



*“buildee is at the core of effective building energy management, from benchmarking and asset management to planning and measurement & verification of our energy efficiency projects.”*

*- Director, Commercial Real Estate Management Firm*

## buildee® case study

# Virtual Analysis Provides Energy & Cost Savings With Limited Building Access

### Challenge

Energy audits are traditionally done on-site at a building following the standards established by The American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE). With access to buildings limited for third parties, it has been difficult to perform on-site energy audits. It has constrained the ability to provide guidance to building owners on where they can be saving energy and money while reducing the environmental impact of their buildings. At the same time, “energy efficiency providers — including contractors, construction companies, utilities, and community partners — are all searching for ways to keep employees working while the spread of COVID-19 disrupts what on-site work can be done.” The resulting limited building access has presented the need for new solutions that can provide tools to stakeholders to perform energy audits virtually and/or remotely.

This shift in building accessibility has raised the need for new virtual solutions and tools for a major U.S. banking institution.

Key Benefits from using the buildee Virtual Workflow

**90%** time savings over traditional methods

**15** sites rapidly prioritized from a portfolio of 3,000 buildings

**\$77,000** cost savings annually identified

**400+** utility bills analyzed programmatically

Plus:

- Instant prescriptive measures
- Instant incentive identification
- Avoided costs of staff on-site
- All analysis performed remotely

**buildee® virtual assessment solutions**

The **buildee®** platform connects building owners, operators and stakeholders **virtually** to prioritize energy-saving opportunities, streamline engagement, standardize practices, track and report.

## Solution

The Commercial Real Estate (CRE) management firm contracted to operate, maintain, and perform budget planning for the Bank's locations, implemented the **buildee®** software platform to virtually segment and prioritize 3,000 buildings across disparate climate zones in its portfolio. **buildee** standardized the data collection process and provided advanced benchmarking and trending tools. This activity ranked the top 15 priority sites in the portfolio to virtually audit, based on building size and Energy Use Intensity (EUI).

The 15 virtual audits included a workflow that began with the programmatic entry of more than 400 utility bills into **buildee**. This was done by connecting to the property manager's utility database and importing the needed data into **buildee**. Using advanced benchmarking tools, **buildee** prioritized which buildings qualified for further analysis based on EUI. The advanced benchmarking tools consist of CBECS-based benchmarking, as well as a regression-based analysis called **buildee Trend**. **Trend** generates additional insights by finding a correlation between energy consumption and outside air temperature to identify poor-performing facilities and potential operating faults.

Following the benchmarking exercise, the HVAC equipment in each facility was identified through the CRE firm's Computerized Maintenance Management System (CMMS) and past reports and assessed for savings projects. The different climates represented in the data set allowed **buildee** to identify basic "rules of thumb" for recommending and implementing measures like control optimization and lighting projects based on the size of the equipment and the building's location. Finally, each potential Energy Conservation Measure was analyzed based on metrics like payback, return on investment, savings to investment ratio, and energy savings for each of the facilities, allowing the Bank and CRE firm to prioritize them for implementation.

## Results

**buildee** provided significant time savings to the Bank and CRE firm's budget planners and provided instant analysis on how to prioritize and implement money and energy savings opportunities in their portfolio. The budget planners tasked local facilities management staff with collecting needed data, rather than having to send their own team on-site. Instead, they were able to utilize **buildee** to auto-generate reports which could be reviewed with their Bank customer immediately.

Utilizing the **buildee** platform remotely, the Bank and commercial real estate firm identified \$77,000 per year in energy cost savings across 15 sites. These savings would equate to over \$15 million per year across the Bank's 3,000 building portfolio.

Incentives provided by the local utilities to subsidize projects were rapidly identified utilizing the integrated utility incentive database in **buildee**. All savings were identified using virtual tools and without outside staff ever having to set foot in the buildings. **buildee** also provided significant time savings over traditional methods for benchmarking, analysis, recommendations, and reporting. Time savings were measured to be up to 90% per building assessed.



[Learn more at buildee.com](https://www.buildee.com)

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