

CSU Channel Islands Climate Action Plan

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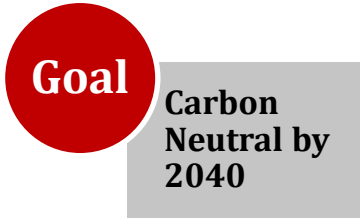
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Executive Summary

California State University Channel Islands (CSUCI) acknowledges that climate change is a real and urgent crisis requiring local and global action. As an institution of higher education, we recognize the vital role we play to teach, engage, research, lead, and innovate to address the climate crisis. Performing in that capacity effectively requires the university to establish ambitious goals to reduce emissions and to take immediate action toward achieving those goals. As such, this plan establishes the goal for the university to **eliminate greenhouse gas (GHG) emissions by 2040**.



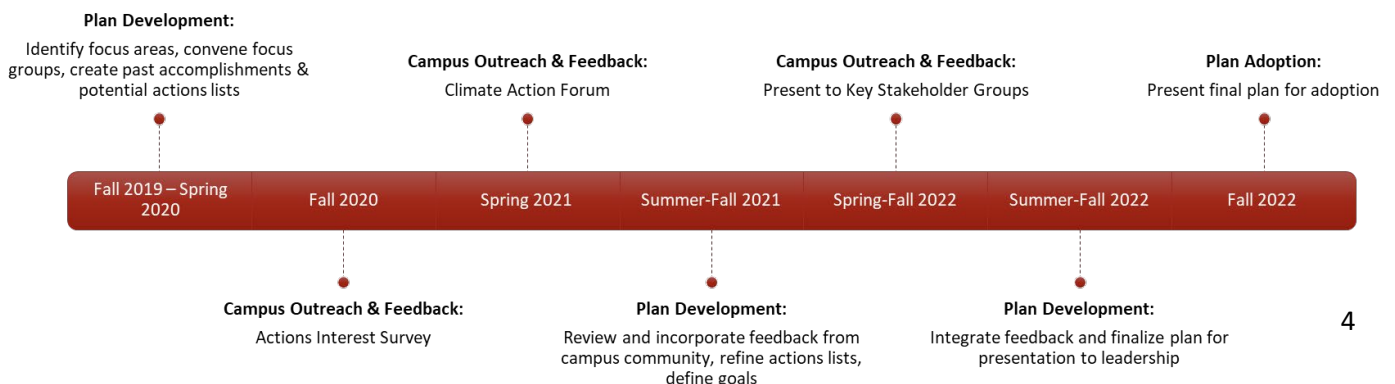
The climate action plan is a strategic guide to assist CSUCI in responding locally to the global climate crisis. The plan is intended to provide a flexible path toward eliminating the university’s GHG emissions and to influence campus planning, policy, and operations. This plan was developed over the course of three years through cross-campus collaboration. CSUCI’s Sustainability Working Group engaged campus stakeholders –student, faculty, and staff– through focus groups, campus forums, surveys, group presentations, and individual conversations.

This plan will outline:

- the university’s current GHG emissions profile,
- long term goals and interim targets to reduce emissions,
- how climate change will impact Ventura County,
- what the university has already done to reduce its impact, and
- proposed strategies and actions to make progress toward carbon neutrality.

Planning Process Overview

This Climate Action Plan was developed by faculty, staff, and students, led by CSUCI’s Sustainability Working Group (SWG). The SWG commenced the planning process in Fall 2019 to establish goals and outline the university’s path toward carbon neutrality. The planning process centered around engaging the campus community to provide input on the goals and actions established herein. Throughout the planning process, the scientific evidence of the climate crisis has continued to expand, and the world’s leading climate scientists have issued warnings that reducing GHG emissions are even more urgent than previously presumed. Although the process was interrupted by the global coronavirus pandemic in 2020-2021, the SWG continued to formulate the plan and engage campus constituents through virtual surveys and forums. This plan was developed through the following steps:



The goals proposed in this plan were developed by a working group with representatives from each division of the university. In identifying the carbon reduction goals, the group considered goals already established by the California State University (CSU), the state of California, and other universities. In addition, feedback received from the campus community through discussion groups, polls, and surveys indicated campus support for audacious goals. As a result of this process, the group ascertained that it is vital for the campus to set ambitious carbon reduction targets and to push for early action, calling for emissions reductions to be weighted most heavily within the first 8 years after adoption of the plan, as outlined in the *Greenhouse Gas Reduction Goals* section of this plan.

Plan Review Schedule

CSUCI's Climate Action Plan (CAP) is intended to be a living document. The CAP will be reviewed and revised every three years to ensure we are tracking progress and updating action items based on the latest science, emerging technologies, best practices, strategic opportunities, and innovative solutions.

Boundaries of the Plan

This plan addresses programs, resources, and emissions associated with the main CSUCI campus and the Channel Islands Boating Center. This boundary focuses the plan on property that the university has operational control over and access to information to support measurement and assessment of GHG emissions and related environmental impacts.

This plan does not include, nor apply to, the CI Power Plant, the Goleta campus, nor the University Glen housing community adjacent to the campus. These locations are excluded from the plan due to lack of operational control, ownership, and/or access to utility information.

This plan will address scope 1, scope 2, and scope 3 GHG emissions. The categories addressed within each scope for CSUCI's carbon reporting are detailed in this plan under the CSUCI Greenhouse Gas Profile section. The actions within this plan extend beyond the current reporting categories to recognize the impact of other items, such as food and purchased goods, which are not currently captured in CSUCI's carbon footprint accounting.



Introduction

Nestled amongst sprawling mountains just off the California coast, CSUCI is a unique institution sheltered by Sat'wiwa, a Chumash sacred mountain of remembrance and reverence. This direct connection to Native people's land, as well as the wildlife that dwells on the mountains bordering the university campus, shape CSUCI's institutional identity, which weaves nature and culture at its heart. As a beneficiary of this natural and cultural wealth, CSUCI witnesses and experiences the effects of the climate crisis that are moving humanity to significantly revise our ways of being, knowing, and acting.

Climate change is the most urgent crisis facing humanity. As an institution of higher education and a responsible steward of community resources, CSUCI is committed to understanding, preparing for, and responding to the climate crisis. It is essential that, as part of this commitment, CSUCI actively engages in raising awareness about climate change and implementing sustainable solutions.

Using the three pillars of sustainability—environment, economy, and equity—as guiding principles, this plan seeks to educate, inspire, and inform meaningful shifts within the campus culture, operations, and policies, to contribute to a resilient and sustainable future and reduce the university's contribution to climate change.

Environment

CSUCI is situated on the traditional, ancestral, and unceded territory of the Chumash¹ peoples. Acknowledging this history compels us to recognize our personal and institutional influence on climate change and our responsibility to reduce the environmental impact of campus activity to preserve opportunity for future generations. The university lands are also home to thousands of species of plants and animals, some of which are listed as endangered, vulnerable, or threatened. For example, the campus is home to the endangered least Bell's vireo and the yellow-breasted chat, a species of special concern.

As an institution of higher learning, it is vital that we remain vigilant in our efforts to educate and raise awareness about climate change and continue to prioritize conservation of the land on which we operate. CSUCI's efforts to mitigate climate change remain at the core of campus culture. However, we recognize that our endeavors must be accelerated to meet the urgency of the climate crisis. It is important that we acknowledge our own use of and reliance on natural resources and the impact this has on the environment. Many of the resources we rely on are finite, and climate change will further impact the availability of resources. The anticipated impacts of climate change are further detailed later in this plan. Considering the environmental cost or benefit of university policies and actions is vital to fulfilling the vision of serving as responsible stewards of the environment and respecting the legacy of the Chumash peoples who historically inhabited the land on which we serve.

