An evaluation of sustainable campus guidelines in energy management context

ABSTRACT

Campus Sustainability can be defined as the integration of sustainable environmental practices into higher education institutional practices. The involvement of the university community, including administration, academic departments (faculty and students), researchers, and the local community, is required for an effective transition to a sustainable campus. After UI GreenMetric was published in 2010 and revised in 2015, most institutions released sustainable campus guidance. However, implementation toward sustainable campus status is still low because some factors such as lack of relevant managerial experience in implementing sustainable campus initiatives and lack of funding were obstacles to achieving sustainable campus development. Furthermore, energy has a significant effect on sustainability since it impacts both the social economy and the environment. Thus, campus sustainability requires an emphasis on energy sustainability due to campus operations and activities that have significant energy consumption depending on the size of the campus, including its buildings and infrastructures. This paper identifies critical energy management needs by extracting energy elements from the green building's framework and highlighting sustainable campuses toward proposing the energy sustainability maturity framework for Malaysian universities.