

The WHPA Compliance Committee is tasked with offering potential solutions to the following list of gaps and barriers and consolidating its recommendations in a WHPA Compliance Committee approved White Paper by Q2 2017.

Gaps and Barriers for CEC's Existing Buildings Energy Efficiency (EBEE) Action Plan Sub-Strategy 1.5.5 identified in the WHPA EBEE Committee's Work Product I. (as of 7-8-15)	WHPA Compliance Committee's Suggested Solutions/Comments (as of 4-2-17)
<p>1. Regarding permitting, cataloging a years worth of permits, review and gather important information regarding permitting compliance specifics to know what is really going on. Uncertain exact % of projects that actually get permitted.</p>	<p><u>Gap 1 Comment 1 (Bob Barks 8-11-16)</u>: Use the WHPA Online Permitting WG as a resource as well as DNV GL Energy's HVAC6 Study work.</p> <p><u>Gap 1 Comment 2 (Paula Gruending 8-11-16)</u>: the Market assessment work under HVAC6 will be useful for analysis. The study should be done by October 2016. It will have information on permit rates and market assessment related to the quality of installation.</p> <p><u>Gap 1 Comment 3 (Eric Taylor 8-11-16)</u>: Get access to CSE's HVAC Permitting Best Practices market study as a foundational resource. (WHPA Staff Note: Per CSE, at this time CEC does not want the CSE report shared publicly or have its findings used to support other studies. That said, CSE did authorize WHPA to reference CSE's project and review its methodology based on their public HVAC Permit Compliance Survey Results presentation on CSE's HVAC Permit Compliance program page.)</p> <p><u>Gap 1 Comment 4 (Chris Walker 8-11-16)</u>: The relationship between the CPUC and the Utilities on the dispensation of rebate dollars that is frustrating the requirement for permit closures should be addressed. The issue is Utility company resistance "in the Capitol" to require a permit closure as a precondition for issuing a rebate because of frustration with local government not working expeditiously enough in relation to CPUC pressure on IOUs to get the money distributed. (This also relates to Gaps #6 and #7.)</p> <p><u>Gap 1 Comment 5 (Bob Barks 10-13-16)</u>: Summarization of Oct 13th meeting discussion: "We are not reopening the SNT issue." There is HERS tracking through the CFR system, but there is not a system for distributors and manufacturers to open their info for tracking. There is a serious conflict within the Committee and in the market. As we do not have the answers and there are others working on it outside of WHPA, SNT is not a Compliance Committee focus. Recommendation is made for CPUC and other's research efforts to involve manufacturers and distributors to put a number on permitting in the State and clarify how we might be able to improve that number.</p>
<p>2(A). Lack of tools Gap: Lack of website with correct, relevant information to better assist applicants. More actionable information, more user friendly city webpages, etc.</p>	<p><u>Gap 2A Comment 1 (Mark Meyers 9-7-16)</u>: We have some very good tools available to both contractors & enforcement agencies alike and yet we cannot get the tools used. Energy Code Ace is the first one to come to mind.</p> <p><u>Gap 2A Comment 2 (Bob Barks 10-13-16)</u>: Summarization of Oct 13th meeting discussion: A standard form across jurisdictions is needed. The form/process needs to be simple. Methodology needs to be developed to get information in to the most people's hands, in other words to anyone who might be touching that permit. There is always the issue of how and who will pay for it. Not all jurisdictions have money to pay for it.</p>