Economy

The economic impact of climate change is immeasurable. In Southern California, one of the most concerning issues is the threat of increased wildfires. The devastating economic effects of wildfires can be observed within proximity to the CSUCI campus, as Ventura County has had some of the costliest fires in California within the last

few years. The total cost of the Thomas Fire, which was one of the most devastating wildfires in California history, is estimated to be around \$180 billion². As part of the fight against the blaze, Cal Fire spent roughly \$175 million in fire suppression costs (nearly half of the designated budget)³. Unfortunately, the likelihood of deadly wildfires such as the Thomas Fire is increasing with each year. In fact, the budget for Cal Fire's 2020-2021 season has an astounding \$2.1 billion⁴ dedicated solely to wildfire response. This unprecedented economic expense is California's response to an uptick in larger, more destructive wildfires⁵, a trend that is due to continue.

However, wildfires are only one of many anticipated effects of climate change that CI may experience and must be prepared to manage. Being that the university is susceptible to several adverse climate events, the fiscal impact of inaction is immense. CI must address all facets of climate change in a prompt and prepared manner, as the effects of a disrupted climate are a rising issue that will have significant economic repercussions.

Equity

An equity frame directs the university's actions to respond to the impacts of climate change. CSUCI prides itself on inclusivity and cultural diversity; its student body comes from varied socioeconomic backgrounds who may experience the effects of climate change unequally.

Climate change disproportionately affects low-income communities, as well as communities of color. This is due to low-quality housing, increased exposure to environmental hazards, and economic instability issues that plague lower income areas.⁶ In Ventura County alone, 36,915 people live in underprivileged and impoverished communities⁷. The effects of climate change exasperate the hardships these individuals face. An example of these localized impacts is evident in Oxnard. Oxnard's population is three-quarters Latinx and largely immigrant-based⁸. When compared to wealthier beach towns, Oxnard is disproportionately overrun with power plants and pollution – in fact, the city had the worst pollution score in the county based on the CalEnviroScreen report from the California Environmental Protection Agency⁹.

The need for inclusive climate action initiatives that prioritize environmental justice is paramount, especially for the CSUCI community. As of Fall 2020, 57.9 percent of enrolled students belonged to Historically Underrepresented Groups (HUGS), and 57.5 percent were Federal Pell Grant eligible¹⁰. The issue of climate change does not only impact the environment, but the lives of the students who continue to enrich the campus community. Preventive measures must be taken now to protect, support, and represent those who are most vulnerable to the negative effects of climate change.

Why a Climate Action Plan?

Adopting a CAP will establish specific strategies, actions, goals, and targets to guide the university's continued growth and improvement with a focus on minimizing negative environmental impact. This plan will also align CSUCI's commitment to sustainability with national and statewide priorities to address climate change.

Presidents' Carbon Commitment

CSUCI is a signatory of Second Nature's Carbon Commitment¹¹, which aims to reduce GHG emissions and achieve carbon neutrality on university campuses. The Carbon Commitment outlines specific steps that must be taken

by the university, such as establishing a sustainability committee, conducting annual GHG emissions inventories, and creating a CAP that identifies a target date for carbon neutrality. The production of this plan demonstrates CSUCI's dedication to carbon commitment and climate action.

California State University GHG Reduction Goal

As part of the CSU system, CSUCI is an essential component in the system-wide initiative to curb climate change. The CSU has established the goal of achieving 80 percent reduction in GHG emissions by 2040. To attain this goal, each campus has been encouraged to create a plan outlining their specific efforts.

State of California GHG Reduction

CSUCI's commitment to carbon neutrality further aligns with the state of California's GHG reduction goals. Currently, California has pledged to reduce GHG emissions to 40% below 1990 levels by the year 2030 and to achieve carbon neutrality by the year 2045¹².

Climate Impacts for Ventura County

Climate change is a clear and present threat to humanity around the globe and to our local communities. While climate impacts across the globe may have a ripple effect that affect the university, for the purpose of this plan we are focusing on the known and anticipated climate disruptions local to the campus in Ventura County, which is also home to more than 50% of CSUCI's students. Ventura County, California encompasses approximately 2,208 square miles and is home to 846,006 residents¹³. Scenic coastline, agricultural production, and favorable weather are characteristic traits of the area. These local features will be threatened by climate change impacts in this area including rising temperatures, effects on agricultural production, impacts on air quality, sea-level rise, and lengthening wildfire seasons.

Warming

Ventura County has seen a rapid increase in population growth and development over the past several decades. Urbanization has been identified as one of the leading factors contributing to our warming climate. Factors related to city development such as loss of trees and vegetation, growth of roads, and industry emissions can bring about a phenomenon known as the "urban heat island¹⁴" effect in which cities capture more heat than the rural areas around them. As a city heats up, the need for energy used to cool buildings and homes increases, which only intensifies this effect. While the ocean provides a buffering effect¹⁵ that allows the area to experience relatively lower amounts of warming compared to inland areas, temperature increases in Ventura County over the past decade have been substantial. Current projections suggest that Ventura County will see a rise of three to six degrees Fahrenheit by 2090. The county has seen five of its warmest years on record since the year 2014, current projections suggest that Ventura County will see a rise of three to six degrees Fahrenheit by 2090¹⁶. Warmer weather in Ventura County will continue to have effects on precipitation patterns, agricultural production, and increase the risk of severe weather events as well as have impacts on ecosystems and human health¹⁷.

Wildfires

Fire season in Ventura County previously spanned from April to October, but due to rising temperatures and drier conditions now extends earlier into the spring and later into the fall¹⁸. Approximately 144,000 residents of Ventura County live in high-risk wildfire areas¹⁹, making increases in temperature and changes in precipitation patterns a considerable concern for this region. Hot and dry weather paired with droughts lead to drying vegetation which can become a major fire hazard. In fact, it was Santa Ana winds paired with dry, drought-stressed chaparral that created the perfect conditions for the sparking one of the state's largest recorded fires, the 2018 Thomas Fire. The Thomas Fire impacted the cities of Santa Paula and Ventura, burning down 281,893 acres and resulting in two fatalities²⁰.

Air Pollution

In Ventura County, emissions from motor vehicles account for more than half of our air pollution. While air quality in the general area improves year by year, Ventura County's air quality continues to exceed EPA's National Ambient Air Quality standards²¹. EPA's Air Quality standards protect public health by establishing maximum allowable levels of harmful pollutants such as carbon monoxide, nitrogen dioxide, and ozone. In an area that is prone to wildfires, harmful pollutants such as soot and smoke²² as well as the chemicals used to treat fires—which can significantly harm air quality—also become a concern. When we breathe polluted air, pollutants get into our lungs and can then be carried to internal organs, which can then cause health problems such as asthma and even cancer²³. Additionally, polluted air can cause damage to our agricultural activity and ecosystems, which can lead to loss of biodiversity.

Agriculture

Ventura County is the tenth most productive county in the country for agriculture, with approximately 6,800²⁴ acres of land designated as agricultural land. Due to our favorable and temperate climate, the county produces crops year-round, including strawberries, lemons, celery, avocados, and raspberries. These crops may face consequences from a warming climate and air pollution. One of the biggest challenges agricultural production faces in this area is ground-level ozone, of which the highest concentrations are found within areas of hot and sunny weather²⁵. Ground-level ozone is created when pollutants emitted by fossil-fuel combustion chemically react to sunlight²⁶. Ground-level ozone decreases the ability of plants to produce and store food. This disturbance hinders plant growth and reproduction and diminishes plant health, which weakens the ability of plants to survive disease, extreme weather, and attacks from pests which thrive in warmer temperatures²⁷.

