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## **Halal Supply Chain Management Analysis for Improving Shariah Compliance in Housing Industry**

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### **Abstract:**

This research examines how halal supply chain management can be applied to strengthen shariah compliance in the housing industry. A multi-criteria decision-making approach, the Fuzzy Analytical Hierarchy Process, is used to evaluate six criteria and nineteen subcriteria based on expert judgments validated by shariah scholars. To improve the reliability of the results, Chang's extent analysis is combined with centroid defuzzification. The findings indicate that subcriteria closely related to core shariah principles, namely Islamic financing, impurity control, certification, and shariah-compliant design, consistently achieve the highest priority, each with a weight of approximately 0.141 under the Chang method. The centroid results provide a more differentiated prioritization, identifying Islamic financing (0.140), impurity control (0.131), eco-friendly (0.103), and waste management (0.096) as the most influential factors. Overall, the results suggest that strengthening shariah compliance in housing supply chains requires prioritizing fundamental Islamic principles alongside operational and sustainability improvements.

### **Keywords:**

Halal Supply Chain Management, Shariah Compliance, Multi-Criteria Decision-Making, Fuzzy AHP, Housing Industry.