

Scaling energy efficiency

Driving change across portfolios



Now you can enjoy a water park, and feel good doing it. Great Wolf Resorts turns energy efficient.

Overview

As a kid, going to a water park is a dream come true. One minute you're in a car, and the next you've entered into an aquatic kingdom. The gates open and it's an invitation to run, splash, slide, tube until your fingers prune, no matter what time of year. But what's going on to make this paradise possible? How does the water stay heated? How is the tubing powered? It's by energy – and a whole lot of it.

[Centerbridge Partners, L.P.](#) is a private investment firm that owns a company – Great Wolf Resorts – that operates indoor water parks. Centerbridge sees the value in advancing sustainability and conserving energy when possible. Not just for our planet, but for businesses. By investing in energy efficiency, companies can conserve energy and see meaningfully reduced operating expenses. Just this past year, Centerbridge saw an opportunity to do this at Great Wolf Resorts.

The family-oriented indoor waterpark chain has 14 resorts spanning different climatic zones, each including a hotel with anywhere from 300 to 600 rooms, the indoor water parks, arcades and spas. A profile like that means there are lots of opportunities to save energy and money. So Centerbridge decided to partner with EDF Climate Corps to identify opportunities for scaling energy efficiency improvements. And the results? They were very exciting.

Finding support

Astha Ummat, a grad student at Columbia University, dove into the data. She analyzed the waterpark's portfolio to better understand its energy use patterns. How did the climate differ? Were there different electricity rates, or local rebates? Were some buildings older and others more modern designs? The data confirmed that low-hanging energy efficiency upgrades were needed – as the company anticipated, but what they didn't realize was the business could also benefit from solar energy and battery storage installations.

The projects at Great Wolf could save roughly 13,000,000 kWh and 9,600 metric tons of CO2 in one year. To put that in perspective, that's equivalent to powering the electricity of 1,450 homes for a year.

With the scope mapped out, it was time to call in help. Ummat roped in a technical partner to conduct both energy audits and a technical analysis of Great Wolf lodges. Soon enough, she had a list of energy efficiency projects specific to the needs of each location.



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Moving on to the next stack of paper, Ummat analyzed interval data, energy bills and solar radiation patterns. This narrowed down locations best suited for solar and battery storage.

Making the business case

But Ummat hadn't forgotten to focus on the bottom line: how to implement these ideas in a cost-efficient manner. She detailed a business case and an implementation plan for each project, quantified the cost savings, identified the ROI, and calculated savings in annual operating costs. The projects at Great Wolf could save roughly 13,000,000 kWh and 9,600 metric tons of CO2 in one year. To put that in perspective, that's equivalent to powering the electricity of 1,450 homes for a year, with potential cost savings in excess of \$10 million over a "payback period" of less than 5 years.



EDF Climate Corps fellow Astha Ummat onsite at Great Wolf Resort in the summer of 2017.

The numbers speak for themselves

With numbers like those, the business case clearly held water. But Ummat wasn't stopping there. She wanted to make sure that the company could not only carry out these projects, but implement them across its entire portfolio of lodges, for both existing and future buildings. She developed a streamlined operational

About Centerbridge Partners

Centerbridge Partners is private equity firm headquartered in New York City. Centerbridge creates enduring value at its portfolio companies by encouraging responsible decisions pertaining to sustainability, and by introducing or enhancing environmental, social and governance (ESG) criteria within their operations.

process for replication and implementation of energy efficiency measures, which included a "sequenced playbook" to ease the process. For all the remaining lodges, she created a scale-up, replication plan, helping to get additional sites up to speed.

For anyone trying to make the business case for energy efficiency, this is it. Scaling energy efficiency is an easy way to accomplish your energy goals. And as Ummat pointed out, it's extremely cost-effective. The best part? The savings don't stop at Great Wolf Resorts. Centerbridge is working to apply the learnings from this project to other companies in its where applicable.

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EDF Climate Corps

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EDF Climate Corps is a premier summer fellowship program that embeds trained, custom-matched graduate students inside leading organizations to accelerate clean energy projects and climate goals.

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