Sea Level Rise

The ocean absorbs about 90%²⁸ of the heat from GHGs in the atmosphere. As the ocean gets warmer, it expands, resulting in rising sea levels²⁹. The Intergovernmental Panel on Climate Change (IPCC) suggests that California could see between 39.37 to 55.12 inches of rise in sea level by the year 2100,³⁰ which drastically increases the threat of coastal flooding. In Ventura County alone, 170 miles of critical structures will be impacted by sea level rise, including hospitals/emergency facilities, schools, power plants, and wastewater treatment plants³¹. Furthermore, rising sea levels could put agricultural land, 16,000 homes and businesses, roads, and train lines at risk³². While the coast is equipped with coastal armoring such as seawalls and levees, their current structural condition is unknown.

The coast is not only the location of important infrastructure but is also an essential part of the identity of Ventura County. With over three million visitors per year³³, county beaches are a main source of local tourism. However, due to sea level rise, Southern California beaches are expected to lose recreational value— a decline of \$10 to \$15 million dollars³⁴. As the sea level rises, coastal erosion becomes more prevalent. Because many of the beaches in Ventura County are naturally narrow, significant coastal sediment loss would result in dangerous conditions. As a result, beaches could be limited to seasonal access, or disappear altogether³⁵. Perhaps even more concerning is the detrimental impact this may have on local wildlife. Several endangered species live in Ventura County's beaches and wetlands. Sea level rise also threatens to flood coastal ecosystems, having a devastating effect on ecological zones and food webs³⁶ leading to extreme habitat loss and potential extinction of species.

Saltwater Intrusion

Sea level rise also has the potential to affect the quality of groundwater resources and inland soils, both of which Ventura County is heavily dependent on for agricultural production. Agriculture is a vital component in the county's economy, creating \$2.1 billion in revenue annually³⁷. Local farming also plays a significant role in providing employment opportunities, accounting for around 31,000 jobs in Ventura County³⁸. Excellent weather conditions allow for a variety of crops to be grown, which depend heavily on the usage of freshwater irrigation systems. As sea levels rise, waves inch closer to the shore, heightening the risk of saltwater intruding into coastal aquifers. If saltwater intrusion does occur, drinking and irrigation water systems could become compromised³⁹, resulting in a public safety risk and devastating consequences for agriculture. As saltwater seeps into soil, it degrades⁴⁰ and becomes unsuitable for most produce. This could lead to a detrimental loss of revenue as agricultural land will become far less productive, only able to support salt-tolerant low value crops. Moreover, corrupted cropland may become unusable altogether and completely taken out of production⁴¹. If agriculture is no longer profitable, a major source of economic revenue and employment stability will be lost. Additionally, saltwater intrusion may cause freshwater conditions to deteriorate to unsafe levels, making it largely unsuitable for use by the public.

Flooding

Ventura County is well renowned for its prime location along the serene California coast. However, it is a low-lying coastal landscape, which increases its vulnerability to catastrophic flooding events⁴². Historically, the county has struggled with flooding issues that span over the decades. As climate change takes place, the likelihood of major flooding events, such as the "100-year flood," increases drastically. (A 100-year flood refers to the fact that such an event has a 1-percent in 100 chance of occurring⁴³.) Should a 100-year flood event take place with sea levels remaining stable, 7,300 people in Ventura County live in areas that are at risk⁴⁴. As sea levels rise, the number of people impacted increases.

As a result of climate change, precipitation patterns can become irregular and unpredictable. High intensity precipitation events can trigger flash floods, which have the potential to harm wildlife as well as industrial areas. Irregular precipitation patterns can also lead to an influx of intense flooding events, meaning that massive and abnormal storms will be exceedingly more common⁴⁵. In Ventura County alone, nearly 16,000 businesses and homes are threatened by possible flooding events; should these structures be lost, projected replacement costs total around two billion dollars⁴⁶. While flood events have the potential to harm all of Ventura County, a large number of individuals are disproportionately vulnerable⁴⁷. Low-income and immigrant families, who commonly

live in coastal zones such as Oxnard and Port Hueneme, are at elevated risk. Additionally, many of these individuals rely on agricultural-related enterprises to support themselves, which may become obsolete after flooding events take place.

Drought

While drought afflicts California statewide, Ventura County was one of the first regions to experience harsh drought conditions, and one of the last to emerge⁴⁸. Ventura County remains susceptible to prolonged periods of drought, with the county falling under extreme drought conditions as we develop this plan⁴⁹. These periods of drought occur because of climate change. As temperatures rise, the frequency and severity of drought events grow. Changes to precipitation levels can negatively impact the natural flow of local watersheds such as the Santa Clara River, Calleguas Creek, and the Ventura River⁵⁰, threatening local water sources.

In Ventura County, groundwater makes up around 67 percent of the water supply⁵¹. When a period of drought occurs, the rates of groundwater pumping rise exponentially. This causes groundwater levels to deplete within basins, which may increase the likelihood of land subsidence⁵². Furthermore, this can lead to groundwater basins becoming polluted with seawater⁵³. As periods of drought grow in frequency and length, Ventura County will face seasons with limited precipitation and snow melt that will negatively affect water quality and supply. Methods of drought prevention that were previously implemented will need to be adjusted to address the longevity and intensity of future drought periods.

This Climate Action Plan is CI's institutional commitment to understand and respond to the climate crisis that, as shown, manifests at the local level in drastic ways. The following sections provide information on the university's greenhouse gas profile. Then, we will detail the goals proposed for the campus to reduce climate pollution by reducing greenhouse gas emissions, followed by guiding strategies and proposed actions.



CSUCI Greenhouse Gas Profile

Creating a plan to reduce CSUCI’s contribution to climate change requires an understanding of the current sources and quantities of GHG emissions being generated by campus operations and activities. We have established the 2018-2019 fiscal year as the baseline emissions year for this plan. This year was selected because it is the most recent year for which we have data that reflects normal operations before the coronavirus pandemic caused campus closures in March 2020.

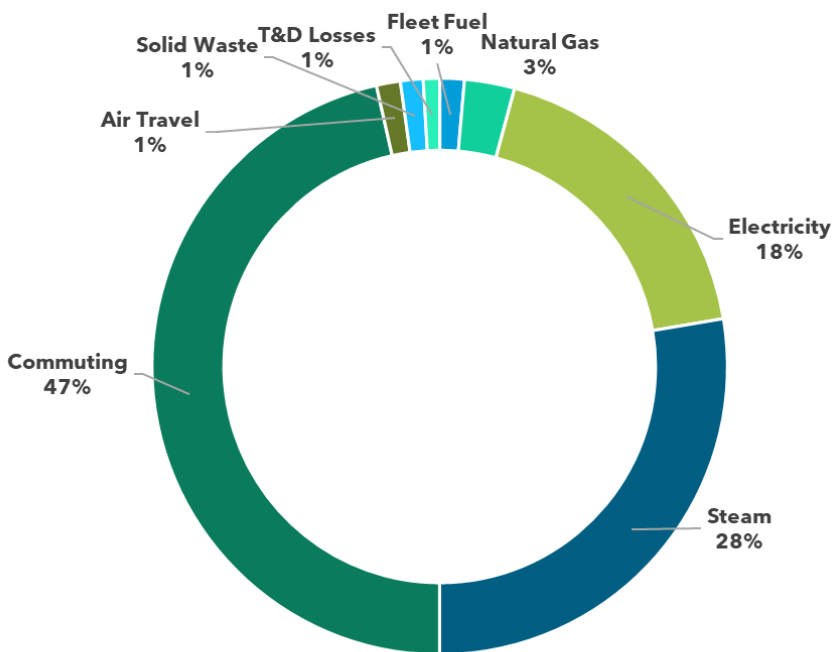
This GHG inventory follows the guidelines set forth by the Second Nature Carbon Commitment, which requires campuses to report on the following emissions categories:

- Scope 1: stationary fuel combustion (e.g., natural gas, diesel, propane, etc.), mobile fuels (e.g., gasoline, diesel, propane, etc.), and fugitive refrigerants.
- Scope 2: purchased electricity and purchased steam.
- Scope 3: university-funded air travel, student and employee commute, solid waste disposal, and transportation and distribution (T&D) losses.

