

# An Employer's Guide to EV Charging in the Workplace



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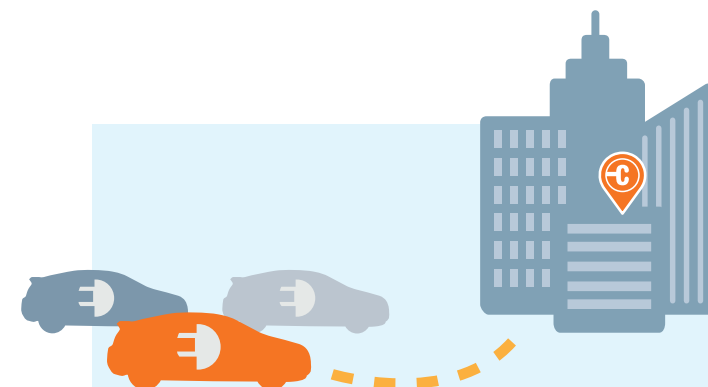
# Your Current and Future Employees Are EV Drivers

Who's buying electric vehicles (EVs)? Everyone from the environmentally aware to the financially savvy to lovers of technology. EV drivers are also highly educated and earn twice the average national income—they are the talent your employer wants to attract. EV charging is becoming a popular employee benefit that today's brightest and most ambitious talent not only seek out, but also take into consideration when choosing where to work. In order to use their EVs for commuting—or to even consider switching to an EV—your employees need on-site EV charging at work.



**60% of workplace drivers** surveyed at a Fortune 500 company said they are likely to switch to EVs if workplace charging becomes available.

Source: 2016 ChargePoint Webinar, Making the Business Case for EV Charging



## Offering EV Charging Has Many Benefits for You and Your Company

- ☒ Easily accommodate requests for EV charging, with minimal effort
- ☒ Centrally manage an EV charging solution that meets the needs of employees
- ☒ Align sustainability initiatives with business goals
- ☒ Reduce Green House Gas (GHG) emissions
- ☒ Understand your environmental and financial ROI
- ☒ Establish your brand as a green leader

# The Rise of the EV Market

## Electric Vehicle Adoption is Revving Up

The move to EVs has gained momentum across North America, with nearly 700,000 EVs on the roads today. In the last four years, EVs on the road have increased 7X and by 2025, 25% of vehicles sold will be electric. As EV ownership increases, a new wave of environmentally conscious drivers will make up a growing proportion of your current and potential employees.

While California remains the country's largest EV market in terms of cars on the road, it is no longer the fastest-growing. More states are encouraging EV driving by offering incentives such as tax credits, HOV lane access, utility rebates, and special rate plans for EV charging.

## Transportation Is Changing

2007 Then vs. Now 2017

### AUTOMAKERS<sup>1</sup>

0 automakers  
offered a  
mass-market EV



100% of major  
automakers  
sell EVs and PHEVs

### ELECTRIC VEHICLES IN NORTH AMERICA<sup>2</sup>

2,150



700,000  
(324% Growth)

### PUBLIC EV CHARGING STATIONS INSTALLED<sup>3</sup>

375



322,265  
(858% Growth)

### RENEWABLE ENERGY PRODUCTION<sup>4</sup> (MEGAWATTS)

989,213



2,006,202  
(103% Growth)

<sup>1</sup> Mashable

<sup>2</sup> International Energy Agency (IEA) Global EV Outlook 2017

<sup>3</sup> United Nations World Urbanization Prospects

<sup>4</sup> International Renewable Energy Agency Renewable Capacity Statistics 2017

## Case Study: Raytheon

# Raytheon

Employees at several Raytheon offices requested the convenience of EV charging at work, which also offered a promising way to attract new recruits. “It can be a discriminator to attract and retain the best talent you can,” says Frank Marino, Senior Corporate Environment, Health, Safety and Sustainability Manager of EV charging. “A lot of EV drivers are engineers, and you want to attract and retain them.”

In addition to employee retention, Raytheon has 14 ambitious sustainability goals, two of which are to reduce greenhouse gas (GHG) emissions by 12% and certify 20 locations as zero waste by 2020. The EV charging solution helps reduce Scope 3 GHG emissions. To meet employee demand, attract new talent and achieve sustainability goals, Raytheon decided to start with EV charging in local offices that requested it, allowing charging to grow with employee demand rather than be mandated by headquarters.

