

# Marriott CASE STUDY

## CLIENT



[www.marriott.com](http://www.marriott.com)

## APPROACH

“We try to understand current problems, as well as future needs. We then work to design appropriate solutions that are based on our careful analysis. We don’t take anything for granted. We double check and verify everything, always going beyond what the client expects.”

- Marcin Jakubowski  
RTM Associate

## SUMMARY

Marriott International, Inc. is a leading lodging company with more than 3,400 lodging properties in 68 countries and territories. Ranked among the Fortune 500, Marriott also has been recognized as one of the “greenest” big companies in the U.S.

## CHALLENGE

When two chillers started to fail inside a 1,000-square-foot, 30-year-old Marriott hotel, the building operator assumed that a one-for-one replacement would provide the most sensible solution.

However, the manufacturer’s engineers had doubts. Suspecting that an upgrade of the entire mechanical system would be a wiser investment, Trane—the manufacturer—advised contacting RTM & Associates to gain insights that only an engineering consulting firm could provide.

## APPROACH

To determine the best solution for the client, RTM started by conducting a complete system audit—including analyzing energy usage and projecting the energy payback realized over time if a new system was installed.

The audit revealed that simply changing out the chillers would actually be more expensive over time, versus upgrading to new technologies for all mechanicals: heating, cooling, domestic hot water, ventilation and controls.

“One-to-one was not going to be the best solution,” says Marcin Jakubowski, RTM Associate. “In proposing new technologies, we



is an engineering firm that goes beyond a typical consulting role. We become a partner to our clients by aligning with the goals, processes, and people at each organization. Since our inception in 1981, we have stood for a consistent offering by way of exceptional responsiveness to project and client processes.

We integrate a full range of engineering consultant services with sustainable design as a given.

#### Our services include:

- Mechanical
- Electrical
- Plumbing
- Fire Protection
- Civil
- Survey
- Technology
- Construction Administration
- LEED (Sustainable Design)

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were able to show the savings that would be realized by meeting current standards for energy efficiency—from less consumption to reduced maintenance.”

For all its clients, RTM looks at the larger picture. That consultative approach is part of RTM’s Signature Method, which ensures responsiveness, quality and adherence to schedule and budget, while always delivering the right design for the need.

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## SOLUTION

Sensitive to the financial realities of a major capital investment, RTM offered several different options to the client.

Among them, RTM engineers showed how it would be possible to do a full system upgrade in phases. The solution would allow the hotel to remain in full operation through construction and also spread out the hotel’s financial outlays, thus easing the impact on cash flow.

In the end, the client chose that custom, multi-phase solution to ensure its mechanical systems would operate effectively and efficiently for decades to come.

Drawings have been issued, and construction will start soon.

