

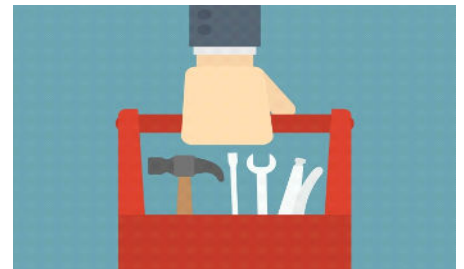
## Get Energy Smart With Building Maintenance

### Key Points

- Lighting and HVAC systems account for 70 percent of energy use in commercial buildings.
- Preventive maintenance can save energy and increase equipment life and reliability for these systems.
- Make preventive maintenance a key part of your business energy improvement strategy.

Saving energy is a great way to cut costs and boost profitability. But you're a business owner, not an energy professional, so where do you start? Here's a tip: lighting and HVAC systems make up more than 70 percent of commercial building energy use, according to the U.S. Department of Energy.

Preventive maintenance will improve the energy efficiency of these systems, and you'll have the added benefits of increased equipment life and reliability. What are you waiting for? Make preventive maintenance a part of your business energy strategy.



### Lighting

Effective lighting maintenance can reduce your energy costs, improve productivity and enhance visibility. Best practices include:

- Clean the dust off fixtures, lamps and lenses every 6 to 12 months.
- Clean or repaint small rooms every year, and larger rooms every two to three years. Dirt collects on surfaces, which reduces the amount of light they reflect.
- Replace lights in groups. Lamps can lose up to 30 percent of light output over their service life. Group replacement saves labor and helps keep illumination levels high.
- Make sure lamps and fixtures are compatible. Installing new fixtures with new lamps increases energy efficiency and service life.
- Periodically test light levels to ensure that they match the space and tasks being performed. The Illuminating Engineering Society (IES) provides light level recommendations.

### Heating, ventilation and air conditioning (HVAC)

A preventive maintenance program can save on energy costs and keep building occupants comfortable—and productive—all year long. Key elements include:

- Hire a qualified professional to clean and inspect your HVAC system equipment at least once per year.
- Inspect seals, valves, pipe joints and instrumentation for leaks and make repairs when needed.
- Check gauges and other instrumentation to ensure that they're in line with building maintenance policies or manufacturers' recommendations.
- Be sure all dampers and linkages are connected and opening and closing as intended.
- Clean heat transfer coils and replace filters as needed.
- Inspect motors and check belts regularly for tightness.
- Make sure the cooling system is charged with the right type and amount of refrigerant—too much or too little can increase operating costs.
- Clean and recalibrate mixed-air and supply-air sensors regularly to ensure that they match occupancy schedules and building conditions.

A preventive maintenance program that optimizes energy savings is more than just a checklist of items. Coordinate your preventive maintenance program with your overall energy management plan. Review maintenance policies when considering equipment upgrades

or a building redesign. View additional [energy saving tips](#) and start saving today.

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