Management of Environmentally Friendly Electrical Energy in Realizing Sustainable Energy Development.

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- **Abstract:** The largest users of electrical energy and contributors to CO2 emissions apart from industry are universities. Energy consumption in non-domestic buildings is a complex issue due to the variety of energy uses and services and therefore the energy demand of each building needs to be understood. Overall, awareness and personal attitude about the need to save energy should be realized with perceived actions including university authorities so that there will be convenience and opportunities to reduce energy consumption. Based on this, we need a system that can support energy savings, namely a system that is used to regulate energy needs called the Energy Management System (EMS). Based on this thought, the locations chosen as respondents in this study were students, staff and lecturers at the State Polytechnic of Malang which is one of the education industries that supports the policy of Malang City in realizing green infrastructure. This study aims to analyze and identify the influence of Energy Saving Culture, Electrical Energy Policy and Energy Management System on the use of environmentally sound electrical energy in order to save environmentally friendly electrical energy at the State Polytechnic of Malang. Furthermore, designing the right strategy to create an environmentally sound electrical energy management. The results of the SEM analysis show that an environmentally friendly electrical energy management model is feasible to be developed, so it can be said that the Electric Energy Management Model is effective and efficient. The results of the SWOT analysis show that the position of environmentally friendly electrical energy management is in quadrant I. This position indicates that environmentally friendly electrical energy management is in a strong position and has the opportunity to be developed.

- **Keywords:** Energy Management System, environmentally, opportunities