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Presentation Title: Tweeting Up with the Joneses - Using Sentiment Analysis to Understand Perceptions of Solar Power

Abstract: Social media both reflects and affects the perceptions and attitudes of those who are creating and consuming content and is a strong driver of consumer behavior change (Chen and Lin, 2019; Stephen, 2015). As such, program implementers have increasingly turned to social media to nudge behaviors using approaches from messaging to engaging influencers. Solar installation may be partially driven by "keeping up with the Joneses" so it may be a market that is receptive to social media marketing (Graziano and Gillingham, 2014). Thus, social media may have the power to help us leap forward and effectively increase solar adoption rates; but its more negative qualities also may hold us back in our attitudes and decisions around solar energy. ILLUME conducted a quantitative sentiment analysis and qualitative review of tweets and traditional media comparing both mediums in their handling of utilities and solar. Our presentation will cover: 1) Methodologies and key considerations for analyzing content from social media sources, including how to address sources of bias and systematic data collection approaches. 2) Comparisons of the language and imagery used to talk about solar energy in different types of media. In our analysis, we found that tweets about solar (removing barriers, increasing resiliency, and saving money) were significantly more positive than tweets about utilities. We also found that the overall "mood" of tweets can reflect major events and the sway of influencers. 3) Practical considerations for program implementers as they leverage social media to drive behavior. If solar installation is driven by keeping up with the Joneses and the Joneses thrive on social media, it can be a tool for driving solar adoption. Positive testimonials via Twitter could be the push people need to go from nudge to leap on solar installations.