Federal fleets aim to buy only AFVs P. 4

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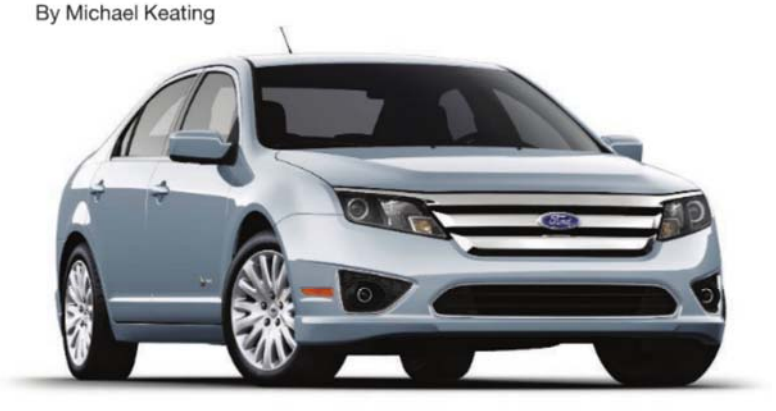
INSIDE

GOVERNMENT NEWS

Fleets: Feds aim to buy only AFVs by 2015

By Michael Keating



In the photo: a 2011 Ford Fusion Hybrid. In 2009 the U.S. Army was the single largest purchaser among federal government fleets, acquiring 400 Fusion hybrids.

President Obama announced recently that he is directing managers of federal fleets to purchase 100-percent alternative fuel, hybrid or electric vehicles by 2015. In his remarks on American energy security, the president noted that his administration has "already doubled the number of alternative vehicles in the federal fleet."

The federal government operates fleets with more than 600,000 vehicles and buys 60,000 to 70,000 cars annually through GSA.

The president's goal is "eminently doable by 2015," according to Edmunds.com's senior editor and Green Car Advisor John O'Dell. Of course, O'Dell told Government Product News, government policies on fleets are subject to change. "It could change with a new administration. Very definitely — or through legislation in Congress that reduces or eliminates funding for alternative fuel fleet purchases. But, even the Republicans are on board with the need to get off petroleum for transportation. So, I see an increasing push to put their money where their mouth is: 'Do as I do as well as I say.' If government is preaching the virtues of weaning the U.S. from petroleum, then government has got to be one of the first places that that starts."

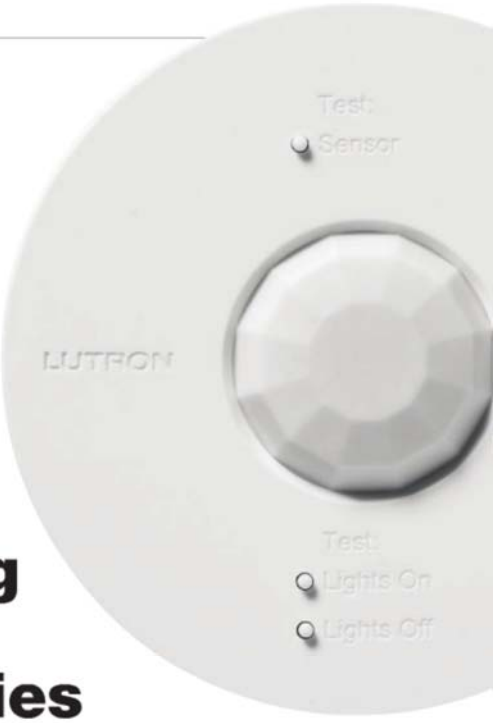
John O'Dell

A bounty of alternative-fuel vehicles is poised to hit the market, O'Dell says. "In addition to electric models, we've got a lot of compressed natural gas (CNG)-fueled vehicles coming online. There are a lot of companies out there converting conventional power plants into CNG-powered trucks and other vehicles whose duty cycles would argue against the battery-powered electric."

Other levels of government are not sitting on their hands, O'Dell says. "I have a feeling state and local agencies are probably leading the feds," he says. "Most state-local fleets already have green component goals. State and local agencies get credits for greening up their fleets based on state and local regulations. So, there's a lot of pushing."

Besides purchasing new vehicles, government fleet managers can use biodiesel to meet green goals, says Randy Olson, executive director of the Ankeny, Iowa-based Iowa Biodiesel Board. "Having an alternatively fueled fleet doesn't necessarily mean you have to invest in entirely new, expensive vehicles to achieve this goal. Biodiesel can help fleets achieve this goal, because it works with existing diesel engines, with no need for modification," Olson told Government Product News.

"Biodiesel is a domestic, renewable fuel for diesel engines derived from natural fats and oils like soybean oil, and which meets the specifications of ASTM D 6751. While there are a few fleets that use 100-percent biodiesel (B100), the more common blend is 20 percent (B20). Nationally, we expect to sell 800 million gallons of biodiesel this year." GPN



A Lutron Radio Powr Savr wireless occupancy sensor

Lighting control strategies to save money

By Andy Wakefield, Government Business Development Director, Lutron Electronics

Government facility managers can significantly reduce lighting expenses through flexible, scalable retrofits with a payback time frame of a few years.

