

## 2012 BECC Conference: Poster Presenter Abstracts

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### ***Technicians in the Wild: An Observation Study of HVAC Technicians Practices***

Studying attitudes of energy efficiency implementers may have even greater impact than focusing on individual residents' attitudes towards energy efficiency improvements. We conducted a study to find out whether HVAC technicians actually deliver the effective maintenance that could result in the 30% energy savings promised by lab studies. There are few field studies of HVAC maintenance and no data on what technicians do in the field. In this study we invited 16 contractors to provide maintenance services to the home of a team member. We introduced either one or two optimization opportunities, to see if the technicians could identify them. When the technicians arrived at the home, we observed them as they reviewed the condition of the air conditioner, and carried out certain tests of its performance. Only a fraction of the technicians were able to identify any of the opportunities, and none were able to identify the simultaneous opportunities. We tracked the inspection tasks carried out by the technician, and found that very few carried out the tasks outlined in ACCA 4 Maintenance Standard. We also observed other attributes of the technicians and compared them with a previous survey, in which residents were asked what attributes of a technician they value. The earlier survey found that residents valued a sense of trustworthiness and technical mastery. Our subjective evaluation of these 16 technicians found that they all conveyed these attributes well; although our technical findings suggested that time constraints led to a de-emphasis of energy savings opportunities.