

UNIVERSITY OF TECHNOLOGY SARAWAK

NON RESIDENTIAL NEW CONSTRUCTION [NRNC]

OWNER/APPLICANT

EDUSAR RESOURCES SDN BHD

PROJECT ADDRESS

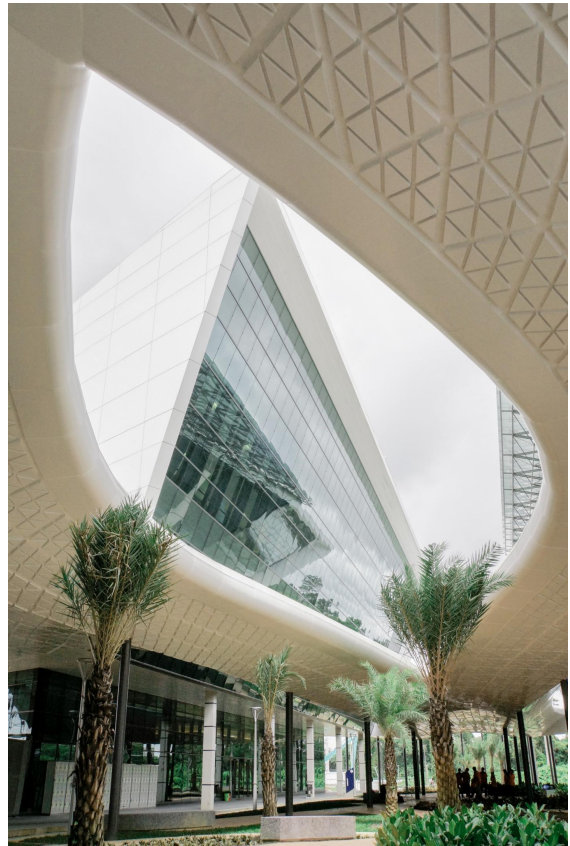
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PROJECT DESCRIPTION

University of Technology Sarawak (UTS), located in the heart of Borneo, Sibu is recognized as the only 'home-grown' Technical and Vocational Education and Training (TVET) university with the aim to produce educated and highly skilled students for the new and emerging industries based on Science and Technology that are relevant to Sarawak Corridor of Renewable Energy (SCORE) and the nation Malaysia. UTS achieved its full university status in November 2021 and was voted as one of the seven most beautiful campuses in Malaysia by Tatler Malaysia in May 2021. UTS campus consists of 12 educational blocks and has achieved GBI Platinum rating in October 2021 with 5 Star GBI EE rating.

From a distance, we can see a huge umbrella roof structure connects the University's Administration building to all the academic blocks. This large covered outdoor plaza acts as the main linkage, circulation and breakout space for students in a lush landscape setting with walkways and higher level bridge links. UTS is designed with sustainable development concept by adopting environmental preservation and smart energy conservation right from start. Its passive design has enhanced not only the availability of beautiful external view and natural daylighting but it also maximizes the flow of natural cross ventilation which resulted in an overall low Building Energy Intensity (BEI) value of 86kWh/m². The use of low-E glass for the building façade has lowered the overall thermal transfer of heat into spaces and UTS achieves this with an OTTV of 42W/m². This is further complemented by installation of Building Management System (BMS) that linked to most of the systems and meters are installed in the buildings for effective monitoring and control purposes aided the good performance. The installation of 100kWp photovoltaic (PV) panels on the roof top contributes 3.16% of the total building energy consumption.





Large perimeter windows bring in sufficient daylight into the academic blocks, this coupled with efficient lighting design and automated motion sensors at lift lobby & corridors aids to reduce electricity consumption when not in use. During daytime, lighting near perimeter windows are controlled by photocells that switch off the internal perimeter artificial lighting once sufficient lighting is detected. Visual comfort is taken care by external shading devices and blinds.

Supporting the University's green initiative, rainwater harvesting (RWH) and recycling of waste water from sewage treatment plant is adopted to facilitate more effective use of water on site. The RWH system installed is able to contribute to 34% reduction of total potable water usage. The waste water produced is treated and serves 100% of the irrigation needs, aiding the reduction of potable water usage. Approximately 51% reduction of total potable water usage reduction are achieved just from implementation of water efficient fittings throughout the buildings.

University of Technology Sarawak sustainable innovative achievements further extends to a condensate water recovery system, recycle fire water testing, vacuum degasser, real time energy and water usage public display, refrigerants leakage detections for early detection making this truly a platinum green building.

