

# ENERGY EFFICIENCY SERVICE

## 70+ Years. 25,000 Facilities. \$500+ Million in Savings.

For decades, EMCOR Facilities Services (EFS) has been implementing smart energy solutions through in-house technical staff, EMCOR Group, Inc.'s companies, and key energy-industry partnerships. In the last six years alone, we've analyzed, designed, or reviewed energy projects in 25,000+ facilities, saving customers \$500+ million in energy costs.

### Why EFS?

- 70+ years of energy expertise
- Vendor-neutral for objective equipment analysis
- Focus on green energy solutions
- Professional, industrial, design-build services
- Certified Energy Procurement Professionals (CEP)
- LEED-accredited professionals
- Access to EMCOR's companies nationally for special projects
- Licensed professional engineers

**Are You Blowing Hot Air for No Reason?**  
*Energy costs typically account for 30% of the total cost of operating a facility and 85% of buildings are over-ventilated. This accounts for billions of dollars of wasted energy.*



### Multiple Solutions. One Energy-efficient Expert.

EFS is equipped to handle virtually every energy efficiency project, from retro/re-commissioning to LEED-certification support, and photovoltaic and fuel cells to wind solutions, and more. EFS experts can prepare a summary of suggested implementation strategies designed to reduce annual utility consumption and operating expenses. We also work to prioritize each of the suggested implementation strategies in order to optimize the performance and financial results of the facility operations.

### EFS Energy Services

- Energy audits
- Water system conservation and retrofit
- Lighting retrofits
- Mechanical system retrofits
- Electrical upgrades
- Occupied space retrofits
- Solar programs
- Preventive and predictive maintenance
- Water treatment
- Building envelope services
- Design enhancements
- Load monitoring
- Critical equipment monitoring
- Renewable energy system installations
- Emergency backup generators

### Technology Driven Energy Savings.

We help customers become more energy efficient in order to help them save money. One way we do this is to recommend certain technologies based on energy needs. These technologies may include:

**Energy Monitoring** – energy-use alarms help identify problem sites immediately for savings up to 15%

**Project ID Streamlining** – low-cost first step for organizing projects based on payback range

**Field Measurements** – three-step energy audit with follow-up wireless monitors to track operating conditions

### Nonstop, Continuous Innovation.

EFS is always looking for ways to improve customers' facility operations—especially when it can reduce the impact on the environment. We constantly evaluate—and sometimes implement—new technologies and programs to help us reduce environmental impact and lessen utility operating expenses. Some of these programs and technologies include:

- Utility company de-regulation, mergers, acquisitions, rate changes, and metering technology
- HVAC, lighting, and electrical equipment and control technology
- Energy management control system technology
- Third party metering and sub-metering technology
- Compressed-air equipment technology

#### Featured Technology

- Automated demand response building management system
- Smart building technologies
- Grid demand technology

#### Certifications Held by EFS Personnel:

- LEED-certified
- ENERGY STAR partner
- US DOE Save Energy Dow Ally Organization
- Certified Energy Manager (CEM™)
- Certified Business Energy Professional (BEP®)
- Certified Lighting Efficiency Professional (CLEP)
- Certified Energy Auditor (CEA)
- Certified Measurement & Verification Professional (CMVP®)

#### Memberships of EFS:

- United States Green Building Council (USGBC)
- American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE)
- AEE (Association of Energy Engineers)
- U.S. Department of Energy Zero Energy Commercial Buildings Consortium

## EFS Implements New Overhead Lights; Saves Customer 53% in Energy Consumption.

**Problem:** When a customer's airline hangar and office needed upgraded overhead light fixtures, the EFS team got to work immediately, replacing 400-watt metal halide light fixtures with 4-lamp and 6-lamp, 4-foot, 25-watt fluorescent light fixtures. In the office, EFS retrofitted 4-lamp, T12 light fixtures with 2-lamp, T8 lamps.

**Solution:** EFS energy engineers and airplane maintenance staff worked closely together to design the layout of the new lighting fixtures. The new lighting

provided even distribution of light throughout the hangar, making it easier to maintain the exterior of the aircrafts being serviced.

The potential for annual energy savings was much greater than originally anticipated due to the fact that the new fluorescent light fixtures can be turned on and off as needed with instant-on/off switches. **The end result: a 53% reduction in energy consumption.**

# We Know Facilities Inside and Out