

Thesis Title	Budget Allocation of Electricity Costs at KMUTT
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### Abstract

Methodology for allocating electricity cost to faculties and other university units is presented in this report. The study employs the principle of fixed and variable consumptions. The fixed part consists of consumption in administrative offices including academic staff working rooms and service activities, whereas the variable component involves the use in classroom and laboratories. From investigation using past years figures as reference, it was found that the proportion of electricity consumption in the administrative and service sectors forms about 80 % of the university total consumption. Within these 2 groups, estimated as percentage of the university total consumption, 64-70 % is used in administration activities, 10-16 % in the service areas, 4-6 % in the Library building, 2.9-5.4 % in the student's computer service area, 2.2-3.1 % in the Pra-Chomklao-190-years building, 0.5 % in the Seminar building, 0.1 % in sewage treatment plant and pumping of flooded rainwater, and 0.14 % for street lighting. As for the specific consumption values, these were found to be 5,400-5,950 kWh/working staff/year, and 230-265 kWh/full time equivalent student/year. From the information above, a model for allocating electricity cost to faculties, administrative offices and service facilities can be constructed by using current figures of full time equivalent students of each faculty, number of FTES who have to attend classes outside their own faculty buildings, and number of academic and administrative staff in each faculty and unit. The method can also be adjusted in case there is a constraint in budget. In such situation, the actual values may be reduced proportionally to the initial values. The difference in the amount of actual use and the allocated amount is to be borne by the faculty or unit itself.

Keywords : budget allocation of electricity costs in university / electricity consumption in administrative activities / electricity consumption in service activities / electricity consumption in study activities / electricity consumption per staff / electricity consumption per full time equivalent student