California has much to brag about when it comes to energy efficiency. Per capita, the state's residents use far less energy than our national counterparts while enjoying an equal or better standard of living, thanks to energy efficiency standards developed in the 1970s:

California's per capita energy use compared to the U.S. since the 1970s

But the state is committed to doing better. Last week, I was invited to Sacramento to present findings from the Berkeley and UCLA Law white paper "Saving Energy" at a legislative hearing on the economic impacts of energy efficiency measures (called by the State Assembly Select Committee on California's Clean Energy Economy). The special recess hearing was co-chaired by Assemblymembers Nancy Skinner and Bob Wieckowski. You can watch Part 1 of the hearing here and listen to my testimony in Part 3 here (it begins about 12 minutes in).

First of all, kudos to Assemblymembers Skinner and Wieckowski for showing enough passion for the subject to stay for almost five hours straight of testimony, right through lunch. Second, it is clear from the hearing that state will need to do much more to encourage existing homeowners of older housing to undertake retrofits to make their homes energy efficient. Energy Upgrade California, a statewide effort launched by the California Energy Commission in March, has shown promise in promoting retrofits. However, to get to the potentially nine million homes that could make a significant dent in our statewide energy use, we'll need more than just a few thousand early adopters to undertake the process.

If we want to get serious about retrofits, the state will ultimately have to require energy audits or disclosures at the time of sale or rent of certain buildings in order to drive demand. Other jurisdictions have already implemented such requirements, like New York City, Austin, and Montgomery County, Maryland. We'll also need to make financing readily available, such as through PACE (assuming Congress passes the bipartisan legislation to restore the program for residential properties), on-bill financing (where your utility provides the money for the retrofit that you repay on your bill over time), and energy efficient mortgages (where the bank gives you an extra amount on your mortgage to pay for efficiency upgrades that save you more on your energy bill than the increased mortgage payment).

In the long run, if we can drive demand, the other barriers will work themselves out. And hopefully we can set a powerful example for the rest of the country, led by forward-thinking leaders in Sacramento.