Our Environment

Green Design

We believe that good sustainability practices begin during the design phase for our operations to be truly sustainable. As a result of embracing sustainable infrastructure from the beginning, we can enjoy several long-term benefits, including reduced air conditioning costs and benefits for patients from natural light and green spaces.

Case Study: Malaysia's First Green Hospital – Pantai Hospital Laguna Merbok

In 2014, Pantai Hospital Laguna Merbok ("PHLM") achieved GBI Silver certification, becoming the first purpose-built hospital to incorporate green technologies and design into its construction and operations in Malaysia. IHH acquired 100% ownership of the hospital in 2018 and conducted a GBI renewal assessment in 2021. The reassessment found that PHLM scored particularly well in Energy Efficiency, Sustainable Site Planning & Management, and Innovation. The noteworthy innovations are green vehicle charging stations, condensate water harvesting, solar hot water for showers, and LED façade lighting.

The hospital's orientation was deliberately designed to reduce heat transfer from the sun, reducing internal temperatures and, therefore, less reliance on air conditioning. A window fitting is carefully adjusted to eliminate glare so that patients' rooms receive adequate natural daylight.

A tranquil indoor courtyard with plants and flowers surrounds the inpatient ward rooms, providing a soothing perspective of the hospital. Relaxation and anxiety reduction are critical to the recovery process.

A 44% reduction in water use has been achieved by installing water-efficient fittings in the hospital. Landscapes are watered entirely using rainwater harvesting and reclaimed reverse osmosis water used in haemodialysis.

PHLM installed rooftop solar panels in FY2020, producing 60,977 kWh of electricity, which accounted for 3.2% of the hospital's overall electricity consumption. In FY2021, solar electricity generation totalled 61,356 kWh, an increase in the previous year's total. Regular monitoring of the solar system is possible through real-time data display.

Red hybrid tilapia (Oreochromis spp.) and black tilapia (Oreochromis niloticus) are raised on-site through the hospital's aquaponics project. These fish species were chosen for their ease of rearing and rapid maturation. The fish are harvested once mature and served in the hospital cafeteria. Also grown at PHLM are four types of vegetables (baby bok choy, coral lettuce, kailan, and choy sum), served in the cafeteria and inpatient meals.

All plastic cutlery has been replaced with wooden cutlery at the hospital cafeteria, allowing us to reduce landfill waste by about 6,500 pieces of plastic cutlery each month. Using reusable ceramic mugs instead of plastic bottles has eliminated 1,300 plastic bottles each month. Using biodegradable containers has reduced paper waste by 1,500 pieces each month.

Aquaponics Facilities at PHLM

Resource Use and Conservation

Waste Management

In the healthcare industry, where medical, biological, and other hazardous wastes are produced along with general waste such as paper and plastics, proper handling and management are imperative. A lack of adequate waste management can impact the environment and our larger community. The Group adheres to strict waste management regulations in each country of operation and engages licensed contractors to handle and dispose of clinical waste.

Reducing waste output is one of the three Key Performance Indicators for our Global Initiatives. To minimise waste generation and landfill disposal, we are undertaking the following activities:

Greater China and Hong Kong

Direct contracting with a recycling company to handle medical and hazardous products in China.

Over 60 kg of takeaway plastic waste has been saved from entering landfills due to the "bring your own container" programme in Hong Kong. In addition to recycling 13,435 kg of cardboard, and 490 kg of magazines and newspapers, we upgraded our quilt fabric with more durable material to last longer.

India

Transitioning to electronic prescriptions and electronic billing to reduce paper waste.

Malaysia

A zero-plastic-bottle initiative has been launched to eliminate plastic bottles in our hospital cafeterias. Our priority is to acquire reusable, recyclable, or biodegradable alternatives.

Singapore

Segregated bins are placed in various locations around the hospitals to collect recyclable general waste. As part of these initiatives, staff have been trained on the correct kinds of waste to be recycled versus disposed of in landfills.

Turkey & Europe

Pathology laboratories often use Xylene, which can be recycled through a recycling device, which will allow the recycled material to be used again as a product wash. At Acibadem Atakent Hospital, 60% of Xylene was recycled annually, amounting to 720 litres.

Energy Conservation, Climate Change, and Water Efficiency

We have also taken steps to reduce our water and electricity consumption throughout all our operations in order to reduce our environmental footprint further.

Our efforts in China include raising and promoting awareness of energy-saving mechanisms, such as standardising the use of lighting and air-conditioning with optimal ranges. All hospitals are equipped with water-efficient features such as sensor faucets and high-efficiency toilets.

In Hong Kong, fluorescent bulbs have been replaced with LED lights. A timer controls the light in common areas and turns them off during non-business hours. The temperature setpoint for major facilities has been raised from 22°C to 24°C. In addition, every ward received low-flow showerheads estimated to reduce water consumption by 30%.

We have upgraded our central chillers in India to more energy-efficient models. Plans include installing solar water heaters with heat pumps, further reducing our dependence on grid electricity. After wastewater is treated, it is recycled for gardening, landscaping, and flushing toilets.

Malaysian hospitals were designed, reviewed, and then fitted with appropriate Heating, Ventilation, and Air Conditioning ("HVAC") systems depending on their unique structure and ventilation requirements. HVAC systems are fine-tuned after installation to ensure the best efficiency. Besides harvesting rainwater for gardening, we have recently launched our Solar System Project in hospitals across Malaysia.

We have installed leak detection sensors and water meters in Singapore that monitor water usage. When a discrepancy is detected, we can act immediately to prevent a leak.

At Acibadem, the steam generators in our Bulgaria facilities have been upgraded with high-efficiency units that offer energy recovery of up to 65%. Periodic energy studies are conducted to monitor consumption and identify areas that can be reduced. Regular maintenance ensures the maximum effectiveness of machinery. In addition, new, energy-efficient dishwashers have recently been installed.

Solar System Project in hospitals across Malaysia.