“A major attraction of the ChargePoint network was its nationwide reach, robust metrics collection process from the online dashboard and the fact that all firmware updates are automatically pushed out to all stations, nationwide.”

— Frank Marino, Raytheon



### 5 Years of Savings and Results

- ✓ Saved 280 megawatt hours of energy
- ✓ Saved 117,145 kg of GHG emissions
- ✓ Saved 35,000 gallons of gasoline (the equivalent of growing 8,000 tree seedlings for 10 years)
- ✓ Attracted new employees and retained existing staff
- ✓ Simplified pricing and station management with smart tools

# Why EV Charging Is Good for Every Business

## Make Your Company a Great, Greener Place to Work

EV charging is an investment that will be utilized every day, providing tangible benefits for your employees. When companies commit to installing EV charging stations for their employees, they are opening the doors to attract and retain top talent. Charging also lets your company engage in helping to slow climate change or even eliminate emissions altogether if using renewable energy sources. Networked EV charging stations that support demand response and time-of-use electricity programs not only help control electricity costs, but also [earn points toward LEED certification](#).

## EV Charging Helps Reduce GHG Emissions



30% of U.S. CO<sub>2</sub> emissions come from transportation



50% average savings in CO<sub>2</sub> emissions created by EV charging across the U.S.

100% if charging on renewable energy



3.5 commercial buildings worth of CO<sub>2</sub> emissions created by every 100 employees driving to work



Smart charging can help you measure emissions avoided



## Assess the Need for Workplace Charging

An employee survey is a good place to start when trying to assess the demand for EV charging stations as well as gather useful data to help build a business case to present to your company's stakeholders.

## Survey Question Examples

1. Does anyone in your household currently own an electric vehicle (EV)? This could be a plug-in hybrid electric vehicle (PHEV) or battery electric vehicle (BEV).
2. If you own an EV, where do you charge your vehicle most often?
3. Are you considering leasing or purchasing one in the next 6-12 months?
4. Is having access to EV charging at work a factor in your decision to lease or purchase an EV?
5. If EV charging was available at your primary work location, how likely are you to charge there?

# EV Charging Installation 101

## What to Look for in an EV Charging Solution Provider

At a minimum, workplaces should seek a provider with a charging station solution that is certified for safety, can be installed in parking garages or outdoor parking lots, and includes 24/7 driver support to reduce the burden and cost of the employer. Being able to set your own pricing policies and maximize station utilization is also important, as is the ability to anticipate employee charging needs and ensure stations will be available for as many employees to use as possible. Finally, you would ideally want a charging provider that works with partners that offer infrastructure expertise and installation support.

## Why Choose Networked Charging

Trying to maintain a budget, fulfill employees' requests for EV charging and cope with the realities of your existing electrical infrastructure can leave you overwhelmed. The answer is a networked charging solution. Real-time network communications enable these stations to address your challenges while recouping the costs at the same time. A networked solution unlocks benefits for employees and employers alike:

### Employees



Use Waitlist to get in line at a busy station



Check charging status from phone



Find available stations



Receive personalized driver report for spending, usage and energy savings



Get notifications when your car is done charging

### Employers



Intelligently share power, manage energy consumption and measure your emission reduction



