One of the core goals of our environmental law programs at UCLA Law is to influence and inform public policy with our research. I'm proud to say that our Emmett Center on Climate Change and the Environment is doing exactly that. The City of Los Angeles, influenced by the Emmett Center's work, is moving forward with plans to ensure that the city and its residents adopt "cool roof" technology that saves energy and has the potential to dramatically reduce greenhouse gas emissions, while reducing heat impacts on our city's residents.

In 2011, the Emmett Center released a groundbreaking report, authored by my colleague Cara Horowitz, that analyzed the potential energy savings and other environmental benefits from widespread adoption of cool roofs in Los Angeles. Mayor Antonio Villaraigosa cited this report when he announced last Friday that he is "directing the Department of Building and Safety to take the necessary initial steps to adopt cool roof measures from the state's Cal Green codes into our building code. I am also directing the LADWP to broaden their incentive program to make it financially more attractive for homeowners to install cool roof technologies."

Cara's report, <u>Bright Roofs</u>, <u>Big City</u>, describes how Los Angeles residents could make neighborhoods cooler, reduce climate pollution, and save \$30 million per year if the city expanded its adoption of cool roofs on new and existing buildings. The paper was the second in the Emmett Center's series of <u>Pritzker policy briefs</u>, which are designed to promote achievable environmental policy goals. As Ann Carlson <u>explained</u> when the report was released:

Cara Horowitz, the author of the report, used a dataset of Los Angeles rooftops and estimated energy savings the city could achieve simply by using roofing surfaces that "reflect ... more of the sun's light and heat than the average rooftop." Horowitz concludes that the energy savings we could achieve by switching all roof surfaces to cool roof materials could save \$30 million annually in energy costs and could eliminate up to 40 million tons of greenhouse gas emissions on a one time basis. Just to give you some perspective, 40 million tons is equivalent to removing seven million cars from the road for a year and is nearly 80 percent of the city's total annual emissions. And that's not all: the use of cool roofs could significantly lower urban temperatures, which are on average higher than surrounding areas because paved areas radiate heat, which would in turn led to less smog and lower air conditioning use.

City of Los Angeles will promote widespread adoption of "cool roof" technology, citing benefits documented in Emmett Center report | 2

The Mayor made his announcement at a conference convened by the nonprofit organization Climate Resolve. The UCLA Emmett Center on Climate Change and the Environment cosponsored the conference, along with the City of Los Angeles and Los Angeles Regional Collaborative for Climate Action and Sustainability. Cara emceed the conference and spoke about what L.A. can do to embrace this climate solution. Los Angeles's promotion of cool roofs may be a model for other cities, as local governments work towards solutions that will save money and energy, reduce GHG emissions, and improve the quality of life for residents in the face of increasing temperatures and other consequences of climate change.