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| Document Title: | Presentation - Building Permits Quality HVAC Installations |
| Description: | 1.D Scott Blunk, SMUD |
| Filer: | Raquel Kravitz |
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Building Permits: Quality HVAC Installations

Scott Blunk September 10, 2021



Permitting and Quality HVAC Installation

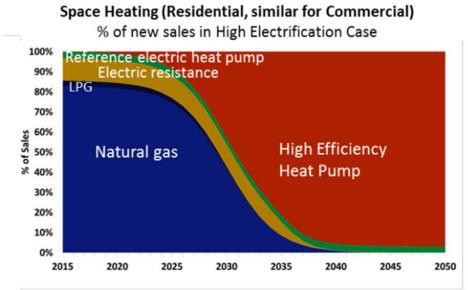
- Permitting is a foundational item to improving HVAC installation quality
 - Customer Benefits
 - Value of property and neighborhoods are maintained
 - Saves energy / money
 - Safety and Health impacts
 - Contractor Benefits
 - Level playing field is established between all bidders
 - Reduces liability
 - Increases legitimacy of the profession
- Unpermitted work costs utilities/ incentive programs
 - Participating in programs, and permitting the work, costs \$200-\$400 per installation when the cost of not obtaining a permit is essentially \$0
 - This has cost SMUD ~\$1.1M in the last 3 years on HVAC alone

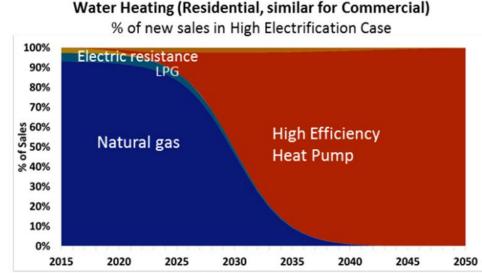


Now more than ever – Quality Matters

- There are a lot of gas furnace to be replace with heat pumps
- Quality installations of heat pumps lead to better customer satisfaction
- Permit compliance is a step in ensuring this transition when code aligns

Figure 8: Percent of New Sales by Technology Type for Residential Space Heating and Water Heating in the High Electrification Case (2015–2050)







Source: E3

Permit Compliance

- Improving Compliance Options
 - Equipment Registration <u>CEA Proposal</u>
 - City of Davis, CA has near 100% compliance
 - Boulder Colorado has ~75% compliance
 - Study these jurisdictions to understand how this is achieved
- City of Davis, Resale Inspection Program required when selling home
 - Verifies compliance to codes in effect at the time the home was constructed, or at the time any subsequent work was performed
 - \$438 inspection fee, good for 18 months
 - Creates jobs for inspectors and building officials
 - Cost neutral to the City
 - Piece of mind to the home buyer, reduces liability to the real estate professionals



Permit Compliance & the CSLB

- Contractors State License Board (CSLB)
 - In charge of contractor licensing including obtaining and maintaining licenses, complaint investigation, unlicensed activity, etc.
 - CSLB may lack the workforce or funding to adequately investigate unlicensed and/or unpermitted contracting
 - Could be integral in maintaining the integrity of and trust in the contracting industry
 - Important partner in developing programs to improve permit compliance
- Consideration: Expand Plumbers and HVAC contractor ability to contract
 - Plumbers: allow to perform or sub-contract the electrical required for HPWH installation
 - HVAC: allow to perform or sub-contract insulation and air sealing as part of a HVAC replacement



Thank you

