



Government Participation and Green Housing: Policy, Promotion, Regulation

Policy Note prepared by Trevor Gardner

ISSUE

Moderator Matthew Zaragoza-Watkins, of the California Air Resources Board, initiated the discussion with the observation that the residential sector accounts for 10 percent of the energy consumed in California. Despite this clear opportunity, California has yet to realize residential energy savings. Moreover, the federal government has backed away from environmental regulation in general, in effect, directing greater responsibility to state and local governments and entrepreneurs.

PANEL FINDINGS

Two issues could affect efforts to promote residential retrofits. Carla Peterman, of the California Energy Commission, noted customer uncertainty regarding the effect on home equity, and the possibility that regulations requiring retrofits will hamper recovery of the housing market. Max Auffhammer, of UC Berkeley, noted the difficulty in estimating savings accurately, given that savings beneficiaries might change their behavior as energy costs decrease. He counseled policymakers to therefore anticipate the effect of energy-efficiency technology on energy demand, rather than assuming that it will not trigger a behavioral response.

Cisco DeVries, of Renewable Funding, argued that the residential energy retrofit market is enormous, with homeowners spending \$40 billion on home energy projects in 2010.

Peterman reported that the State of California has identified four barriers to entry in the market for housing energy retrofit: upfront costs and financing (even with rebate programs, customers are required to pay 50 to 75 percent of the costs upfront), lack of consumer awareness, lack of a trained and ready workforce, and lack of program coordination.

She noted that AB 758 is a critical ingredient to state efforts to address these challenges. The legislation creates the first statewide program in the country to increase the energy efficiency of existing buildings. Under the new law, the California Energy Commission, working with the Public Utilities Commission, has initiated a three-phased implementation process: 1) infrastructure development, 2) market development, and 3) the incorporation of

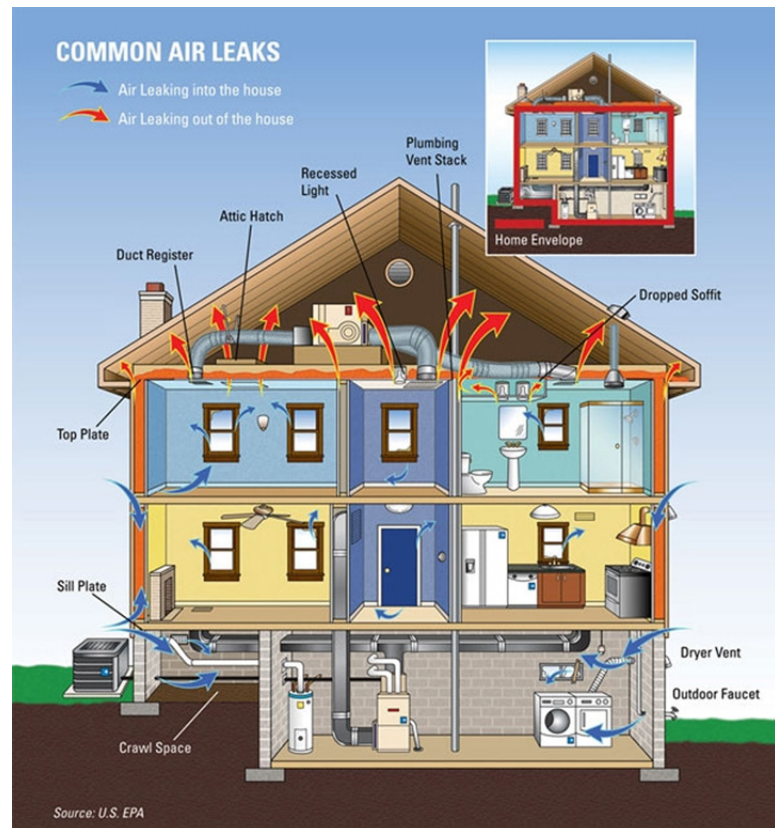


Figure 1. "Whole House" energy profile illustration.
Source: U.S. Environmental Protection Agency

statewide ratings and upgrade requirements.

Heather Larson, of StopWaste.org, suggested that in the multi-family sector, there are more jobs than professionals trained to do them, and the market for retrofits has yet to build a workforce as robust as there is in new construction.

RECOMMENDATIONS

To tap the large market, energy retrofits must be, “simple, safe, and free,” DeVries said. The first targets for energy retrofit initiatives should be innovators, followed by more mainstream home-energy technology consumers.

Government Intervention	Prescription
Capital	Incentives at the point of sale
Coordination	Infrastructure-building partnerships
Consumer Education	Standardized building energy-efficiency assessments

Figure 2: Models of government cction.

Programs should be targeted at the point of sale, with information packages that clearly spell out anticipated savings and government financial incentives, which would be tied to arrangements permitting the government to share in the monetary savings over the life of the technology. Non-profits and private sector companies should form partnerships to standardize comprehensive retrofit programs for commercial and residential buildings.

DeVries pointed out that the federal government provided meaningful support to local governments and non-profits through the American Recovery and Reinvestment Act, but federal stimulus dollars end in 2012.

Peterman called for uniform “whole house” assessment programs that convey the energy consumption of a given building (Figure 1). Consumer education programs can also take a lesson from private sector marketing efforts to paint building retrofits as chic and trendy.

The panelists concluded that government can and should play an active role in promoting technology to improve building energy efficiency, with local and state governments assuming a larger role in providing capital, informing consumers of benefits, and coordinating plans with the private and non-profit sectors.

PARTICIPANTS

Presenters

Max Auffhammer, UC Berkeley
 Cisco DeVries, Renewable Funding
 Heather Larson, Stopwaste.Org (Alameda County)

Carla Peterman, California Energy Commission
Moderator
 Matthew Zaragoza-Watkins, California Air Resources Board

This is a Policy Note from the third panel in the first conference, “Energy Efficiency in the Residential Sector: Practice, Policy, Prospects,” in the Sustainable Cities series held in 2011-2012 at UC Berkeley, organized by John Quigley and Larry Rosenthal, along with Michelle Wilde Anderson, Karen Chapple, and Cecilia Estolano. It was hosted by Berkeley Law, the College of Environmental Design, the Institute of Urban and Regional Development, the University of California Transportation Center, and the Berkeley Program on Housing and Urban Policy.

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