

Sarah Outcalt, UC Davis Energy & Efficiency Institute

Title: Market Intelligence? Eliciting valuable information from uninformed stakeholders

Abstract: Large customers are responsible for an enormous amount of purchasing power, but when it comes to energy efficiency and sustainability products, the time, effort, cost, and risk associated with making an informed decision to adopt new technologies are often unsurmountable. The California Energy Commission is funding a study to evaluate emerging energy technologies and create a Hub to provide the information customers need to bridge the knowledge gap. In the first phase of the study, we conducted interviews and surveys with 300 potential Hub users to identify which products most align with customers' priorities. But how can researchers ask survey takers to report on unfamiliar products? First, to democratize the ability to provide input, all products were described in plain English and respondents were instructed to answer based on any level of information they had. Second, to minimize the survey burden, respondents were asked about increasingly detailed products only once they expressed interest at a high level. Interestingly, the importance respondents subscribed to a technology varied with the level of specificity and the sequencing of information. For example, the individual products within some sectors (e.g., Electric Space Conditioning) were rated much higher in importance than the sector overall. Conversely, sectors like Photovoltaics and Energy Storage ranked very highly in general terms, but the specific products it comprised ranked much lower. This revealed an important disconnect between how researchers and consumers define specific families of energy efficiency products. An innovative approach was utilized to score and rank product priorities given the inconsistencies across levels of specificity. In addition, the priorities reported by energy professionals (e.g., sustainability consultants, design/consulting engineers) was compared to those of end users (e.g., schools, hospitals, commercial businesses). Analysis revealed that the latter consistently understate the importance of certain product sectors (e.g., fenestration and windows) relative to the "experts", though overall the rankings were largely consistent across groups. This approach identified the areas where relying on customer feedback on relatively unknown products may lead to oversights in their prioritization. The lessons from this study can be applied to other efforts to prioritize funding, outreach, or research based on the input of stakeholders who are unfamiliar with the relevant technologies.