

Abstract #: 210

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Abstract Title: What about Everyone Else? Thinking beyond the Customer: Market Barriers to Adoption of Efficient HVAC Technologies

Abstract Text:

Much of the behavioral work on HVAC technology adoption focuses on customers, to the exclusion of other critical stakeholders. However, if the middlemen - e.g., distributors, contractors – do not adopt efficient technologies, the question of customer adoption is moot. This study aims to fill that gap by focusing on the barriers to adoption faced by relevant stakeholders in the supply chain. Data was collected from 76 individuals, primarily through in-depth interviews. The principles of behavioral economics were used to identify stakeholders' behavioral drivers according to their motivations, abilities, and triggers. Analysis of the data identified eight factors that influence stakeholders' motivations to adopt efficient technologies, namely: Technology requirements and performance; Technology costs; Secondary benefits; Access to information; Endorsements and social norms; Status quo bias; Stakeholder coordination; and Accountability and support. In addition, six factors influencing stakeholders' ability to adopt efficient technologies were identified, including: Technical feasibility; Cost; Effort; Awareness, knowledge and communication; Access; and Empowerment. Finally, the study identified numerous behavioral triggers that raised the motivation or ability to adopt efficient technologies. Specific examples of the above factors and how they affect market adoption or constitute market barriers are described for various stakeholder groups. The study provides recommendations on increasing awareness and knowledge, improving technical performance and feasibility, addressing cost-related market barriers, and improving utility rebates. Together, the recommendations address issues of dependency, risk, transparency, accountability, and trust.