Singapore | Technology

Agoda advances more sustainable IT infrastructure

Client profile

Digital travel platform, Agoda connects millions of travelers to accommodations, flights, and travel experiences across the globe. Headquartered in Singapore with offices spanning 35 markets and a multilingual workforce representing over 90 nationalities, Agoda employs more than 7,000 staff dedicated to delivering value-driven travel solutions through its digital platform available in 38 languages.

As Agoda's travel platform grows, the company is working to mitigate the environmental impact of its IT infrastructure without compromising performance or reliability. Leveraging NTT Global Data Centers' (GDC) footprint in Singapore, Agoda is adopting renewable energy solutions, improving energy efficiency, and optimizing hardware utilization to support more sustainable growth.

> "At Agoda, we are always looking for practical ways to operate our IT infrastructure more efficiently and responsibly. By partnering with the right colocation provider, such as NTT GDC, and optimizing how we use our infrastructure and hardware, we can support more sustainable growth while maintaining the seamless experience our users expect from our platform."

Paolo Prinsecchi,
VP of Global IT Infrastructure, Agoda

100%
renewable energy certificate coverage for eligible infrastructure

~40%
lower server-level cooling energy use per server

Up to 16%
lower energy consumption for eligible non-latency-sensitive workloads

Business need

Partnering to advance sustainability goals

As digital platforms scale and technologies such as AI increase infrastructure demand, companies are under greater expectations to operate more efficiently and manage their environmental impact.

As part of Booking Holdings, Agoda has long been committed to the Group's SBTi-approved emissions-reduction targets, with absolute Scope 1 and 2 emissions to be reduced by 95% by 2030 and maintained through 2040, and absolute Scope 3 emissions reduced by 50% by 2030 and 90% by 2040, against a 2019 baseline.

To support this, Agoda needed a colocation provider capable of supporting its sustainability objectives and helping address emissions linked to data center service usage, while also enabling its own initiatives, from server-level optimization to more efficient hardware lifecycle management.

Solution

Optimizing infrastructure in our data center environment

As part of its infrastructure environment, Agoda leverages one of our data centers in Singapore, which has achieved internationally recognized sustainability certifications, including the BCA Green Mark Platinum Award and Leadership in Energy and Environmental Design (LEED) Gold certification, reflecting our commitment to environmental responsibility, energy efficiency, and sustainable data center operations.

From 2026 onward, we also started matching 100% of the electricity consumed by Agoda's eligible IT infrastructure with locally sourced renewable energy certificates procured by NTT GDC.

Complementing these measures, Agoda's technology team actively reviews and implements feasible optimizations within its existing IT infrastructure to reduce energy consumption and enhance energy efficiency. To get more computing output from available power while protecting resilience, Agoda uses intelligent workload distribution, redundancy planning, and ongoing operational tuning. The team also monitors and remediates rack hotspots, where uneven airflow can increase temperatures and drive excess power consumption. For non-latency-sensitive workloads, Agoda uses dynamic power management governors that allow idle CPUs to downclock. Based on Agoda's internal measurements in 2026, eligible workloads delivered up to 16% lower energy consumption over a 24-hour interval compared with how they would perform under static power management, while maintaining required service levels.

Server cooling is another major area of focus for Agoda. The company has optimized cooling by configuring fan speeds to adjust automatically to operating conditions rather than running at maximum capacity by default. Agoda's internal measurements from 2026 showed that the optimized cooling profile improved airflow inside server racks, increasing cooling efficiency and resulting in approximately 40% lower cooling-related energy consumption per server over a 24-hour interval compared with a maximum cooling mode scenario, while maintaining thermal stability and system performance.

Building on these server-level improvements, we now plan to install cold aisle containment, which will separate cold intake air from hot exhaust air and support better airflow and a more energy-efficient data center environment.

Beyond operational efficiency, Agoda is also looking at how to reduce the hardware footprint needed to support growth. Instead of replacing servers and networking equipment based on a standard refresh cycle, the company keeps assets in service for approximately six years, where performance and reliability allow. Retired equipment is handled through trusted recycling partners, helping recover valuable materials and reduce waste sent to landfill.

Outcomes

Driving sustainability and efficiency without compromising performance

The collaboration between Agoda and NTT GDC brings together server- and infrastructure-level optimization with facility measures and renewable energy solutions, helping mitigate energy demand and emissions without compromising performance, availability, or scale. Together, the teams are advancing a practical approach which has already translated into measurable outcomes, including:

- 100% renewable energy certificate coverage for Singapore infrastructure
- ~40% lower server-level cooling energy use per server
- Up to 16% lower energy consumption for eligible non-latency-sensitive workloads
- Average hardware lifecycle extended to approximately 6 years

This work shows that sustainability and performance do not need to compete. It also highlights how collaboration between a colocation provider and a digital platform can turn sustainability goals into measurable operational progress. As Agoda continues to grow, the company will continue to evaluate opportunities to improve efficiency across its technology ecosystem and deepen its collaboration with NTT GDC to support more sustainable IT infrastructure.

> “Sustainable infrastructure is most effective when it is practical, measurable and built into day-to-day operations. Our work with Agoda shows how data center efficiency can support business growth while helping reduce environmental impact.”

Tadaaki Arimura,
Singapore Country Head for NTT Global Data Centers