

# Balancing Act (Energy Use and ESG) by a Leading Data Center Operator in Malaysia



## Challenge

A leading data center operator in Malaysia was expanding into the second phase of their facility due to the country's rapid digital transformation, increasing demand for cloud services and high-capacity data processing.

The company faces a substantial challenge in balancing the high energy demands of its data centers with its commitment to achieving sustainability goals and reducing its carbon footprint.

## Solution

A strong relationship and close collaboration with the owner and design team were crucial for Trane in successfully proposing the chiller solution. This solution involves the installation of high-efficiency direct drive chillers, equipped with a variable frequency drive and utilizing HFO refrigerant..

The chiller system is designed to optimize energy consumption to match the cooling demand, thereby enhancing overall efficiency. Additionally, the use of HFO refrigerant supports the company's sustainability goals, as it has a lower GWP compared to traditional refrigerants.

## Result

- Meeting their PUE target of 1.4, signifying a highly efficient use of energy within its data centers.
- Making a considerable contribution to their ESG goals by significantly lowering their carbon footprint.

## Project Highlights

**Market:** Malaysia

**Segment:** Data Center

**Products and Services used:**

- 13 X CenTraVac™ CVHF Water-cooled chiller

## Featured Products



**Product name:** CenTraVac® Water-Cooled Centrifugal Chiller Simplex Model CVHF

### At a glance:

- Capacity range: 850 to 2100 RT
- Refrigerant: R514A
- Centrifugal compressor
- Industry-leading Reliability and Efficiency
- Rapid Restart: Fast and stable control on desired chilled water temperature after a power outage to support reliable data center operations
- Operating Range: Wide range able to meet various data center conditions
- Trane smart controller with Adaptive Controls™



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