



FirstStep Data Center Assessment:

The first step toward reducing energy costs

Improving energy efficiency is top of mind. Energy costs continue to escalate. Strict regulations are on the horizon. And environmental concerns remain paramount. General & Mechanical Services helps customers address the business, regulatory, and environmental issues that drive their energy efficiency efforts and goals. Our scalable approach to energy management enables you to align your energy savings goals with your budget and investment capabilities.

Balancing energy efficiency with optimal performance

For quick efficiency wins in the data center space, General & Mechanical Services offers the FirstStep Data Center Assessment service—a cost-effective service that may lead to immediate returns by identifying the most significant issues affecting your energy usage. FirstStep is the perfect first step because it unveils areas where noticeable efficiency improvements can be implemented right away to curb fast-growing energy costs.

Through a thorough on-site evaluation of your facility's infrastructure, which consumes the majority of a data center's energy-related costs, the FirstStep assessment zeroes in on areas of inefficiency. Armed with such knowledge, you can take action to reduce energy consumption and your operating expenses.

While energy reduction is a primary goal, we understand that it is not your only concern. The need to drive down energy costs must be carefully balanced with the need to protect critical loads. As a thought leader in data center management, General & Mechanical Services understands this challenging issue and addresses it head on. In addition to pointing out easy ways to reduce energy consumption, FirstStep identifies design, operational, or maintenance issues that place system availability at risk. What's more, it provides recommendations for providing better protection against system downtime.



FirstStep is an entry-level assessment that helps you identify savings opportunities and improve energy efficiency.

Comprehensive data collection and analysis by the energy experts

FirstStep Data Center Assessment is ideally suited to a Tier I or Tier II data center with a raised floor, cold air supply environment. Comprising an on-site data collection visit, an extensive analysis by an experienced energy management consultant, and a customized assessment report, FirstStep is an essential first step toward effective energy management.



From information to energy insight

Utilizing sophisticated software, the data collection is performed by a General & Mechanical Services certified service professional trained to understand the technical dynamics of the raised floor, multivendor data center environment. The data collected provide insight into components, layout, operational settings, and practices that

may reduce electrical efficiency, increase energy consumption, or threaten system availability.

- > Floor layout and air distribution
- > Computer Room Air Conditioners (CRACs)
- > Rack configuration
- > UPS configuration
- > Battery configuration



A proven methodology for energy savings

The collected data is analyzed by an Energy Management Services (EMS) consultant with expertise in data center management and real-world experience in implementing energy management solutions in the data center. Your EMS consultant will present you with a customized report that:

- > Identifies the most significant issues that waste energy in the data center
- > Presents detailed findings, recommendations for improvements, and estimated savings
- > Includes a "scorecard" for the data center and its subsystems based on industry standards and best practices
- > Prioritizes recommendations so that you can focus on those that are most critical or provide the highest return on investment

The scorecard rates the efficiency of subsystems, reports the findings, provides vendor-neutral recommendations for improvements, and indicates potential energy savings.

Scorecard

- Floor layout and air distribution
- Computer room air conditioners (CRAC)
- Racks
- Uninterruptible power supply (UPS)
- Batteries

- Efficiency and/or reliability is average or above.
- Efficiency and/or reliability is below average.
- Efficiency and/or reliability is significantly below average. Improvements highly recommended.



- How will your data center score when it comes to energy efficiency?
- Are you doing everything you can to maximize system availability?

Find out in your customized FirstStep Data Center Assessment Report