

Abstract #: 335

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Abstract Title: Decision modes' influence on energy choices in the US and Switzerland

Abstract Text:

Environmentally beneficial energy options (e.g., green energy tariffs or peak load control tariffs) often involve tradeoffs, i.e., programs that offer electricity with a lower carbon footprint are often more expensive for consumers. Policy makers and utilities implicitly assume that consumers rationally weigh costs against benefits (a calculation-based mode) as they choose to engage or not in an environmentally beneficial energy tariff. Behavioral research, however, has documented a much broader range of consumer decision making processes, which may lead to different energy tariff choices. This research project examines the role of different decision modes in the choice of environmentally beneficial energy tariffs. Personal as well as domain-specific goals influence the degree to which people use affect-based, calculation-based and/or rule-based choice processes. Although these qualitatively different decision modes often operate in parallel, different contexts (here: energy tariff choices) influence the degree to which a consumer attends to them, because the different modes tend to satisfy different goals. In Study 1, 200 participants in the U.S. were presented with two scenarios describing a choice between an environmental friendly option (scenario A: slightly more expensive green energy tariff, scenario B: peak load control tariff which requires adaption of consumption behavior during peak hours) and a standard option (A: tariff for standard power mix, B: standard tariff without peak load control). For both scenarios, participants' decisions were regressed on the extent to which they indicated (post-decision) having used an affect-based, calculation-based or role-based decision modes. Stated use of an affect-based mode was more likely to lead to choosing the environmentally friendly option (green power choice: $\beta = 1.54$, $p < .001$; peak service plan: $\beta = 0.65$, $p = .001$). Conversely, stated use of the calculation-based mode reduced choice of the environmentally friendly option (green power choice: $\beta = -0.80$, $p = .022$; peak service plan: $\beta = 0.36$, $p = .069$). Building on these findings, we will conduct a similar investigation of energy tariff choices using customers of a Swiss energy provider as participants in July/August 2015. Besides investigating the influence of decision modes on Swiss consumers' choices, we will also manipulate the description of the peak load control tariff options to test whether highlighting different benefits in promotional materials encourages customers to use different decision modes and whether this shift in decision mode use affects their choices. This experiment will also include a consequential response measure, namely the option to enroll in a pilot from the Swiss energy provider in which the new tariffs will be tested.