



Creating awe-inspiring and energy efficient lighting experiences that transcend the way **you** do business.



810.227.3377 | 7050 Jomar Dr. Whitmore Lake, MI 48189 | www.edssenergy.com
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What We Do

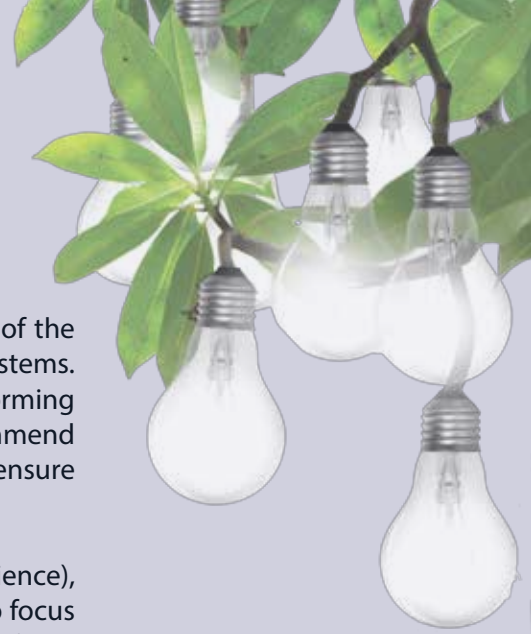
Formed and headquartered in Michigan in 2007, Energy Design Service Systems (EDSS) is a national authority on commercial energy efficiency. Under the direction of David Ely, EDSS has flourished from a lighting design firm into a company on the forefront of energy efficiency and renewable energy building applications and incentives. EDSS serves a broad range of industries throughout the United States including academic institutions, arenas, restaurants, hotels, factories, retail stores, and other large and small businesses alike.

As an **ENERGY STAR partner** and **U.S. Green Building Council Member**, EDSS offers a unique model of energy and cost-savings strategies. We leverage more than a dozen programs such as the 179D tax deduction (the Energy Policy Act of 2005), 45L tax credit, rebates, tax incentives, lighting design, and grant writing; EDSS is able to offer clients a sustainable competitive advantage by delivering a custom solution that will enhance aesthetics, improve the bottom line, and reduce energy consumption.

Companies turn to EDSS to implement strategies that help save money and equipment while improving the employee and customer experience. Over the past 2 years alone, EDSS has obtained over **\$500 Million in tax deductions and rebates** for their clients, all while making those operations cleaner, more energy efficient, and more environmentally responsible.



Featured on 21st Century Business' Television Series *Energy Efficiency Solutions for Commercial Environments*, EDSS leads others to see the benefit of reducing carbon foot-prints with reducing the cost associated with energy consumption.



EDSS Facility Energy Audits

The long-term benefits of an energy conservation program rely upon the dedication of the local operator of the A/M/E/P (Architectural/Mechanical/Engineering/Plumbing) systems. Although technology is important, energy efficiency usually corresponds with high performing and well-maintained A/M/E/P systems. While our auditors use their expertise to recommend changes, many of our recommendations come from local staff and can be refined to ensure that they work for your site.

In addition to the expected expertise in energy audits (80 years of combined experience), EDSS also has a diverse professional team of engineers, architect, and technicians who focus exclusively on exploring all energy efficient incentive opportunities, including those offered by utility, state, local, and federal agencies. EDSS excels at consistently identifying all available financial incentives and tailoring our recommended measures to minimize initial cost after incentives and maximize energy savings.

Bridging the Gap

EDSS staff involves all parties in energy conservation efforts to assure local commitment and continued success. Since various occupants and operators have different needs and expectations, EDSS acts as a communication bridge between corporate and local entities, occupants, and operators.

Our recommended improvement measures will stand the test of time and result in increased occupant comfort because of our focus on performance as well as energy.

