# Energy Savings Guide **Auto Dealer**

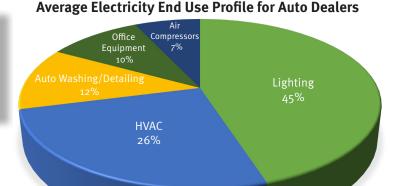


According to the National Automobile Dealers Association, energy is the third-highest overhead expenditure for auto dealerships, and they use approximately **18% more energy per square foot than a typical office building**. In addition to typical sources of energy usage in commercial buildings such as lighting & HVAC, many dealerships have on-site auto washing, auto detailing and auto repair and service areas. These services can add significant costs for energy usage.

### **Low-cost / No-cost Fixes:**

- Turn off lights when not in use
- Use ENERGY STAR® products wherever possible
- Perform regular maintenance on HVAC equipment
- Identify and repair leaks on air compressor systems

Next, consider upgrading older, less efficient equipment and installing controls on lighting and building equipment. Many of these upgrades are eligible for incentives that can reduce capital costs and shorten the payback period. Areas specific to your auto dealership include:



Source: ENERGY STAR





## **Lighting Controls and Updated Lighting Technology**

- Install occupancy sensors or add skylights and daylighting controls to adjust lighting levels as needed
- Replace older fluorescent lighting with LED lights
- Re-evaluate exterior lighting needs and ensure that the lighting levels are consistent with those recommended by the Illuminating Engineering Society of America. Replace older lighting technology with LED.



#### **Compressed Air Systems**

Many compressed-air systems are inefficient and waste energy through leaks, improper sizing and type based on performance needs, and poorly designed components. According to the U.S. Department of Energy, optimizing compressed-air systems can improve efficiency by 20 to 50 percent. Consider retaining a compressed air service provider to provide an assessment of your facility's compressed air needs and control strategies, leak detection, or monitoring of energy use. When replacing your compressed-air system, select the most efficient system for your dealership's needs.



## **Electric Motors and Drives**

Many dealerships have on-site vehicle washing centers and/or service bays. These areas can be extremely energy intensive, meaning that small improvements can lead to significant savings in energy and operational costs. Wherever possible, replace existing older motors with NEMA premium motors and add variable speed drives where applicable.



### **Bay Doors**

- Check seals to minimize air infiltration
- Retrofit existing doors and add actuators to ensure doors close immediately after vehicles exit or enter

# Efficiency in Action Auto Dealer



**Start Here:** Apply online at <a href="mailto:EnergySavePA-Business.com">EnergySavePA-Business.com</a>, email <a href="mailto:EnergySavePA@Sodexo.com">EnergySavePA@Sodexo.com</a>, or call 844-243-4946.

# **Project Examples:**





# **Project Description:**

Interior and Exterior Lighting Replacement

**Equipment Cost:** Incentive: \$15,374 \$8,540

Annual Savings: Payback with Incentive: 170,807 kWh Less than 6 Months\*

# Large Auto Dealership



## **Project Description:**

Interior and Exterior Lighting Replacement with Lighting Controls

**Equipment Cost:** Incentive: \$231,150 \$32,000

Annual Savings: Payback with Incentive:

641,591 kWh 3.1 Years\*

## **Auto Dealership Service Center**



## **Project Description:**

Added two VFDs to an existing compressed air system

**Equipment Cost:** Incentive: \$31,670 \$19,409

Annual Savings: Payback with Incentive: 388,182 kWh Less than 6 Months\*

\*Payback calculated using \$.10/kWh electricity cost