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<p>2(B). Lack of enforcement gaps need to be addressed. Not enough enforcement.</p>	<p>Gap 2B Comment 1 (Mark Meyers 9-7-16): Insufficient enforcement is a function of a lack of enforcement tools being available to agencies to do enforcement. Equipment tracking is a great example. How can an agency enforce laws when they have no idea where equipment is and what is being done? <u>Gap 2B Comment 2 (Bob Barks 10-13-16):</u> Summarization of Oct 13th meeting discussion: it sounds like there are distributors/manufacturers that have information on where equipment shipped and perhaps sold, but that it is not available to anyone who would enforce permits. Even with that information, it is unclear who will do the enforcement as CSLB does not have manpower and local jurisdictions may not have the information or the manpower if they did have the information. Homeowners also have a part in this. Someone needs to do enforcement but no one is doing it at this point.</p>
<p>2(C). Permit process too time-consuming due to lack of online tools. Building departments not using their online software to it's fullest extent. Building departments are limited in their ability to inform the public because they don't use the platforms that applicants use to find information. Website not accurate or up-to-date or doesn't have the right information. Don't know how to present the material so the applicants can easily understand and access. (IT specialist to user) Strip message down to bare bones message and make it actionable. Not barraging them with a wall of complex text.</p>	<p>Gap 2C Comment 1 (Mark Meyers 9-7-16): This is often said but is not very believable as there are many communities throughout the State that have online permitting currently. While we need all to get there, the ones who already have this do not have permitting rates that are substantially better than those who do not. As far as being too time-consuming, the required CEC forms that are seldom brought to the building department are time consuming and troublesome, but the contractor also made no attempt to use the tools that are available, such as Energy Code Ace. <u>Gap 2C Comment 2 (George Rodriguez 11-10-16):</u> Building permits for nonres are quite complex as there may be requirements for structural permits with plan check as well as for energy. They may need to go through the health department, fire department, etcetera, which is beyond residential requirements. <u>Gap 2C Comment 3 (Bob Barks 11-10-16):</u> Summarization of Nov 11th meeting discussion: Suggestion that any statewide online permitting system should be limited to residential. The online system will be for permit issuance, but once the permit has been issued, the onsite inspector still has responsibility to check some of the other issues, including if the project was initially permitted. There are two subjects being discussed. One is focused on how to make the permit process simple. The other is on the jurisdictional responsibility that is still there to ensure the job is done correctly and to look for the unknowns that might cause a hazard. Focus is on quick changes that are not captured on permits and won't be done as professionally as some contractors do with all needed information gathered upfront.</p>

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<p>3. Hard to get non-compliant people to the table. Building Dept staff do not consider themselves as enforcers or often do not have resources to enforce. No enforcers.</p>	<p><u>Gap 3 Comment 1 (Mark Meyers 9-7-16)</u>: Building Departments DO consider themselves the enforcement group. The problem is that they cannot get tools in place to do their job as they are blocked from getting information and functional tools to get their job done.</p> <p><u>Gap 3 Comment 2 (Eric Taylor 10-11-16)</u>: CEC input is needed to address the issue of who is enforcing the enforcers. "“No one seems to have a stick even though there are laws saying it is illegal”.</p> <p><u>Gap 3 Comment 3 (Mark Meyers 10-11-16)</u>: SUGGESTION: It is a simple as limiting access to equipment and making sure proper procedures are followed. Make it a requirement to register a CF1R so the jurisdiction knows where equipment is and then go in and enforce.</p> <p><u>Gap 3 Comment 3 (Bob Barks 11-10-16)</u>: There is a need to encourage greater communications between local jurisdictions, CSLB, and contractors to foster discussion beyond just when there is a problem. Something is needed upfront to allow them to work together on a regular basis. There is currently no funding for that.</p> <p><u>Gap 3 Comment 3 (Charles Segerstrom 10-11-16)</u>: Building departments have no incentive for enforcement since it costs them more to enforce than they can collect for a permit. There is a need to show incentive.</p> <p><u>Gap 3 Comment 4 (Mark Meyers 10-11-16)</u>: Those losing money are not properly adjusting fees for cost recovery per what Title 24 allows. Jurisdictions need to figure out how to make cost recovery whole.</p>

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<p>4. No big stick. Not sufficient value for owner or contractor. No consistent message that there is a value proposition.</p>	<p><u>Gap 4 Comment 1 (Bob Barks 8-11-16)</u>: What is the stick used to get people's attention?</p> <p><u>Gap 4 Comment 2 (Mark Meyers 8-11-16/9-7-16)</u>: Some contractors look at compliance as optional. From that view, they look at market factors and the costs for compliance versus noncompliance. If there are no penalties for non-compliance then why comply? If compliance costs more and no one will care then why do it? Remember we are dealing with one of the most unsophisticated consumers in any market here with thoughts such as "It is hot and I want it cool now and cheap to install."</p> <p><u>Gap 4 Comment 3 (Bob Barks 1-12-17)</u>: Summarization of Jan 12th meeting content: There are some suggestions related to catching permit issues through real estate transactions, etc., but it would not be the best stick for improving compliance. More Gap discussion is needed.</p> <p><u>Gap 4 Comment 4 (Barbara Hernesman 1-12-17)</u>: SUGGESTION: It sounds like a possible pilot program that could be implemented in specific California regions. There are multiple "touches" that need to be included along the way. As it has already been proven that compliance does not work when it is all put on the contractors, the solution is to work with the WHPA EBEE Committee to determine who all the players are and how to identify incentivization for each of those players for process involvement.</p> <p><u>Gap 4 Comment 5 (Susan Davison 1-12-17)</u>: CF1R tracking data is in the Registry so reports could be generated for those who would want to look at it, but there also needs to be some financial remunerations to Building Departments to offset the cross-checking cost to see which contractor was working on a unit or where it went. SUGGESTION: Add some fees or penalty for violations that could help fund needed actions to foster increased compliance. While we are not supposed to discuss serial number tracking, there is a full process in which all players "have some skin in the game". If only one part of the process is addressed and not for all the players, then it will not work overall. While serial number tracking may not be "the magic bullet", at some point, all players must take ownership of the issue.</p>

