

Magnetotelluric Method Approach for the 3-D Inversion of Geothermal System's Dissemination in Indonesia

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Abstract : Sustainable energy is the main concern in According to solve any problems on energy sectors. One of the sustainable energy that has lack of presentation is Geothermal energy which has developed lately as the new promising sustainable energy. Indonesia as country that has been passed by the ring of fire zone has many geothermal sources. This is the good opportunity to elaborate and learn more about geothermal as sustainable and renewable energy. Geothermal systems have special characteristic whom the zone of sources can be detected by measuring the resistivity of the subsurface. There are many methods to measuring the anomaly of the systems. One of the best method is Magnetotelluric approachment. Magnetotelluric is the passive method which the resistivity is obtained by injecting the eddy current of rocks in the subsurface with the sources. The sources of Magnetotelluric method can be obtained from lightning or solar wind which has the frequencies each below 1 Hz and above 1 Hz.

Keywords : geothermal, magnetotelluric, renewable energy, resistivity, sustainable energy

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