

## EVs EVERYWHERE

By David Sandalow and Levi Tillemann, Ph.D.

For the U.S. parking industry, the question of electric vehicles (EVs) is not if they'll come, but how soon? The answer is now.

The U.S. is already the world's leading market for electric vehicles. In fact, EV sales in the U.S. tripled in 2012; Americans purchased more than 50,000 of them. They have won critical acclaim with awards such as *Consumer Reports'* highest customer satisfaction vehicle (Chevy Volt), 2011 World Car of the Year (Nissan Leaf), and 2013 *Motor Trend* Car of the Year (Tesla Model S). As EV sales grow, these cars will change the shape of America's transportation and parking system.

This new age of transportation presents both an opportunity and a challenge for members of the International Parking Institute (IPI). Offering EV charging has the potential to draw new customers and profits. At the same time, new business models may need to be developed.

In recognition of this, the Department of Energy (DOE) is working with IPI to prepare America's parking facilities for a growing EV population. DOE has launched a partnership called the Workplace Charging Challenge with an impressive group of industry leaders, including IPI, Google, Verizon, 3M, and Siemens, to help give EV owners the ability to charge at work (for more information, visit [energy.gov/articles/ev-everywhere-charges-workplace](http://energy.gov/articles/ev-everywhere-charges-workplace)). IPI is also developing a best practices manual on installing and operating EV charging stations. DOE and IPI are promoting cost-saving measures, such as planning for EV charging during new parking construction when ducting is economical and efficient to install. By thinking ahead and integrating charging elements into new construction, IPI members may be able to avoid expensive retrofits and deploy future charging stations at a fraction of the cost of installing systems later.

### Growing the Market

Why do we want to encourage EVs? Today, 93 percent of our transportation fuel comes from petroleum, with far-reaching consequences for our country's national security, economy, and environment. Although America's petroleum imports have fallen in recent years, we still

import about 45 percent of our oil, sending more than \$1 billion overseas every day. As a society, our dependence on oil leaves us vulnerable to geopolitical crisis, exposes us to economic risks of volatile oil prices, and leads to local air pollution.

EVs can run on electricity from any number of sources (including sun, wind, and hydroelectric power). If it can be turned into electricity, it can fuel an EV. They are quiet and cheap to operate—the cost to fuel a vehicle

with electricity is generally equivalent to about \$1 per gallon of gasoline.

Readers of *The Parking Professional* likely know that cars spend about 96 percent of their time parked. Much of that is at the office during the day, as people attend meetings, answer emails, and word process. If the average EV driver plugs in on arriving at work in the morning, they may be able to substantially extend the distance they can drive on electricity.

The parking sector is uniquely positioned to enable common sense solutions to the current limitations of electric vehicles. While we make progress on building batteries that are cheaper and store more energy, workplace and destination charging can draw in customers and demonstrate a company's commitment to sustainability.

The U.S. is at a turning point with our energy system. Robust leadership from the parking industry can help accelerate EV deployment and bring the benefits of these vehicles to our communities.

The Department of Energy wants to partner with leaders in America's parking industry to pave the way for the future of our energy transition.

For more information on *EV Everywhere*, IPI's role in this effort, and how your operation can participate, contact Henry Wallmeyer IPI's deputy director, at [wallmeyer@parking.org](mailto:wallmeyer@parking.org). 



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