LOGISTICS NETWORK CONFIGURATION DESIGN USING CLOSED SYSTEM APPROACH
(Case study: distribution of LPG 3 kg in Malang and Batu)

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Abstract

The government made the policy of diversion of kerosene subsidy to Liquid Petroleum Gas (LPG) in 2007. This conversion program is targeted to be completed in 2010. In Malang and Batu district have converted 100% while Kabupaten Malang has not fully converted yet. The system used in the distribution of LPG 3 kg is an open system. Open system is a system where the downstream channel can obtain more than one supplies from upstream channel but the system is causes instability in demand SPPBE and agents. To solve these problems use a closed distribution approach. The method which is the writer used in the Final Project is an integer programming using Lingo software. From the LINGO’s, we know that the difference in distribution cost for 1 year for the open system is Rp 663,845,850,356.90, - while for the closed system is Rp 813,328,840,727.52, -. This difference between with the two system approaches about Rp 149,482,990,370.62 or 23% more expensive than open system.

Keywords: closed distribution, integer programming, LINGO, and LPG 3 kg.
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