

Introduction

The University of California (UC) is a global leader in the effort to address climate change. Across its 10 campuses, six academic health centers, three affiliated national laboratories and numerous natural resources cooperative extension centers, UC's renowned researchers, climate-focused leadership, sustainability policy experts, and grassroots advocates are pioneering climate change mitigation strategies with equity and environmental justice at the forefront. By developing favorable climate and sustainability policies, UC can work in conjunction with the federal government, including climate policy experts at federal research and climate science-focused agencies, to make a tangible impact on mitigating climate change and deploying sustainable infrastructure throughout the country. UC seeks Congress' support in this effort.

Working to identify and combat global climate change has been a priority at the University for decades, with significant early contributions, like the recognition of carbon dioxide's role as a greenhouse gas in the 1950s, as well as recent milestones, such as operating the first carbon-neutral public research university campus at UC Merced in 2020, as well as establishing the UC Center for Climate Justice in 2021. UC is committed to continuing in that leadership role in the 117th Congress and urges the federal government to take actions on climate change in partnership with institutions of higher education.

However, the University believes that adequately addressing the increasing threat that climate change poses to our neighborhoods and local, state and federal infrastructure requires a substantial increase in congressional support for existing and emerging climate and sustainability research and technology development. These innovations, many of which were proposed or developed at public research universities, have the potential to make a profound impact on nationwide progress on responding to our greatest climate challenges, particularly in low-income areas and communities of color that have been historically-disadvantaged by inequitable applications of these advancements.

Below are the climate and sustainability priorities UC requests to be addressed in the next climate or infrastructure bill. As legislation and proposals are further developed, UC will provide additional comments, recommendations and requests.

For more information or questions regarding UC's climate and sustainability priorities, please contact Phil Harman, Director of Federal Research Policy in UC's Office of Federal Governmental Relations at 202-974-6306 or Phil.Harman@ucdc.edu.

Facilities Energy Resiliency

UC seeks to earn targeted financial support for institutions of higher education to conduct projects focused on resiliency, energy efficiency, renewable energy and grid integration. UC welcomes support for these projects as they would provide cost-effective solutions that improve the existing energy storage paradigm and enhance campus resiliency efforts. Moreover, this would allow UC to collaborate with local stakeholders and agencies to ensure that all

communities, whether near or far from UC's campuses, benefit equitably from UC's efforts to address climate change.

UC supports:

- Distributing grants to states under a State Energy Program for project facilitation and administration of building projects that increase resiliency, energy efficiency, renewable energy and grid integration at public facilities.

Clean Energy Microgrid Implementation

The University of California, San Diego's Microgrid Optimization is one example of UC's tradition of pioneering novel solutions to address climate change hazards. Federal support for similar efforts would allow UC to serve as a living laboratory for microgrid innovation, given the strong focus on energy research and campus physical energy infrastructure. UC's demonstrated and unwavering commitment to bold climate solution innovation and community outreach sets a standard for what must be accomplished to reach carbon neutrality.

At UC alone, approximately \$3-4 billion would be required to transition campuses to clean-energy microgrid systems. Currently, UC's campuses funding sources for broader investment in microgrid deployment are constrained, as clean-energy transformation plans compete against seismic upgrades, housing projects, and other necessary capital programs. Investment from Congress, including grants and no-interest loans, would allow campuses to wind-down natural gas-fired power plants and separate from the California power grid. With increased rolling blackouts to prevent wildfires along major energy transmission routes becoming more frequent in California—and the disproportional impact of these blackouts on historically underserved communities—the need to transition to clean-energy microgrids across the state and country is apparent and overdue.

UC supports:

- Funding for community outreach and project development for clean energy microgrid implementation projects that increase resiliency to climate change hazards. This would help achieve UC's goal of transitioning from natural gas combined heat and power plants (CHPs) to clean-electricity systems, a solution that would help minimize demands on the power grid and provide proof-of-concept for the value of broader investments in nationwide microgrid development.

Distributed Energy Resources

The use of distributed energy resources, such as UC Irvine's use of solar power and hydrogen fuel—which is in turn generated by excess solar generation—to provide power to the campus community in a clean, efficient manner, is a critical step in reaching carbon neutrality and mitigating climate impacts. Flexible energy production, storage, and transmission will be essential to ensuring nationwide climate goals are met, and scaling this to a national level will be essential.

UC supports:

- Establishing programs that provide loans to support deployment of distributed energy systems that improve grid security and resiliency, increase the use of local renewable energy resources, and enhance peak load management.

Climate Justice

To ensure the equitable distribution of federal investments that help meet climate goals in every community across the country, especially those which have been historically underserved—as well as to recognize that environmental, social and health impacts due to climate change are not distributed equally—UC urges Congress to approach climate-related legislation with an emphasis on climate justice. Legislative proposals that emphasize climate justice recognize the historic inequities that have led to disproportionate climate change impacts on communities of color and low-income communities, and would move to reverse this harmful trend. By ensuring the federal government includes climate justice as a pillar of its climate-focused efforts, and by empowering local communities to meaningfully engage with climate change mitigation in their neighborhoods, this goal can be achieved.

UC supports:

- Codification of existing requirements that federal agencies integrate climate justice into their missions and develop comprehensive, agency-wide strategies.
- Establishing grants to support and empower local communities to participate in federal regulatory decision-making processes affecting the quality of their local environment and social dimensions.
- Developing competitive grant programs to support community-level zero-waste initiatives.
- Developing a national strategic action plan to ensure that public health and health care systems are prepared for the impacts of climate change; to help with state and local efforts to develop climate preparedness plans; to expand research into the intersection of climate change and health; and to enhance the federal government's ability to track the spread of infectious diseases due to climate change.

Other Areas of Opportunity

To accelerate the nationwide transition to sustainable energy infrastructure, additional support for climate change research and development, deployment of clean-energy infrastructure and similar investments are needed. Direct investment in UC's efforts to further its own sustainability efforts and defray the cost of expanding on-campus infrastructure will allow UC's researchers and sustainability experts to dedicate time and energy to refining and simplifying these advancements, making them portable and scalable for nationwide benefit.

UC supports:

- Providing at least \$35 billion for climate research and development, as outlined in the American Jobs Plan, helping achieve technology breakthroughs that address the climate crisis and position America as the global leader in clean energy technology and clean energy jobs.
- Developing a 21st century power grid that improves the resiliency, performance and efficiency of the electric grid, while ensuring the provision of safe, secure, reliable and affordable power.
- Developing competitive grant programs for energy efficiency and renewable energy improvements in public school facilities.
- Developing programs to award grants to nonprofit organizations to purchase energy efficiency materials for installation in nonprofit buildings.

- Developing programs providing rebates to eligible entities that install publicly accessible electric vehicle supply equipment.