The GHG inventory was calculated using the Sustainability Indicator Management & Analysis Platform (SIMAP)⁵⁴ offered by the University of New Hampshire. SIMAP is a carbon and nitrogen accounting platform used by institutions of higher education to track and analyze GHG emissions.

The main sources of GHG emissions at CSUCI are commuting and energy consumption.

FY 2018-19 GHG Emissions by Category



Nearly 50% of the university’s emissions are associated with energy used to heat, cool, and operate campus buildings. This energy comes in the form of electricity, steam, and natural gas.

The single largest category in CSUCI’s inventory is commuting, with travel to campus by students and employees accounting for 47% of emissions.

It is important to note that there are substantial emissions sources omitted from this inventory, such as food, purchased goods and services, study abroad travel, and other categories that are difficult to measure accurately.

Greenhouse Gas Reduction Goals

Establishing goals for emissions reduction and carbon neutrality provides the compass for future campus planning, policies, and operations.

In adopting this plan, CSU Channel Islands will pursue the following climate action goals:

Carbon Neutrality Goal

100% reduction of Scopes 1, 2, and 3 by 2040

Interim Targets (reductions from 2018-2019 baseline)	
25% by 2025	10,702 MTCO ₂ e
60% by 2030	5,708 MTCO ₂ e
85% by 2035	2,140 MTCO ₂ e
100% by 2040	0 MTCO ₂ e

In addition to pursuing general emissions reduction, the university is establishing Supporting Goals that identify targets for specific emission sources and align with the CSU Sustainability Policy.

Supporting Goals	
Buildings & Energy	Source 90% renewable electricity by 2030.
Environment & Water	Reduce water consumption 10% below 2019 by 2030.
Waste	Divert 70% of waste from landfill by 2030.
	Divert 80% of waste from landfill by 2040.
Transportation	Electrify 100% of small off-road engine equipment by 2035.
	50% of all light-duty fleet vehicles Zero Emission Vehicles (ZEV) by 2035.
	100% of heavy-duty fleet vehicles will be ZEV by 2045.

To achieve the goals set forth in this plan, the university will prioritize investing resources in emission reduction before pursuing any carbon offset purchases. Carbon offset purchases will be considered in the goal years to address emissions that cannot otherwise be reduced or avoided.

Guiding Strategies

CSUCI recognizes the importance of taking substantive action to reduce the university’s contribution to climate change through reducing emissions immediately. In the pursuit of a net zero campus by 2040, CSUCI will focus on five guiding strategies:

Decarbonize Energy & Transportation	by improving access for pedestrians and transit riders, incentivizing zero-emission transportation and multiple occupancy vehicle trips, and transitioning away from carbon-intensive energy sources.
Reduce Energy Use	by improving efficiency and reducing demand for energy.
Energy Storage	by storing excess solar energy to extend availability of renewable energy, increase resilience, decrease reliance on the power grid, and provide renewable backup power.
Engagement and Culture	by educating the campus and community about climate change to empower individuals to engage with solutions and embed climate justice and sustainability in the campus culture.
Monitor and Adjust	by tracking progress and updating strategies to reflect emerging solutions to achieve the ultimate goal of carbon neutrality.

Progress Assessment and Plan Review

Information about the severity of climate change and effective solutions is rapidly evolving. To ensure this plan remains current, relevant, and actionable, there must be routine progress assessment and plan review.

- **Progress Assessment:** A progress report shall be developed each fiscal year providing updates on the status of established goals, interim targets, and supporting goals. Proposed performance indicators to be featured in the report include:
 - Annual net GHG emissions - total MTCO₂e and total MTCO₂e/FTES
 - Percent change in GHG emissions from 2018-19 baseline
 - Percent of renewable electricity
 - Percent change in water consumption from 2019 baseline
 - Percent of waste diverted from the landfill
 - Percent of small off-road engine fleet that is electric or battery powered
 - Percent of light-duty and heavy-duty fleet vehicles that are zero emission vehicles
- **Plan Review:** This Climate Action Plan shall be reviewed every three years, and updated as necessary, to ensure the plan reflects the latest available information on climate impacts and effective solutions.

Past Accomplishments

Since its founding in 2002, CSU Channel Islands has maintained a long-standing commitment to sustainability, which is at the heart of the campus. This section will take a closer look at the initiatives CSUCI has already undertaken to advance sustainability and reduce the university's environmental impact. While the university has achieved excellent milestones thus far, we continue to further develop these initiatives as we look towards a just and sustainable society.

Dolphin Food Pantry

With the help of the Wellness Promotion and Education program, students at CSUCI created The Dolphin Pantry in 2017. The Pantry aims to alleviate food insecurity amongst students in the CSUCI community by providing them with locally donated food products at no cost. The pantry receives an average of fifteen visits per day and counts on the donations of canned goods, non-perishable food items, refrigerated and frozen food items, fresh produce, and hygiene items. Several farmers' markets donate locally grown fruits and vegetables.

Ekho's Closet

It is estimated that the U.S. alone sends about 21 billion pounds of textile waste to landfills each year⁵⁵. Ekho's Career Closet was a student-run initiative that aims to provide CSUCI students with free gently used, professional attire to help them prepare for job and internship opportunities. Over 600 donations were received in 2017 thanks to the generosity of the campus community. This included donations of clean, ready-to-wear clothes, ties, briefcases, and shoes as well as clothing racks, shoe racks, shelves, hangers, and dressing mirrors. These donations helped to mitigate some of the impacts that the fast fashion industry has on the environment. Unfortunately, Ekho's Closet closed in 2021, due to lack of activity during the coronavirus pandemic.

University Drive Solar Field



In March 2022, CSUCI officially started receiving power from the 3.75 MW solar array constructed in the floodplain along University Drive and Lewis Road. The solar project was made possible through a power purchase agreement (PPA). Through the solar PPA, the university committed to purchasing electricity generated from the solar array at a fixed rate of \$0.06 per kilowatt hour for the next thirty years. Duke Energy paid for the construction, and manages the maintenance and operation of the solar farm. The system is expected to provide 68% of the university's annual electricity needs, with anticipated savings of eight million dollars over the thirty-year contract period.

Santa Rosa Village LEED Building

Sustainably constructed buildings help to reduce utility costs and lower GHG emissions due to their reduced reliance on fossil fuels⁵⁶. The Santa Rosa Village student housing building is an embodiment of the campus' commitment to sustainability. In 2017, the 118,000 sq. ft. student housing building earned the Leadership in

Energy and Environmental Design (LEED) Gold certification as evaluated by the United States Green Building Council. The building was designed with water and energy efficiency in mind and makes use of LED lighting, low-flow toilets and shower heads, and timed faucets that shut off automatically after a few seconds. Furthermore, a stormwater basin was designed around the perimeter of the building to help prevent stormwater runoff, which is a significant source of water pollution and has the potential to wash away wildlife habitats. The stormwater is instead filtered into the ground through a perforated pipe which helps better manage runoff, storing it temporarily until channels can safely carry the water away.

Microplastics Research

CSUCI students and researchers study the presence of microplastics in several destinations including Hawaii, the California coast, and the Channel Islands Harbor. After closely studying microplastic ingestion by marine animals, CSUCI professor and researcher Clare Steele testified before the California State Senate at a joint hearing of the Senate Committee on Environmental Quality and the Committee on Natural Resources and Water regarding Senate Bill 54, which called for California to phase out single-use plastics by the year 2030.

