

ABSTRACT

This study was conducted to determine the factors that influence and the most influence factor to the utilization of photovoltaic at Surabaya households and support energy saving through alternative energy substitution, especially solar energy. This explanatory research collected primary data through questionnaires from household respondents and interview some special respondents. The results of the structural equation model analysis using Lisrel revealed that there are three factors affect the use of solar cell in Surabaya, start from the most important: government policies, social integration, and the last is education and socialization. Previous research in Taiwan said there are four factors that influence, but one of them, support from social education unit not statistically significant in this study because people prefer the function rather than the unit's form. This result can be used as the work plan design consideration to increase the utilization of photovoltaic at Surabaya household

Key words: energy saving, photovoltaic, Structural Equation Modelling

