Climate Projects at a Glance

CURRENT AND RECENTLY COMPLETED RESEARCH

Heat Resilient L.A.

Funder: Anthony and Jeanne Pritzker Family Foundation

LCI is part of a nearly $1 million interdisciplinary research award from the Sustainable Grand Challenge's Sandpit Program to determine where and when people moving around Los Angeles are most vulnerable to the effects of extreme heat and assess which communities most need cooling interventions. Based on their findings, the team will design and site new cooling structures at places like bus stops. Throughout the project, the researchers plan to engage directly with communities to produce the best possible design for the cooling structures and choose the best possible locations.

Making Justice40 a Reality for Frontline Communities

Funder: Climate & Clean Energy Equity Fund

This report provides a framework that federal officials could use to maximize the impact of Justice40, President Biden's initiative to address the disproportionate effects of climate change on disadvantaged communities. Drawing from analysis of state-level climate programs seeking to address environmental justice, the authors identify key areas of focus for the initiative: investing to provide resources for the people who need them most, empowering communities to make local policy and investment decisions, and holding government agencies and contractors accountable for furthering environmental justice goals.

Adapting to a Hotter Future Through Outdoor Cooling Interventions

Main Funder: Strategic Growth Council's Climate Change Research Program

Through a unique blend of micro-scale heat modeling, the design and installation of outdoor shade structures, and community participation to inform these efforts, this series of projects investigates the heat ameliorating benefits of urban greening and other cooling interventions in four heat impacted communities. The goal is to produce community-led and cost effective design solutions that can cool neighborhoods and improve thermal comfort, and to transfer this knowledge broadly.

Measuring Heat Impacts to Design and Target Protective Policies

Funder: Strategic Growth Council's Climate Change Research Program

A team of interdisciplinary LCI researchers completed multiple studies that measured significant financial and health risks that extreme heat poses on vulnerable populations, including workers, low-income households, pregnant mothers and infants. We are supporting state action through a policy analysis that revealed gaps in cohesive heat governance and funding opportunities. Finally, we are developing a tool to identify vulnerable populations and communities.

Identifying Tribal Needs in Climate Adaptation and Resilience

Funder: California Energy Commission

The California Tribal Gap Analysis will identify tribal communities' priorities, needs, and barriers in the areas of clean energy, transportation, and climate change adaptation. We are supporting the project with research design and analysis, as part of a team led by Prosper Sustainability.

Learning from Transformative Climate Communities

Funder: Strategic Growth Council

We are assessing progress and results of investments through the Transformative Climate Communities (TCC) program. We are focusing our evaluation effort on five TCC grants, totaling over $160 million, in the communities of Fresno, Watts, Ontario, Northeast Valley Los Angeles, and Stockton. These investments are being evaluated along environmental, health, economic, and social justice dimensions and could serve as a national model for holistic, community-driven climate action.

Workforce Impacts of Decarbonization

CURRENT AND RECENTLY COMPLETED RESEARCH

Workforce Impacts of LA's Clean Grid Initiative

Funder: Los Angeles Department of Water and Power (LADWP)

The City of Los Angeles is embarking on an effort to dramatically clean its power grid by 2030, including: (1) source 60 percent of total power supply from renewables; (2) retire the use of once through cooling (OTC) practices at coastal power plants; and (3) upgrade transformation infrastructure to allow for more distributed power generation. Researchers at UCLA are quantifying the workforce impacts of different scenarios for achieving these goals.

Workforce Impacts of Decarbonizing California's Transportation System

Funder: State of California, through the Budget Act of 2019

We contributed to the first report to comprehensively evaluate a path to a carbon neutral transportation system for California by 2045. Leading the study's workforce analysis, we found that achieving carbon neutrality in California's transportation sector could create over 7.3 million job-years of employment over the next 25 years.

California Building Decarbonization Workforce Needs and Recommendations

Funder: Sierra Club

We published the first study to estimate the potential employment impacts of building decarbonization in California. A core strategy identified by the state to reach climate goals, building decarbonization requires both energy efficiency improvements and reducing the use of fossil fuels in residential and commercial buildings by switching to electricity powered by renewable energy. The study found that California's transition to all-electric buildings could support more than 100,000 jobs annually for 25 years, after accounting for losses in the fossil fuel industry.

Employment Benefits from California Climate Investments

Funder: California Air Resources Board and the Energy Foundation

During debate over the future of California's Cap-and-Trade Program for reducing greenhouse gases, legislators looked to analysis by the Luskin Center for Innovation about the employment benefits of the investments supported by revenue from that program. The study is the first to quantify the number of jobs supported by California Climate Investments and co-investments from residents, businesses, and governmental entities that contribute matching funds.

CONTACT

V. Kelly Turner, co-director, (vkturner@ucla.edu)
Jason Karpman, climate and workforce development project director (jkarpman@luskin.ucla.edu)
Daniel Coffee, climate equity project manager (dcoffee@ucla.edu)
Jake Dialesandro, postdoctoral research fellow (jdiales@ucdavis.edu)