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	<p><u>Gap 4 Comment 6 (Chris Walker 1-12-17)</u>: CalSMACNA is very interested in finding a way for Building Departments to get consistent funding and maintain their strength when the funding cycle is not on since they see the inconsistency in B.D. strength as a big issue.</p> <p><u>Gap 4 Comment 7 (Bryan Rocky 1-12-17)</u>: A lot of distributors bring equipment into California and then send them to other states to be sold. How would the CF1R process handle that? Any model tracking, whether called serial number tracking or not, is still tracking from manufacturer to distributor to contractor to consumer. While project based is different than job based, it still sounds like serial number tracking.</p> <p><u>Gap 4 Comment 8 (Mark Meyers 1-12-17)</u>: The process is already required so it is not something new. <i>(Similar to comment in Gap 3)</i></p> <p><u>Gap 4 Comment 9 (Charles Segerstrom 1-12-17)</u>: Discussion of the CF1R form and how the process could be improved is an important piece of the puzzle, but the role of the whole paradigm needs to be looked at as well. SUGGESTION: The paradigm could be changed past the CF1R to enable contractors to have some sort of self-certification and verification piece with the use of modern technology.</p> <p><u>Gap 4 Comment 10 (Dave Hegarty 1-12-17)</u>: Comment was made that manufacturers and distributors will reduce warranties if equipment is properly tracked and installed.</p>

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<p>5. Value-add not a value for building department. They are about health and safety. No perception of the long term health and safety impact of not having energy efficient buildings.</p>	<p><u>Gap 5 Comment 1 (Mark Meyers 9-7-16)</u>: I believe this is an unfair statement. Building Departments take their responsibilities for compliance very seriously, but, once again, without any tools to follow the equipment, how do we expect them to do their job?</p> <p><u>Gap 5 Comment 2 (Bob Barks 1-12-17; 2-9-17)</u>: Summarization of Jan 12th meeting content: The comments on Gaps 4 and 5 are interrelated. Summarization of Feb 9th meeting content: There are issues with consumers, contractors, and the community at large not understanding the issues having to do with life safety and the energy efficiency issues with that. Useful suggestions may be narrowed down from meeting recordings.</p> <p><u>Gap 5 Comment 3 (Barbara Hernesman 1-12-17)</u>: The WHPA EBEE Committee's discussion on this was that the recession resulted in reduction of personnel and services in building departments that were never replaced with improvement in the market. The end result is that health, life, and safety and energy efficiency go "hand in hand". If we going to ask them to take HVAC into account as well, the opportunity is to support more personnel in building departments so they can do the needed work. This includes educating on how they go "hand in hand" and can complement each other.</p> <p><u>Gap 5 Comment 4 (Mark Meyers 1-12-17)</u>: We need to break the question apart into 2 pieces for service-fees and enforcement. Building Departments fill a service and fees are billed based on that service. They can cover costs for those that are compliant in pulling permits. The enforcement activity for those who are not compliant is the other portion. Trying to be the unfunded enforcer is the issue. Some try to do what they can with the tools they have, but trying to put an inspector "on every corner" to watch for unpermitted actions is not allowable or practical. SUGGESTION: We need to find tools and methods to make compliance more palatable for the industry for increased willingness for compliance, while also making it worse for them if they are not compliant.</p> <p><u>Gap 5 Comment 5 (Bob Johnson 2-9-17)</u>: SUGGESTION: Adjust the contractors law to clarify that permit pulling as a requirement must be included in the contract.</p> <p><u>Gap 5 Comment 6 (Lea Haro 2-9-17)</u>: SUGGESTION: Better enforcement is needed. Explore resources available to get decision makers actively engaged in being informed.</p>