Services Offered

- Energy Policy Act of 2005 (EPA) 179D Tax Deduction
- Cost Segregation & Retirement of Assets Study
- IRS Related Services (Reserve Study, Insurance Replacement Estimate (IRE))
- Carbon Reduction Certification
- Repair & Maintenance (263 (a))
- Facility Energy Audits (FEA)
- LEED® Certification & RetroCommissioning
- Lighting Design & Supply
- ENERGY STAR Certification
- Energy Procurement
- State & Local Rebates
- State & Local Incentives





The EDSS Value

When you get an energy assessment with EDSS you will receive exceptional service and recommendations geared towards your corporate goals and constraints.

Before Implementation -

We will brief local staff and adjust measures as needed to accommodate your needs and corporate goals. For this process, we will interview local staff to understand current and past building performance.

During & After Implementation -

We educate operating staff on the importance of maintaining high-performing A/M/E/P Systems.

The 4 Phases of Successful Energy Audits

1. Benchmarking - determine how much energy is used relative to one's peers using square footage, unit cost, gross revenue, or other criteria
2. Auditing - evaluate Architectural/Mechanical/Electrical/Plumbing (A/M/E/P) process systems of the building(s)
3. Design/Implementation - design and implement recommended energy conservation measures
4. Evaluation - continue benchmarking and restart the process as new technologies become feasible and building use changes



ASHRAE Standard Audit Levels Offered

EDSS offers 3 levels of energy audits based on the ASHRAE (American Society of Heating, Refrigerating, and Air-Conditioning Engineers) standards. These standards are also recognized by the U.S. Green Building Council, who sets LEED standards and certification details.

Preliminary Energy-use Audit

- Compare to similar buildings
- Calculate kBtu/sf

Level 1 : Walk-through Audit

- Rough costs & savings for ECMs
- Identify Capital Projects

Level 2 : Detailed Energy Survey & Analysis

- End-use breakdown
- Detailed Analysis
- Cost & Savings for ECM
- O & M Changes

Level 3 : Investment Grade Detailed Survey & Analysis

- Refined Analysis
- Additional Measurements
- Hourly Simulation

RetroCommissioning (RCx)

RetroCommissioning (RCx) is a process of evaluating energy-saving opportunities for an existing building to ensure all components are operating as intended and at maximum efficiency.

The RetroCommissioning process is based on the building type and current usage, especially if the current usage differs from the initial design. Typically, it does not include upgrading or replacing equipment, but rather “tuning up” your existing equipment for better performance. The process can provide commercial facilities with lower energy usage, operating costs, reduced maintenance, and improved comfort and productivity without making large capital investments.



The Process

Assessment - A detailed analysis of your building + summary report that provides a list of *low to no cost* energy efficiency improvements recommended for your building along with payback periods.

Implementation - You choose which recommendations to implement. Upon completion of improvements, a final assessment will be done to confirm energy savings and put into a final report verifying the improvements and the estimated energy savings.



Possible Building Inefficiencies

- Thermostats are adjusted by staff throughout the year
- Lighting technology is out-dated and inefficient
- Equipment (plug loads) are added/removed
- Setpoints are not scheduled or they have drifted
- Change of space/type/usage/frequency
- Hardware/mechanical systems fail
- Dirty heating and cooling coils
- Over-ventilated buildings

EDSS Water Audits

Water audits are a key part of responsible water management. They are essential to gathering the facts and analyzing them to provide management with options, costs, savings and financial returns. Audits form the basis for the sound decision making in the allocation of valuable capital. Benchmarking is a tool which can help you to improve your processes, products, and services by comparing your business's performance with that of similar organizations. It can help you to identify processes to reduce your use of water and cut costs.

Benefits:

- We will survey and report on current water usage for your records
- We will recommend improvements for increased efficiency
- We will estimate costs, savings, and payback time for recommended changes
- You can improve risk management by preparing for water supply variability & vulnerability
- You can market/advertise as a green, sustainable company to elevate your public company profile
- You can get up to date with new energy codes and standards

