

Energy-saving effect of Brunei micro-module data center



Overview

This paper presents a systematic review of the role of waste heat recovery technologies in data centers for achieving low-carbon development. This guide provides an overview of best practices for energy-efficient data center design which spans the categories of information technology (IT) systems and their environmental conditions, data center air management, cooling and electrical systems, and heat recovery. IT system energy efficiency. integration of renewable energy sources. Each tier builds upon the one maximizing cost savings, efficiency gains, and sustainability benefits.) The application discloses an energy-saving control micro-module data center, which comprises a plurality of cabinet modules, wherein each cabinet module comprises two rows of cabinets and a. Unified National Networks (UNN) recently signed with Vertiv, a global provider of critical digital infrastructure and continuity solutions, to design and construct its data centre facility in support of the nation's digitisation efforts. The signing was held at UNN Tungku Submarine Landing Station. Data centres are growing to be a crucial industry sector, currently consuming an estimated three percent of the annual electricity supply globally, contributing two percent of total global greenhouse emissions, and half of the energy wasted as dissipated heat. In this respect, this Recommendation focuses on: Energy.



Article Content

Dec 13, 2025

World Bank Document

The key to achieving energy savings lies in the design of the data center, which should incorporate energy-efficient technologies, optimized cooling systems, and efficient power distribution to minimize ...

Dec 08, 2025

ITU-T L.1307 (03/2024) Energy efficiency in micro data centres ...

This Recommendation describes considerations for improving the energy efficiency of micro data centres, which are essential items of equipment for edge computing services, and how to operate ...

Dec 01, 2025

Engineering Sustainable Data Centres

The study delves into the potential of reusing waste heat from data centres and proposes alternatives to enhance the efficiency of waste heat utilisation by data centre operators. It also discusses how liquid ...

Apr 28, 2026

Zero-Carbon Development in Data Centers Using Waste Heat ...

The construction of green data centers has emerged as a critical pathway for achieving carbon neutrality goals and facilitating energy structure transition. This paper presents a systematic ...

Feb 08, 2026

IT / Data Center

Typically, a colo provides the building, cooling, power, bandwidth and physical security while the customer provides servers and storage. Colocation grants companies the benefits of having their ...

Jan 17, 2026

Energy-saving control micro-module data center

According to the intelligent temperature control system, the intelligent temperature and other information are monitored, and the intelligent processing of the acquired information is adopted, so...

Feb 18, 2026

Towards energy-efficient data centers: A comprehensive review of ...

This paper provides an overview and guide to DC energy-consumption issues, emphasizes the importance of implementing passive and active design strategies to reduce DC ...

Nov 01, 2025

UNN invests in eco-efficient data centre infrastructure to meet Brunei ...

Upon construction completion, UNN's prefab data centre will have the capacity to host data centre and IT services and infrastructure of government and private businesses in Brunei.

Dec 05, 2025

ENERGY EFFICIENCY AND CONSERVATION HANDBOOK

The use of energy sources other than that taken from the grid usually involves a higher initial cost but will provide savings to electricity consumption costs in the long run

Apr 24, 2026

Best Practices Guide for Energy-Efficient Data Center Design

This guide provides an overview of best practices for energy-efficient data center design which spans the categories of information technology (IT) systems and their environmental conditions, data center ...

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://ntmmgroup.co.za>

Email: sales@ntmmgroup.co.za

Phone: +27 82 471 2596

Address: Unit 7, Optic Park, 24 High-Tech Lane, Century City, Cape Town,
7441, South Africa

This document is for informational purposes only. Specifications subject to
change without notice.

