

PANTAI HOSPITAL LAGUNA MERBOK

NON-RESIDENTIAL NEW CONSTRUCTION [NRNC]**OWNER/APPLICANT**

AMANJAYA SPECIALIST CENTRE SDN BHD

PROJECT ADDRESS1, LORONG BLM 1/10, BANDAR LAGUNA
MERBOK, 08000 SUNGAI PETANI, KEDAH

PROJECT DESCRIPTION

Pantai Hospital Laguna Merbok (PHLM), the first purpose-built green hospital in Malaysia to incorporate green sustainability from design through to construction and operation was completed in 2014. The 100 bedded Green hospital is located at Sungai Petani, Kedah. Targetted Silver rating, the medical center has successfully maintained this rating for the second consecutive cycle (every renewal cycle is 3 years). The latest Renewal and Verification Assessment (RVA) was just completed in June this year showing their continuous commitment to maintain the health and well-being of this institution and its Green performance. The sustainability features in PHLM includes a reduction of CO₂ emissions by about 20% and the operating costs by 15%-20%. The Green Building Index (GBI)-certified facility is a three-storey multi-disciplinary hospital building and is among the five projects listed under the government's Economic Transformation Programme (ETP) healthcare National Key Economic Area (NKEA) aimed at promoting Malaysia as a popular healthcare tourism destination in the northern region.

Aside from a number of energy efficient features and technologies, notable green features include eco-Glass for the overall external surface of the hospital building was designed to ensure thermal comfort to patients and staff as this has effectively reduced the Overall Thermal Transfer Value (OTTV). Another important feature to minimise further heat gain into the building was the incorporation of double brick wall at the western façade resulting in a low OTTV of 34.40 W/m². As part of the hospital's effort to lower the building carbon, the hospital installed Solar Photovoltaic's (PV) and has successfully achieved a Building Energy Intensity of 135kwh/m²/yr together with this renewable energy. The special skylight design in the central courtyard of the hospital also provides natural daylight to patient wards facing this inner courtyard.

The hospital's green features did not stop even after its construction period ended. In fact, the hospital continues to implement green initiatives in its daily operations. Recycled water from haemodialysis machines and harvested rainwater are used to irrigate the landscaping. Working in tandem are the water-efficient fittings that helps to reduce the overall water consumption by 44% water in savings. Pantai Hospital Laguna Merbok will continue to trailblaze the green healthcare sector in the country. Hospitals, which operate 24-hours a day, will benefit greatly from green building design that can effectively lower operational costs and carbon footprint. while optimizing patients' comfort.