

# **Abstract**

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## **A conceptual model for linking lean manufacturing to energy efficiency**

Lean manufacturing emphasizes the effective utilization of available resources (including energy). Thus, this research aims to explore how lean implementation leads to improved energy efficiency. Reviewing literature revealed that lean implementation contributes in improving labor efficiency and capacity utilization, which, in turn, were proved to significantly enhance energy efficiency. As a result, a conceptual model is developed to illustrate how lean manufacturing implementation enhances energy efficiency through improving labor efficiency and capacity utilization.