



When we ponder ways to reduce the greenhouse gas emissions that cause climate change, nothing says “low hanging fruit” more than retrofitting our existing homes and small businesses to make them more energy efficient. Energy use from commercial and residential buildings accounts for 22 percent of California’s greenhouse gas emissions. But relatively simple steps like insulating air ducts, sealing leaks in the building, and improving insulation in the walls can result in significant greenhouse gas reductions in the aggregate, while saving consumers as much as \$500 a year on their energy bills.

“[Saving Energy](#),” a [new white paper](#) released today by the UC Berkeley and UCLA Schools of Law and the California Attorney General’s Office, discusses the primary challenges to launching a comprehensive retrofit program in California and offers recommendations to overcome them.

The key barriers are a lack of awareness among building owners about the opportunity to save money by retrofitting, insufficient funds to cover the upfront costs of retrofits (which can pay for themselves over time), a tenant and landlord population that has no incentive to pay for retrofits when the other party will benefit, and an absence of professional standards for retrofit contractors.

The main recommendations for policy-makers include:

- support Property Assessed Clean Energy (PACE) programs, which allow building owners to receive the upfront costs of retrofits from their local government and pay it back over twenty years as an assessment on their property tax bills. Local governments raise the

capital from the municipal bond market. For consumers, the additional tax payments may be less than their energy bill savings. PACE programs have so far been successful in Sonoma County, Palm Desert, and Berkeley, and California is now developing a statewide version.

- promote Energy Efficient Mortgages, which allow home buyers to add the cost of a retrofit to their mortgage. In many cases, like the PACE program, the additional mortgage payment may be less than the savings.
- develop a comprehensive and well-funded consumer marketing campaign (that builds on current utility efforts) to advertise the benefits of retrofits; and
- create strong licensing standards to attract a pool of skilled retrofit contractors.

And as an added bonus, a comprehensive retrofit program would help launch a new market for idled construction workers. For example, the California Public Utilities Commission (CPUC) estimates that its retrofit program will create between 15,000 and 18,000 new jobs. Overall, retrofits are a win-win-win solution and a key component of the fight against climate change. Fruit just can't get any lower than that.