

DOCKETED

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CONSUMER BEHAVIOR AND MARKET TRANSFORMATION



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RESEARCH ON CONSUMER BEHAVIOR AND MARKET TRANSFORMATION SUGGESTS WAYS TO IMPROVE COMPLIANCE

The Commission should put their thumb on the scale to encourage quality, in several ways:

1. Create a “Credible Threat”: Yes, You Might be Caught
2. Create a “Credible Threat”: Yes, the Consequences are Scary
3. Reduce the Cost of Compliance
4. Help Contractors Explain Higher Bid...
5. ...While Addressing the Issue of Inappropriate Upselling
6. Help Contractors Improve their Perceived Value
7. Help Distinguish Quality Contractors
8. Create a 360-Degree Culture of Compliance
9. Regain Trust

THE COMMISSION SHOULD PUT THEIR THUMB ON THE SCALE TO ENCOURAGE QUALITY

- **CNC = COST OF NON-COMPLIANCE.** Product of:
 - PIC_p = Penalty if Caught (Perceived)
 - $P(GC)_p$ = Probability of Getting Caught (Perceived)

- **CC = COST OF COMPLIANCE.** Sum of:
 - ICE = Incremental Compliance Expenses
 - AL = Additional labor (for installation, duct sealing, permit coordination, HERS coordination, inspection coordination, paperwork)
 - ATR = Additional truck roll
 - PF = Permit fee
 - HERS = Registry fees, HERS Rater fee
 - LR = Lost revenues. Product of:
 - EP = Expected profit on job (without compliance).
 - $P(L)_p$ = Probability of Losing Job to a lower-price (non-compliant) contractor. (Perceived) (This is a function of ICE)

Costs Passed on to Customer

I. CREATE A “CREDIBLE THREAT”: YES, YOU MIGHT BE CAUGHT

Would your competitor get caught for not taking out a permit?

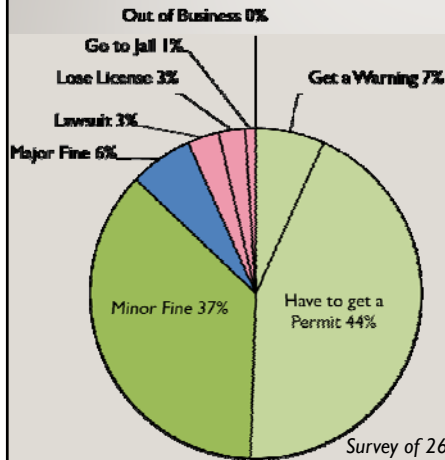
Response	Percentage
YES	1%
PROBABLY	4%
DON'T KNOW	13%
PROBABLY NOT	46%
NO	36%

- An HVAC Registry may be an effective way to catch the largest number of n'er-do-wells.
- But this need not be the goal. Rather it should be to create a credible threat of being caught.
- CSLB, continue with stings and publicize the outcomes.
- Note that even if an HVAC Registry is created, it will not solve the problem unless there is a mechanism in place to punish the people who are caught.

Survey of 268 Contractors for WHPA, Heinemeier ACEEE Paper, 2010

2. CREATE A “CREDIBLE THREAT”: AND YES, THE CONSEQUENCES ARE SCARY

What would happen to him if he got caught? • CEC and the CSLB, work with the AG, and with District Attorneys to come up with a policy that can be consistently effective statewide.

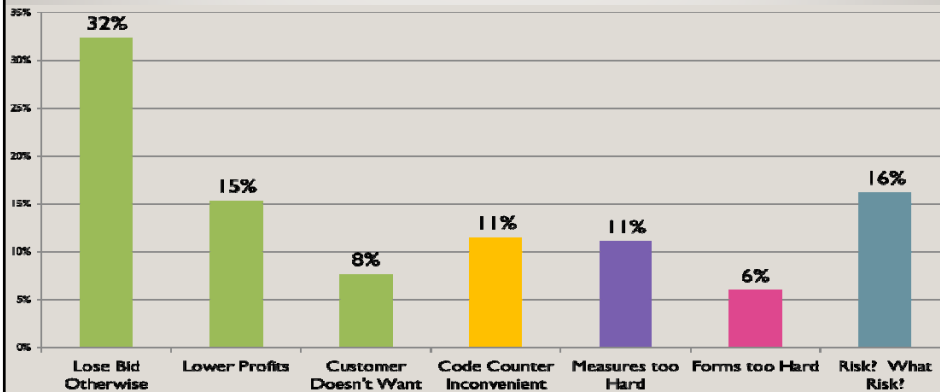


- It should be something like:
 - First Strike: **Warning Letter**
 - Second Strike: **Listed on Website**
 - Third Strike: **License is Taken Away**

Survey of 268 Contractors for WHPA, Heinemeier ACEEE Paper, 2010

3. REDUCE THE COST OF COMPLIANCE

Why would he take that risk?



