ANALYSIS OF OIL AND GAS INDUSTRIAL CLUSTER PERFORMANCE IN EASTERN JAVA WITH DYNAMIC SYSTEM APPROACH

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Abstract
The Government, explicitly, has formulated long term industrial development policies, that one of them aimed at forming a national industrial cluster in accordance with Law Decree No. 25 of 2000 on National Development Program (Propenas and also for the development of oil and gas potential in East Java. This industrial cluster development effort will begin with an audit of the institutional cluster to determine the performance of the existing institutional clusters today. Industrial cluster is a macro-level, less detailed and more of strategic level, where many policies and external and internal factors have a significant effects on oil and gas industry cluster in East Java. Because of those condition a dynamical systems approach is used to describe the current cluster system and to analyze the problems that occured when trying to improve the institutional performance of the industrial cluster.

This research shows that the status of institutional performance cluster is at embryo level, as well as the status of the completeness and effectiveness of its functional components cluster. This indicates that oil and gas industry cluster located in East Java is currently at the very early stages of cluster formation. The variable representation that have the highest influence in the development of oil and gas cluster is a representation of commercial oil and gas industry, a little change in these variables will improve institutional performance cluster significantly, but in its development, the increasing of representation Ministry of Industry can enhance the other variables in the functional effectiveness and becomes the most effective efforts to improve institutional performance cluster.

Keywords: Oil and gas industry, industrial cluster, audit cluster, cluster performance, dynamic system