

## Energy Auditing Services



Energy audits are a powerful tool for uncovering operational and equipment improvements that will save energy, reduce energy costs and lead to higher performance. Energy audits can be done as a stand-alone effort or may be conducted as part of a larger analysis across a group of facilities, or across an owner's entire portfolio.

Simple energy audits equip building and facility owners with a list of no-cost or low-cost recommendations and a general road map for future planning. Many of these recommendations are easily implemented by operations and maintenance staff, and energy savings are seen almost immediately. Resulting cost savings can then be put toward future energy efficiency projects.

More complex energy audits provide a comprehensive energy efficiency capital investment plan in line with a building or facility owner's financial goals. This type of rigorous energy audit is typically part of a larger energy management program.

Whether you are looking for simple retrofits or a long-term investment project, an energy audit is the first step toward reducing energy use and improving the performance of facilities in your portfolio.

Energy audits typically take a whole building (or process facility) approach by examining the building envelope, building systems, installed equipment, operations and maintenance procedures, and building & process schedules. Whole building audits provide the most accurate picture of energy savings opportunities.

Alternatively, energy audits can be targeted to specific systems (i.e., lighting, HVAC or specific manufacturing processes). Targeted audits may miss significant bigger-picture energy savings opportunities but may be appropriate if the facility owner has specific energy efficiency retrofit projects in mind and limited funds to invest.

APT offers three levels of audits as defined by ASHRAE<sup>1</sup>. Each audit level builds on the previous level. As audit complexity increases, so does thoroughness of the site assessment, the amount of data collected and the detail provided in the final audit report.

---

<sup>1</sup> American Society of Heating, Refrigeration and Air-Conditioning Engineers

**Level I: Site Assessment or Preliminary Audits**

identify no-cost and low-cost energy saving opportunities, and a general view of potential capital improvements. Activities include an assessment of energy bills and a brief site inspection.

**Level II: Energy Survey and Engineering Analysis Audits**

identify no-cost and low-cost opportunities, and also provide EEM (energy efficiency measures) recommendations in line with the facility owner's financial plans and potential capital-intensive energy saving opportunities. Level II audits include an in-depth analysis of energy costs, energy usage and building/facility characteristics and a more refined survey of how energy is used in the building or facility.

**Level III: Detailed Analysis of Capital-Intensive Modification Audits** (sometimes referred to as "investment grade" audits) provide solid recommendations and financial analysis for major capital investments. In addition to Level I and Level II activities, Level III audits include monitoring, data collection and engineering analysis.



APT is prepared to work with building and facility owners to determine the appropriate level of audit based on project goals and available budget.