Depending on the investment, facility managers can expect to shave 20 to 60 percent from lighting costs. Additionally, lowering lighting costs translates directly to lower HVAC costs. With less heat from lights, there is less need for air conditioning. The rule of thumb is that for every three watts of lighting cut, a facility manager can reduce HVAC needs by one watt.

Lighting control systems employ a variety of strategies to save electricity use. The strategies and the resulting cost savings compound as each strategy is added to the overall lighting control system. That allows facility managers to build a total lighting control system gradually by employing one strategy at a time to suit any space and any budget.

Dimming is the easiest way to cut lighting costs. Dimmers can easily reduce electricity use from 15 to 20 percent through high-end trim, light-level tuning and personal light control.

High-end trimming sets the maximum light level for each space. For example, the human eye can barely distinguish between a light level of 100 percent and a light level of 80 percent. Dimming lights to 80 percent reduces energy use by about 20 percent while keeping light levels comfortable for the human eye.

Andy Wakefield

Light-level tuning sets the appropriate light level for each space. Typical lighting levels in office spaces are much higher than necessary, which is often because of large, outdated banks of overhead lights that were installed before the widespread adoption of computers. Using high-end trim in addition to dimming lights in office spaces, for example, minimizes glare from computer screens and creates a more comfortable lighting environment for the human eye. Even when high-end trim is used, many offices choose to dim the lights even further to minimize glare on computer screens.

Personal light control gives individuals remote-control units to control the lights in certain areas of the office. Studies show that giving people direct control over their own lights can reduce electricity use by at least 10 percent.

Occupancy/vacancy sensing automatically turns off lights after occupants leave a room or space. On average, occupancy/vacancy sensors can reduce lighting electricity use by 15 percent. Depending on the use and size of a space, sensors can save electricity use by as much as 60 percent.

Daylight harvesting automatically dims electric lights when enough daylight is present. Daylight harvesting can save an additional 15 percent in lighting electricity costs in buildings with many windows or skylights. To

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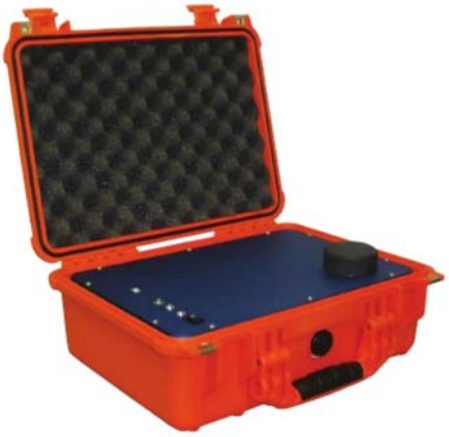
ensure maximum savings, daylight harvesting lighting controls should be used with continuous dimming ballasts so the light can be gradually and continuously adjusted to maintain the internal lighting level as the availability of daylight externally changes. With continuous dimming ballasts, daylight sensors start to dim the lights as soon as daylight is sensed in the space, thereby immediately saving energy.

Controllable window shades serve a dual purpose, to let daylight in and keep excess heat and cold out. For total control of the visual environment, shades can open and close automatically at different times of the day to harvest daylight and reduce HVAC costs by as much as 30 percent.

Demand response/load shedding reduces the overall lighting load at times when electricity costs are the highest. Many utility companies offer incentives to customers who are willing to reduce their electricity use during peak demand periods, i.e., during normal office hours when residents are at work, overnight hours or holiday hours. Lighting control systems are uniquely better suited to load shedding than other energy-saving technologies because they can respond quickly to changing conditions and operate safely at a wide range of power levels.

Scheduling will automatically dim or turn lights off at certain times of the day, and can reduce lighting costs by 10 percent. With scheduling, a facility manager does not have to depend on the last person that leaves a common area of the building to turn off the lights. GPN

Go to govpro.com to read part 2 of this series, which covers retrofit and renovation strategies.



Briefcase-sized tool analyzes prescription pills

By Michael Keating

Investigators with the Cherokee County, Ga., Multi-Agency Narcotics Squad are testing a small piece of equipment from Centice Corp. in Morrisville, N.C., in a pilot program to see how it performs in police work. It is designed to aid law enforcement in identifying prescription pills during traffic stops and drug busts.

The squad has two investigators who focus strictly on prescription drug abuse cases. Several unlawful pain clinics that dispense pills have set up shop in the county recently. Cherokee County is located 35 miles north of Atlanta.

Here's how the portable device works: an optical laser passes through a pill to analyze its individual chemical fingerprint. A computer then compares that fingerprint with thousands of others stored in a database. In less than 10 seconds, a match is usually found.

The Centice device has limited application in criminal investigations because results from it cannot take the place of a drug test from an approved crime lab. The unit's test findings are not considered evidence that meet court admissibility standards. Results from the Centice unit can be used, though, to establish probable cause for an arrest. In Cherokee County, narcotics squad officers have been using the Centice unit at crime scenes in presumptive tests.

"The Cherokee narcotics squad is very excited about the product. All of the indications have been positive, and we hope to be able to get back to the Cherokee County officials in a week or 10 days with the final results of the beta test," said Scott Albert, president and CEO of Centice.

"We'll be working with members of the National Association of Drug Diversion Investigators to potentially find other organizations that might want to work with us on some of the initial beta test sites," Albert told Government Product News. GPN