Recycled Water for Irrigation

CSUCI uses recycled water to meet 99% of our outdoor irrigation needs (lawns, gardens, landscaping, play fields, etc.). The recycled water is provided by the neighboring Camrosa Water District and is the product of wastewater that has gone through three stages of treatment⁵⁷. The use of recycled water for irrigation reduces the strain on finite potable water resources.



Academics Focused on Sustainability

- **Environmental Science and Resource Management**

CSUCI offers a Bachelor of Science in Environmental Science and Resource Management (ESRM) with a choice of emphasis in either Earth Systems or Marine & Coastal Systems. The ESRM program offers students hands-on experience in the field to encourage meaningful change. Students divide their time equally between laboratories and classrooms, supplying them with insurmountable real-world opportunities. The ESRM program serves students who value science as well as preserving the environment.

- **Environmental Communication**

The Bachelor of Arts in Communication with an emphasis in Environmental Communication is a unique program that merges communication studies with environmental science. This program emphasizes the importance of human connection and relationships to address environmental issues and helps students understand the significance of language in the ways we communicate, interact with, and change the world.

Student Clubs, Organizations, Events

CSUCI students engage in sustainability work through various clubs, events, and local organizations, such as the Green Generation Club, CI Audubon, the CSUCI 4 Ocean Club, and the Ventura County Surfrider Foundation. These clubs and organizations empower students to engage with sustainable solutions on campus and in the region through community service, educational campaigns, sustainability events, and proposing new solutions. The groups have contributed to campus sustainability through initiatives such as battery recycling, trash cleanups, tree plantings, earth week activities, and more.

Carpool Program

In 2018, Transportation and Parking Services launched a program that offers incentives to carpoolers in the form of preferred parking spaces and monthly raffles. Carpooling helps improve air quality and limit carbon emissions by reducing the number of vehicles driving to campus and single-occupancy vehicle trips. CSUCI also uses a RideMatch program that helps students and employees find others with similar schedules and destinations to carpool with.

Other Areas of Recognition

- **Tree Campus USA**

In 2022, CSUCI was named a Tree Campus USA for the tenth consecutive year. This honor is provided to campuses that demonstrate a commitment to protecting the campus tree canopy and providing service-learning projects to share the value of trees.

- **Bee Campus USA**

In 2018, CSUCI became the first four-year university in California to receive the Bee Campus USA recognition. Bee Campus USA recognizes CSUCI's commitment to create and maintain sustainable habitats for all pollinating species, each of which are vital to feeding our planet. Students designed and implemented a pollinator garden which serves as a safe haven for these creatures as part of efforts to help ensure their health and abundance.

- **STARS Gold Rating**

CSUCI earned a Gold rating in 2020 from the Association for the Advancement of Sustainability in Higher Education's Sustainability Tracking, Assessment, and Rating System (STARS). The Gold STARS rating is the result of CSUCI's ongoing demonstration of integrating sustainability throughout university planning, operations, academics, and culture.



Actions

To achieve the goals established in this plan the university must take bold action to improve operations, expand the curriculum, and nurture a culture of climate action. The actions listed herein were created through collaborative consultation with the campus community. The actions are organized into seven focus areas:



Action ideas were generated by small focus groups for each area. Those actions were then presented to the campus community for feedback through surveys, social media polls, discussion forums, and other presentations. These action lists represent the starting line of CSUCI’s journey to carbon neutrality.

Support Actions

During the development of this plan, there were several actions that did not fit neatly into one focus area and were found to be integral to the overall success of the plan. These actions have been categorized as Support Actions, since the action itself may not result in direct emission reductions, though they are foundational steps to support other actions and goals within this plan.

Action ID	Focus Area	Action Summary	Action Detail
SA1	Support Actions	Sustainability Fund	Develop a sustainability fund to make capital available for campus constituents to implement sustainability projects.
SA2	Support Actions	Campus Carbon Tax	Consider adopting a campus tax on carbon (or proxy) that is considered in all purchasing, policy, and procedural decisions to reflect the true carbon cost of decisions.
SA3	Support Actions	Expand Utility Metering	Continue to expand sub-metering throughout campus for all utilities to provide better data to identify buildings with high energy use and to measure efficiencies achieved through retrofits/outreach efforts.



Buildings & Energy

Buildings and energy are a joint category because they are closely related. According to the U.S. Energy Information Administration, buildings account for 40% of total energy consumption in the U.S.⁵⁸. Major sources of energy consumption within buildings are heating, ventilation, and air conditioning⁵⁹. When buildings are constructed or updated with energy efficiency in mind, they use significantly less energy, save money on utility bills, and can improve indoor air quality for occupants⁶⁰.

One of the largest sources of GHG emissions for CSUCI comes from combined energy consumption including electricity, steam, and natural gas energy sources. This energy is used on campus to provide heating, cooling, lighting, and power to electronics. However, to slow climate change, we must aim to be as energy efficient as possible and actively shift toward renewable energy.



This section focuses on ways to reduce energy consumption, improve energy efficiency, incorporate sustainable building design in new construction, and transition to renewable energy sources.

Action ID	Focus Area	Action Summary	Action Detail
BE1	Buildings & Energy	Power Down Computers at Night	Implement a program to have the campus standard for all computers to be programmed to shut off during nights, weekends, and other campus closures. Individual exceptions can be made, as appropriate.
BE2	Buildings & Energy	Lighting Upgrades and Controls	Update all campus lighting to LEDs (where applicable) and integrate lighting controls to facilitate better lighting levels and efficiency improvements. Extend bilevel lighting to all exterior lights on the campus.
BE3	Buildings & Energy	Decarbonize Landscaping Equipment	All new landscaping equipment shall be electric, battery-operated, or use other carbon-free fuels. All existing equipment shall be phased out by 2030 or sooner.
BE4	Buildings & Energy	Renewable Backup Power	Explore options for renewable energy such as battery storage and other alternative fuel solutions to replace the existing diesel-powered backup generators.
BE5	Buildings &	Integrated Controls	Consider options to upgrade to integrated controls that

	Energy		connect lighting and HVAC operations based on occupancy and/or class schedules. Evaluate spaces on campus to determine which would benefit from vacancy or occupancy sensors.
BE6	Buildings & Energy	Replace Old Windows	Replace old/original and broken windows with dual-paned Low-Emissivity (low-E) glass windows.
BE7	Buildings & Energy	Fuel Switching - Electrify	Change all building and central plant fuels to fully electric with no fossil fuel combustion.
BE8	Buildings & Energy	Sustainable Building Standards	All new construction and major renovations should pursue sustainable building standards, such as LEED Gold or Platinum (certification or compliance) at a minimum. When possible, consider more advanced green building programs such as the Living Building Challenge and the WELL building standard. New construction and major renovation projects should also consider Zero Net Energy Ready standards.
BE9	Buildings & Energy	Commission Buildings	Routinely commission buildings on campus to ensure building systems are operating as intended. Commissioning should be done every three years or sooner.
BE10	Buildings & Energy	Update Campus Design Guidelines	Review, update, and adopt campus design guidelines to reflect current and emerging technologies and to align with campus energy and climate action goals. Updated guidelines should inform building design for climate resilience and GHG reduction.
BE11	Buildings & Energy	Develop Energy Storage	Develop an energy storage solution to leverage the solar project and make use of stored electricity during evenings.
BE12	Buildings & Energy	Low Temperature Hot Water Heating	Explore options to transition the campus heating loop to operate with low temperature hot water for heating.



Environment & Water

While burning fossil fuels is the primary source of human-caused emissions, the second major source is deforestation, which contributes up to 20 percent of global carbon emissions. CSUCI is home to about 2,900 trees of 120 different species, vital assets for shading and carbon absorption.