Reduce infrastructure and operational costs with power management



Monitor stations remotely and maximize station utilization



Control who can access your station and set a company pricing policy

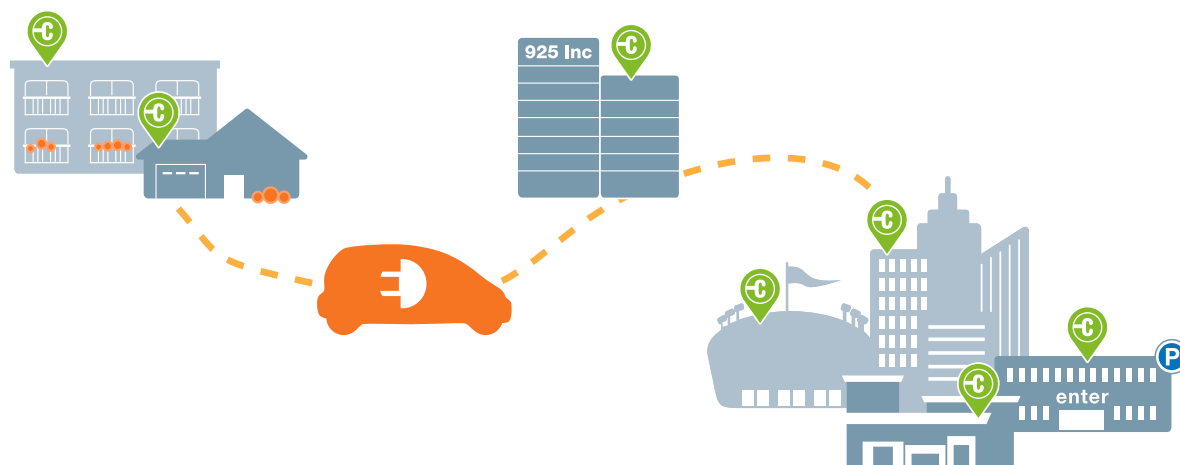


Get alerts about potential problems to avoid downtime

## Smart Steps for Choosing Your EV Charging Solution

EV ownership is only going to increase moving forward. Now is the time to plan for the future and get your workplace EV ready. The following best practices can help you ensure that you make smart decisions about charging station installation:

- ✓ Plan for at least 5–10% of employees to purchase plug-in electric vehicles over the next 3 to 5 years. For new construction workplaces or in places with high EV density, plan for 10–20% of employees to drive EVs.
- ✓ Prepare for an increase in the number of employees driving EVs by making additional parking spaces “EV Ready” with conduit and electrical wiring connected to the building’s power source.
- ✓ Create an EV charging policy that is easy to scale beyond the first EV driver so that you can accommodate future EV drivers.
- ✓ Some workplaces will not have enough electrical panel capacity to charge all employee EVs at once. Power Management can install more stations than rated capacity and eliminate or significantly delay costly upgrades.
- ✓ Choose a networked EV charging solution that maximizes usage and future-proofs your investment with smart features and automated software updates.
- ✓ Take advantage of grants, rebates, and tax credits [available in your region](#).



### Get More from Your Charging Solution

Unsure how to implement shared charging that works for everyone? ChargePoint has it figured out for you. The Waitlist feature lets employees use their phone to get in line at charging stations when all locations are busy and conveniently notifies them when it's time to go plug in. Offer valet parking at your workplace? ChargePoint's Valet feature gives valet attendants a quick real-time view into the charging status of all vehicles and available ports at valet charging stations so they can charge more vehicles and serve more EV driving customers.

**Improve employee productivity** by making it easier to get their cars charged

**Maximize station utilization** and keep drivers charged up and happy

**Eliminate the need for homegrown systems** to mediate access to stations

**Identify drivers** who don't move their vehicles promptly

**Understand demand and plan for capacity** upgrades using automated reports

# Why ChargePoint

## ChargePoint Is Committed to Providing Businesses with Smart EV Charging Solutions

ChargePoint operates the world's largest and most open electric vehicle (EV) charging network, bringing EV charging to more people and places than ever before. We design, build and support all of the technology that powers this network, from charging station hardware to energy management software to a convenient mobile app. We're committed to understanding how EV drivers behave and how that behavior varies according to location, time of day, cost of charging and industry—and we use this data to better understand, anticipate and meet the needs of both drivers and EV station owners everywhere. Our work transforms transportation and energy use by helping more people choose to drive electric.

**Learn more about how ChargePoint can help you increase employee satisfaction and meet the growing demand for EV charging.** Visit [www.chargepoint.com/businesses/workplace/](http://www.chargepoint.com/businesses/workplace/) or [check out what grants, rebates, and tax credits are available](#) for purchasing and installing stations in your region.

**Contact us at [sales@chargepoint.com](mailto:sales@chargepoint.com) today.**

1 in 4 of Fortune's "100 Best Companies to Work For" is a ChargePoint Customer

"We noticed that the number of EV drivers increased after we started offering workplace charging because it enabled people to commute using their EVs. They are able to come in earlier due to HOV lane access and maximize time both at work as well as with their families. It also helped us achieve our LEED certifications and enhance our green image."

— Ted Ludwick, Amazon Lab126



MOMENTUM  
FOR CHANGE

