

ABSTRACT

Construction industry in Indonesia continues to grow from each year. This includes the PLTS (Solar Power Plant) Construction sector. The data shows that the construction of PLTS in Indonesia still far from the RUEN (National Energy Plan) targets set by the government. Many problem experienced by stakeholders in this ecosystem affects the sustainability of the Rooftop PLTS industry. This research was conducted with the aim of analyzing the complex needs of stakeholders that affect the ecosystem sustainability of Rooftop PLTS Construction industry in Indonesia by using Social Network Analysis (SNA).

This study uses UCINET6 as software to visualize the stakeholders network model in the ecosystem and calculate the centrality value of stakeholder dominance and their needs. Stakeholder needs and obstacle experienced by stakeholders are analyzed from the result data analysis of social network. We demonstrate its effectiveness in the rooftop solar power plant construction industry in Indonesia.

This study used a qualitative research methodology. Data were obtained through in-depth interviews with stakeholders who formed the industry, we identified their needs and problems that have impacted the industry's growth. The result of this study is Indonesia's rooftop solar power plant construction industry ecosystem map, stakeholder needs structure, analysis of stakeholder needs, and an understanding of how to approach a complex sociotechnical problem that was observed in a service ecosystem for sustainable network configuration.

Keywords: *Stakeholder needs, Social Network Analysis, Ecosystem Sustainability, Rooftop PLTS Construction Industry*