Survey of 268 Contractors for WHPA, Heinemeier ACEEE Paper, 2010

4. HELP CONTRACTORS EXPLAIN HIGHER BID...

NO PERMIT, NO ENFORCEMENT, NO COMPLIANCE			
	TIME	MATERIALS	TOTAL
FURNACE	\$945	\$1,600	\$2,545
DUCT SEALING	\$360	\$50	\$410
PERMITS	\$720	\$110	\$830
HERS	\$270	\$100	\$370
HOMEOWNER	\$0	\$0	\$0
TOTAL	\$2,295	\$1,860	\$4,155

FULL PERMIT, FULL ENFORCEMENT, FULL COMPLIANCE			
	TIME	MATERIALS	TOTAL
FURNACE	\$900	\$1,500	\$2,400
DUCT SEALING	\$0	\$0	\$0
PERMITS	\$0	\$0	\$0
HERS	\$0	\$0	\$0
HOMEOWNER	\$0	\$0	\$0
TOTAL	\$900	\$1,500	\$2,400

DIFFERENCE FROM BASELINE			
	TIME	MATERIALS	TOTAL
	\$1,395	\$360	\$1,755
			(73% increase)

- Play a critical role in supporting a new kind of training: salesmanship.
- Provide:
 - A well-articulated argument for the benefits that the customer can expect directly and indirectly,
 - Data and analytic tools to support that argument, and
 - Training in how to make the argument.

Why is your bid so much higher? What do I get for all that extra money?

*Thanks!
-the Customer*

2015 Analysis for CIAG, White Paper #13

5. ...WHILE ADDRESSING THE ISSUE OF INAPPROPRIATE UPSELLING

- Contractor will have to sell energy efficiency and quality installation.
- Help them by developing and deploying tools that will help well-meaning contractors to identify and distinguish work that truly needs to be done from unnecessary work, so that they can convey the need to do the work while retaining customer trust.

Interviews of Contractors for SCE, Barriga et al. 2012

THE DANGER ZONE: Losing trust by appearing to push-sell expensive and unnecessary "energy efficient services"

THE HOPE ZONE: New tools to show energy savings, and the rare motivated customers.

THE COMFORT ZONE: Appealing to traditional motivations to get HVAC services makes the trust relationship safe.

"We just don't want to tell you, 'you have to have this giant system and you have to pay all this money' and you say 'that's not what I was looking for, you're just trying to sell me on the most expensive thing'... There's not what we are trying to push on you."

"Are you being honest with me that that is the problem and that I really need to replace that part? Or are you telling me to replace that part because it's going to make you money?"

"We don't have a way to show efficiency. We just don't. I wish we did. That would be the biggest no-brainer in the history of mankind. It would make it so simple."

"There's a lot of people who are looking to be green and want to feel like they are saving the world and what not... some people go, 'I want to be net zero, I want to be green... it's like, I can do that for you...'"

"On the energy saving side we haven't done it far as far as showing them, specifically quantifying that information"

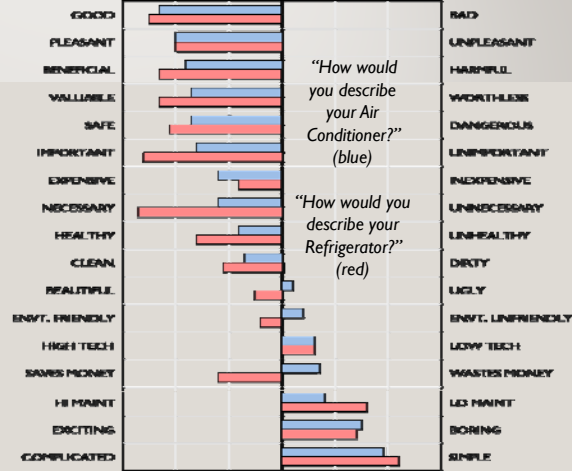
"I always believed we were selling comfort, efficiency is important, but they need to be comfortable."

