

Development of a Campus Carbon Footprint Intervention Framework

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Abstract

In conjunction with the sustainable development in the current society, University serves as a higher educational institution, has a strong influence in promoting the sustainable development. As an effort in accomplishing sustainability, University are encouraged to employ sustainable development in the campus, as it is identified as the centre of community whereby a various kind of human activities take place in the University campus, the energy consumption is significant due to the large population in the campus. Behind every activity there are carbon emission that would contribute to global warming. In order to develop an intervention framework for the carbon footprint, the carbon footprint of the campus has to be identified. UCSI University Kuala Lumpur campus has six buildings and 20-acre of land located within the city, the carbon footprint of the campus has been identified and analysed. The total carbon footprint of UCSI campus in year 2018 is 6 005 107.24 kilogram of Carbon Dioxide (kCO₂), according to the surface area covered with the greatest interest, the carbon emission from the major activities is identified. Carbon footprint mitigation strategy has been suggested according to the energy consumption behaviour of UCSI campus.

Keywords

Carbon footprint, Carbon reduction, Sustainable campus, and Energy consumption.