

ABSTRACT

In recent decades, electricity demand has risen rapidly around the world. Fossil fuels are still the main source to generate electricity, but energy reserves are limited. With the rapidly increasing electricity demand, Indonesia's energy mix is also still dominated by fossil-based energy. The geothermal energy, an energy which is abundant in Indonesia, is one of the alternative solutions to generate electricity with its green energy and renewable resources. There are many types of research about geothermal energy development which especially discuss technology and management aspect. On the other hand, there are only a few studies about public views on geothermal energy development, especially in developing country. This research describes the perceptions of local stakeholders that shape the acceptance of the development of geothermal power plants, identify the factors that influence their perceptions and analyze the impact of local stakeholders' perceptions for the development of geothermal power plants through a case study in Guci Geothermal Working Area in Tegal Regency, Central Java, Indonesia. Therefore, to draw up this research, a mixed method approach was chosen to provide a better understanding of the research problems through questionnaires and semi-structured interviews. The result of this study shows the perceptions of local stakeholders of geothermal power plant neither positive nor negative and driven by the NIMBY concept. Furthermore, trust in authority, communication, conservative belief, perceived benefit, and perceived risk are the factors that influence the perceptions of local stakeholders. In addition, adjustment in regulation and policy is necessary to guarantee the success of the development of geothermal energy to support sustainable energy development.

Keywords: Geothermal energy; Stakeholders' perception; NIMBY syndrome