

***ENERGY AUDIT TO DETERMINE IKE AND PHE AT SDN KEBONSARI  
05, SUMBERSARI DISTRICT, JEMBER REGENCY***

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***ABSTRACT***

*An energy audit is an important step in energy conservation efforts to improve efficiency and reduce electricity wastage in a building. This study aims to determine the Energy Use Intensity (EUI), Energy Saving Potential (ESP), and to analyze the lighting and air conditioning systems at SDN Kebonsari 05, Summersari District, Jember Regency. The methods used include field observation, interviews, and the collection of secondary data. The results show that the electricity consumption reached 244,846 kWh/month with an EUI value of 0,30583 kWh/m<sup>2</sup>/month, which falls into the “very efficient” category according to the National Education Department standard. Nevertheless, several energy-saving opportunities were identified, including reducing the operating hours of fans and lamps, as well as utilizing automatic light sensor lamp fittings. In addition, some rooms still have lighting and air conditioning systems below the applicable SNI standards, which require adjustments. This energy audit is expected to serve as a basis for better energy management planning within the school environment.*

***Keywords:*** *Energy audit, IKE, PHE, energy conservation, electricity efficiency*