In Ventura County it is predicted that climate change will intensify the need for water—whether it be for firefighting purposes or personal consumption—as well as significantly prolong periods of drought⁶¹. Currently, adequate water supply is a pressing issue within the county due to the limitation of imported water, decline in river flows, and overdraft of local groundwater basins⁶². However, it is possible to address these issues by implementing water reduction and conservation programs.

The Environment and Water section includes recommendations to expand ecologically sustainable green spaces, encourage connections to nature, expand water efficiency and conservation, and utilize sustainable designs to reduce negative environmental impacts.



Action ID	Focus Area	Action Summary	Action Detail
EW1	Environment & Water	Develop list of preferred plants	Develop a list of preferred plants to use for campus landscaping. This list will consist of "climate wise" plants (i.e., native, drought tolerant, firewise, indigenous significance, edible plants, etc.).
EW2	Environment & Water	Expand Campus Tree Canopy	Continue to expand campus tree canopy to provide shade to cool down outdoor gathering areas and buildings to reduce AC costs and sequester carbon.
EW3	Environment & Water	Update Water Action Plan	Review and update CSUCI's 2014 Water Action Plan to improve data tracking and identify conservation initiatives.



Food

Production, transportation, and disposal of food has a major impact on GHG emissions and human health.

Food is the single largest component taking up space in U.S. landfills. It is said that 80 billion pounds of food is thrown away each year in the U.S., or roughly 30%-40% of the national food supply⁶³. While tons of food are wasted every day, Ventura County has more than 70,000 residents that face uncertain or limited access to adequate and nutritious food supply, and about 30% of college students experience food insecurity.

In addition to the tragedy of wasted food in the face of hunger, the emissions from energy used to produce that wasted food in the U.S. equates to the emissions from 37 million cars.

This section focuses on issues with food production, consumption, and disposal including increasing student access to foods, opportunities to integrate more real foods into campus eateries, and ways to reduce food waste and food packaging waste.

Action ID	Focus Area	Action Summary	Action Detail
F1	Food	Real Food Menu	Develop a "Real Food Menu" as an option for catered events to promote sustainable, nutritious, whole foods at events.
F2	Food	Grocery store/recurring farmers market	Explore campus and University Glen community interest in having a recurring Farmers' Market on campus for students, employees, and residents to have access to more local, whole foods.
F3	Food	Expand Healthy and Sustainable Food Options	Increase the percentage of "real food" (organic, local, fair trade, etc.) purchased for campus use and resume purchasing "Monterey Bay Seafood Watch" certified seafood. Consider implementing the "Menus of Change" program to engage students with sustainable and healthy menu items.
F4	Food	Catering food accessible for students	Make extra catering available for students and others to eat before disposing, thus reducing food waste.
F5	Food	Feature more plant-based and plant-forward entrees	Feature more plant-based and plant-forward entrees at all (or most) stations and dining locations on campus.



People & Campus Life

Fostering a culture of sustainability on campus engages the campus community as environmental stewards and helps to develop responsible global citizens. Educational programs, research opportunities, and campus engagement programs can empower and inspire students, faculty, and staff to build their own resilient communities. As a university, we help to educate the leaders of tomorrow. As such, it is important



that our own campus embodies environmentally, socially, and economically responsible decision making.

This category includes actions related to curriculum, co-curricular activities, academic support programs, student life, and other areas of campus that directly impact the student experience and campus culture.

Action ID	Focus Area	Action Summary	Action Detail
PCL1	People & Campus Life	Sustainability as part of the General Education	Incorporate sustainability as a required component of the general education credits (could be a required course, integration of sustainability throughout existing GE courses, or a separate GE strand, etc.).
PCL2	People & Campus Life	Sustainability Learning Outcomes	Incorporate sustainability into program learning outcomes and/or include a "sustainability-focused" course as a required course for all students to graduate.
PCL3	People & Campus Life	Outreach and Engagement Events/Activities	Host more collaborative outreach/engagement events on campus through a Climate Outreach Task Force or by the general campus community.
PCL4	People & Campus Life	Offer Faculty Workshops for Sustainability	Offer workshops to help faculty integrate sustainability within their curriculum.
PCL5	People & Campus Life	Adopt a Sustainable Procurement Policy	Establish a Sustainable Procurement Policy to provide goals, metrics, and guidelines to reduce the carbon impact of purchased services and supplies.



Transportation

In the United States, the transportation sector is the largest source of GHG emissions. Transportation is also the main source of air pollution in California, making up 50% of the state’s total GHG levels⁶⁴. Similar to national trends, commuting accounts for nearly 50% of CSUCI’s total emissions⁶⁵.

A typical passenger vehicle emits about 4.6 metric tons of carbon per year, contributing to air pollution, human health issues, and higher amounts of GHG that drive climate change.



The best way to mitigate transportation emissions is to embrace a shift to alternative transportation options. CSUCI’s location in a semi-remote agricultural zone makes walking and biking to campus impractical for many. Providing accessible alternatives is essential to reduce transportation-related emissions and contribute to improved air quality.

The transportation section focuses on initiatives to promote alternative transportation such as carpooling, public transportation, biking, walking, and other transportation-related emissions from activities such as idling.

Action ID	Focus Area	Action Summary	Action Detail
T1	Transportation	Support Electric Vehicle Usage	Support EVs by expanding electric vehicle parking and improving electric vehicle charging infrastructure with sustainable options.
T2	Transportation	Bicycle Programs and Infrastructure	Pursue opportunities to enable and encourage more cycling to and around campus. Such as a campus bike share system, improved regional bike corridors, and a staffed bicycle center on campus.
T3	Transportation	Increase Alternative Transportation Outreach	Increase outreach about the campus carpool program and other alternative transportation options to increase engagement and reduce single occupancy vehicle trips to campus.
T4	Transportation	Reduce travel to conferences/meetings	Encourage remote attendance for meetings and conferences whenever feasible.
T5	Transportation	Evaluate Off-Campus Shuttle Potential	Evaluate potential for an off-campus shuttle that can supplement areas VCTC cannot service to decrease single rider vehicle trips from outside of campus.
T6	Transportation	All new parking lots solar-ready	All new parking lots should be made solar-ready and include electric vehicle charging infrastructure to improve feasibility of adding solar carports and electric vehicle chargers in the future if not feasible at the time of construction.
T7	Transportation	Support Telework	Support telework, telecommuting, and/or hybrid schedules for employees whose work and performance is conducive to working remotely.
T8	Transportation	Adopt anti-idling initiative	Launch an initiative on campus to reduce idling by fleet vehicles and visitors. Include informational campaigns, followed by a warning/citation process and information about spaces for students and visitors to relax or study.
T9	Transportation	Summer conservation schedule	Consider implementing a reduced week schedule during the summer to reduce energy usage in buildings, where possible, by letting employees work 4/10

			schedules or having everyone work remotely on a certain day(s) of the week.
T10	Transportation	Evaluate Campus Circulation Shuttle	Assess the need and evaluate options for a campus circulation shuttle (powered by alternative fuels) to decrease single rider vehicle trips within the campus core and to/from University Glen.



Waste

The world is producing waste at an extremely rapid pace. Waste production has multiplied tenfold over the last century and will likely double again by 2025⁶⁶, wearing heavily on the environment and communities.



Landfills and other waste disposal sites are most often located adjacent to marginalized communities, illustrating patterns of racial and socioeconomic disparities in the distribution of polluting industrial facilities⁶⁷.

CSUCI has already implemented many measures to reduce waste sent to the landfill, including composting pre-consumer food waste, providing recycling bins throughout campus, and encouraging our community to reduce and reuse. Reducing waste and increasing diversion from landfills further lowers CSUCI's carbon footprint, fosters responsible resource use, and decreases the university's operational expenses.

