

## **Spatial Planning Model on Landslide Risk Disaster at West Java Geothermal Field, Indonesia**

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**Abstract :** Geographically, Indonesia is located in the arc of volcanoes that cause disaster prone one of them is landslide disaster. One of the causes of the landslide is the conversion of land from forest to agricultural land in upland areas and river border that has a steep slope. The study area is located in the highlands with fertile soil conditions, so most of the land is used as agricultural land and plantations. Land use transfer also occurs around the geothermal field in Pangalengan District, West Java Province which will threaten the sustainability of geothermal energy utilization and the safety of the community. The purpose of this research is to arrange the concept of spatial pattern arrangement in the geothermal area based on disaster mitigation. This research method using superimpose analysis. Superimpose analysis to know the basic physical condition of the planned area through the overlay of disaster risk map with the map of the plan of spatial plan pattern of Bandung Regency Spatial Plan. The results of the analysis will then be analyzed spatially. The results have shown that most of the study areas were at moderate risk level. Planning of spatial pattern of existing study area has not fully considering the spread of disaster risk that there are settlement area and the agricultural area which is in high landslide risk area. The concept of the arrangement of the spatial pattern of the study area will use zoning system which is divided into three zones namely core zone, buffer zone and development zone.

**Keywords :** spatial planning, geothermal, disaster risk, zoning

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