

Case Study

LEED Silver Embassy Suites Identifies \$60K/Year in Energy Savings With a 1-Year Payback

Savings Identified Within Hours Using **buildee®**



Introduction

The Embassy Suites is a luxury hotel chain with over 230 locations, representing almost 100 million square feet. These hotel locations have varying degrees of efficiency, which presents an opportunity to undertake operational and retrofit projects in order to save energy and money as well as add value to the portfolio of hotels. Correlate, an energy management services firm for portfolio building owners, was contracted to manage an onsite energy program for an investment firm which owns hotel properties, including Embassy Suites. The energy program included coordination of an on-site energy assessment of the Embassy Suites

Denver Downtown, a 550,000 square foot, LEED-Silver certified hotel, built in 2009, and renovated in 2017.

buildee® was utilized during this assessment to quickly identify energy saving opportunities in the hotel and provide metrics on energy upgrade potential. Work that would normally take weeks was accomplished in under 3 hours at a low cost, saving the hotel owners tens of thousands of dollars while still providing credible insights.

Savings Identified

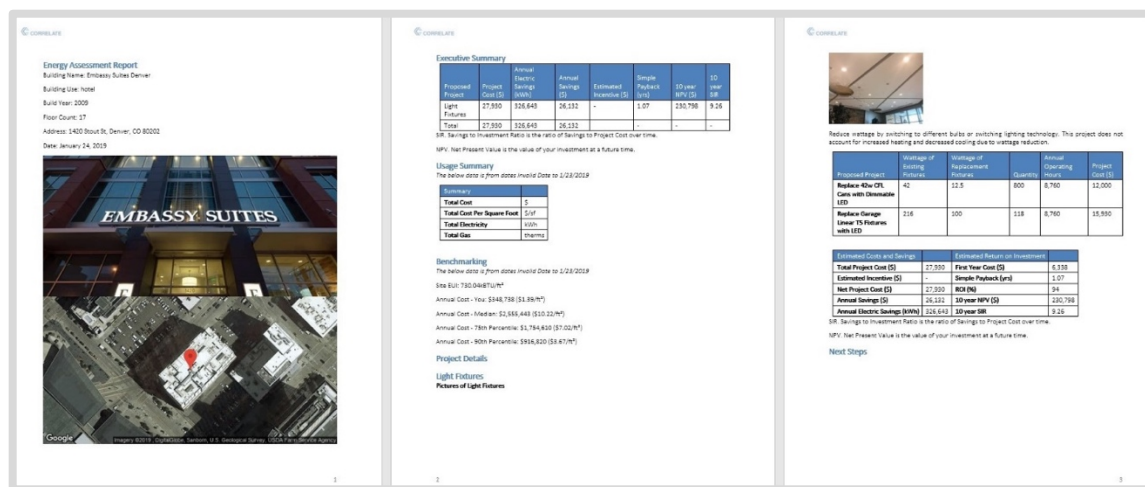
- 776,643 kWh Savings Annually
- \$61,132 Savings Annually
- 1-Year Payback
- \$539,662 10yr NPV
- Assessed in Under 3 Hours
- Savings Uncovered in a LEED Silver Hotel

Challenge

The Correlate and Embassy Suites teams were tasked with identifying high ROI and short payback retrofit projects in this LEED Silver property. Assessing a large building with many different spaces, like a hotel, in a short amount of time is usually not possible because an energy assessment that produces actionable metrics is often a time and cost intensive process. This specific hotel had been renovated in 2017, so there was no clear economic value to the owner to spend thousands of dollars on an assessment.

Solution

Correlate coordinated an onsite assessment using buildee's cloud-based platform and mobile app to quickly identify and analyze energy savings potential. The assessment was performed with the facility engineer in less than 3 hours and immediately identified lighting and HVAC savings potential that had not been addressed during the building's recent renovation. Using buildee Reports, a branded report was generated for Embassy Suites in minutes identifying current building performance, benchmarking, and retrofit analysis.