This category focuses on ways to reduce waste at the source and educate the campus community to prevent waste and improve waste diversion.

Action ID	Focus Area	Action Summary	Action Detail
W1	Waste	Conduct routine waste audits	Conduct regular waste audits to better understand the campus waste profile and explore areas of improvement.
W2	Waste	Green Event Guidelines	Develop green event guidelines that will be provided to all groups hosting conferences/events.
W3	Waste	Waste reduction workshops	Host workshops about zero waste practices, food waste reduction, proper waste disposal, etc.
W4	Waste	Reduce single-use to-go items	Support reduction of single-use to-go items from campus eateries and events including beverage containers, food containers, straws, utensils, and other disposable

			packaging through incentive programs, single-use fees, reuse programs, and other strategies.
W5	Waste	Establish a program for materials/supplies reuse	Establish a program for students and employees to donate used office supplies or other materials for reuse. A donation program should be organized for residents moving in/out of the residence halls to reuse household items.



Limitations & Recommendations

This Climate Action Plan has been developed by students, staff, and faculty contributors primarily during volunteer time. It has been an extended effort of concern, care, and passion for the future of the university and the protection of people and the planet. While this plan is a valuable step in the right direction, there are undoubtedly pieces that require further exploration and analysis.

The actions in this plan have not been assessed for priority level, feasibility, nor cost-benefit. Professional assistance is needed to conduct such assessments to provide more specific information to guide data-based decision making regarding which actions should be prioritized, which have the most impact, and which may be the easiest to implement. An external consultant, or faculty offered release time, may also be able to provide an analysis of the economic, social, and environmental impacts of inaction.

To ensure the success of this plan and future iterations, it is essential that the university allocate more resources to address sustainability and climate change on campus. These resources may come in the form of staff time to work on sustainability, release time for faculty, and permanent funding for sustainability projects and programs.

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References

- ¹ Road to Restoring Sat'wiwa, *Channel Magazine* 24, no.2, (Fall 2019), <https://www.csuci.edu/news/channel/fall-2019/satwiwa.htm>.
- ² Matthew Renda, "Cost to Fight 2017 California Wildfires Shatters Records," *Courthouse News Service*, January 8, 2018, <https://www.courthousenews.com/costs-to-fight-2017-california-wildfires-shatters-records/>.
- ³ Renda, "Cost to Fight 2017," <https://www.courthousenews.com/costs-to-fight-2017-california-wildfires-shatters-records/>.
- ⁴ "State Wildfire Response Costs Estimated to Be Higher Than Budgeted," *Legislative Analyst's Office*, October 19, 2020, <https://lao.ca.gov/Publications/Report/4285>.
- ⁵ "State Wildfire Response Costs," <https://lao.ca.gov/Publications/Report/4285>.
- ⁶ Wendy Ortiz, "Lessons on Climate Change and Poverty from the California Drought," *Center for American Progress*, August 19, 2015, <https://www.americanprogress.org/issues/poverty/reports/2015/08/19/119446/lessons-on-climate-change-and-poverty-from-the-california-drought/>.
- ⁷ Kimberly Ortiz, "In Pursuit of Environmental Justice: New State Law Maps Disadvantaged Communities," *VC Reporter*, August 17, 2017, <https://vcreporter.com/2017/08/in-pursuit-of-environmental-justice-new-state-law-maps-disadvantaged-communities/>.
- ⁸ "Oxnard California: The City That Stopped a Gas Plant," *CAUSE*, <https://causenow.org/node/282>.
- ⁹ "Environmental Report Shows Oxnard Has the Worst Score in the County," *VC Star*, April 23, 2013, <https://archive.vcstar.com/news/environmental-report-shows-oxnard-has-worst-score-in-the-county-ep-292853930-351727101.html/>.
- ¹⁰ "Enrollment Snapshot," *CSU Channel Islands*, accessed April 2021, last updated March 7, 2023, <https://oneci.csuci.edu/t/IRPEGuest/views/FallEnrollmentpublic/EnrollmentDashboard>.
- ¹¹ "Our Mission, Vision and History," Second Nature, Inc., <https://secondnature.org/mission/>.
- ¹² "California Climate Strategy," *CalEPA*, July 3, 2015, modified June 6, 2019, <https://calepa.ca.gov/wp-content/uploads/sites/6/2016/10/Climate-Documents-2015yr-CAStrategy.pdf>.
- ¹³ "Quick Facts: Ventura County, California," *United States Census Bureau*, <https://www.census.gov/quickfacts/fact/table/venturacountycalifornia,US/PST045219>.
- ¹⁴ "The Urban Heat Island Effect," *The Sydney Morning Herald & The Age*, May 12, 2016, <https://youtu.be/4SihdPRRMPI>.
- ¹⁵ "California's Fourth Climate Change Assessment: Los Angeles Region Report," *California Natural Resources Agency*, November 2019, 11, https://www.energy.ca.gov/sites/default/files/2019-11/Reg%20Report-%20SUM-CCCA4-2018-007%20LosAngeles_ADA.pdf.
- ¹⁶ "Appendix B: Climate Change," *Ventura County 2040 General Plan*, B-23, September 2020, https://docs.vcrma.org/images/pdf/planning/plans/Final_2040_General_Plan_docs/VCGPU_B_Climate_Change_2020_09_15_web.pdf.
- ¹⁷ N.S. Oakley, B.J. Hatchett, D. McEvoy, and L. Rodriguez, "Projected Changes in Ventura County Climate," *Desert Research Institute*, June 2019, 2, 15, 27, 45-48, https://wrcc.dri.edu/Docs/VenturaClimate2019_bookmarked.pdf.

