

# Optimizing Geothermal Energy Potential

Tuesday, 30 January 2018 WIB, By: Marwati




Dependence on fossil energy in Indonesia becomes an issue which has to be addressed by utilizing existing alternative energy potential, including water, wind, geothermal, and biomass. As an alternative energy, Indonesian geothermal potential is abundant and promising.

Regina Tetty Mary said Indonesia has the biggest geothermal energy potential in the world which reaches 40% of the global potential. Aside from being efficient and economic, the utilization of geothermal energy is more environmentally friendly than fossil energy.

“Geothermal energy can be used as alternative energy to replace fossil energy which is non-renewable one. Geothermal can be utilized because its development has a strategic value and it is able to reduce the utilization of fossil energy which will lead to foreign exchange saving and environmental impact reduction,” said Regina on Monday (29/1) during an open examination for her Doctoral Programme at Graduate School UGM.

By obtaining regulation support, according to Regina, the development of geothermal energy has a potential as well as an interesting investment opportunity. Data from Indonesian Ministry of Energy and Mineral Resources showed the world only utilized 9.67 percent (11.5 GW) of the existing geothermal potential (119.3 GW).



On the other hand, the geothermal potential in Indonesia is placed at the second position in the world with 24.77 percent while its utilization reaches the third position with 12.95 percent. The Philippines becomes the country with the highest geothermal utilization which is 46.75 percent and their nature preserve areas are used as a geothermal power plant. Meanwhile, Japan becomes the country with the biggest direct utilization of geothermal energy.

Defending her dissertation entitled *Implementation of Geothermal Power Plant Policy in Encouraging Electricity Provision*, Regina emphasized the importance of a policy framework for geothermal typical characteristics where the geothermal policy has to reflect the characteristics of the resources and the government's will to fulfill the needs of community and industry.

"In order to reach 100 percent of electrification ratio, the government has to build a geothermal power plant in rural areas for fulfilling the electricity demand. In order to avoid conflict, the local people have to be prioritised to obtain the non-interconnected electricity. Therefore, the local people will wholeheartedly provide their land to be utilized as a geothermal power plant for gaining the national prosperity," said Regina.

---

## Related News

- [UGM and New Zealand Cooperate in Geothermal Energy Utilization](#)
- [Developing Geothermal Energy, Pri Utami Earns Award from New Zealand](#)
- [GEOCAP Assists National Geothermal Capacity Building](#)
- [Geothermal Potential Has Not Been Fully Managed](#)
- [UGM and Geological Agency Develop Potential Geothermal Energy](#)