"When it really comes to it, people are guarding their money. That's reality. Same with energy upgrades, people just won't spend that much money, especially if they're split-down."

"But because we know everybody so well and that them, they know if they are knowingly sell somebody something that they don't need I will be them, and I never do that. There is no deception here."

6. HELP CONTRACTORS IMPROVE THEIR PERCEIVED VALUE

- Contribute to development of meaningful certifications that can help to give quality contractors a customer-facing badge that might help to give confidence to customers.
- Provide templates for reporting findings that enhance customer's perception of the value they will receive.



Survey of SCE Residential Customers, Barriga et. al 2012.

7. HELP DISTINGUISH QUALITY CONTRACTORS

- Help quality contractors to distinguish themselves from lower-cost competitors.
 - Provide a rubric that customers can use for evaluating the quality of a contractor.
 - Host a clearinghouse of contractor evaluations or provide guidance to third-party clearinghouses (such as Yelp and Angie's List).

Draft document for CoolDavis HVAC Program

1. Is your company licensed by the California State License Board? Yes No
License Type: _____ License Number: _____

2. How long has your company provided services in the City? _____

3. Approximately how many projects has your company completed in the City in:
a. The last 12 months: _____
b. The last 24 months: _____

4. Roughly, what percentage of the buildings you have served in the City are in each of the categories below (these should add up to 100%):

New:	
1. single family homes	_____ %
2. multifamily homes	_____ %
3. low income housing	_____ %
4. commercial buildings	_____ %
Existing:	
5. single family homes	_____ %
6. multifamily homes	_____ %
7. low income housing	_____ %
8. commercial buildings	_____ %
TOTAL:	100%

5. Is your company certified to participate in Energy Upgrade California? Yes No

6. What trade certifications do your technicians hold? (for each, provide the percentage of your technicians who hold the certification)

_____ %
_____ %

7. What residential services does your company offer? (Please check all that apply)

- Responding to high energy bill requests
- Responding to no heat or no cooling calls
- HVAC repair
- HVAC changeout
- HVAC installation
- HVAC emergency service
- HVAC maintenance
- HVAC maintenance agreements
- Installation, repair, maintenance, or service of advanced HVAC technologies
- Duct sealing and testing
- Thermostat replacement

8. Using calculations or computer models to determine the appropriate size of the replacement component or system.

9. Whole building energy assessments

10. Insulation removal and installation.

11. Envelope sealing

12. Window replacement

13. Water heater replacement

14. Tankless water heater installation

15. Water conservation improvements

16. Solar PV

17. Solar thermal domestic hot water

18. Solar swimming pool heating

19. Processing applications for rebates or financing

9. Does your company provide potential customers with information about: (please check all that apply)

- Equipment and appliance warranties
- Energy efficiency of different equipment and appliance options
- Availability of ENERGY STAR rated products
- Private financing
- Life-cycle cost effectiveness of different installation/repair options
- Ongoing operation and maintenance for maximum performance

10. Does your company provide potential customers with information about: (please check all that apply)

- State and city energy code requirements
- Energy efficiency financing programs
- Private financing
- PSE&E rebates
- State tax credits
- Federal tax credits

11. Will you agree to: (please check all that apply)

- provide written, itemized estimates including specified make and model of any equipment that will be installed
- State and city energy code requirements
- provide a written proposal before work gets started
- take out a building permit for any subject projects
- ensure that any permits are finalized
- provide any follow-up services that are required (such as adjusting refrigerant charge that couldn't be checked in winter)
- provide potential customers with consumer information prepared by the City
- provide an anonymous customer satisfaction survey, which the customer will return to the City
- provide understandable written documentation for any recommended part, component, or system repair or replacement



9. REGAIN TRUST

- Initiate a new process in order to regain trust on all sides: a “hard reset.”
 - Include all stakeholders in an equal and substantive way in the process of vetting and prioritizing alternative elements of the plan,
 - Allocate the resources that are needed to enable stakeholders to participate (eg, stipends and/or travel expenses).
 - Provide sophisticated facilitation.
 - Encourage all parties to come to the table prepared to compromise.
 - Work towards having industry-wide support for any legislation that is needed.