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- ¹⁸ Oakley, et al., “Projected Changes,” 2, https://wrcc.dri.edu/Docs/VenturaClimate2019_bookmarked.pdf.
- ¹⁹ “Appendix B: Climate Change,” B-26, https://vc2040.org/images/2040_General_Plan_Files_-_May_2019/Appendix_B_CAP_2019-05-09.pdf.
- ²⁰ “VCFD Determines Cause of the Thomas Fire,” *Ventura County Fire Department*, March 13, 2019, <https://vcfd.org/news/vcfd-determines-cause-of-the-thomas-fire/>.
- ²¹ “Air Quality,” *Ventura County Air Pollution Control District*, 2009, http://www.vcapcd.org/air_quality.htm.
- ²² “Appendix B: Climate Change,” B-28, https://docs.vcrma.org/images/pdf/planning/plans/Final_2040_General_Plan_docs/VCGPU_B_Climate_Change_2020_09_15_web.pdf.
- ²³ “Air Quality,” http://www.vcapcd.org/air_quality.htm.
- ²⁴ “Industries,” *Ventura Chamber of Commerce*, 2017, <http://venturachamber.com/do-business-in-ventura/industries/>.
- ²⁵ “Agricultural and crop-effects of ozone,” *Global Challenge Network on Tropospheric Ozone*, https://www.ceh.ac.uk/sites/default/files/files/GNC_OzoneFactSheets_AgriCropEffects.pdf.
- ²⁶ “Ground-level Ozone Basics,” *United States Environmental Protection Agency*, last updated on June 14, 2022, <https://www.epa.gov/ground-level-ozone-pollution/ground-level-ozone-basics#formation>.
- ²⁷ Oakley, et al., “Predicted Changes,” 16, https://wrcc.dri.edu/Docs/VenturaClimate2019_bookmarked.pdf.
- ²⁸ “Ocean Heat Content Rises,” *National Centers for Environmental Information*, last updated January 23, 2020, <https://www.ncei.noaa.gov/news/ocean-heat-content-rises>.
- ²⁹ Rebecca Lindsay and Luann Dahlman, “Climate Change: Ocean Heat Content,” *Climate.gov*, August 17, 2020, <https://www.climate.gov/news-features/understanding-climate/climate-change-ocean-heat-content>.
- ³⁰ “Chapter 12: Climate Change,” *Ventura Country 2040 General Plan*, September 2020, 12.23, https://docs.vcrma.org/images/pdf/planning/plans/VCGPU_12_Adopted_Climate_Change_September_2020.pdf
- ³¹ “Chapter 12,” 12.19, https://docs.vcrma.org/images/pdf/planning/plans/VCGPU_12_Adopted_Climate_Change_September_2020.pdf.
- ³² “Ventura County,” *Coastal Resilience*, 2021, <https://coastalresilience.org/project/ventura-county/>.
- ³³ Tricia Maier, et al., “VC Resilient Coastal Adaptation Project,” *County of Ventura*, December 14, 2018, ES-8, https://docs.vcrma.org/images/pdf/planning/programs/vcrcap/Vuln_Assess_Report_12-14-18.pdf.
- ³⁴ “Ventura County,” <https://coastalresilience.org/project/ventura-county/>.
- ³⁵ Maier et al., “VC Resilient Coastal,” ES-11, https://docs.vcrma.org/images/pdf/planning/programs/vcrcap/Vuln_Assess_Report_12-14-18.pdf.
- ³⁶ Maier et al., “VC Resilient Coastal,” ES-12, https://docs.vcrma.org/images/pdf/planning/programs/vcrcap/Vuln_Assess_Report_12-14-18.pdf.
- ³⁷ “Ventura County,” <https://coastalresilience.org/project/ventura-county/>
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- ³⁹ “Ventura County,” <https://coastalresilience.org/project/ventura-county/>
- ⁴⁰ Maier et al., “VC Resilient Coastal,” ES-10, https://docs.vcrma.org/images/pdf/planning/programs/vcrcap/Vuln_Assess_Report_12-14-18.pdf.
- ⁴¹ “2014 Integrated Regional Water Management Plan: 2019 Amendment,” *Watershed Coalition of Ventura County*, “2019, 13.29, https://vcportal.ventura.org/WCVC/IRWMP/2019/0-13_Section_13.0_-_Climate_Change_-_Revised_7.20.pdf
- ⁴² “Chapter 12: Climate Change,” 12.20, https://docs.vcrma.org/images/pdf/planning/plans/VCGPU_12_Adopted_Climate_Change_September_2020.pdf.
- ⁴³ “The 100-Year Flood,” *USGS*, <https://www.usgs.gov/special-topics/water-science-school/science/100-year-flood>.
- ⁴⁴ “Chapter 12: Climate Change,” 12.19, https://docs.vcrma.org/images/pdf/planning/plans/VCGPU_12_Adopted_Climate_Change_September_2020.pdf.
- ⁴⁵ “How Does Climate Change Affect Precipitation?” *NASA: Global Precipitation Measurement*, <https://gpm.nasa.gov/resources/faq/how-does-climate-change-affect-precipitation>.
- ⁴⁶ “Ventura County,” <https://coastalresilience.org/project/ventura-county/>.
- ⁴⁷ “Chapter 12: Climate Change,” 12.19, https://docs.vcrma.org/images/pdf/planning/plans/VCGPU_12_Adopted_Climate_Change_September_2020.pdf.
- ⁴⁸ Oakley et al., “Predicted Changes,” 48, https://wrcc.dri.edu/Docs/VenturaClimate2019_bookmarked.pdf
- ⁴⁹ “Drought Conditions for Ventura County,” *Drought.gov*, accessed April 2, 2021, <https://www.drought.gov/states/California/county/Ventura>.
- ⁵⁰ “Chapter 12: Climate Change,” 12.22, https://docs.vcrma.org/images/pdf/planning/plans/VCGPU_12_Adopted_Climate_Change_September_2020.pdf.
- ⁵¹ *Ventura County 2040 General Plan*, September 2020, 9.6, https://docs.vcrma.org/images/pdf/planning/plans/Final_2040_General_Plan_docs/Ventura_County_2040_General_Plan_web_link.pdf.
- ⁵² *Ventura County 2040 General Plan*, 9.1, https://docs.vcrma.org/images/pdf/planning/plans/Final_2040_General_Plan_docs/Ventura_County_2040_General_Plan_web_link.pdf.
- ⁵³ *Ventura County 2040 General Plan*, 9.1, https://docs.vcrma.org/images/pdf/planning/plans/Final_2040_General_Plan_docs/Ventura_County_2040_General_Plan_web_link.pdf.
- ⁵⁴ “Simplify Sustainability Decisions,” *SIMAP*, <https://unhsimap.org/home>.
- ⁵⁵ Allison McCarthy, “Are our clothes doomed for the landfill?” *Remake*, March 22, 2018, <https://remake.world/stories/news/are-our-clothes-doomed-for-the-landfill/>.
- ⁵⁶ “What are the benefits of energy efficient buildings?,” *CleanBC Better Buildings*, <https://betterbuildingsbc.ca/faqs/what-are-the-benefits-of-energy-efficient-buildings/>.
- ⁵⁷ “Recycled Water User’s Manual,” *Camrosa Water District*, July 2019, <https://www.camrosa.com/wp-content/uploads/2019/07/Camrosa-Recycled-Water-Users-Manual.pdf>.

⁵⁸ “How Much Energy Is Consumed in U.S. Buildings?” *U.S. Energy Information Administration*, last updated December 23, 2022, <https://www.eia.gov/tools/faqs/faq.php?id=86&t=1>.

⁵⁹ “Chapter 5: Increasing Efficiency of Building Systems and Technologies,” *Quadrennial Technological Review*, 2, September 2015, <https://www.energy.gov/sites/prod/files/2017/03/f34/qtr-2015-chapter5.pdf>.

⁶⁰ “A Valentine to the Planet,” *Architecture 2030*, February 2011, <https://architecture2030.org/3295836807/>.

⁶¹ *Ventura County 2040 General Plan*, 9.1, https://docs.vcrma.org/images/pdf/planning/plans/Final_2040_General_Plan_docs/Ventura_County_2040_General_Plan_w_eb_link.pdf.

⁶² “Chapter 10 Water Resources,” *Ventura County 2040 General Plan*, September 2020, 10.1, https://vc2040.org/images/Background_Report_-_September_2020/VCGPU_10_Adopted_Water_September_2020.pdf.

⁶³ Jim Young, “When It Comes to Food, Americans Are Shamefully Wasteful,” *Newsweek*, July 21, 2016, <https://www.newsweek.com/food-waste-80-billion-pounds-foodborne-illness-482849>.

⁶⁴ “Transforming Transportation,” *California Energy Commission*, January 2019, https://www.energy.ca.gov/sites/default/files/2019-07/TRAN-TransformingTransportation_1.pdf.

⁶⁵ “Greenhouse Gas Inventory Fact Sheet FY 2018-19,” *California State University Channel Islands*, <https://www.csuci.edu/fs/sustainability/documents/2018-19ghgfactsheet.pdf>.

⁶⁶ Daniel Hoomweg, Perinaz Bhata-Tata, and Chris Kenney, “Environment: Waste production must peak this century,” *Nature*, 502(615-17), October 13, 2013, <https://www.nature.com/news/environment-waste-production-must-peak-this-century-1.14032>.

⁶⁷ Rina Li, “Nearly 80% of US incinerators located in marginalized communities, report reveals,” *WasteDive*, May 23, 2019, <https://www.wastedive.com/news/majority-of-us-incinerators-located-in-marginalized-communities-report-r/555375/>.