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<p>6. Not understanding contractor motivation. Contractors listen to customers only and CSLB. Looking to put food on the table so will do exactly what their customer tells him to do. No demand on the part of the consumer. No neighborhood spot checks.</p>	<p><i>See "Gap 1 Comment 4 (Chris Walker 8-11-16)"; See "Gap 7 Comment 1 (Mark Meyers 8-11-16)"; See "Gap 7 Comment 2 (Bob Barks 8-11-16)"</i></p> <p><u>Gap 6 Comment 1 (Mark Meyers 9-7-16)</u>: This is the most relevant statement in this document. Contractors live in a PRICE competitive market. What does the customer want?: "A cool house right now and at the LOWEST possible initial cost". They do not look at long term savings for a very large investment in re-ducting their HVAC systems. Also 15 minutes after the house has cooled down, they have already forgotten about the A/C system.</p> <p><u>Gap 6 Comment 2 (Dave Hegarty 3-9-17)</u> SUGGESTION: Since Big Box stores put the permit responsibility on the contractors or installers they use, but they do not enforce it, Big Box stores should be forced to comply so contractors will have the correct competition.</p> <p><u>Gap 6 Comment 3 (Eric Taylor 3-9-17)</u> SUGGESTION: When a contractor bids on a job, have the owner sign a disclosure document that clarifies compliance elements for permits. It might be a registered document at the time of quote so it could be tracked. <u>Gap 6 Comment 4 (Bob Barks 3-9-17)</u>: The idea of having the owner sign an acknowledgement that they must have a permit and that the information will somehow be registered is a key concept.</p> <p><u>Gap 6 Comment 4 (Dave Hegarty 3-9-17)</u> SUGGESTION: Put bold letters that the "Contractor must get a permit" on the contract.</p> <p><u>Gap 6 Comment 5 (Barbara Hernesman 3-9-17)</u> SUGGESTION: Since health and safety is important, tell stories about what happens when health and safety is not in compliance as part of a marketing campaign.</p> <p><u>Gap 6 Comment 6 (Todd Washam 3-9-17)</u> SUGGESTION: Include a note in an advertising campaign to the homeowner on health and safety that they also may face a fine if a permit is not pulled and work is not done to code. (Dave Hegarty noted that a potential fine is already incurred when a home is sold. Barbara Hernesman noted that insurance repercussions will incur if home improvements are done improperly and cause a health and safety issue.</p>

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	<p><u>Gap 6 Comment 7 (Bob Barks 3-9-17)</u>: When properties are sold there is a declaration required by realtors about an unpermitted work. Quite often it does include uninformed or incorrect information property is purchased with unpermitted work since the buyer wants the property. Some jurisdictions do an inspection of what was done since the last sale and the last permits to find unpermitted work. Insurance companies are probably losing money on some policies because they are ensuring unpermitted work. It is blamed on the furnace but the insurance company still pays without much check to see if the equipment was correctly installed.</p> <p><u>Gap 6 Comment 8 (Charles Segerstrom 3-9-17)</u>: If something goes wrong, the buyer sues the seller and the permitting issue does come into play there.</p> <p><u>Gap 6 Comment 9 (Louis Fuented 3-9-17)</u> SUGGESTION: Take the average age of the home in California, quantify that 10 years back, and then have a number to provide to the Utilities for understanding. Rather than provide a rebate to the consumer who does not understand as much about compliance and what contractors have to go through, provide a rebate to the contractors that do comply to enable those contractors to be more competitive in the marketplace.</p> <p>ACTION: The Compliance Committee Chair and WHPA Staff to further discuss when/if representatives from the: (1) WHPA Residential Quality Installation Committee should provide clarification on possibly aligning discussion focused on energy savings impacts, and (2) CPUC could provide updates on their research on the effects of compliant and noncompliant installations.</p>
<p>7. Lack of value. No demonstration of value to customer. No behavior modification programs.</p>	<p><i>See "Gap 1 Comment 4 (Chris Walker 8-11-16)"</i></p> <p><u>Gap 7 Comment 1 (Mark Meyers 8-11-16)</u>: With regards to Chris Walker's comments about Utility frustration with local government not working expeditiously enough in relation to CPUC pressure on IOUs to get rebate/incentive money distributed, in some cases, it is not the jurisdiction creating the issue. Sometimes the market is such that the rebates do not hold sufficient value. PG&E's "To Code Program" is an example of a rebate value too low to offset the compliance costs contractors would incur if the Program was used. <i>(This also relates to Gap #1 Comment 4 and Gap #6.)</i></p> <p><u>Gap 7 Comment 2 (Bob Barks 8-11-16)</u>: Additional questions are needed to determine understanding of why the efforts made for incentive programs have not been effective. Non-valued programs will not be used. <i>(This also relates to Gap #1 Comment 4 and Gap #6.)</i></p> <p><u>Gap 7 Comment 3 (Mark Meyers 9-7-16)</u>: Remember many customers in the market for HVAC change out are not looking at a long term plan or investment. They plan to sell and move in two years. "The system is out and I want it fixed. Slap on a 'High Efficiency' unit and I will get my money back when I move." If compliance was considered by the market to be a real value, it would already be adopted by the market and we would not be having this conversation.</p>