

Sustaining Sustainability

Doubling and protecting achievements from ongoing energy-saving initiatives



Telekom Malaysia Berhad (TM)

Industry: Telecommunications

Project Location: TM Exchange Kepong, Kuala Lumpur

Project Delivery Partner: Lotus West Sdn. Bhd.

Company Bio

TM is Malaysia's largest broadband services provider, in addition to offerings in data, fixed line, pay television and network services.



Overview

The growing demand for high-speed broadband has prompted TM to upgrade their exchanges including the supporting systems. The company also wanted to increase its operational efficiency to better manage the capital investments.

We responded by providing a real-time energy monitoring system to maximize the opportunity to cut energy costs.

Awareness Savings
10%

Process Savings
20%

Technology Savings
30%

Follow-On Projects So Far
22

The Challenge

Improving the energy efficiency and reliability of air conditioning (AC) is an upgrade priority since the facility is a major energy user and critical to the mission of the exchange. As such, the effort focused on replacing old and inefficient equipment.

Although equipment replacements can deliver impactful outcomes, they are not the only means of saving energy in existing buildings. Our partner sought to differentiate themselves by capturing and sustaining more energy savings.

The Approach

We recognized the opportunity to deliver greater value with a real-time energy monitoring system. Seeing live energy use made it possible to immediately separate energy waste from the energy essential to providing a service.

Thus, our partner was able to demonstrate how energy was wasted in daily operations, even before replacing equipment.

The Solution

Real-time energy monitoring was applied to continuously monitor the major electrical loads in the building.

For the AC system, our partner made use of live energy data to guide staff on the individual actions to be taken and the processes to be followed to stop energy waste.

Only after the operational initiatives were proven successful was the old equipment replaced. Energy monitoring was then used to verify that the new equipment was properly installed.

The Results

Continuous real-time energy monitoring has helped our partner secure a staggering 60% AC energy savings.

By facilitating the capture of an extra 30% savings through operational improvements, it has also enabled the full 30% savings from installing new equipment to be realized.

Today our partner is generating sustainable energy-cost reductions at an increasing number of exchanges.

