

An Energy Audit to Minimize Waste Energy in Weaving AJL 2 Departement PT. Daya Manunggal Textile

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Abstract

Global warming is an environmental problem that is a major issue in the world. Alternative solutions to minimize the impact of global warming is the use of alternative energy or saving the consumption of energy, especially in the production process in the industry. Efficiency in energy consumption is expected to reduce production costs and solve problems of global warming. This study purposes to audit the consumption of electrical energy in weaving division AJL 2, PT. Damatex. In the weaving division AJL 2, PT. Damatex alleged to happen waste of energy consumptions. This is indicated by the ratio of energy use 0.791 kWh per day. Meanwhile, the company's energy usage ratio target is 0.74 kWh. In these conditions, the weaving division AJL 2 only produced for 31 162 yards/day, while the production target of 34,500 yards/day. It is necessary for efforts to minimize the use of electrical energy, in order to know the profile of electricity usage, the intensity of energy consumption (IKE), the waste of energy and energy-saving opportunities. This study uses green value stream mapping to determine green waste, especially waste in the usage of electrical energy. Based on the audit results obtained IKE annual value of 0.7789 kWh/yard, so we need to optimize energy conservation and lower the energy consumption of the company.

Keywords

Energy consumption, waste, audit, green value stream mapping, global warming

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