Reports generated in minutes with buildee

Results

Using buildee, Correlate identified 2 lighting projects and a project to turn on disabled economizer controls that could save over 775,000 kWh and \$60,000 annually. The kWh savings from the combination of these projects is equivalent to the Greenhouse Gas (GHG) emissions of 117 vehicles driven for one year or the CO2 emissions from over 600,000 pounds of coal burned¹.

Project	Cost	Annual Cost Savings	Annual Energy Savings	Payback Period	10yr NPV
LED Lighting	\$27,930	\$26,132	326,643 kWh	1.07 yrs	\$230,798
Economizing	\$0	\$35,000	450,000 kWh	0 yrs	\$300,000
Total	-	\$61,132	776,643 kWh	-	-

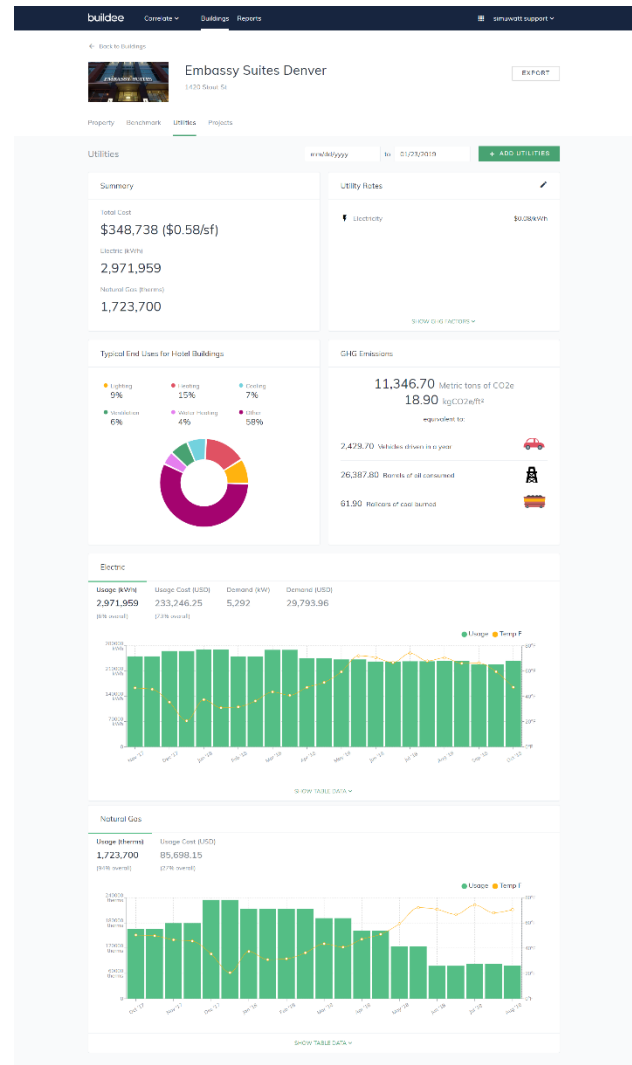
*Results may vary based on available incentives, contracting, solution, and measurement and verification.

¹ U.S. Environmental Protection Agency (EPA)

The Correlate program identified several funding options to transform these capital projects into cash flow positive investments with no cash required. Portfolio owners can work with Correlate and buldee to identify and implement energy improvements and eliminate traditional barriers like budget requirements and time investments.

Conclusion

buldee was utilized during an assessment of a recently renovated 550,000 square foot, LEED Silver certified building and identified significant energy and cost savings in under 3 hours at a low cost to the building's owner. The Correlate team coordinated an assessment that would normally take engineering firms weeks and accomplished the same work in hours at a low cost. The owners of the Embassy Suites were happy with the results of the assessment and plan on continuing to use Correlate services and buldee software to identify energy saving projects throughout their portfolio.



Energy consumption data in buldee

Utilize buldee to inform retrofit decisions, save energy, and add value to your building today.

Contact us – buldee: inquiries@buldee.com

Correlate: energybot@correlateinc.com