Analisis Konsumsi dan Konservasi Energi Proses Produksi Gula di PG Asembagus, Situbondo (Analysis of Energy Consumption and Conservation of Sugar Production Proceses in PG Asembagus, Situbondo)

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ABSTRACT

The use of energy efficiently and rationally is one aspect which is the goal of the company. Through Energy Conservation, the company expect energy use according to need. Research conducted in the PG Asembagus, Situbondo aims to determine the use of energy in the sugar production process. Further result of the specific energy comsumption and conservation of energy is capable of being a reference in identifying the stages of the process less efficient, so the energy saving effort can be done immediately. From the observation, the need of electrical energy to process sugar production amounted to 63576,2 kWh. The electrical energy produced by the two plants which process a total power of 70080 kWh. In addition, the are other sources of electrical energy derived from (PLN). This indicates that the total supply of electrical energy generated by two turbine, could not be distributed properly to the sugar production process. Less energy distribution maximum occurs in Triveni turbine steam supply from the boiler caused Strok and Takuma insufficient to drive turbine. So the lack of supply of electrical energy required during the process of production of sugar from PLN. Based on research that has been done, boiler stations, power stations, as well as central plant station in PG Asembagus, Situbondo is a plant sites that need to be conserved energy so that energy comsumption is optimal.

Keywords: Conservation Energy, Electrical Energy, PG Asembagus, Situbondo