; vehicle parking);~~
- ~~c. Encourages stormwater quality elements such as appropriate source control, site design (low impact development), and stormwater treatment measures to be considered during the planning stages of projects in order to most efficiently incorporate measures to protect stormwater quality;~~
- ~~d. If feasible, cites relevant and current location stormwater related plans and permits in an appendix or reference list accompanying the Water Action Plan; and~~
- ~~e. Includes, to the extent feasible, full cost evaluation of stormwater management initiatives similar to the approach in the Water Usage and Reduction Strategies section above.~~
- ~~6. Each location's Water Action Plan will include a section on Education and Outreach that:~~
  - ~~a. Presents potential opportunities to serve as a living laboratory for sustainable water projects;~~
  - ~~b. Supports efforts of students, faculty and other academic appointees, and staff to implement sustainable water systems on campuses and other locations;~~
  - ~~c. Identifies opportunities for pilot projects that illustrate the University's commitment to sustainable water practices through teaching, research, and service; and~~
  - ~~d. Identifies opportunities for new practices that could create behavior change with regard to water use and watershed management.~~
- ~~7. Each location's Water Action Plan will include a section called Irrigation and Landscape that includes:~~
  - ~~a. Total square feet of turf area and breaks out used and underused turf areas; and;~~
  - ~~b. A description and plan to reduce irrigation with potable water.~~

## **J. Sustainability at UC Health**

1. The UC Health Sustainability Working Group, with input from relevant working groups for each subject area, will develop normalized data reporting protocols to track the implementation of sustainability programs at health locations. Annually, the UC Health Sustainability Working Group will report to the University of California Health Center Chief Operating Officer Group and the University of California Sustainability Steering Committee.
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 UC 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 complete fiscal year.  
~~Beginning in the 2018/19 fiscal year, these reports will be used for the Annual Report on Sustainable Practices that is presented to the UC Regents.~~

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 ~~policy~~ goal of achieving Practice Greenhealth Partner for Change Awards may be at the campus or facility level.
- ~~4. Health locations will set targets for their facilities for waste diversion and reduction as well as for water reduction in accordance with the schedule outlined in section III.J. If targets require a comparison to a baseline dataset, Practice Greenhealth's 2017 report will be used as a baseline. These targets will be recommended to the system wide Sustainability Steering Committee for addition to the Policy at the meeting following the due dates listed in section III.J.~~

#### **K. General Sustainability Performance Assessment**

1. The rating must be for a current certified STARS report, and under the current STARS point allocations.

#### **L. Health and Well-Being**

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

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## **VI. RELATED INFORMATION**

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~~[Annual Report on Sustainable Practices](#)~~

~~[AASHE STARS 2.2 Sustainably and Ethically Produced \(Food and Beverage Purchasing\)for campuses](#)~~

~~[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](#)

[State Administrative Manual](#)

[The Climate Registry](#)

[Trademark Licensing Code of Conduct](#)

[UC Annual Report on Sustainable Practices](#)

[UC Flexible Work Arrangements and Telecommuting Website](#)

[UC Sustainability 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.S. Environmental Protection Agency Comprehensive Procurement Guidelines](#)

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## VII. FREQUENTLY ASKED QUESTIONS

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Not applicable.

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## VIII. REVISION HISTORY

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**XXX, 2021:** 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 should 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.](#)

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**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 adding 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 Lawrence Berkeley National Laboratory.

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

**August 2018:** Policy expanded to include UC Health and change 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.

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**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](#))

## MODEL COMMUNICATION

The University of California Office of the President invites comments on the proposed updates to the existing Presidential Policy on Sustainable Practices. The proposed revisions address the following key issues:

- **Green Building Design:** The updates to this policy section align with industry practice by providing an option for building design teams to further customize their use of energy efficiency performance targets for laboratory buildings. The updates also specify a reporting procedure for the existing policy requirement for energy efficient new buildings.
- **Climate Protection:** First, this policy section is revised to add criteria addressing concerns around the quality of potential carbon offsets that locations may purchase to meet greenhouse gas emissions reduction goals. Historically, no constraints have been in place for the purchase of offsets. Second, consistent with the expanded, more comprehensive and inclusive mission of the Carbon Neutrality Initiative and in response to input from many faculty and students, campus climate action plans that have previously focused exclusively on emissions reductions will be required to also integrate environmental justice, adaptation and resilience. Third, in response to some confusion regarding whether the policy would allow locations to increase greenhouse gas emissions after meeting the 2020 emissions target, the revisions clarify that greenhouse gas emissions reductions should be maintained after the 2020 target date.
- **Sustainable Transportation:** Technological advances in zero emission vehicles and new State policy goals for zero emission vehicles led to a need and opportunity to update the fleet goals in this policy section. Secondly, changes in work and commuting patterns during the pandemic created an opportunity and need for campus sustainable transportation programs to promote telecommuting opportunities.
- **Sustainable Water Systems:** Updated the section to make it easier to read and removed expired dates and details that are already regulatory requirements.
- **Sustainability at UC Health:** Some health locations had not yet adopted waste and water reduction goals. All health locations will now have the same waste and water reduction goals.

If you have any questions or if you wish to comment, please contact \_\_\_\_\_ at \_\_\_\_\_, no later than \_\_\_\_\_, 2021.